PILOT CASE-STUDY ON E-TRAINING BY PERSONS OF INDIAN ORIGIN (PIO) FOR WOMEN DIGITAL ENTERPRISES, IN SOUTH INDIA

by

Guruprasad

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Guruprasad

APPROVED BY

Jaka Vadnjal

<Chair's Name, Degree>, Chair

Iva Buljubašić

<Member's Name, Degree>, Committee Member

Hanadi Taher

<Member's Name, Degree>, Committee Member

RECEIVED/APPROVED BY:

< SSBM Representative, Degree>, SSBM Representative

Dedications

This pilot case study is dedicated - To the leaders & heroes in every home & community whom we revere immensely (Sri Narendra Modi, current Prime Minister of India). To the womenfolk who hold the families and societies together (my mother - Mrs Sharadamma, my wife - Mrs Sangeetha Sharaff, and my daughter - Pragna Guruprasad). Also, paternal roles support them to keep their head held high with invaluable resources (my father - Mr C.B. Lakshmana Rao).

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ABSTRACT

PILOT CASE-STUDY ON E-TRAINING BY PERSONS OF INDIAN ORIGIN (PIO) FOR WOMEN DIGITAL ENTERPRISES, IN SOUTH INDIA

Guruprasad

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Dissertation Chair: <Chair's Name>

Co-Chair: <If applicable. Co-Chair's Name>

This small-scale pilot case-study research has the objectives to make original contributions to the virtual or online, custom-made, on-the-job, e-training programs for women entrepreneurs & their female employees in selected locations of southern India and verifying the feasibility of work-from-home or remote working e-business models, by building minimum viable products (MVPs) which could be eventually scaled to bigger businesses. Initially, the e-training has been guided by persons of Indian origin (PIO) with in-depth exposure, skills, & knowledge in the business coaching & start-up/SME ecosystem on global levels and who are building the capacities in international business leadership.

The researcher has collected primary & secondary data for about four and a half months (about 18 weeks), from early November 2022 until mid-March 2023, to conduct this research. Using qualitative methodologies & research instruments such as semi-structured or unstructured questionnaires, a total mix of 275 interviews & personal observations have been done with the help of about 100 women digital entrepreneurs/management staff, 100 female e-staff, 25 persons of Indian origin (PIO), 25 digital training providers, and 25 overseas customers from Australia.

The female stakeholders of women enterprises with a good school or college education & computer/digital literacy, between the age group of 20 to 45 years, have been selected from the six cities/towns, i.e., Hyderabad, Machlipatnam, Mysuru, Kodagu, Ooty, & Wayanad to collect the research data to represent the five southern states of India, i.e., Telangana, Andhra Pradesh, Karnataka, Tamil Nadu, & Kerala, to conduct this small scale pilot case-study.

The results of this small-scale pilot case-study research provide an initial understanding and feedback on the hypotheses that utilising the e-training programs to achieve pre-defined e-business goals & objectives on a smaller scale is feasible. The findings of this small-scale pilot case study can be used in related industry segments to assist in definitive, full-scale research and pave a path to the stakeholders for lifelong learning (LLL) in international business leadership and to add value to the local & global communities in a subtle, grateful and humble manner.

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CHAPTER I

INTRODUCTION

1.1 Introduction

Virtual/remote or work-from-home business models are getting more feasible and affordable, day by day, due to the availability of cheaper internet & Wi-Fi in tier-1, tier-2, and tier-3 cities, smaller towns, and even in some rural areas of south India (Bouncken et al., 2022). Thus, it makes an important and exciting area for research to assess how and where one can use e-training methodologies, programs, and modules more appropriately to reach the grassroots levels using these technological advancements that have gained unprecedented popularity in the last decade or so, in south India (Roy and Roy, 2020).

Although corporate organisations have utilised e-training or digital training for about two decades, it has become a major trend nowadays (Roy and Roy, 2020). One of the main reasons for most of the global population is forced to accept and adapt to e-learning, e-working & e-businesses can be attributed to the Covid-19 era (Saxena et al., 2021). The covid-19 pandemic and its effects have also made 'social distancing' a new normal for over two years, which could have been nearly impossible in any other situation (Saxena et al., 2021). It is often said that "necessity is the mother of all inventions". Thus, these unforeseen circumstances have given rise to a whole new atmosphere with newer, better work/job opportunities for women where they could handle their jobs virtually/remotely from their own homes, using online or digital or web-based tools (Joshi, 2021). Working from home (remotely/virtually) had become a 'new normal' during the Covid19 global pandemic, and online/web-based learning was adopted for students to learn from home (Joshi, 2021). During these challenging times, much awareness was built about virtual job

opportunities and digital entrepreneurship possibilities for small to medium, women-led businesses due to more robust, and high-speed (4G/5G) internet facilities across south India.

As such, women empowerment is a widely visited, much older topic wherein much work has been done already and is still being done on both academic research levels and on the ground by governments and non-government agencies on local, national, and global levels (Panneerselvam, 2022). Hence, the goal of this research, which partly revolves around doing a small-scale pilot case study related to e-training methodologies & modules for remote/virtual, work-from-home business owners and e-employees in south India, would add more value in the direction of creating better environment for women empowerment in the area of international business leadership (Herma, 2022).

Persons of Indian origin (PIO) or their descendants who hold visas or citizenships in other countries are also known as non-resident Indians (NRIs) when they reside overseas or overseas citizens of India (OCIs) when they reside in India (Bhat, 2022). Most Indian immigrants would like to connect to their motherland and use their knowledge, skills, resources & potential to give back and add value in some way or other (Agarwala, 2015). Indians have been a part of the migrant communities in many parts of the world; hence, they respond well & adapt to the concepts of global citizenship (Bhat, 2022). Hence, a meaningful engagement with them becomes necessary with an incredible transfer of power taking place from states & bigger institutions to smaller institutions & individuals in various countries, where the influence of the Indian diaspora is positive and growing stronger day by day (Gevorkyan, 2022).

1.2 Research problems

Research problems that are related to the research topic of this current small-scale pilot case study are the areas of concern or challenges in micro, small & medium enterprises (MSMEs)

of south India, wherein research efforts are made to address in this dissertation/thesis, by defining the specific business problems, using a more scientific & methodical approach (Marchisotti and Farias Filho, 2022).

The business problems in e-training methodologies, programs, modules & digital micro, small & medium enterprises (e-MSMEs) of south India are generally explained in simple words, related to circumstances that might involve complex relationships and conflicts (Reim et al., 2022). Hence, this small-scale, pilot case-study research focuses on analysing the research problems concerning training methodologies, programs, and modules that are used for implementing and testing feasible business models to attain the minimum viable products (MVPs), for women-led micro, small & medium enterprises (MSMEs) and their employees in south India, that are viewed from a few different perspectives, in specific areas of the business or industry segments, whereby the research rationale is developed based on the fundamental questions (Hattiambire and Harkal, 2022).

One of the research problems is the long hours of hectic travel to & from workplaces and getting ready to go to offices, mainly as applied to married women in south India who also take care of children and their family members (Goel et al., 2022). If we look at this research problem from different angles, we understand that long hours of travel to & from workplaces and longer times to get ready to go to offices affect both business owners and employees (Goel et al., 2022). In some major tier-1, tier-2 & tier-3 cities of south India, getting ready and commuting to workplaces could take one to two hours for one-way travel (Sindhu, 2022). Hence, a total of about two to four hours a day for getting ready and travelling to & from work could be considered a common business problem that needs to be addressed, where possible, on a high priority because this precious time could be better utilised for constructive purposes that could assist in their

personal goals such as health, relaxation, continuous professional development and family goals (Sindhu, 2022).

This pilot case study is primarily focused on women entrepreneurs and their female staff in south India because women face quite a lot of difficulties in India when they want to start their businesses or want to join a job to earn their livelihood (Mukilan, 2022; Rastogi et al., 2022). Specifically, many micro, small and medium enterprises (MSMEs) in south India need to adequately address the challenges that working mothers undergo (Sharma and Dhir, 2022).

However, this pilot study is not primarily related to much addressed the older and general subject of women's empowerment in south India because a significant part of the research is dedicated to finding simple solutions to business problems that are much more specific in digital entrepreneurship and digital training that can add a layer to the existing support systems (Ma et al., 2022).

Work-life balance is another major problem for working women in south India, whether for business owners or employees working in a conventional, brick-and-mortar business (Rajani and Nandula, 2022). When women go out for jobs, it becomes harder to manage the household work and provide attention to their kith & kin; hence, the work-life balance is badly affected (Rajani and Nandula, 2022).

Research problems related to starting or managing micro, small & medium enterprises (MSMEs) in south India, by women entrepreneurs, without doing a small-scale pilot case study or market research on a smaller level can be risky, as the problems can get bigger and much more undefined & complicated, in the future (Geissdoerfer et al., 2022).

This small-scale pilot case study looks at the problems faced by so many Indian immigrants or persons of Indian origin (PIO) who want to connect to their motherland and use their knowledge, skills & other resources to give back to their country in some way other. However, due to the numerous practical difficulties, they need help to do that in a comfortable, ethical and legal manner (Loreng, 2022).

1.3 Purpose of research

On a high level, the purpose of this small-scale pilot study research is to collect initial primary and secondary data to design, develop, or put together and test custom-made e-training methodologies, programs, and modules to facilitate simpler, smaller, easy-to-do, home-based, feasible, e-business models so the women's digital entrepreneurs, in south India, can work towards their dream of financial independence & a better lifestyle (Roy and Roy, 2020).

Many persons of Indian origin (PIOs) or non-resident Indians (NRIs) have been making frequent business visits to India that used to be only family or social visits before (Gevorkyan, 2022). Indian diaspora is a fundamental pillar of India's public diplomacy and overall foreign policy orientation (Kapur, 2003). The current Prime Minister of India, Sri Narendra Modi (Since 2014), has been very effective in engaging with the Indian diaspora by communicating directly through his much acclaimed and widely attended community events in the recent past. These events have also seen leaders in the respective countries participate frequently and consistently with open-handed support for the spirit of India (Palit, 2019).

This small-scale pilot case study has the purpose of collecting & analysing, primary & secondary data for creating more manageable, faster, and more comfortable ways for persons of Indian origin (PIO) to connect back to their home country and add value in an ethical, legal,

honourable, and respectable manner to their motherland, at various stages, from the grassroots level to the governance levels.

Hence, one of the purposes of this pilot case study is predominantly to initiate the work towards building an ecosystem for providing on-the-job, digital training related to e-businesses, and e-employment, where women from south India can Learn & Implement (LI) the skills & techniques of Simple & Feasible (SF), Ethical & Legal, Respectable & Honourable ways (EL+RH) of money making (MM) & money management (MM) with Gratefulness and Empathy (GE) which can be enjoyable & exciting (EE) (Neeley and Leonardi, 2022).

Since work-from-home systems, e-businesses, and e-employment are not well-known concepts yet, many problems are faced by female as well as male virtual employees and e-business owners, as the family members, relatives & neighbours do not understand that professional work is being conducted in the home environment (Aksoy et al., 2022). Remote work may cause unrest in the family and eventually give rise to cultural & social problems in south India if not appropriately addressed on time (Eniola, 2022). Hence, there is a necessity to document and analyse this area with an open mind and positive attitude, because when the business owners or staff go out for work, they could have had a way to escape this kind of scrutiny & stress from their family members, relatives & neighbours (Eniola, 2022). Working from home is a significant paradigm shift in how people work, live, and communicate, in Indian communities, during and in the aftermath of the covid19 pandemic (Aksoy et al., 2022).

Although it might look like a tall tale or an abstract concept, the purpose of this pilot study, on a broader level and in the longer run, is inspired by the story that is told in the business circles, and the gist of the story goes like - Henry Ford (Ford motors) had a dream of seeing a motor car in every home and Bill Gates (Microsoft) had a dream of seeing a PC in every home (Das, 2022).

Similarly, this pilot study envisages having a millionaire (or a million-dollar business) in every home or every person, starting from selected/representative communities, in south India, with the help of e-technologies, e-training, e-businesses, e-employment, and e-transformation (Marchand, 2022).

1.4 Significance of the study

It is well-known that home is the primary domain for women, even though many men support women with household work and participate actively in raising children (Obioma et al., 2022). Since joint families are considered as the concept of the past and nuclear families are the new trend in current times, there is a necessity for one of the parents or, if possible, both the parents to be at home to take care of younger children and manage housework (Obioma et al., 2022). Remote/virtual or work-from-home e-businesses or e-employment offers a range of solutions to address this scenario (Obioma et al., 2022). Hence, if/when more women in India prefer to take up virtual, work-from-home businesses or employment options, it becomes necessary to be ready with the tools and techniques to facilitate e-training (Obioma et al., 2022). Hence, this is a functional area for a case study-based research project that addresses it as a significant research area.

Remote or work-from-home employment models are becoming more acceptable and popular, especially during and after the Covid19 pandemic (Flores, 2019). Many people want to take up this option and are okay if the income levels are lower than in-office/on-site jobs (Hunter, 2019). Remote staff is more open to taking up freelance assignments, contract jobs, or part-time employment than full-time, permanent jobs, which have been a norm in south India (Popovici and Popovici, 2020). Hence, it is evident that it is an important area for research that is significant to understand the future of remote work in south India.

Several fully furnished, ergonomically designed, plug & play-type co-working spaces are available for digital, start-up entrepreneurs who can rent a desk with Wi-Fi/internet connections (Bouncken et al., 2020). Co-working spaces can be rented for short durations or longer durations, so there is not much burden on the e-business owner (Bouncken et al., 2020). Even remote staff can rent co-working spaces when they feel bored or get disturbed by their family members in their homes (Bouncken et al., 2020). Current pilot case-study research has primary and secondary data to support the extensive availability of co-working spaces across the selected representative locations in south India, and their number is growing steadily.

There are 14 science, technology & entrepreneurship parks (STEP) across India (Mala Rani et al., 2021). Also, many start-up incubators are run by innovation hubs funded by local and central governments and private institutions to support start-up entrepreneurs to transform ideas into minimum viable products (MVPs) (Mala Rani et al, 2021). E-business owners find quite a few start-up accelerators in major cities of India whenever they want to diversify or scale their businesses, locally, nationally, or globally. However, most have an on-campus or offline support mode for women entrepreneurs (Mala Rani et al, 2021). The research problems created by the ignorance about the fantastic opportunity that the start-up ecosystem in south India has created might lead to lost opportunities (Mala Rani et al, 2021).

A digital entrepreneurship business model based on GLOWW features for women in south India can be put together such that it is ‘global’ in nature & approach; it is run by passionate, enthusiastic people who are full of life, i.e., ‘living’, with passion, creativity, resourcefulness, and productivity; and the ‘organizations’ with various complex resources that are put together to work in synergy; organizational structure and resources need to be carefully managed, so the whole thing works like a living organism rather than an artificial mechanism; the business-organization/s can

serve the clients ‘worldwide’ and the systems & processes could be extrapolated to include women across the world in a step-by-step manner, i.e., starting from the selected locations of south India (Hammer et al, 2022).

Business mentoring or coaching is not very popular in south India. However, formal business education courses in colleges and institutes are available that predominantly cover general or overall theoretical knowledge (Sharma et al, 2022). Hence, many on-the-job business secrets, techniques, or skills are unavailable for first-time business owners or staff working in MSMEs who intend to start their new enterprises, in south India (Sharma et al., 2022). Not having proper mentoring means business owners in south India might have to take high risks and do business by trial and error. They might waste time, money, and other resources (Wasdani et al., 2022). The government-supported business support centres or associations, such as the local chamber of commerce & others, need to be better when providing practical, day-to-day support to business owners (Behera and Gaur, 2022). Government officials or bank staffs push individuals who want to start their business from pillar to post. Significantly this affects women the most and it might even kill their motivation to start thinking about their business concept or continue to pursue their business ideas (Wasdani et al., 2022). In contrast, business coaching or mentoring and custom-made programs are standard in the western world. Hence, this industry gap is addressed in the current small-scale, pilot case-study research where the women e-business owners and e-staff can have the opportunity to be coached by persons of India origin (PIO) with the assistance from the e-training programs & personal mentoring sessions (Ghosh and Pandita, 2022).

Persons of Indian origin (PIO) have made notable foreign direct investments (FDIs) in information technology-based businesses, real-estate properties – both residential and commercial, shopping malls, healthcare establishments, educational institutions, retail shop fronts, and others,

hence, making investments in e-training institutions for micro, small, medium enterprises (e-MSMEs) & feasible e-businesses is going to be another addition to their contributions to the economy, in south India (Choudhury and Gill, 2022). Thus, there is significance in the above areas covered by the current small scale pilot case study.

1.5 Industry gap & research gap

The industry gap, research gap or literature gap, empirical gap, theoretical gap, & the gap in the professional practice covered in this small-scale pilot case-study using qualitative research methodologies are given briefly in this section. This research project has obtained more information about the gaps from the 'scope & recommendations for further research' areas of the existing literature and scholarly articles as well as from observations/discussions (Miles, 2017).

Digital training for women digital entrepreneurs to build feasible micro, small and medium enterprises (MSMEs) in south India is scarce (Kelly and McAdam, 2022). South India witnessed the magical advantages of e-training and e-entrepreneurship during the Covid-19 global pandemic (Kelly and McAdam, 2022). Local businesses and communities have also appreciated these advantages; hence, the demand for digital training has quickly increased. Thus, a considerable research literature gap has been noticed in this area (Molina-López et al., 2021).

There is also a dearth of research papers or scholarly articles on customised e-training for the individual micro, small and medium enterprises (MSMEs) category involved in the outsourcing businesses that recruit female remote/virtual/work-from-home staff and are owned & managed by the women entrepreneurs, in south India (Kamberidou, 2013). When conducting this small-scale pilot case study based on qualitative research methodologies, it was noticed that general digital learning or training programs might only suit some of the women's digital businesses to make them feasible in the real world in short to mid-term (Olsson and Bernhard, 2021). Digital training had

to be tailor-made and continuously fine-tuned to become valuable and productive for the women, digital, micro, small and medium enterprises (MSMEs) in south India (Boellstorff, 2022).

Scarcity of on-the-job training and the research in this area is indicated by a few research papers and scholarly articles for micro, small and medium enterprises (MSMEs) involved in the outsourcing businesses that recruit female remote/virtual/work-from-home staff & owned/managed by the women entrepreneurs, in south India (Morris et al., 2006). This industry gap has created a significant void for women digital entrepreneurs in south India (Bartolomé et al., 2022). Hence, the related research gaps must be addressed sooner rather than later to support the women in these business communities (Bartolomé et al., 2022). Some of the training & learning programs and the related research papers & scholarly articles could be more cohesive & specific to this particular target audience's needs ((Bartolomé et al., 2022).

There is minimal research on the add-value aspects of persons of Indian origin (PIO) in south India (Enderwick et al., 2011). Hence, it is challenging to find the research studies and scholarly articles that can provide related data, information and knowledge on persons of Indian origin (PIO) (Enderwick et al., 2011). This pilot case-study research has found that there is a lack of research to support the immense potential of persons of Indian origin (PIO) in the areas of nation & community building in south India and public diplomacy in the foreign country they live & work. Apart from some limited data and information from the research papers related to foreign remittances by the persons of Indian origin (PIO) or non-resident Indians (NRIs) or overseas citizens of India (OCI) to their kith and kin in south India, not much research data/information are currently available (Enderwick et al., 2011).

Most parts of India, including many parts of south India, are witnessing a significant digital-entrepreneurial revolution in the current decade and this trend is forecasted to continue in

the next decade, as well (Shinde, 2015). However, there are only a few scholarly articles & research papers available in this area (Bhatnagar et al., 2022). Even though, the next step of preparing the ground for this major digital-entrepreneurial & green revolution and providing support for women digital entrepreneurs is gradually happening in a slow and steady manner. Hence, this gap between dreams, future forecasts and reality has created a significant research gap in south Indian states (Bhatnagar et al., 2022).

There has been a limited availability of research papers and scholarly articles on the micro, small and medium enterprises (MSMEs) involved with the outsourcing/remote working businesses that recruit female virtual/work-from-home staff and managed by the women entrepreneurs, in south India, which has created a visible gap, as well. Even though, there are few case studies on bigger information & communication technology (ICT) and business process outsourcing (BPO) companies, they might not cover the gaps associated with the women's digital micro, small & medium enterprises (eMSMEs) (Panagariya, 2022).

As discussed in chapter II – Literature review, many learning theories that were proposed in the last decades related to academic/general learning are available to the researchers/investigators. Even some learning theories that had their concepts taken from past centuries were also focused on academic or general learning. Hence, not many theories are available for training the stakeholders of micro, small and medium enterprises in the current era of digital-economic revolution (Porfírio et al., 2022).

There are no explicit and directly related learning theories from academia suitable for the digital era comprising online education, e-learning and digital training which are more complex (Estes, 2022). Blended learning and training have given rise to intricate methodologies that include educational/technological tools involving social media, online meetings and webinars, which are

some of the latest technological advances of the past few decades or years of the twenty-first century (Bizami et al., 2022). Hence, this leads to a complicated situation where-in using and adopting the existing age-old learning theories must be rethought in more detail.

1.6 Hypotheses for the current small-scale pilot case-study

Some of the following assumptions are the basis of the hypotheses that were made for this small-scale pilot case-study based on qualitative research methodologies:

1) Reliable and robust Internet/Wi-Fi connectivity is available in the tier-1/tier-2/tier-3 cities & towns of south India (Arora, 2019).

2) Female candidates with formal school & college education and sufficient computer/digital literacy are available to work for the women's digital enterprises in the tier-1/tier-2/tier-3 cities & towns of south India (Radovanović et al., 2020).

3) There is a positive trend supporting digital education, digital entrepreneurship and digital employment in south India (Gupta and Sengupta, 2021; Dana et al., 2021).

4) Women in the communities of south India are looking for ways & means of earning disposable incomes and getting financially independent. They are eager to learn & implement, simple & comfortable, ethical & legal ways of money making & money management in respectable & honourable ways that are enjoyable & exciting, while expressing their empathy & gratefulness (LI+SC+EL+MM+MM+RH+EE+EG) (Ram et al., 2019).

5) This small-scale pilot-study research has used 6D5PRFS criteria to design, develop, test and implement the feasible e-business models for creating minimum viable products (MVPs) for the women entrepreneurs in south India - i.e., 'digital' services, 'decipherable', 'dollars', 'distant', 'delegable', 'duplicable', 'e-products', 'e-projects', 'e-portal', digital/online 'e-platform' & supported

'physical' shop fronts, 'rupees', able to 'franchise' or 'licensable', & 'scalable' (Salvador et al., 2020). It is designed to work well on a smaller level. Further explanation on 6D5PRFS-based feasible business models are given in section 3.2.2.

1.7 Research purpose and questions

E-business management by women entrepreneurs comes up with challenges, especially when implementing them in the Indian scenario. In the last twenty years, enormous changes have occurred in the technology businesses, and women need to evolve themselves to become tech she-preneurs (Ghosh and Pandita, 2022). E-training methodologies, programs, and modules in this small-scale pilot case study aim to add value in specific local areas based on the research data obtained from five southern states of India, i.e., Telangana, Andhra Pradesh, Karnataka, Kerala, and Tamil Nadu.

Research questions derived from the research problems are designed to find answers or to explore further to find the most appropriate answers. Since the research questions might vary depending on the business categories, target markets, and types of business owners and employees, they are identified at various stages, and in many areas of the e-businesses, so they become relevant to the current small-scale pilot study. Similarly, research questions are put together based on the requirements of the stakeholders to cater to their needs. Explorative and casual research questions are used based on the requirements of the situations.

Some of the research questions related to e-businesses can be as follows: How to understand the needs of e-businesses to make them profitable (Nanda, 2022)? What types of e-businesses can be suitable for specific areas in south India (Nanda, 2022)? Which e-business can be tailored for developing a minimum viable product (MVP) in a faster time? When can an e-

business scale itself to cater to more customers in western countries and spread its operations to more geographical areas in south India?

Furthermore, a few research questions related to e-business owners are as follows: Which areas do the e-business owners need e-training to acquire new clients and retain their existing clients? Do e-business owners need external finance, or can they manage it on their own?

Also, other research questions concerning e-business employees are as follows: What are the minimum qualifications of employees who want to work from home, virtually/remotely, in e-businesses (Shirmohammadi et al., 2022)? How does an employer test, measure & match employees' skills, aptitude, and willingness to handle a job position? If & when do the staff need training on improving their English language skills and how to facilitate that?

Due to less opportunity to go out for physical activities, sitting in chairs & staring at the computer screens for a long time while doing virtual work and reduced exposure to sunlight may lead to health problems such as D-vitamin deficiency, obesity, eye problems, and others (Ahmed et al., 2022; Cueto et al., 2022). Hence, both the business owners and the employees of digital enterprises need to be posed with research questions regarding professional hazards and related health issues (Ahmed et al., 2022; Cueto et al., 2022).

When awareness & education are not given regarding easier accessibility of e-training opportunities, e-commerce platforms, e-business technologies & social media on affordable Wi-Fi-enabled smart mobile phones or tablets, then that scenario could restrict knowledge enhancement, professional development and global connectivity substantially; hence, research questions in this area need to be able to address the stakeholders of the businesses as well as community members, in south India (Anshari et al., 2022).

CHAPTER II

REVIEW OF LITERATURE

2.1 Theoretical framework

A focused research effort has been made in this small-scale pilot case study to connect the dots to bring out synergy with ideas to understand if e-training, e-businesses & e-employment can fill the gap of the need for persons of Indian origin (PIO) or an overseas citizens of India (OCI) or non-resident Indians (NRIs), wherein they could connect to their motherland easily & quickly and add value to the women-led e-MSME ecosystem in south India, while also serving the countries where they currently, work & live (Hall, 2019).

As such, specific theories for e-learning are unavailable; hence, the existing learning theories are transformed suitably and used in the e-training/e-learning industry (Mayes and Freitas, 2004). Research-based practices for designing, developing, or selecting ready-to-use e-training modules to facilitate e-training for the e-employers and e-staff are necessary for south India; hence, the learning theories are the basis for this strategy. Some of the well-known learning theories are briefly discussed below:

2.2 Behaviourism theories of learning

Several behaviourism theories are proposed by eminent scholars from psychology and philosophy (Weegar and Pacis, 2012). Some well-known behavioural psychologists are Watson, Skinner, Kantor, Spencer, Hull & Tolmen (Weegar and Pacis, 2012). Some revered behavioural philosophy scholars are Carnap, Quine, Wittgenstein, & Ryle (Weegar and Pacis, 2012).

Behaviourism theory of psychology uses object language to discuss the issues and the concepts utilized to build the educational theory wherein the stimulus is created based on a learning

scenario. The response from the learners is considered to reward the behaviour that aligns with the pre-defined e-learning goal (Faryadi, 2007). In contrast, a correction or punishment is used when the behaviour does not match the goals (Faryadi, 2007).

In the micro, small & medium enterprises (MSMEs) segment, rewarding positive behaviour is always acceptable; however, punishing the e-staff is replaced with overlooking the under-performance to a minimum acceptable extent and providing extra training to support and encourage individual behaviours to promote cooperation and a better result (Faryadi, 2007).

Behaviourist philosophers use meta-language to articulate the issues. Behaviourists believe learning happens from observing culture and the surrounding environment (Weegar and Pacis, 2012).

Many rewards, such as incentives for better productivity, are used in this pilot study (Weegar and Pacis, 2012). The current pilot study supports the e-learners to express themselves as excellent human beings and professionals while they are going through the process of e-training and getting ready to acquire money-making (MM) and money management skills (MM) to attain financial freedom and to become millionaires (Weegar and Pacis, 2012).

2.3 Cognitive theories of learning

There are a few cognitive theories, such as cognitive load theory, dual code theory, and cognitive theory of multimedia learning (Wong et al. 2012). Cognitive theories are based on how our mind handles the external data to process, discord, or store (Wong et al. 2012). The cognitive system of human beings consists of working memory (WM), which is used to process information and long-term memory (LTM), which in turn takes care of retaining the information (Wong et al. 2012).

As such, a single theorist or an associated group of theorists was not responsible for formulating the cognitive theory of learning (Yilmaz, 2011). On the other hand, multiple theories from several studies have added value to the on-going development of cognitivism (Pramling, 2022). Some of the well-known names in this field of cognitivism and their theories that are very much relied upon are as follows: Piaget's theory of individual cognitive development & Vygotsky's theory of social cognitive growth or zone of proximal development (Yilmaz, 2011). Other famous researchers and their theories are as follows: Festinger's cognitive dissonance theory, Spiro's cognitive flexibility theory, Sweller's cognitive load theory, Bruner's cognitive constructivist learning theory, and Tolman's theory of sign learning which is a bridge between behaviourism and cognitive theory (Yilmaz, 2011).

Cognitive load theory tries to understand the terminologies such as total working memory capacity and total cognitive load (Sweller, 2011). The total working memory capacity explores the concepts such as free capacity, germane load, extraneous load, and intrinsic load, whereas the total cognitive load deals with the germane, extraneous, and intrinsic cognitive loads (Sweller, 2011).

Learning experiences are enhanced by the intervention of sophisticated technologies for providing instructions using animations created by multimedia and spoken information, which are found to affect the cognitive abilities of the learners (Wong et al., 2012).

The current small-scale, pilot case-study project envisages that micro, small & medium enterprise (MSME) owners and e-staff need to be given e-training that comprises e-learning methodologies based on cognitive theories. Hence, smaller bits of e-learning modules are devised to impart permanent information along with frequent revisions that lead to long-term retention rather than transient information that might hinder cognition (Darejeh et al., 2021).

2.4 Constructivist theories of learning

Constructivism learning theories are extensively used while designing e-learning methodologies. As per individual constructivism learning theory, persons who want to learn will only imbibe the information automatically & actively (Almala, 2005). However, they construct the knowledge based on their previous experiences in life and connect it by using their personalized schematic representations (Almala, 2005).

The current small-scale pilot case study focused on micro, small & medium enterprises (MSMEs) in south India intends to incorporate on-the-job, e-learning methodologies that assist the e-entrepreneurs and e-staff in building knowledge & skills by associating the new skills with their previous experience (Almala, 2006). The pilot study also includes the basics of social constructivism learning theory. The learning management system (LMS) is designed to be collaborative. It creates an atmosphere to learn from others and establish building blocks by interacting with the trainers and co-learners (Almala, 2006). Many tools are used to interact with the learners and encourage them to share their knowledge with other team members (Almala, 2006). Using local languages as a part of the learning methodologies alongside English is also planned to promote the effectiveness of e-training in the selected locations of south India where the current small-scale, pilot case-study research has been carried out (Almala, 2006).

2.5 Empirical studies & discussion on learning theories

Many empirical studies have been conducted regarding the learning theories & models in the past two decades, and the recent studies over the past decade have been pretty rewarding for the e-learning/e-training industry due to the positive snowball effect that has happened in online education, learning management systems (LMS) and the birth of massive open online courses

(MOOC) in addition to the popularity of e-portals, e-platforms supported by the unexpected & enormous success of e-commerce business models on local, national and global levels, after witnessing the boom and bust in the dotcom era (Janelli, 2018).

Behaviourism learning theory is probably one of the earlier theories, and many studies have contributed to this over time; however, the later versions of this theory have been predominantly formulated on the studies done by the American Psychologist B.F. Skinner on the observable, quantifiable events and behaviours of learning, in reaction to subjective, unquantifiable, introspective psychology of the 19th century wherein he suggested that behaviours are learnt from external stimuli rather than internal forces (Skinner, 1984). Pavlov's dog is one of the famous examples of behaviourism, wherein Ivan Pavlov, a Russian physiologist, discovered that dogs would salivate even on hearing the footsteps of the person bringing the food, as though the food was placed in front of them, thus highlighting that learning can happen through rote learning, i.e., repetitions and memorisations (Brau et al., 2020). Hence, behaviourism emphasises that learning happens by enabling an environment for the actions that could be repeated; and either positive outcomes can be rewarded, or adverse outcomes are unappreciated or punished (Brau et al., 2020).

Behaviourism has been criticised that it may be suitable for teaching mathematics and foreign languages, and it may not be suitable for analytical and comprehensive learning (Budiman, 2017). Another debate on behaviourism is that this learning theory focuses predominantly on cause and effect; hence, it must be developed completely to cover the many areas of learning and human behaviour (Staddon, 2021). Human behaviour can be more complex than animal behaviour, so many other parameters must be considered to understand the resulting human behaviour that impacts learning (Staddon, 2021). Thus, behaviourism ignores the enormous and exciting internal cognitive abilities of human beings as it considers that learning in human beings happens as it

happens in animals, thereby over-simplifying the remarkable capabilities of the human mind about learning (Brau et al., 2020).

There are several empirical studies conducted on cognitive learning theory. Students handling their classwork or homework are a simple example of cognition that involves memory, thinking, and focus. Another example is gamification or game-based learning, which enables participants to absorb the course information by thinking creatively and drawing connections from other sources (Yilmaz, 2011). Participants of e-training modules based on the cognitive theory of learning are given opportunities to provide better ideas and individual opinions and deduce their conclusions by not subjecting them to any punishments or fear of making reasonable mistakes (Ramírez-Montoya et al., 2022).

Alahmad (2020) discusses that the efficient application of cognitive learning theory can be used while creating knowledge structures with usefulness and teaching clinical reasoning, which makes clinical exercise crucial to systematically organise memory, knowledge, and facilitation of recall, which clearly emphasises that teachers need to have an awareness of prior clinical experiences of the students to assess, whether they experience a powerful performance.

Cognitive learning discounts the underlying assumption that learning passively takes place and tries to emphasise that the mind or brain is actively involved while information is absorbed and processed (Yilmaz, 2011). The basis of cognitivism is the human being's ability for thought and the activity of the mind to acquire information or knowledge with the help of the five senses based on individual and collective experiences (Raj and Renumol, 2022). The cognitive theory of learning consists of studying mental processes known as schema. A representation of our surroundings is built using the schemas as the building blocks in the cognitive models (Alahmad, 2020).

Swiss psychologist Jean Piaget proposed four cognitive stages that he identified in his research studies that every child goes through in sequence one by one, and this had a profound influence on the developmental psychology of the child during his time, which guided psychologists in reimagining the ideas of cognitive development as well as some crucial questions that paved a path to newer findings in the area of cognitive development (Alahmad, 2020). However, there are criticisms that Piaget ignored the cultural, educational, and social effects on children's cognitive development in his research (Pramling, 2022). Another point highlighted against Piaget's findings was that he overlooked evaluating children from diverse backgrounds to identify cognitive development stages as his focus group was limited to certain areas (Pakpahan and Saragih, 2022).

Piaget comes with quite a few areas for improvement for Cognitive theory of learning. Behaviourists criticise them as they view that the abstract nature of the ideologies makes it difficult to clearly define them because some of the areas seen as self-critical by one study can be articulated as rational by another (Pramling, 2022). Also, there needs to be a proper understanding of the definition and application of cognitive theories on a larger scale, considering universal stages of cognitive development and biological maturation. The study ignored the effect of the social setting and the culture (Pakpahan and Saragih, 2022). One of the main disadvantages of the cognitive approach is that it is impossible to observe the processes directly, which means that a researcher could not observe memories; however, only the answers from an interview could be understood (Winstanley, 2022). Hence, when the results of the invisible processes are considered, they tend to be highly subjective and unreliable (Winstanley, 2022).

The Russian psychologist Lev Vygotsky, who conducted several research studies on child development simultaneously with Jean Piaget, has found that a profound influence on cognitive

development happens due to social interaction (Kilag et al., 2022). Lev Vygotsky debated that through continuous social interactions, children can attain the capacity to achieve a higher amount of cognitive improvement, which was overlooked by Piaget (Kilag et al., 2022). Piaget's cognitive development theory involved analysing children's dealing with physical objects. In contrast, Vygotsky took a completely different approach to illustrate that by interacting with other people's minds, children's mind develops because children tend to use language to ask questions when interacting with people around them to obtain a response from them, and this could lead to a substantial improvement in the cognitive ability of the children (Kilag et al., 2022). Although Vygotsky agreed with Piaget that children develop in stages, he proposed a newer path by closely connecting learning and development to social interactions and culture. While Piaget held the belief by 'doing things', Vygotsky debated that by 'showing things', children could be guided to learn newer things (Pramling, 2022). These theories and observations led to the constructivist movement of learning theories (Yilmaz, 2011).

Constructivist learning theory is used in a plethora of relatively modern empirical studies. One of the essential empirical studies that might assist the students, higher education providers, and suppliers of education technology was to find out how the performance of university students was affected using online learning & social media during the Covid-19 pandemic when constructivism theory of learning was extensively adopted (Alismaiel et al., 2022). The findings were promising as the students' communication with their peers and the guides, with the help of collaborative learning using social media, led to a better online learning environment that enhanced their ability to interact with others and led to increased satisfaction during the Covid-19 pandemic (Alismaiel et al., 2022).

Some authors indicate that the ideas of constructivism were first framed in the 20th century (Piaget, 2003; Vygotsky and Cole, 1978). In contrast, many other authors explain that constructivist ideologies would have been in place for over a hundred years or can even be traced back to the B.C.E. period (Von Glasersfeld, 2003).

There are several approaches to constructivist learning theory as it is emerging steadily over a period (Phillips, 1995). Phillips (1995) articulates a few areas of constructivist learning, such as individually or socially constructed knowledge, creation or discovery, and intellectual or physical knowledge construction. When used in the classroom scenario, direct teaching is not used in the constructive learning method. The teacher acts as a facilitator, mentor, or coach to the learners, so they can discover & construct their knowledge using their in-born creativity and natural abilities, with the option to interact with the social circle around them (Phillips, 1995).

There are several categories of constructivism, and the topic is better understood when viewed as a synchronised knowledge derived from the existing thinking pathways such as cognitive, social, critical, personal, and radical constructivism (Matijević et al., 2017). However, cognitive and social constructivist theories have predominantly influenced student-related pedagogy (Matijević et al., 2017).

One of the significant criticisms of constructive theory learning that warns the practitioners is that it encourages methods of pedagogy that need to be fully guided or adequately structured. Otherwise, the students might feel lost in the wealth of information available around them, and some learners might also feel annoyed and discouraged because of the same reasons (Kirschner et al., 2006). Many empirical studies have repeatedly highlighted that unguided methods of pedagogy are only partially effective in classrooms, whether it is the on-campus or online mode of teaching (Yang et al., 2022). Another criticism of constructivist learning theory is that students acquire

skills and knowledge in different ways because they view the world around them in a unique & individual manner; hence, having a uniform, standard curriculum for all the learners might not work well, and a case-by-case approach could be a better teaching methodology for teaching or training (Carlson et al., 1992).

The constructivist learning method has several practitioners as supporters, who apply it in their fields because it has an ingrained future orientation to it, i.e., it is a type of learning method that can foresee what can happen and that could provide a platform for delivering the performance that supports individual & group learning, hence, despite the various methods of learning theories, the constructivist approach can be found in all previous theories used in the field of pedagogy and didactics (Ackermann, 2001). Advocates of constructive learning theory believe that teachers or trainers who use this theory have the aim to help the learners to build their skillsets & knowledge through their creativity in an enjoyable and exhilarating manner, and the students are not made to feel the responsibility as a stress or a burden (Ackermann, 2001).

Thus, the whole idea of constructivist learning methods, when applied practically and appropriately, can empower students to become active learners in vibrant learning environments wherein they can tap into the bigger picture of the world around them rather than passive recipients within four walls of out-dated & boring classrooms (Ackermann, 2001).

Also, since constructive learning methods promote diversity compared to other theories, it can be considered more tolerant of different cultures (Ackermann, 2001).

2.6 Theories of training, empirical studies & discussion

Training modules are used to attain specific objectives in the current small-scale pilot case study as primary tools to impart essential practical knowledge & skills of simple & comfortable, ethical & legal ways of money making & money management in honourable & respectable, and

enjoyable & exciting ways with gratefulness & compassion for e-business owners and their e-staff (Milhem et al., 2014). This differs from formal academic teaching, which mainly focuses on imparting theoretical knowledge (Milhem. Et al., 2014). Hence, theories on training and their empirical studies are looked in to as a part of the literature review proposal for this proposed pilot case-study research project (Milhem et al., 2014).

Another point that needs to be clarified is the difference between the learning theories and training principles & theories and the necessity of understanding them for the current small-scale, pilot case-study research (Milhem et al., 2014). As such, the learning process not only makes a person face current problems but also makes it possible to be ready with the solutions for tomorrow's problems (Ahmad et al., 2012). In comparison, the training program has the main intention to introduce and improve relevant & specific skills or sets of skills that are planned to be used in practical applications in life or job or work or business scenarios, to discharge the functions or duties or role & responsibilities, within a short time after they complete their training program and achieve pre-defined results (Colquitt et al., 2000). In simple terms, differentiation is about individual learning and doing it with their intent, whereas training is an activity given to a person (Nof et al., 2015). In other words, individuals undergo learning, whereas they obtain the training (Nof et al., 2015).

However, the theories of learning, such as the behavioural theory of learning, cognitive theory of learning and constructivist learning theory, are interchangeably used as theories of training, sometimes with some minor adjustments for the design and development of vocational or other types of training programs. In contrast, some newer training theories & concepts have evolved (Antonacopoulou and Gabriel, 2001). Training could be provided in different types, i.e., on-the-job or off-the-job (Nof et al., 2015). The training programs are delivered with various

training methods, such as e-training, team training, mentoring, simulation, seminars, field trips & tours (Nof et al., 2015). Some of the training theories that were used in the current small-scale pilot case study are discussed below:

2.7 Learning-curve theory of training

The learning process typically starts as more complex; however, the candidates get the hang of the subject over time and become more comfortable with the skills and knowledge (Zangwill and Kantor, 1998). Hence, the difficulty is plotted higher up in the learning curve during the initial stages.

In contrast, after the initial duration, the curve starts to go down with the level of difficulty that the trainees experience (Zangwill and Kantor, 1998). Also, repetition & rehearsal at planned time intervals assists with retention as the information is stored in the long-term memory and helps to acquire a skill, or a skill set, quicker (Murre and Dros, 2015).

Hermann Ebbinghaus's experiment on forgetting, known as the Ebbinghaus Forgetting Curve, has been used to arrive at the learning-curve theory of training (Murre and Dros, 2015). Empirical studies involving flashcards to remember the information for the training assessments for the current small-scale pilot case study were used to understand the application of this training theory (Murre and Dros, 2015).

2.8 Life-long learning theory of training

Vocational training, on-the-job training, and continuous professional development (CPM) are the cornerstone of the current era of education. These concepts are derived from the lifelong learning theory of training, which highlights that learning newer skills and updating existing skills & knowledge is a lifelong journey that stretches even after the school and college education ends (Edwards et al., 2002).

Hence, tailor-made, personalized training modules managed by training & development institutes or organizations can facilitate programs as manageable projects to address the knowledge & skill gaps that happen due to the constant enhancements in technology and business practices but not caught up by formal educational institutions, yet (Kang, 2007). The training programs also address the regular bottlenecks such as age and financial issues, as the candidates can undergo training later in life when their financial conditions have improved (Kang, 2007). Thus, the lifelong learning theory of training provides an equal opportunity for everybody to acquire & enhance their skills immaterial of the variations in demographics (Kang, 2007).

Lifelong learning-training theory is used in an empirical study where a multigenerational learning program is created in vocational training institutes, and it was noticed that generational responses regarding work have lesser variations than what was generally thought about, and with the help of a democratized learning model these variations could be accounted for (Fischer, 2000; Gould, 2012). Thus, it was found that creating an environment for flexibility, i.e., short, mid & longer-term career options, by imparting institutional knowledge and enhancing digital literacy can have the much-required effect of levelling the playing field for candidates of all ages (Fischer, 2000).

2.9 Adult-learning theory of training

The training theory of adult learning highlights that the necessities of adult and younger learners vary because adults come with a vast amount of real-world experience with them, i.e., they carry years of accumulated real-life knowledge (Merriam, 2008).

Another salient factor is that adults typically have clear aims and objectives for taking up a training program, such as acquiring a particular skill for a change of career or promotion in their job (Merriam, 2008).

Adults predominantly show a higher maturity in their thinking & decision-making. Their time constraints also drive them, so they need to be able to undergo training at their comfortable speed to achieve certain defined tasks and handle specific responsibilities at the end of the training program without much intervention from the training instructors or coordinators (Merriam, 2008).

Empirical studies on the adult-learning theory of training conducted in the areas of leadership development by Allen et al., (2022) in business school training programs emphasize that cognitive training, such as lectures as the primary way of instruction is used excessively while training business leaders of tomorrow (Allen et al., 2022).

Hence, a training program model that includes five learning theories such as cognitive, behaviourist, humanistic, social cognitive, and constructivist, can be a better one in practical scenarios (Allen et al., 2022).

It is observed that training programs designed for professional purposes, such as in medical and military training, use a model involving five or more learning theories so they can obtain better outcomes regarding the quality of leadership & execution (Allen et al., 2022).

2.10 Literature review on poverty and the need for money making & money management skills (MM&MM) for women, in south India

Nobel laureate in economical sciences, Abhijit Banerjee, along with his co-researchers, has conducted research studies on the influence of a Micro Finance Institution (MFI), Spandana, on the lifestyles of women in the slums of Hyderabad, a tier 1 city, in south India. Banerjee et al., (2015) conducted a series of studies in the treatment areas and comparison households in the subject locations for about 3.5 years. Coincidentally, a part of this current pilot case study also focuses on the women enterprises of Hyderabad, India (Kaibarta et al., 2022).

However, a major part of the programs in the current small scale pilot case study has been designed for digitally-literate and duly educated women between the age group of 20 years and 45 years from the higher middle class, middle class or lower middle-class suburbs of Hyderabad city who can make sensible & responsible decisions and not specifically appropriate for the computer illiterate & relatively un-educated women in the slum areas (Jungari et al., 2022).

Banerjee et al., (2015), with the help of the baseline and end-line studies, interpreted that there were no changes in the developmental outcomes such as health, education, or women empowerment based on their randomized evolution of the effects of providing micro-credit to a group of women by Spandana, a micro finance institute (MFI), who had opened their branches in half of the 104 slums of Hyderabad, India. A group of six to ten women was given micro credits of up to Rs 10, 000 for about 50 weeks (about 11 and a half months) with an interest rate of 12% per annum which works out to be 24% annual percentage rate (APR), on a non-declining balance (Banerjee et al., 2015). There was no strict requirement in Spandana's loan application that the women needed to use the micro-credit to do business or pretend to be doing it (Banerjee et al., 2015). Hence, it was found that the women, who took these micro-credit loans, used them to buy durable goods (Banerjee et al., 2015).

These women in the slum areas did not & generally do not have the proper knowledge, skills or access to training to start a business or join a good job (Banerjee et al., 2015). Evidently, they did not have awareness, or no guidance was given about the feasible business models, cash flow requirements and income generation methods (Banerjee et al., 2015). Hence, over a period, it was realized that these micro-credit funding models did not work as they were previously envisaged, they would (Banerjee et al., 2015).

The significant industry gap, in this case, was related to the skills & knowledge required to build feasible business models and custom-made training methodologies, to learn & implement, simple & feasible, ethical & legal, honourable & respectable (LI+SF+EL+HR) ways of money-making (MM) and money management (MM) that are exciting & enjoyable (EE) with gratefulness & empathy (GE) (Jungari et al., 2022). Also, the loan amount of Rs 10,000 was too little to do a viable business in India (Jungari et al., 2022).

When the Spandana website was visited recently, it was noticed that they have currently assigned Rs 80,000 as the loan amount, i.e., an eight times higher amount, for this same loan – Joint Liability Group Loan (JLG Loan) that was designed to assist women, previously.

Hence, the comparative information from this research study are suitably utilized, in this current small scale pilot case study to formulate the e-training methodologies, programs, and modules for the target audience, in south India, according to their needs.

2.11 Literature review on the persons of Indian origin (PIO)

In this pilot case study research, an effort is made to observe, identify and acknowledge one of the social & economic phenomena of this century in the Indian subcontinent, i.e., persons of Indian origin (PIO), and how a section of the Indian population could obtain a formal university education in local colleges with a single-minded determination to go overseas to the developed countries and earning dollars or a higher valued currency with a better exchange rate through jobs or businesses, kick-starting the process of escaping poverty, overcoming lower medium class & poor class mindset, envisioning several ways to venture out of the mediocre lifestyle and attaining a life of financial freedom, affluence & richness - for themselves as well as their family members, back in India (Sharma et al., 2023). This small-scale, pilot case study also endeavours to explore

how the same or similar phenomenon could be duplicated and achieved by women, with the help of digital tools & ICT technologies tools by being in south India, from the comfort of their homes or even from anywhere in the world, remotely/virtually, through e-business models that are facilitated by e-training programs, enabled by persons of Indian origin (PIO) (Ferriss, 2011; Singla and Sriram, 2022).

Many suburbs in the middle-class and lower middle-class areas in south India have been successfully able to demonstrate that the parents had a clear & firm goal of educating their children in good institutions and sending them to the developed countries such as the USA, Canada, the UK, Europe, & Gulf countries and others, for higher studies or jobs (Jijin et al., 2022; Gopinath and Poornappriya, 2022). These persons of Indian origins have been able to work hard, save money and send foreign remittances to their parents and other family members, thereby giving them a stable, healthier & better lifestyle in their homeland (Khusaini et al., 2022).

There is a saying in the local communities in Indian suburbs of tier-1, 2, and 3 cities/towns that are known to be good, secure, affluent, and stable that there must be at least one child or one family member in these homes, living in a developed country and sending foreign remittances to their parents, close family members or extended family members regularly or when the need for extra money arises for any unexpected reasons (Kaur, 2022).

Hence, this is a proven and time-tested formula for financial and lifestyle success for two to three generations in south India (Kaur, 2022).

2.12 Literature review on foreign remittances to India from persons of Indian origin

Deheri (2022) has revealed the findings of the investigations in the scholarly article published in the Indian economic journal, which covers information on how the remittances from persons of Indian origin (PIOs) or non-resident Indians (NRIs) or overseas citizens of India (OCI)

influence the financial development in India. autoregressive distributed lag (ARDL) and vector error correction (VEC) models were used to understand the short and long-run dynamics of the effects of foreign remittances by persons of Indian origin on the Indian economy from the year 1980 to the year 2018 (Deheri, 2022). The impulse response function (IRF) and forecast error difference decomposition (FEVD) analysis were also used to comprehend the dynamic reaction of financial development, in India, to a given shock to the inflow of foreign remittances from persons of Indian origin and other related variables (Deheri, 2022).

This current pilot study on e-learning methodologies enabled by persons of Indian origin for women-led e-businesses in south India would like to agree with the findings of the investigation from Deheri (2022) that more foreign remittance inflows to India must be encouraged by creating formal channels that are not only ethical and legal but also easier and quicker.

When the number of persons of Indian origin (PIO) who use the channels such as facilitation & funding of e-training methodologies designed for women-led e-businesses & their stakeholders in India increases, that can directly influence the improvements in the economic growth on the grassroots level and boost the financial development while indirectly adding value to the overall economy (Jijin et al., 2022).

The impulse response function (IRF) and forecast error difference decomposition (FEVD) analysis were also used to comprehend the dynamic reaction of financial development, in India, to a given shock to the inflow of foreign remittances from persons of Indian origin and other related variables (Deheri, 2022).

2.13 Literature review on traffic congestion & air pollution in major cities of south India

Traffic congestion in major cities and towns that are giving rise to major research problems such as air pollution, road accidents, and mental stress to pedestrians as well as vehicle drivers are studied minimally, in this small-scale, pilot case study (Rawat et al., 2022).

Air pollution in Indian cities has reached such high levels that they are quite unbearable and even dangerous to health (Rawat et al., 2022). It is increasingly getting riskier and more stressful driving/riding vehicles on the roads of inner cities and towns of India (Rawat et al., 2022).

Government departments that manage the road traffic and related services such as police, road maintenance, and roadside/pedestrian walking areas, seemed to have lost the plot and are struggling to manage this infrastructure on minimum acceptable standards (Rawat et al., 2022).

2.14 Summary

At first, when we observe India on its socio-economic level, we see a considerable disparity between individuals on their income levels and lifestyles (Endow and Mehta, 2022). Hence, organizing India in this specific area of bridging the gap in socio-economic disparity can be one of the biggest business problems to address & solve, as well as one of the significant business opportunities of this era (Behera and Pozhamkandath, 2022). For the same reason, it could be one of the most critical areas to conduct detailed research to address this seemingly colossal research gap in a step-by-step manner, focusing on one specific & defined area at a time, using e-training methodologies and modules, as a vehicle for adding value to the positive & dynamic socio-economic transformation in south India (Braesemann et al. 2022).

Quite a few research studies cover the overall e-learning methodologies and theories involved with it. Moreover, many research literature/papers on the global levels address the e-training methodologies for MSMEs (micro, small, and medium enterprises). Also, some relevant research literature/papers on the national level in India cover various areas of e-training for MSMEs (micro, small, and medium enterprises) and the corporate sector. However, most of them focus on the northern states of India, where the capital city of India– Delhi, is situated. Hence, due to the social, economic, cultural, and psychological differences and the necessities of tier-1 and tier-2 city/towns of southern states of India such as Karnataka, Telangana, Andhra Pradesh, Kerala, and Tamil Nādu, there is a requirement for further research studies and research literature that focus on the women in these specific areas. Hence, this pilot study has the main aim of addressing this research literature gap by conducting research that can be representative or indicative of the e-training needs for the digital micro, small, and medium enterprises (e-MSME) sector in tier-1 and tier-2 city/towns of southern states of India, with a particular focus on women digital entrepreneurs & their e-staff in the age group of 20 to 45 years, who are duly educated and sufficiently computer/digitally literate, in order to understand if work-from-home or virtual work could be facilitated for them, in a realistic and valuable manner. Another research gap that this pilot case study aims to fill is about the e-training methodologies and modules for e-businesses since most of the research literature or papers are relevant to e-training methodologies for conventional businesses and not related to e-businesses or digital businesses led by women entrepreneurs. Yet another research literature gap covered in this small-scale pilot case study is about persons of Indian origin (PIO) from developed countries enabling e-training to women digital entrepreneurs who intend to do e-businesses or who are already running an e-business in south India.

Although it might seem contradictory to the current research topic, this small-scale pilot case study might also cover areas that involve empowering men. However, indirectly, by enabling e-learning opportunities to develop skills in remote/virtual, work-from-home methodologies, so they can also participate and take on responsibilities in household work and carry out many facets of home management (Obioma et al., 2022). Because women empowerment does not just mean that women learn more skills, improve themselves professionally, take on more responsibilities, and do extra work (Obioma et al., 2022). Because when that happens, women might become too exhausted; hence, they tend to neglect or lose their focus or postpone some of the areas that are inherent to women, such as childbirth, providing motherly care to the children, keeping harmony in the family and community via social bonding and others (Obioma et al., 2022).

The current small-scale pilot case study is not merely intended to be a theoretical or research exercise; however, it aims to continue further and implement the research outcome in the real world of digital micro, small, and medium enterprises (e-MSME/e-business) in south India. Hence, a definitive, full-scale research study is envisaged to be conducted to facilitate a more accurate, reliable, and adequate level of research outcome, after the completion of the current doctoral studies.

This pilot study is mindful of addressing various parameters that are exclusive to the current context, in south India, such as:

Availability of internet/Wi-Fi and technology tools across tier-1, tier-2, and tier-3 cities in India have improved, supporting e-businesses, e-employment, and substantial foreign direct investments (FDIs) (Bajpai, 2009). As the noble laureate Amartya Sen, rightly illustrates in his globally well-known literary papers/books, these market developments could lead to individual freedoms (Sen, 1993). The ‘Make in India’ movement is increasing its momentum, and many

major multinational companies (MNCs) have established their presence and are making considerable foreign direct investments (FDI) in India (Agrawal, 2018).

Massive infrastructural projects in the transport sector (highways, flyovers, roads, and railroads, local & international airports) & telecom sector are being implemented much faster. The Indian outsourcing & offshoring sector are multiplying and expanding to cover many areas such as IT, healthcare & engineering (Joshi and Raman, 2022).

Not having a reliable business model to build a business could pose problems for new women entrepreneurs. Entrepreneurs get carried away with business ideas for emotional reasons (Stalmachova et al., 2022). Also, business owners get bogged down with routine business work and do not have the focus or the knowledge to create good, feasible business models; hence, some of the current business models are unable to face problems in the changing world (Stalmachova et al., 2022). A business model that does not have a goal to create and maintain an MVP (minimum viable product) for their business and to generate a healthy cash flow with sustainable, reliable management systems & processes can go through many hardships as cash reserves & morale of the stakeholders can be adversely affected; hence, this is one of the research problems that needs addressing on a high priority (Awan and Sroufe, 2022).

Indian women are dreaming & aiming bigger. They are participating & leading in most of the industry/organization segments, nationally & globally (Dreze and Sen, 1999). Hence, an ecosystem is being created with the right mindset from governments and communities – both local & global, which is more conducive to women's empowerment (Amarnath & Ghosh, 2005).

India is noted as one of the world's largest democracies (Kamdar, 2008). India is also one of the most highly populated countries in the world, with an approximate population of 1.42 billion

people as of November 2022, i.e., about one in six people in the world live in India, which is a very substantial number. This information is taken from countrymeters.info, 2022 and from the ADHAR department of India.

Mukesh Ambani is 10th in the Bloomberg rich list as of November 2022 (Kumar and Anand, 2022). It is interesting to understand the meteoric rise and rags-to-riches story of the Ambani group during the past few years and what they could achieve in one or two generations using mere ideas, smartness, and intelligent application of both, supported by single-minded determination and consistent love for creativity & innovation (Bansal, 2016).

Hence, hopes are rising within India's business communities, entrepreneurial ecosystem, and the Indian diaspora. All the above findings and parameters apply to south India, as well, in varying degrees. Thus, the current small-scale pilot case study has been able to focus on and understand the unique parameters as much as possible within the scope of this research.

Through this literature review, the researcher would like to conclude, that the current small-scale pilot case study has been able to actively collect the primary & secondary data required to do the qualitative analysis and put together the information & relevant knowledge resources to illustrate that e-learning methodologies could be confidently applied across the target audiences, such as the women-led, digital MSME owners and e-staff in south India, & to guide them through an exciting journey to achieve the pre-defined goals on the individual, business, and community levels, which could be guided by persons of Indian origin (PIOs) (Jijin et al., 2022).

CHAPTER III

METHODOLOGY

3.1 Overview of the research problem

Indian communities are leapfrogging technologically, socially, culturally, and in many other areas due to the qualities they adopt, such as creativity, innovation, and leadership (Verma et al., 2022). Hence, these newer social ecosystems must be supported in various ways that are currently unknown. There is a need to build these ecosystems methodically and systematically to reach the people on the grassroots level (Yap et al., 2022). Necessity for more focus on the required level of this responsibility by the citizens, government departments, and community leaders is the cause of problems.

Many unexpected business problems were created during Covid-19 and the aftermath for women entrepreneurs in south India. Most of these business problems were unheard of before because of the global pandemic that posed unprecedented catastrophes across various industries (Trivedi, 2022). Some women-led businesses faced huge financial problems, whereas others were wiped out because the businesses had to be shut down during the lockdown for more than eighteen to twenty-four months at a stretch (Trivedi, 2022). Problems in women-led food-related businesses were much more drastic because of the perishable nature of the stock (Trivedi, 2022).

The problems related to disturbances & distractions at home, as women might think they can handle multi-tasking while working from home (Tayal and Mehta, 2022). Hence, focusing on job responsibilities may become problematic when women need help to organize themselves and manage their household and office or business-related work (Tayal and Mehta, 2022).

Women might feel overworked and burn out as they end up doing office work and housework within a limited period (Tayal and Mehta, 2022). This overworking might lead to physical and mental health problems (Ma et al., 2022).

3.2.1 Operationalization of theoretical constructs

A research case study can be qualitative or quantitative according to the purpose of the study and how it is designed (Hollstein, 2011).

This small-scale pilot case study completely relies on qualitative research methodologies (Hollstein, 2011).

There are many qualitative research designs, such as phenomenological studies, ethnographic studies, grounded theory studies, historical studies, case studies, pilot case studies and action research studies (Hollstein, 2011). The current research uses case studies, specifically the small-scale pilot case-study design.

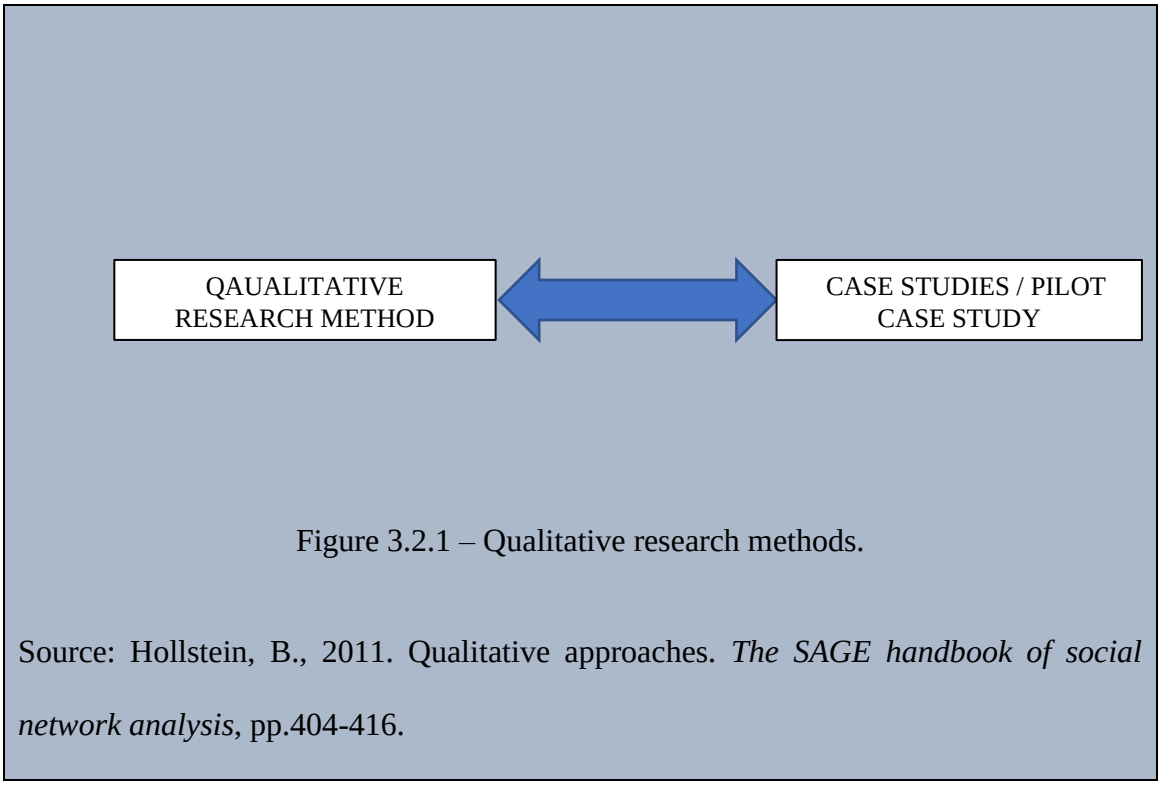

Figure 3.2.1 – Qualitative research methods.

Source: Hollstein, B., 2011. Qualitative approaches. *The SAGE handbook of social network analysis*, pp.404-416.

Stakeholders of women's digital enterprises between the age group of 20 years and 45 years are asked to take part in the case studies, which involve the owners, management staff or employees of the micro, small & medium enterprises (MSMEs) from selected locations of south India. Detailed observations of individuals and teams, physical resources, systems and processes of organizations are done (Hollstein, 2011). Content analysis deciphers conversations or information gathered based on pilot case studies (Hollstein, 2011). Pilot case study was used to research the micro, small & medium enterprises (MSMEs) in south India as organizational entities used in the 6D5PRFS feasible business models. Exploratory approaches are used at the outset to understand the information unavailable and to explore with open-ended questions, but not necessarily to conclude the collected data (Ponelis, 2015). However, later in the current pilot case-study research, an interpretive approach was used, which was based on questioning the stakeholders of the Micro, small & medium enterprises and observing the various functions of the women's digital businesses in south India to obtain in-depth information about the research topic (Ponelis, 2015).

Triangulation was used in this pilot case study as it gathers the data from different methods such as observations and interviews to collect the primary data in this qualitative research to develop an overall understanding of the research topic (Heale and Forbes, 2013).

In addition, an in-depth literature review is done to understand the principles and theories behind e-learning and e-training used in this pilot case study. This pilot case study also experimented with training methodologies to test their appropriateness to the target audience. As more than one approach is used to research a question, in this pilot case study, triangulation helps in integrating the data received from various sources (Heale and Forbes, 2013). This small-scale pilot case study uses exploration and interpretive approaches to collect and analyse the data. This

way of obtaining data from a combination of approaches can give a much better comprehensive outcome than one of the approaches that could have been done independently. Therefore, there is a necessity to use triangulation with this small-scale case study pilot project's research methods, approaches, and designs (Heale & Forbes, 2013).

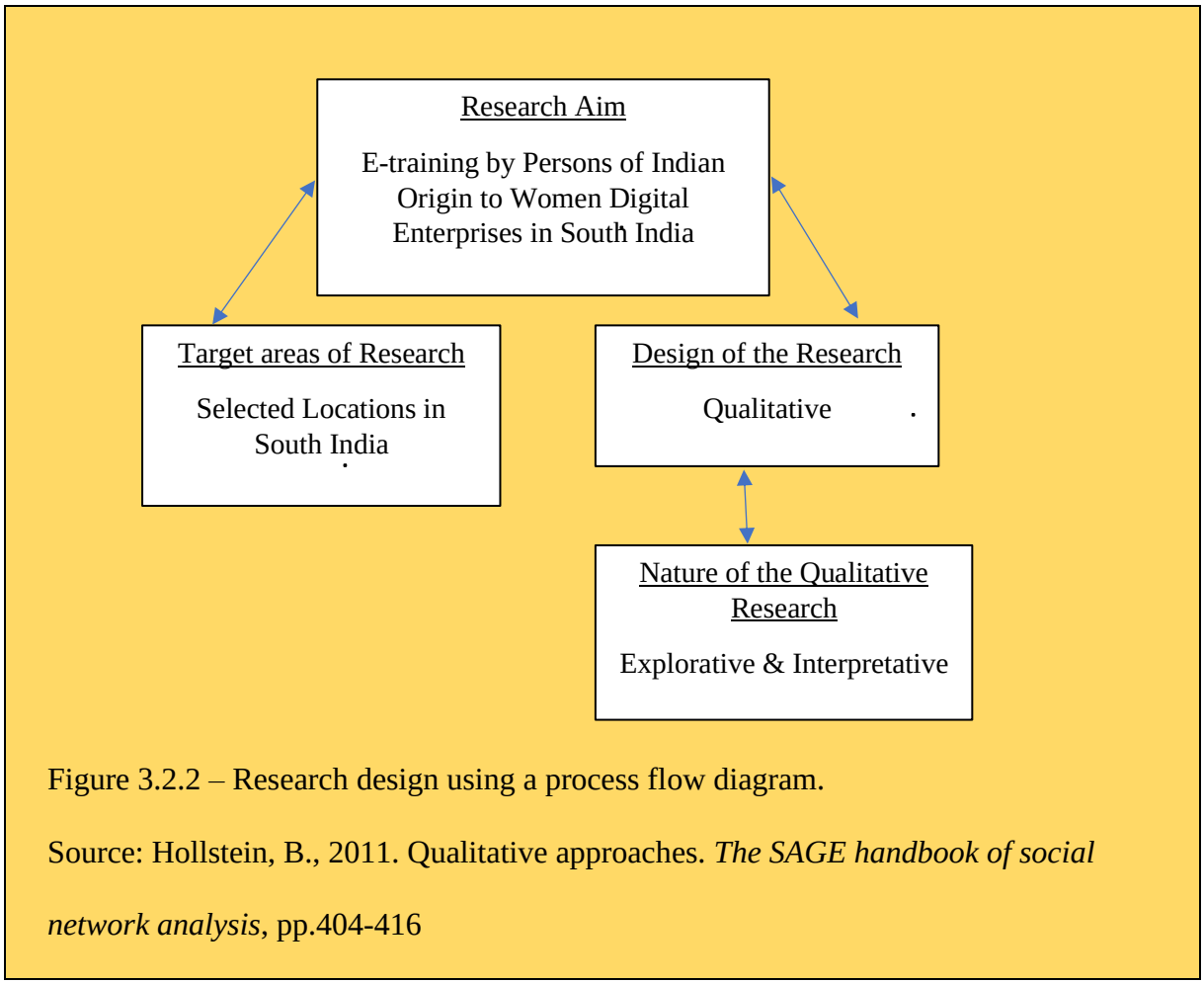

Figure 3.2.2 – Research design using a process flow diagram.

Source: Hollstein, B., 2011. Qualitative approaches. *The SAGE handbook of social network analysis*, pp.404-416

When triangulation is said to be used in the current pilot case study research, that means several forms of datasets, theories, methods, and investigations are incorporated to address the research questions (Heale and Forbes, 2013). Triangulation is used as a research strategy that can assist this small-scale pilot case-study research in improving the credibility, upgrading the validity

of the findings, and addressing biases involved with the research work, if any (Heale and Forbes, 2013).

There are four types of triangulation methods that are predominantly used in research projects: method triangulation, investigator triangulation, theoretical triangulation, and data source triangulation (Heale and Forbes, 2013).

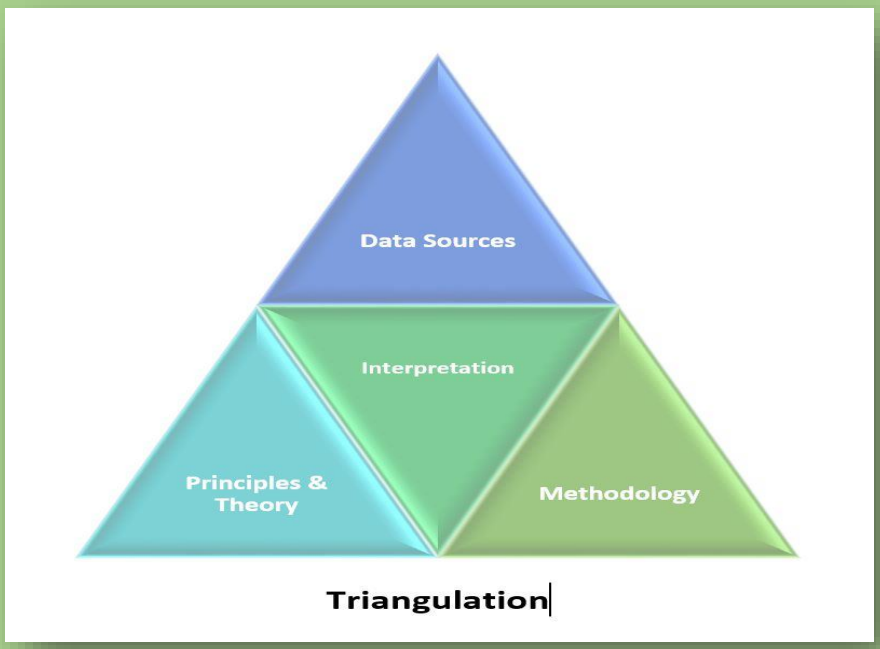

Figure 3.2.3 – Triangulation for data collection using different methods.

Source: Heale, R. and Forbes, D., 2013. Understanding triangulation in research. *Evidence-based nursing*, *16*(4), pp.98-98.

3.2.2 Brief explanation on 6D5PRFS-based feasible business models

The pilot case study research involves formulating e-training methodologies and custom-made e-training modules to build the minimum viable products (MVPs) to the business models for e-businesses or digital MSMEs around the 6DRSF5P criteria (Malhotra, 2014; Singh and Paliwal, 2017).

6D5PRFS-based enterprise modelling criteria is explained briefly as follows: 'digital' services, 'decipherable', 'dollars', 'distant', 'delegable', 'duplicable', 'e-products', 'e-portal', digital/online 'platform', 'e-projects', 'rupees', able to 'franchise' or 'licensable', 'scalable', and 'physical shop fronts' areas (Khatri, 2019). Hence, the e-business model needs to have one or more of the 6D5PRFS criteria to be included in the pilot case-study research and they do not need to be necessarily in some sequence (Malhotra, 2014). That is, the online business or e-entrepreneurship for women in south India can be modelled to make it more interesting, attractive, appealing, accessible, resilient, reliable & sustainable by incorporating 6D5PRFS features, so that it can be predominantly 'digital' and women can work-from-home remotely/virtually that are involved with service or information based or outsourcing or web-based businesses (BPO – business process outsourcing or KPO – knowledge process outsourcing); 'decipherable' i.e., it is small (or big) enough for a women entrepreneur & their female staff to have a good clarity and understanding of every part of the business model; that can generate revenues in 'dollars' or a higher value currency which is achieved by doing business with the clients from the English-speaking, developed countries that have stronger currency conversions to Indian rupees such as UK (Rs 92), Switzerland (Rs 91), USA (Rs 85), Canada (Rs 61), Ireland (Rs 79), Australia (Rs 56), Singapore (Rs 57), New Zealand (Rs 48), Malaysia (Rs 18), China (Rs 12), Hong Kong (Rs 10), Mexico (Rs 4), & south Africa (Rs 5), and others, approximately, as on December 2022; the e-business model

is envisaged in such a way that the e-business owners as well as e-employees are able to work ‘distant’ to each other or from the main business place, if/where that exists - virtually, remotely, in co-working places or from their homes i.e., so the distance does not really matter, making them location independent; good training & development methodologies need to be ingrained in to this work-from-home business model so each job position or function can be ‘delegated’ to the staff in a systematic manner; the business model is supported by robust systems & processes, so it can be comfortably ‘duplicated’ to build, same or similar businesses, by suitably trained professionals;

‘E-products’ such as e-books, educational resources, training courses, e-manuals, online diaries for specific professionals, and others; or SaaS – Software as a service: simple, easy-to-use, software packages or apps on a monthly or yearly subscription basis for personal or business usage could be added after the digital services category works well (Malhotra, 2014).

An extensive online ‘portal’ can be built to support the commercial and social areas of this work-from-home business to create an even better & bigger impact on the local and global communities (Malhotra, 2014).

A larger & elaborate online ‘platform’ could act as an umbrella to hold several related and supportive, work-from-home e-businesses in synergy to reach out and create broader service offerings (Malhotra, 2014).

Software & technology based ‘projects’ with the support from excellent and economically available resource-base in tier-1, tier-2 and tier-3 towns of south India, are utilized to facilitate further add-value to the long-existing software & technology industry segment and knowledge process outsourcing (KPO) ecosystem of south India (Malhotra, 2014).

This work-from-home, remote, digital business model does have the option to include the ‘physical’ products, shop fronts, or brick & mortar entities where necessary, even though these

types of capital-intensive investments that can pose higher risks are consciously kept at the end. at this stage of the e-business, probably it can be tested for the target market being India, where the number based revenue from the ever growing population in India (approximately, 1.417 billion as in December 2022) would be generated in ‘rupees’ alongside the original model, wherein revenue generation was in dollars, alone; women business owners who use this work-from-home, web-based business model do have an option to ‘franchise’ or ‘license’ it to other capable and willing women so that they can be financially empowered, as well; this digital business is envisaged in such a way that a minimum viable product (MVP) or a prototype for a ‘scalable’, work-from-home business model is prepared, so if & when the women entrepreneur wants to grow the business, further investments can be raised from banks or private investors, although this business model needs a very low initial investment and could grow organically without the need for any outside investments or funding (Malhotra, 2014). Furthermore, this e-business model could even be used to launch the women’s enterprise as a public limited company, and later it can be listed on various stock exchanges across the world.

3.2.3 Brief explanation on the minimum viable product (MVP) approach

In the minimum viable product (MVP) approach using the minimum features, a good value is provided to the customers. These customers are part of the early product development cycle and are typically considered early adopters from whom the feedback is collected so a better product with more features or better service delivery can be made for future users or a broader user base (Lenarduzzi and Taibi, 2016; Moogk, 2012).

Another significant characteristic of an MVP is that it has a sufficient value that people can use or buy it initially (Lenarduzzi and Taibi, 2016).

In this small-scale pilot case study, a minimum viable product (MVP) is an overall digital business model itself, which shows clear future feasibility to keep the early adopters (Moogk, 2012). It enables a feedback system to direct further innovation and improvement of the product or service (Lenarduzzi and Taibi, 2016). So, the critical characteristics of a women's digital enterprise model that can be considered as a proven minimum viable product (MVP) are given below (Lenarduzzi and Taibi, 2016).

1. It is smaller in scope, quicker and more economical.
2. It only creates a smaller and more manageable negative impact when the product or service that is based on an initial idea is put into the market to see what kind of response it receives.
3. It is prepared to know if the product or service is feasible when done on a bigger scale.

3.2.4 Macro-economic trends – GDP, GDI & PCI in south Indian states

Gross domestic product (GDP) which is the complete market value creation in any economy, in other words, the total of the value-addition from good and services generated in a specific geographical boundary in a specific time (Singla, 2019). It might be a lower quality of measurement of the society, although, it is extensively used by the practitioners around the world (Van den Bergh, 2022). The GDP for Karnataka for the year of 2022-23 is Rs 224.1 billion and the per capita income, (which is the amount of income earned per head in a specific area), has increased from Rs.2, 65,623 to Rs. 3, 01,673 during the same period. This data is taken from the 45th edition: 2022-23 of economic survey of Karnataka state Government. Similar data from Telangana state, GDP is Rs 132.7 billion, and Per Capita Income is Rs.3.17 lakh (Rs 317000), which is Rs. 1.46 lakh (Rs 146000) higher than the national per capita income in 2022-23 (Rs 1 Lakh = Rs 100000). This data has been collected from Telangana state Government's socio-

economic outlook 2023. Similar data from Andhra Pradesh state, GDP is Rs 144.9 billion and the per capita GSDP of Andhra Pradesh in 2021-22 (at current prices) is estimated at Rs 2, 19,518. This data is collected from the Andhra Pradesh Budget Analysis 2023-24, Andhra Pradesh State Government, PRS Legislative Research, and Institute for Policy Research Studies. Similar data for Tamil Nadu state, GDP is 248.48 billion and the per capita income of Tamil Nadu in 2020-21 (at current prices) was Rs 2,49,517; 5.4% higher than the corresponding figure in 2019-20. In comparison, per capita GDP at the national level was Rs 1, 46,087 in 2020-21 (at current prices). This data is taken from Tamil Nadu State Government, PRS Legislative Research, Institute for Policy Research Studies. Similar data from economic review 2022-23 from Kerala state planning board, Government of Kerala states that GSDP as Rs 113 billion and the per capita GSDP at constant price in Kerala was ₹1, 62,992 in 2021-22, and the corresponding national average was ₹1, 07,670. There is not much relevant data available on the gross domestic investment (GDI) in the respective states of south India. The gross domestic income (GDI) is the total income received by the complete segments of an economy within a territory (Singla, 2019). The GDP is a very commonly cited statistic measuring the economic activity in south India, and the GDI is not well-known (Singla, 2019).

3.3 Research purpose and goals

One primary purpose of this pilot case study is to design, develop, test & be ready with e-training methodologies and related e- training modules to build feasible e-businesses or an e-business cluster in the outsourcing or offshoring industry that can pay a minimum salary of one million rupees a year, to their e-employees, in the states of south India.

One million Indian rupees, i.e., ten lakh Indian rupees, is approximately USD 12,155.50 because USD 1.00 is about Rs 82.27 (as on 08th Dec 2022) (Khare and Bhatt, 2022). Also, one

million Indian rupees is about CAD 16,589.90 because CAD 1.00 is about 60.29 (as on 08th Dec 2022) (Khare and Bhatt, 2022). Similarly, one million Indian rupees is about AUD 18,076.50; AUD 1.00 is about Rs 55.29 (as of 08th Dec 2022) (Khare and Bhatt, 2022). Also, one million Indian rupees are about NZD 19,079.40 because NZD 1.00 is about 52.40 (as on 08th Dec 2022). Similarly, one million Indian rupees is about GBP 9.969.49 because GBP 1.00 is about 100.31 (as on 08th Dec 2022) (Khare and Bhatt, 2022). Also, one million Indian rupees is about Ireland-EUR 11,557 because Ireland-EUR 1.00 is about Rs 86.52 (as on 08th Dec 2022) (Khare and Bhatt, 2022). Another purpose is to plan and initiate the e-training methodologies & e-modules for the creation of Minimum Viable Products (MVP) or prototypes for building about a dozen feasible women-led e-business models and completing an outline for at least one of them for pilot testing or pilot case-study purposes (Lenarduzzi and Taibi, 2016).

3.4 Research questions

On a higher level, one of the research questions of this pilot case study can be to understand how to initiate the e-training methodologies & e-modules for the creation of Minimum Viable Products (MVP) or prototypes for building about a dozen feasible women-led e-businesses and completing at least one of them for pilot testing or pilot case-study purposes (Lenarduzzi and Taibi, 2016)?

Another important research question of this pilot case study can be to understand what are the requirements of local people in western, developed countries postcode by postcode and understand how they could be connected with various places and people of India, post code wise to facilitate the exchange of ideas, e-services and e-products that is geared towards outsourcing or off-shoring or remote work (Erickson and Norlande, 2022)?

Some of the interview questions and guidelines for interviews & observations with the research participants for the work-from-home or co-working spaces are given below, under main categories such as e-businesses, women digital enterprise owners, female e-employees & persons of Indian origin.

3.4.1 Research questions on digital businesses

1.1) Was doing a 6DRS5P, feasible, business model-based, digital enterprise, from home profitable?

1.2) Has managing a 6DRS5P, business model-based, digital enterprise from home feasible or not?

2) Has a 6DRS5P - viable business model-based, women digital enterprises facilitated a situation where the business owners & staff can reduce going out on the busy & congested Indian roads? If more and more citizens follow this as their primary occupation, can it minimize overall air pollution? Also, can it reduce the number of women digital business owners exposed to the adverse effects of air pollution?

3.4.2 Research questions for women digital business owners

1.1) Has the time taken to travel to and from workplaces/offices and the time taken to get ready has reduced/saved by switching to the 6DRS5P, feasible, business model-based, digital enterprises and starting to work-from-home or remotely/virtually or from co-working spaces, near the home?

1.2) Were the 6DRS5P, feasible-business model-based, digital training programs provided to the business owners worthwhile, and the trainers acted helpful?

2.1) Was the 6DRS5P – feasible-business model-based, digital training essential?

2.2) How easy & comfortable was it to work from home along with the family members & friends (kith & kin) while managing the 6DRS5P - viable business model-based, digital enterprises, during the initial stages of starting the business, i.e., three months to six months and up to one year?

3.4.2 Research questions for digital business - Female employees

1.1) How easy and comfortable was 6DRS5P, feasible, business model-based, customized, on-the-job, digital/online training designed for the position?

1.2) Is an Unlimited internet/Wi-Fi facility with sufficient speed and strength to work on digital service-based tasks, assignments, and projects from home or co-working space available?

2.1) What is the level of competence in using computers and digital communications?

3) Can customized, on-the-job activity be effectively provided with the help of digital methods, like face-to-face training in the offices, and a complete training program could be facilitated online?

3.1) Can a 6D5PRFS, feasible, business model-based, digital enterprise create an environment where the women e-staff/employee can find an occupation in tier-2/tier-3 towns and add more value to the local economy of the surrounding areas?

3.4.3 Research questions to persons of Indian origin (PIO)

1.1) What was the central problem of starting a traditional brick-and-mortar business in India while staying overseas in a developed (western) country?

1.2) What were the significant advantages of starting an e-business in India while staying overseas in a developed (western) country as a non-resident Indian (NRI)?

2.1) What were the major problems of dealing with the stakeholders of women's digital enterprises in south India?

2.2) Does providing digital training to women digital enterprises in south India assist them in starting and establishing a feasible e-business?

2.3) Are the stakeholders of women digital enterprises in south India training ready, and their level of computer literacy and education is suitable enough to deliver the digital training on 6D5PRFS-based business models?

3.1) What are the problems for persons of Indian origin regarding going to India for good or going there longer to get involved in building 6D5PRSF business model-based, digital organizations?

3.2) What are the advantages for a person of Indian Origin in going to India for good or going there for a longer term to get involved in building 6D5PRFS business model-based, digital organizations?

3.3) If the persons of Indian origin decide to go to India for good or a longer term to get involved in building 6DRSF5P business model-based, digital organizations, how long would it take to adjust to the local conditions and deliver the outcomes?

Further details on research questions related to digital businesses, women's digital business owners and their female employees are covered in the Chapter IV – Results and Chapter V – Discussion.

Also, further details on research questions related to persons of Indian origin (PIO), digital training providers and feedback from overseas clients are covered in the Chapter IV – Results and Chapter V – Discussion.

3.5.1 Research design

The current pilot case study is conducted on a small-scale basis, using qualitative methodologies with the participation from a total of 275 volunteers. The primary and secondary data are collected on a real-time basis from around 200 participants of female stakeholders i.e., 100 employers and 100 employees between the age group of 20 years and 45 years belonging to the e-businesses or the e-business clusters from selected places of south India who provide digital transformation through e-services and e-products, to niche high net-worth businesses, high performing professionals, government organizations or non-governmental organizations, in developed countries such as Australia (Shetty et al., 2020). This pilot case study also included data collection and qualitative analysis from 25 digital training providers, 25 persons of Indian origin and 25 overseas clients using the outsourced services from the women's digital enterprises in south India (Attia, 2022; Jeske, 2022).

The current pilot case study has used qualitative methodologies such as interviews and personal observations and collected primary & secondary data using instruments such as semi-structured or unstructured questionnaires (Attia, 2022; Jeske, 2022). The timeline of the case study research was planned from the start of November 2022, for four and a half months (about 18 weeks) until the mid of March 2023 to collect the research data for analysis from the participants with good college or school educational qualifications and sufficiently computer/digitally literate, that include stakeholders of the women-led e-businesses, who were asked to undergo e-training programs with various methodologies and custom-made modules for building feasible Micro, small and medium enterprises (MSME) e-business models, while working from home or in co-working spaces (Attia, 2022; Jeske, 2022).

The information for the dissertation or thesis document is collected from the original, comprehensive, and scholarly investigations from the current pilot case study (Attia, 2022). Preparing the initial drafts for the dissertation or thesis document has been taken care of while the case study research is being carried out, and a final draft to the DBA program mentor and next to the dissertation committee was planned to be submitted, latest by the end of March 2023 or in April 2023 (Attia, 2022).

Creating minimum viable products (MVPs) for 6D5PRFS-based feasible business models for Women's digital enterprises in south India and related digital training by Persons of India origin (PIO) provides a suitable arena to use the case-study or pilot case-study method of qualitative research study as the appropriate approach (Tomaszewski et al., 2020).

Since the current research topic enables a bounded system to be a criterion, it paves a path to consider the case-study method to manage this project in selected locations of south India (Tomaszewski et al., 2020). The current pilot case study is also used for external review (Tomaszewski et al., 2020). Predominantly case study methods are used to illustrate, test or extend a theory, so other practitioners in the industry can follow the same or adjust their delivery methodologies (Tomaszewski et al., 2020).

This research uses a pilot case study, which gives the researcher an avenue to design, develop and improve the techniques needed before starting the larger research project. Hence, the researcher intends to collect the preliminary data and ascertain the financial and human resources needed for the final, full-scale project by doing the current small-scale pilot case study.

Since the aim of the current research project has a unique set of quite complex parameters, a case study method facilitates outlining the reliable and critical features for further evaluation (Tomaszewski et al., 2020).

With the help of the pilot case study method, the current scenarios in south India could be studied within the specified boundaries. Multiple data types and information that are difficult to analyse are made simple to decipher (Tomaszewski et al., 2020).

Also, the pilot case study method is specifically selected for the current project because it supports research in introducing enhancement of skills and knowledge, as it gives a wide range of information on meaningful parameters for the full-scale, definitive, commercial research.

3.5.2 Research plan

The following simple and systematic steps for the current small-scale pilot case-study research project using qualitative methodologies are considered.

3.5.2.1 Aims of this small-scale pilot case study are defined

The aims of the current research project are described in detail to design and develop areas to obtain a clearer understanding of the relevance of the categories (Tomaszewski et al., 2020).

3.5.2.2 Business problems are identified

Business problems from the selected locations of south India within the scope of this small-scale pilot case study are identified (Tomaszewski et al., 2020).

3.5.2.3 Research questions are prepared

The research questions are prepared for the small-scale pilot case study to understand the unique features and parameters of the project (Tomaszewski et al., 2020).

3.5.2.4 Sampling

Candidates or participants or respondents allocated responsibilities within a particular boundary, parameter, or criteria relevant to the case study's aims are selected for sampling purposes (Tomaszewski et al., 2020). Interviews and personal observations of the candidates are done as per the literature or documents using both online and offline methods (Tomaszewski et al., 2020).

3.5.2.5 Data collection

Mainly interviews and personal observations are conducted with the help of structured or semi-structured or unstructured questionnaires to collect required primary data (Tomaszewski et al., 2020). Secondary data are collected from reliable sources.

3.5.2.6 Data analysis

A standard way of analysing data is done using qualitative methodologies in this small-scale pilot case study (Tomaszewski et al., 2020). Comparisons of the outcomes with the other related studies conducted in academia or another industry are also made. This pilot case study has done a comparative study with another research study done in south India related to online learning in colleges and universities that is covered in detail under Chapter V – Discussion. Thematic representations and tables are extensively used for analysing the data (Tomaszewski et al., 2020).

3.6 Population and sample

In qualitative research methodologies, a population does not carry the simple English meaning, i.e., the number of people anywhere (Suresh and Kumar, 2022). In research studies, the meaning of population is an overall set comprising elements, i.e., locations, states, countries, objects, organisms, events, species and others (Suresh and Kumar, 2022).

In a research scenario, a population is considered the entire group from which the researcher makes the conclusions (Suresh and Kumar, 2022). In contrast, a sample is usually the specific subgroup from where the researcher collects the data (primary or secondary). Hence, it is evident that the sample size is always smaller than the population size (Suresh and Kumar, 2022).

For the purpose of this pilot case-study research, e-training methodologies & modules are designed, developed or ready-made courses are put-together and tested for the e-business owners & e-staff located in selected, representative locations, in south India, such as Hyderabad, a tier-1

city of Telangana state, which is also known as the city of pearls or city of Nizams; Mysuru, a tier-2 city/town in the state of Karnataka, which is also known as sandalwood city or heritage city or city of jasmine or city of palaces; Machlipatnam, a tier-3 town in the state of Andhra Pradesh which is a port-town, known for fishing and for its kalamkari textiles & paintings that are prepared using vegetable dyes; Ooty, a tier-3 city/town in the state of Tamil Nadu, which is officially known as Udhagamandalam and called as the Queen of hill stations or Switzerland of India; Kodagu or Coorg, a tier-3 town, located in the state of Karnataka, which is called the Scotland of India; and, Wayanad, a tier –2 town in the state of Kerala, which is also known as the 'land of paddy fields'.

The approximate populations of the selected representative locations of this small-scale pilot study in south India along with the population density of each state of south India are given in Appendices, to get an idea of the potential for digital enterprises and associated digital training in these areas. However, the population that needs to be focused on is the current number of micro, small & medium enterprises (MSMEs), or digital woman enterprises in these areas, which are not easily available from reliable sources. Hence, the available secondary data on the number of micro, small & medium enterprises (MSMEs) from the local and federal government departments are given below:

The number of micro-enterprises in Telangana state was reported to be approximately 13,546 units offering employment to 1,35,547 staff as of 2022-23, based on the secondary data collected from the department of industries and commerce, government of Telangana.

The number of small enterprises in Telangana state was reported to be approximately 5,830 units offering employment to 1,65,242 staff as of 2022-23, based on the secondary data collected from the department of industries and commerce, government of Telangana.

The number of medium enterprises in Telangana state was reported to be approximately 578 units offering employment to 62,699 staff as of 2022-23, based on the secondary data collected from the department of industries and commerce, government of Telangana.

The number of micro, small & medium enterprises (MSMEs) in Mysore was reported to be approximately 3108 units offering employment to 27371 staff as of 2021-22, based on the secondary data collected from the planning Karnataka-data centre.

The number of micro, small & medium enterprises (MSMEs) in the Kodagu was reported to be approximately 619 units offering employment to around 4692 staff as of 2021-22, based on the secondary data collected from the planning Karnataka-data centre.

The number of micro, small & medium enterprises (MSMEs) in Wayanad was reported to be approximately 3,780 units offering employment to around 15,864 staff as of 2011-12, based on the secondary data collected from the brief industrial profile of Wayanad, Ministry of MSME, Government of India. Current secondary data must be updated and made available from the relevant Government departments highlighting the numbers from 2022-23.

The number of micro, small & medium enterprises (MSMEs) in Ooty was reported to be approximately 2454 units offering employment to around 5700 staff as of 2011-12, based on the secondary data collected from the A brief industrial profile of Ooty, Ministry of MSME, Government of India. Current data for the year 2022-23 must be updated and made available from the relevant Government departments.

Figure 3.6 shows a map of south India is given below, indicating the five states and their approximate geographic locations (Mohammad et al., 2021).

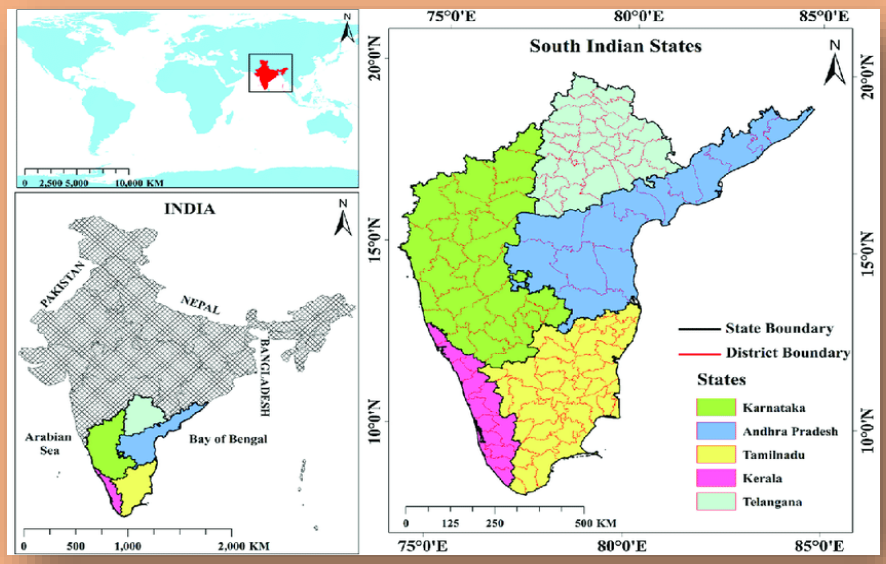

Figure 3.6 – Map of south India showing five states and approximate geographic locations. Source: Mohammad et al., 2021. Nexus between population density and novel coronavirus (COVID-19) pandemic in the south Indian states: *A geo-statistical approach. Environment Development and Sustainability. 23*. 1-29. 10.1007/s10668-020-01055-8.

Sample sizes for this small-scale pilot case-study are about 200 number of participants, based on the availability of the stakeholders i.e., employers and employees of the e-businesses, such as women-led, micro, small & medium enterprise (MSME) owners & their female e-staff (Hertzog, 2008).

Also, about 25 persons of Indian origin, 25 digital training providers and 25 overseas clients from developed countries who used the services of the women's digital enterprises were requested to be in the sample group to take up interviews and undergo personal observations to provide the

related research data and to assist in analysing the same for the current small-scale pilot case-study project.

One crucial point that needs to be addressed here is clearly articulating what is in it for e-businesses and their stakeholders by participating in the pilot case study (Hertzog, 2008). Also, how beneficial or valuable will it be for the stakeholders of the e-businesses and e-training providers to involve themselves in the current pilot case study in the short term (Hertzog, 2008)?

During the subsequent phases of the research, the data from the proposed pilot case study can be used to expand the e-training recipients to other suitable places in south India (Blatch-Jones et al., 2018).

3.7.1 Participant selection

As specified in the research design, real-time primary data and current secondary data for analysis are obtained from around 200 participants who are between the age group of 20 years to 45 years with a good formal education and computer/digital literacy, which includes various stakeholders i.e., employers and employees of the women-led e-businesses who have been participating in e-training programs with various methodologies and custom-made modules for building feasible micro, small & medium enterprises (MSMEs) e-business models, while working from home, in a virtual environment (Attia, 2022).

The subject experts deliver technical knowledge related to the specific business categories in the digital training programs. The experts from business handle general industry headings related to small & medium enterprises (MSMEs) because they come with local & global knowledge and related experience.

Information obtained from the Gazette of Mysuru district in 2018 from the e-archives of the National Informatics Center (NIC) of Karnataka state, provides the secondary data for the

qualitative research and an indication of the percentage literacy of the female population regarding some of the representative locations in south India, such as Mysuru having a female literacy of 55.81% and Kodagu with the female literacy of 72.53%. Also, the secondary data regarding the girls married below the age of 18 years in Mysuru, i.e., 47.9% and Kodagu, i.e., 22%, indicate how many of the married girls could be inundated with family responsibilities and how many of them may be ready to take up the digital training and join women digital enterprises or work-from-home projects.

Various e-training modules are designed to cover many facets and specific categories of e-businesses for women to lead & manage, such as accreditations & compliance, administration & operations, marketing & sales, finance & accounting, recruitment & HR, websites & social media, IT & tech support, e-training & development, business strategy & models, business plans & coaching and others; and also to provide e-training to support e-staff from south India to carry out a variety of e-services or provide e-products in the above areas, to the selected clients, in Australia (Raghuvanshi et al., 2017). More specific information on this is given in Appendices.

Further, as a minor part of this pilot case study, persons of Indian origin (PIO) from developed countries, such as Australia, are requested to volunteer and participate in providing the relevant data to arrive at reliable outcomes for this pilot case study. As given in the previous section, about 25 participants of persons of Indian origin were asked to take part in this small-scale pilot case study to gather the primary and secondary data and assist in data analysis.

As mentioned in the previous section, the data on overseas clients' comments & feedback are also collected from about 25 clients from overseas who were asked to participate in this small-scale pilot study to provide the primary and secondary data and join hands in data analysis.

There are robust and reliable business models catering to many developed countries of the world, from their vast business process outsourcing (BPO) & knowledge process outsourcing (KPO) centres located in urban cities in south India. However, this pilot case study focuses on providing digital training to the stakeholders of the micro, small & medium women's digital enterprises based in selected locations of south India so that they can build minimum viable products (MVP) from the 6DRSF5P, feasible e-business models.

3.7.2 Ethical considerations for the current small scale pilot case study

Research that deals with human subjects is expected to comply with ethical standards (Hennessy et al., 2022). Hence, this current small-scale case study is based on the ethical guidelines of SSBM, Geneva, Switzerland, provided in the informed consent. Informed consent for interviews is given in Appendices (based on the ethical guidelines from Swiss School of Business & Management, Geneva, Switzerland, available in the SSBM - DBA – Student Information Systems - UpGrad - shared web portal). Informed consent has been obtained from all volunteers participating in this small-scale pilot case study.

Academic research must follow ethical guidelines that align with the participating company or business's ethical policies while collecting primary or secondary data (Suri, 2020). Hence, this small-scale pilot case study has taken the utmost care to respect the privacy of all the human subjects who acted as volunteers and participated in this qualitative research project (Suri, 2020).

Informed consent confirmations collected from the volunteers have been appropriately organised and documented (Hennessy et al., 2022). Then they were stored in a safe place to secure the confidentiality of the participants (Suri, 2020).

Ethical considerations had to be met on high standards for the current small-scale pilot case study research since primary and secondary data were collected from various places such as co-

working spaces, start-up incubators and worksites where women's digital entrepreneurs carried out their work (Suri, 2020).

The research's governing ethics were adequately adhered to while conducting this small-scale pilot case study in the selected representative locations of south India (Suri, 2020).

As mentioned in the informed consent guidelines by SSBM, Geneva, Switzerland, most of the areas of the current pilot case study came under the category where 'little or no consent was needed' because the current qualitative research adhered to the parameters that minimised the necessity for obtaining the informed consent. The current small-scale pilot case study had minimal risk, i.e., physical, psychological, social or economic, to the participants; none of the observations or responses was recognised directly with any single entities or persons; the participants of the research study were observed in a subtle manner when they were doing their normal day-to-day, activities. Interviews & personal observations took only a minimum amount of time because the researcher was mindful that the professionals or owners of women's digital enterprises were busy. Also, some of the information was publicly available and collated as the secondary data for this research purpose, or it was based on the observations of general professional opinion of the participants from the selected locations in south India (Suri, 2020). Hence, ethical considerations were duly followed by adhering to the compliance factors. The researcher has taken the necessary steps to explain the guidelines and basic rules regarding the current small-scale pilot case study to initiate trust amongst the research participants (Suri, 2020).

As per the guidelines from SSBM, Geneva, Switzerland, for some parts of this small-scale pilot case study, only 'informal consent was needed' because the researcher had given detailed and specific information regarding the aims, objectives, processes and procedures of this qualitative research project to the women business owners and informed consent was obtained verbally.

Since some parts of the current small-scale pilot case study research posed minimal physical, psychological, social, or economic risks to the participants, their voluntary participation was evidence of their consent. In such cases, the discussion in this dissertation paper did not associate any of the research data with individual interviews and personal observations; very reasonable time or effort was taken during the interviews or observation of volunteers in a way that the participants only felt that in a minor way; however, it did not necessarily disturb the performance of their jobs or personal lives. Sometimes, a supervisor formally consented when their team members in a co-working space or start-up incubators participated in the current small-scale pilot case study (Suri, 2020).

The research participants were selected as able-bodied, able-minded, normal people (Suri, 2020). It did not include persons under 15 years of age; mentally or physically disabled people; vulnerable people or older people older than 70; sick people; or uneducated people who could not understand the research questions (Hennessy et al., 2022). Most candidates expressed their opinions, insights, feedback, and knowledge freely and openly. Personal details were not collected in any manner, and mostly code names, numbers or letters were used to denote the volunteers anonymously in this small-scale pilot case study project, which assisted the investigator in earning their trust and confidence in obtaining the required primary and secondary data for this qualitative research project (Hennessy et al., 2022).

The researcher made all efforts to explain the research goals, context, volunteers' roles, data collection processes, and the variety of questions used for the current small-scale pilot case study (Suri, 2020). The investigator took time to address any questions or doubts from the participants, to maintain clarity regarding the current small-scale pilot case study. Before the

interview process was started the researcher made sure that most of the things were predictable & clear for the participants (Suri, 2020).

3.8 Instrumentation

This small-scale pilot case study uses Semi-structured or unstructured questionnaires as prominent measuring instruments (Janghorban et al., 2014). The questionnaires underwent continuous monitoring and re-structuring to assess how workable and realistic they were, so the researcher could make on-going improvements to facilitate the qualitative research methodologies (Janghorban et al., 2014).

This pilot case study has documented the research data (both primary and secondary) by entering them in a specified manner for qualitative analysis (Janghorban et al., 2014). As mentioned in the research design, for simplicity and clarity, this pilot case study has predominantly used non numerical, qualitative research methodologies for data analysis (Kim, 2011).

However, for the sake of understanding the financial feasibility of the e-businesses, a minute part of this pilot case-study research uses some simple mathematical tools to analyse the financial data and to ensure that the e-business models, research methodologies & e-training methodologies are appropriate for reaching the financial budget related objectives of the current pilot project (Schoenfeld, 1980). Hence, it may not be considered quantitative research (Schoenfeld, 1980).

This small-scale pilot case study uses flow charts, tables, diagrams, figures & other pictorial representations to explain & analyse research data (Malmqvist et al., 2019). To reiterate, non-numeric, qualitative research methodology models have been used for data collection, analysis, and interpretation throughout this pilot case study project (Malmqvist et al., 2019).

3.9 Data collection procedures

The information for this dissertation paper or thesis document has been collected from the original, comprehensive, and scholarly investigations from the current small-scale pilot case study by using a few qualitative methods and models (Attia, 2022).

Qualitative research methodologies such as interviews and personal observations are extensively used by constantly being in locations where e-businesses & their stakeholders could be available such as industrial parks, co-working spaces, start-up incubators, science, technology & entrepreneur parks, technology hubs, innovation hubs and so on (Majid et al., 2017).

Exploratory research methodology is used to investigate the research questions in a detailed manner with the help of in-depth interviews and personal observations using unstructured or semi-structured questionnaires with the stakeholders of the women digital enterprises such as owners, managers or staff, who work from home, from the selected locations of south India (Malmqvist et al., 2019).

At some stages of the current pilot case study, descriptive qualitative research methodology is used to explain & describe the existing e-business models and the e-training methodologies, in detail (Malmqvist et al., 2019).

The narrative model is used by asking detailed questions to the stakeholders of the e-businesses to analyse their thoughts & feedback on a particular research problem by listening to their complete story (Majid et al., 2017).

The historical model is used to study past events about the existing e-business models and e-training areas to obtain a clearer picture of the present and visualize the future trend based on the information (Ledyard, 2020).

3.10 Data analysis

The fact is that e-training methodologies and programs for the stakeholders of e-businesses cannot be designed and delivered overnight or at short notice (Raghavan et al., 2018). Several factors must be considered and analysed for the e-training recipients (Raghavan et al., 2018). Firstly, primary, or secondary data have been collected regarding the skills to understand if the candidates have suitable qualifications, knowledge and skills to handle a position and what skills need to be provided to address this gap (Raghavan et al., 2018). In many cases, it was found that the women who want to take the training do not have proper qualifications, i.e., they might be under-qualified or partially qualified (Raghavan et al., 2018). In some cases, they might not have relevant qualifications for the job position or are over-qualified (Raghavan et al., 2018). Some women might have completed their graduate studies long ago and discontinued their learning (Raghavan et al., 2018). Some women would have gotten married and forgotten what they learned during college (Raghavan et al., 2018). Secondly, relevant data (primary or secondary) are collected to understand whether there is a right mindset and level of interest in the skills related to the job and type of work the training recipients want to take up (Raghavan et al., 2018). Thirdly, it was required to collect the data (primary or secondary) to understand the necessity or the need for the skills and how urgent & important the recipients want to learn or obtain training in a particular set of skills (Raghavan et al., 2018). The fourth factor is, collecting data (primary or secondary) to understand the aptitude or intelligence or the ability of the training recipients to ascertain that they can learn the required skills within a particular timeframe (Raghavan et al., 2018). The fifth factor is data (primary or secondary) collected to understand how much earning/money they want to do/make in terms of monthly or yearly income, as it must be kept in mind that e-business owners need to be paying stipends or salaries to their staff during the e-

training period and they need to be able to justify the costs (Lin, 2008). Sometimes, the training recipients want or need more money, and the stipend or training salary might not make sense or cater to their income requirements (Lin, 2008). The sixth factor is that it is important to collect and research the data (primary or secondary) to understand the family members who make the decision on behalf of the training recipient or influence the decision for the training recipients, such as their husband, parent or a sibling (Lin, 2008). Thus, in some cases even when the training recipient is happy to undergo the training, their family members may not support their decision. This observation is very typical of the family culture in south India, and persons of Indian origin understand these types of unique parameters. The seventh factor is the data (primary or secondary) to decipher the length, or the duration of training needed or what the training recipient is willing to undergo to receive a specified income from their salary at the end of the e-training program (Lin, 2008). Some e-skills might need only a few months to provide the e-training; however, some other e-skills might need a much longer time before they can be used to generate income for e-businesses (Lin, 2008). The eighth factor is if there are any uncertainties with the e-business model and related e-training methodologies when the definitive, full-scale research is conducted during the later stages, it is a good idea to test the same during the pilot case study so it can be more helpful (Lin, 2008). Because lesser difficulties are faced during the full-scale, definitive study as the uncertainties have been addressed and probable solutions have been found in smaller-scale research during the pilot case study (Lin, 2008). Ninth factor is data (both primary and secondary) obtained to encourage the optimum methodical rigour, focus, consistency, and higher quality for the full-scale, definitive research project (Lin, 2008). The tenth factor is to ascertain in clearly practical terms to indicate to the stakeholders who fund the full-scale, definitive study that it is going to be worth their while and to provide necessary information based on the qualitative

research data obtained from the pilot research study or feasibility study so the research duration, e-businesses or e-business clusters or the number of target markets in Australia or other countries, could be planned (Lin, 2008). The eleventh factor is to collect the data (both primary and secondary) to conduct the feasibility study, keeping in mind that most pilot case studies are feasibility studies that have features suitable for a particular research design wherein relevant factors of the future research or part of the future research is conducted on a smaller scale. In contrast, the criteria covered in the feasibility studies can answer whether the research could be done, whether it makes sense to proceed with it, and the documented reasons for doing so (Eldridge et al., 2016). The twelfth factor is to collect primary & secondary data from e-business owners and e-staff to ensure the participants have enthusiastic, creative personalities and global perspectives to work in a team environment to serve overseas clients (Lin, 2008). The thirteenth factor is that data (both primary and secondary) are collected on the foreseeable potential problems regarding e-business models & e-training methodologies and designing plans to address them on a high priority (Lin, 2008). The fourteenth factor is that data (both primary & secondary) are collected to develop the research budgets for both the pilot case study research and the full-scale definitive research (Lin, 2008). Having a fair idea about the required resources would be a good planning measure because the funds must be available to ensure the research projects run smoothly (Lin, 2008).

3.11 Research design limitations

It does not mean that when the current small-scale pilot study is done well, it guarantees the success of the full-scale, definitive research project that is going to be conducted to support the stakeholders of the e-businesses and participants of e-training programs or persons of Indian origin

(PIO) involved with this project (Connelly, 2008). Hence, this feature might be one of the limitations of this small-scale pilot case study (Connelly, 2008).

However, the small-scale pilot case study provides an opportunity to determine if the research project is feasible or not when it intends to implement with e-business clients in the target markets. This pilot case study can open an opportunity to publish its research information in well-known journals to support the current knowledge (Yeo et al., 2022).

One of the primary objectives of this proposed pilot case study is to fulfil the ethical, legal and scientific obligation to see if the outcome of the project could be used to facilitate further research efficiently for the e-business stakeholders, collaborators and fellow researchers (Gopalan et al., 2020). Although this proposed pilot case study research is focused on the smaller scale research regarding the e-business models and e-training methodologies, the bigger picture with other relevant parameters can be derived from the global and local business studies, economic sciences, social sciences, political sciences, computer and digital sciences, information & communication technology (ICT) (Reddy et al., 2022).

The current small-scale pilot case study project can assist in verifying the initial strategies and methodologies (Connelly, 2008). Also, research skills and techniques that might add value to the business research project could be tried in advance and refined (Connelly, 2008).

On the surface, when the pilot case study is closely observed, it might be possible to get the slightest signals that the full-scale, definitive business research project might succeed (Connelly, 2008). Hence, this point might justify the relevance of conducting a pilot case study before the start of the full-scale business research study for the commercial purposes of designing and developing e-training methodologies for the stakeholders of feasible 6D5PRFS-based e-businesses led by women in south India (Connelly, 2008).

Other limitations related to the online training provided to the stakeholders of women digital enterprises in the selected locations of South India are: Often trainers were not very familiar with the technology tools; initial costs of creating the learning management system (LMS) that can be out of the reach of typical businesses and difficulty to adapt to change as teaching or training has been done using face-to-face interactions, since a long time in south India (Wong and Sixl-Daniell, 2020). There is a gap in the industry where these kinds of e-training facilities may not be accessible to some micro, small, and medium enterprises (MSME) in the rural areas of south India.

Hence, this pilot case study has a primary goal of devising such an e-training program for micro, small & medium enterprises (MSMEs) managed by women in south India on a small scale for a trial basis (Zare, 2022).

3.12 Conclusion

The dissertation paper or thesis document consciously & purposefully focuses on contributing to academic discipline and professional practice in the relevant areas to build minimum viable products (MVPs) for e-businesses and the e-training industry (Lamb and Carver, 2022).

Some conventional or digital micro, small & medium enterprise (MSME) business models might look profitable at the outset. However, it must be ascertained if they are feasible or not (Zanjurne, 2018). This parameter is especially true for women who have less or no access to business or technical skills, have a small amount of business finance, limited availability of staff, do not have much business experience, and have a shorter amount of time to understand & execute the business models (Zanjurne, 2018). However, at the same time, they are expected to make a decent income, not only as a return on investment to meet their basic financial necessities and also to cater to the needs of their family members (Zanjurne, 2018).

It might be exciting to start with the research; however, before embarking on full-scale research, it would be prudent to get some insights into whether that could be feasible.

On a full-length business research topic, the study might deal with too many samples and variables for a novice researcher to handle (Morin, 2013). For example, an essential question in a questionnaire for an interview with the stakeholders of the e-business could have been left out. In that case, it might significantly affect the study's outcome (Kim, 2011). In a small-scale pilot study, that kind of error could be rectified quite quickly and redoing that part of the research involving a small number of samples could be much easier (Kim, 2011). Hence, it makes sense to ascertain the feasibility of the proposed research design with a pilot case study before initiating the full-scale research project and investing in more extensive resources (Janghorban et al., 2014). Thus, the research methodologies intended to be used in the large-scale research project are tested on a well-defined, smaller pilot case-study project (Janghorban et al., 2014).

Furthermore, at the later stages, the outcome of the pilot case study might be used to direct the methodologies of the larger-scale research study that can be used to assist real-world business problems (Kim, 2011). For example, the outcome of the pilot study research can be used to design & develop representative models for e-training methodologies to cater to similar clients in other areas of industry or business segments.

CHAPTER IV

RESULTS

As specified in the research design, the current pilot case study is conducted on a small-scale basis, using qualitative methodologies and the primary data are collected on a real-time basis from around 200 numbers participants of female stakeholders i.e., 100 employers and 100 employees between the age group of 20 years and 45 years from e-businesses or the e-business clusters which provide e-services and e-products, to the niche high net-worth businesses, small to medium enterprises (SMEs), high performing professionals, government organisations or non-governmental organisations, of Australia (Shetty et al., 2020). Secondary data for this small-scale pilot case study is also collected from many related sources in South India with the help of existing literature, scholarly articles, internal data collected from Micro, small & medium enterprises (MSMEs) & government publications – both online/offline and others.

As given in the previous sections, the participants of this small-scale, pilot case-study research are selected from representative places of South India such as Hyderabad from Telangana state, Machlipatnam from Andhra Pradesh state, Ooty from Tamil Nadu state, Wayanad from Kerala state and Mysuru & Kodagu both from Karnataka state.

Also, 25 digital training providers from south India, 25 persons of Indian origin (PIO) and 25 overseas customers from Australia participated at various stages of implementing feasible e-business models & assessing the minimum viable products (MVPs).

During the qualitative research studies, it became evident that the effects of digital entrepreneurship and digital training facilitated by persons of Indian origin (PIOs) on Micro, small and medium enterprises (e-MSMEs) and their female stakeholders in south India were not the same and hence, it had to be addressed and understood specific to:

1) Women's digital enterprises, themselves.

2) Owners of the women's digital enterprises.

3) Employees of the women's digital enterprises.

4) Persons of Indian origin (PIOs) as guides or mentors for the stakeholders of women's digital enterprises.

5) Digital training providers (both technical & business) for women digital enterprises to create minimum viable products (MVPs) using 6D5PRFS-based digital enterprise models.

6) And, finally, the clients of the digital women enterprises from developed countries - in this case, it is from selected places in Australia.

Digital training and 6D5PRFS-based digital entrepreneurship guided/enabled by persons of Indian origin (PIOs) were experienced differently by the stakeholders, such as women owners and employees. Also, it was observed that the effects of being the stakeholders of the 6D5PRFS-based digital entrepreneurship were also differently experienced by the persons of Indian origin, digital training providers and clients from developed countries (who used the services from the women's digital enterprises located in south India). Hence, different parameters under these categories needed to be investigated, and related data had to be collected and analysed. Thus, specific research questions have been designed for each category to collect the primary & secondary data, so they are analysed for initial exploration and depth of understanding, at later stages (Kim, 2011).

Due to the narrower scope of this small-scale pilot case-study project, only the main research questions are explored in this chapter. Other related research questions and sub-questions are explained briefly under Chapter V – Discussion; and the scope & recommendations for further research are also given, where necessary.

4.1 Research questions for women's digital enterprises

4.1.1 Was managing a 6D5PRFS – business model-based, digital enterprise from home, feasible? (Yes/No Response)

Table 4.1.1

Feasibility of 6D5PRFS business models

States	Places	Interviews/Observations	Yes	No
Karnataka	Mysuru	30	30	0
Karnataka	Kodagu	5	4	1
Telangana	Hyderabad	40	40	0
Andhra Pradesh	Machlipatnam	5	4	1
Tamil Nadu	Ooty	10	9	1
Kerala	Wayanad	10	5	5
Total		100	92	8

Several businesses are profitable. Furthermore, some of these businesses can be conventional, brick-and-mortar, or even digital businesses. Many come with substantial initial capital investments or take longer to reach the break-even point and earn a handsome profit from the business. However, only some of these businesses may be feasible. Hence, they are unsuitable for women who do not have access to high-capital investments or need to wait for more extended periods to achieve profitability. Hence, about hundred interviews and personal observations were conducted as a mixed qualitative methodology to collect the primary data to ascertain whether the digital service outsourcing businesses run by women in the specified locations of south India were feasible. About 92% of the digital enterprises interviewed and observed reported having a viable business based on the 6D5PRFS enterprise model. Most of them were managing Micro enterprises

that were managed from home or co-working places near their home. It has to be taken notice that in India, as per the data collected from the department of MSME, Government of India, the annual turnover for micro businesses with the effect from 1st of July 2020, has been increased to 5 crores, i.e., approximately, about 1 million Australian Dollars (AUD) or approximately about 6, 03,495.00 US dollars (USD) which is a massive jump from 1 crore (approximately, about 200,000 AUD or approximately, about 121,138 USD), which was the designated amount, just a few years ago. This information is based on the January 2023 currency conversion rates of US dollars (USD) to Indian Rupees (INR).

About 8% of the participants responded that the 6D5PRFS business model was not feasible for them. It was noticed that some women digital enterprises who reported that the business model was not feasible had problems with their internet/Wi-Fi connections. Their home was located in remote area of the towns, and the internet/Wi-Fi facility needed to be more consistent. Some other participants had young families with infants who needed continuous care or a large family where they were expected to manage an enormous workload from their home front so that they were unable to take on any extra work to do justice for the digital start-up business or their new job responsibilities in a digital business. They probably had to organize themselves or get extra support to start.

4.1.2 Does starting and managing a 6D5PRFS - viable business model-based, digital enterprises and digital training- can create an environment for the women entrepreneurs & the staff so that they can work from home/remotely, without the off-line support from co-workers and the team around them (Yes/No response)?

This area of the digital enterprises needs more clarity, as Indians, especially women are highly social in nature, and they are considered as the central nervous system of their family.

Hence, their ability to focus on the work-from-home, digital business or a virtual job with a high level of work ethic had to be verified, in more detail.

Table 4.1.2

Compatibility of 6D5PRFS business models to work from home or remotely

States	Places	Interviews/Observations	Yes	No
Karnataka	Mysuru	30	23	7
Karnataka	Kodagu	5	4	1
Telangana	Hyderabad	40	30	10
Andhra Pradesh	Machlipatnam	5	4	1
Tamil Nadu	Ooty	10	10	0
Kerala	Wayanad	10	9	1
Total		100	80	20

Women's digital enterprises in southern Indian states typically live in joint families; hence women are expected to live in harmony and most of the times compromise a lot with the extended members of their families. Thus, the e-training modules need to include topics on how to maintain a high level of work ethic when they intend to take up the work-from-home, digital business or a virtual job. Qualitative research methodologies were used, and the research was conducted with a mix of about hundred interviews and personal observations, in the sample population located in the five southern states of India, using the primary & secondary data collected for the current pilot case-study research project. About 80% of the participants reported that they could focus and perform their tasks, assignments and projects quite well and up to required industry standards without team members being around them, as usually happens in a conventional office. However, 20% responded that they needed help to focus and deliver the expected quality of work.

One of the solutions could be to join a co-working place near their home where they can ask for assistance from the business owners and staff of similar digital businesses or other types of businesses, where necessary. However, they might have to contact their colleagues/managers/owners digitally unless they stay in the same area and join them in the designated co-working office. However, this area of the digital enterprises needs to be addressed continuously, and more e-awareness & e-training need to be provided to face these challenges.

4.2 Research questions for women digital enterprise owners and management

4.2.1 How many hours of travel time to and from workplaces/offices and the time taken to get ready would have been reduced/saved by switching to the 6D5PRFS – feasible - business model-based, digital enterprises and adopting work-from-home or remotely/virtually or from co-working spaces?

One of the aims of the pilot case study is to ensure that the minimisation or elimination of the time taken for travel to and from work and the time for getting ready for women and addressing the stress involved with that part of their daily life along with the hectic travel in the highly congested and polluted roads within the cities and towns of south India.

Hence, a mix of qualitative methodologies of about a hundred interviews and personal observations were held with the participants in the selected places of five states of south India to obtain the primary data. More than 90% of the interview participants reported that they ended up saving 1 Hr. to 4 Hrs. per day, which was a substantial number that can support the hypothesis of this pilot case study that the work-from-home, virtual nature of the 6D5PRFS enterprise model could bring about productivity in terms of their time management, for the women digital business owners, in south India.

Table 4.2.1

Time management benefits of work-from-home or remote working

Time Saved	Results
30 Mins to 1 Hr.	5
1 Hr. to 1 Hr. 30 Mins	5
1 Hr. 30 Mins to 2 Hrs.	10
2 Hrs. to 2 Hrs. 30 Mins	30
2 Hrs. 30 Mins to 3 Hrs.	30
3 Hrs. to 4 Hrs.	20
Total	100

Since 10% of the interview participants belonged to the smaller towns such as Kodagu, Ooty and Wayanad, the time taken for travel was not much, although the time taken to get ready may be similar to the participants from the metropolitan city areas such as Hyderabad and Mysuru. Since this is a small-scale pilot case study, it is worth noting that these research outcomes are for indicative purposes alone, although they carry significant value for full-scale research.

4.2.2 How easy & comfortable was it to work from home along with the family members (kith & kin) while managing the 6D5PRFS - viable business model-based, digital enterprises, during the initial stages of starting the business, i.e., three months to 6 months and up to one year (on a scale of 1 to 5; 5 being the easiest and most comfortable)?

Digital services-based businesses built on the parameters of the 6DRFS5P enterprise model are deliberately designed to be easy and comfortable to work from home, along with family members & friends (kith & kin) around them. However, they must still deliver good quality standards to the global clients and generate handsome cash flow for the women stakeholders.

Because if this whole system were not designed to be easier, more comfortable and manageable, the owners of digital businesses in south India would not be interested in getting involved with it or even initiating it. A mix of hundred interviews and personal observations were conducted, using qualitative research methodologies with the help of the participants from the selected locations from five states of south India.

Table 4.2.2

Easiness & comfortable nature of working from home for employers

Scale of 1 – 5	Results
1 - Very uneasy & uncomfortable	18
2 - Uneasy & uncomfortable	14
3 - Neutral	8
4 - Easy & Comfortable	35
5 - Easiest & most comfortable	25
Total	100

About 60% of the participants responded that it was easy and comfortable to undergo digital training and manage the 6D5PRFS business model-based digital enterprises while working from home around their family members during the initial three to six months or up to one year of starting the operations. Once they can run the digital business from their homes or remotely for about one year, it can be understood that the women entrepreneurs have figured out the basics. About 8% of the participants decided not to respond to anything and remained neutral. However, 32% revealed that it was not easy or comfortable during the initial period as it can be challenging to focus on the responsibility of the business and convince the importance of allocating valuable time to fulfil the client's expectations to the family members around them.

4.3 Research questions for women digital enterprise employees

4.3.1 Is unlimited internet/Wi-Fi facility with sufficient speed and strength to work on digital service-based tasks, assignments and projects available at home or in co-working spaces? (Yes/No response).

Table 4.3.1

Availability of unlimited internet-Wi-Fi for employees

States	Places	Interviews/Observations	Yes	No
Karnataka	Mysuru	30	28	2
Karnataka	Kodagu	5	4	1
Telangana	Hyderabad	40	38	2
Andhra Pradesh	Machlipatnam	5	4	1
Tamil Nadu	Ooty	10	8	2
Kerala	Wayanad	10	8	2
Total		100	90	10

6D5PRFS business model based, digital enterprises are highly reliant on the availability of unlimited internet/Wi-Fi, which must be strong and has sufficient speed to handle the tasks, assignments and projects for clients from western countries. Hence, the employees who work-from-home, need to tick the box for this parameter. In the last decade, several internet service providers have covered most tier-1 cities, tier-2 and tier-3 towns of South India and 4G/5G networks are available in the major cities, and towns. Although many villages in rural areas of India still need to be connected to internet facilities, enormous work is being undertaken to materialize this vision. Primary data was collected for this pilot case study using qualitative research methodologies such as interviews and personal observations in the selected areas of the

five states of south India from the employees of digital enterprises. About 90% of them who participated across the tier-1 cities and tier-2 and tier-3 towns positively answered that they had unlimited access to fast internet. In comparison, 10% of the participants responded that the internet/Wi-Fi facility was occasionally unreliable, which might adversely affect their work performance. Participants have reported that a reliable & continuous electricity supply was intermittently available in some of these locations. Hence, it directly affects the availability of internet/Wi-Fi. Thus, using the hotspot from smartphones could be a short-term solution.

4.3.2 Competence in using computers and digital communications tools (On a scale of 1 to 5; 1 - Excellent, 2 – Good, 3 – Neutral, 4 – Bad, and 5 – Worse)?

Primary research data was collected from the employees of 6D5PRFS business model-based, digital enterprises for this pilot case study, with a proper mix of qualitative research methodologies such as interviews and personal observations, in the selected areas of the five states of south India. The purpose of the research question was to clarify the employees' ability to use the computers (PCs and laptops) and maintain on-going communication with the digital enterprises' team members, managers, owners and clients. 45% of the participants, who responded to this question on a scale of 5, strongly agreed that they were competent enough to work on a computer and correspond electronically, whereas 40% informed that they agreed with the same.

However, 10% of the sample population stayed neutral. Furthermore, about 3% disagreed that they had the competency to use computers and digital communication skills that could enable them to handle their work responsibilities satisfactorily. Also, about 2% strongly disagreed with the same point. Hence, on-the-job, custom-made, digital training modules have to be provided more often or in more depth on the usage of computers and online communication for employees who need to be good in this area to handle their job better.

Table 4.3.2

Employees' competency of using digital tools and communications

Scale of 1 - 5	Results
1- Excellent	40
2 - Good	45
3 - Neutral	10
4 - Bad	3
5 - Worse	2
Total	100

4.4 Research questions to persons of Indian origin (PIO)

4.4.1 What were the significant advantages of starting a digital women's enterprise/e-business in India while staying overseas in a developed (western) country, as a non-resident Indian (NRI)? Please select from the list below.

a) There would be no need to travel to India frequently as the digital business can be fully set up with online tools and methodologies while staying overseas.

b) Relatively lesser initial cost for setting up the online/digital women enterprise as even for a person of Indian origin (PIO) or a non-resident Indian (NRI), cost management is advantageous during the starting phases of the business, even though they are earning in a higher value currency.

c) Reasonable operational costs are involved because the amount spent in running the business would be in Indian rupees. If they had started the business in their country, they would end up spending on the business costs in a higher value currency of a developed country.

d) Time and management efficiency, as responsibilities can be delegated to local Indian staff after the digital training is given to them.

e) Persons of Indian origin (PIO) can focus on marketing and finding customers in the western country to make more projects or assignments available for the Indian project team.

f) Relocation to India with family members is optional because children born overseas might not find it easier to adapt to Indian circumstances, especially regarding their education and social bonding.

g) A person of Indian origin (PIO) could influence and attract more friends and family members he knows in a developed country who can invest in India or assist with digital training for the Indian project team on the global standards to care for international clients.

h) When the persons of Indian origin (PIO) liaise with clients in a western country, the fees & charges for the services provided can be ethically and legally charged in the higher value currency, as they can locally act as the point of contact for the overseas clients while dealing with the Indian project team directly or with the help of managers, where necessary.

i) Understanding the client's needs in western countries and analysing the market changes first-hand is possible as the person of Indian origin can be stationed in the western country and remotely run the digital training and digital women's enterprise.

As mentioned earlier in this dissertation paper, most persons of Indian origin (PIO) intend to add value to their motherland. They find it harder to leave their jobs or business commitments in the developed countries to travel to India to initiate and run their business enterprises. However, the scenario has changed drastically in the last decade or so. To some extent, it is possible to initiate and run the business remotely or provide mentoring or coaching for women digital business owners. It can take extensive pre-planning and organized efforts to enable higher standards of

mentoring and coaching to the women digital enterprises. As mentioned in the above research question, the ‘digital India’ revolution has taken up momentum.

Table 4.4.1

Advantages for a PIO in starting an e-business in south India while staying overseas

Responses a to h	Results
Response a	4
Response b	2
Response c	4
Response d	3
Response e	4
Response f	2
Response g	3
Response h	2
Response i	1
Total	25

Most government services in south India are available online, now. Legal entities of the business can be established with assistance from local chartered accountants, in south India, at reasonable costs. Collaborating with the local micro, small & medium enterprises (MSMEs) is also possible, where the marketing side could be taken care of by the persons of Indian origin along with the mentoring or coaching and the Indian counterparts could handle the operations.

Since, the currency conversion between Indian rupees to other major currencies from developed countries has created unique opportunities for the micro, small & medium enterprises (MSMEs) in the outsourcing or remote/virtual services industry, all avenues need to explored in

order to strengthen this ecosystem that south India is well-known for over two decades. Persons of Indian origin (PIO) need to be supported positively when they want to operate from overseas. Hence, this research question tries to identify the options with practical solutions to make that possible. About 16% of the participants from the representative participants supported the overall idea that staying overseas and doing the e-businesses or mentoring the e-businesses in India is on their priority list. About 16% of the participants from the requested Persons of Indian origin were supportive of the option of running an e-business in India as it involved reasonable operating costs in rupees as opposed to spending in the foreign currency of the country where they are currently living. Also, another 16% of the participants of the small-scale pilot case-study research indicated that they could handle the marketing side of the business as they understand how to communicate with the customers of developed countries and their business needs.

About 12% of the participants of the research agreed that by remaining in a developed country they can see an improved managerial and time efficiency. At the same time, another 12% of the research participants thought they could influence family and friends who stay overseas to assist them in mentoring and coaching women's digital enterprises. About 8% of the research participants said they noticed that the initial costs of starting a women's digital enterprise were much lesser. About 8% supported the notion that relocating to India to get involved with the digital business enterprise was not a good idea because of their children's education, social & cultural connections, overseas. Also, another 8% of the research participants inferred that local level of remunerations could be charged when they represented the Indian workforce in the developed countries even though they could do the same remotely while being in India and travelling discretely. About 1% of the research participants believed they could understand and analyse the local demands in the developed countries first-hand if they stayed there. Hence, the overall data

and the qualitative data analysis have given ways to explore the possibilities of starting a women digital enterprise in south India while staying abroad, collaborating with women entrepreneurs in south India, or managing a team of professionals in south India.

4.5 Research questions for digital training providers, in south India

About twenty-five digital training providers or prospective digital training providers from the 'train the trainers' departments of the 6D5PRFS-based women digital enterprises were requested to participate from selected locations of south India as research participants for this small-scale pilot case study.

Some of the digital trainers would have already provided digital training to the micro, small & medium enterprises or have the idea to start a business of providing digital training for micro, small & medium enterprises (MSMEs) in south India (Shama and Mazhar, 2022).

4.5.1 Comparison between the e-training given to women in digital micro, small & medium enterprises (MSMEs) and academic e-training in south India? Please select from the list below as it applies to digital business in south India. (Detailed comparative studies on both areas of online teaching & e-training and further details are given in Chapter V – Discussion).

a) E-training for micro, small & medium enterprises (MSMEs) is about implementing the skills they learn as soon as possible and start taking care of clients' business needs in developed countries. In contrast, the academic e-training provides knowledge based on the related pedagogy.

b) E-training for micro, small & medium enterprises (MSMEs) is more focused on the skills that can make money or, in other words, generate revenues and income/profits. In contrast,

academic e-learning is more about imparting knowledge, which might not directly relate to money making.

c) E-training for micro, small & medium enterprises (MSMEs) relate to how specific skills can be imparted more effortlessly, quickly, and steadily. In contrast, academic e-learning is more about teaching over a specified time, usually for a more extended period, such as one to three years or more, in some cases.

d) E-training for women digital micro, small & medium enterprises (MSMEs) is designed for women stakeholders such as the owners and female staff. In contrast, the academic e-training is designed for learners in general, which can include a much broader target audience.

Comparative studies and research of women digital micro, small & medium enterprises (MSMEs) e-training with academic teaching and training is significant because already many technical and business-related courses in various industries are being run by the formal academic institutions in south India. About 40% of the candidates inferred that e-training provided to women digital micro, small & medium enterprises (MSMEs) were vital as it facilitated the management of their outsourcing business and taking care of the needs of their overseas clients. Hence, e-training for women in digital micro, small & medium enterprises (MSMEs) play a significant role in the success of these businesses. About 24% of the participants of this small-scale pilot study research who provided digital training to women digital micro, small & medium enterprises (MSMEs) believed that the focus of academic training was not on the commercial aspects but more on the knowledge and information. About 16% deciphered that academic learning was time-consuming & consisted of longer durations of study. In contrast, e-training for women in digital micro, small & medium enterprises (MSMEs) had shorter training periods and quicker outcomes in south India.

Table 4.5.1

Comparison of e-training given to women digital MSMEs, with academic e-learning, in south India

Responses a to h	Results
Response a	10
Response b	6
Response c	4
Response d	5
Total	25

Also, about 20% believed that women's digital micro, small & medium enterprises (MSMEs) e-training programs were more accurately designed for the purpose. In contrast, academic education was designed for the public. Hence, specifically designed e-training programs with focused modules for imparting transformational business & technical skills can be game changer for women digital micro, small & medium enterprises (MSMEs) in south India.

4.5.2 Comparisons between the e-training given to Micro, small & medium enterprises (MSMEs) and corporate e-training, in South India. Please select from the list below as it applies to digital businesses, in South India.

a) E-training for micro, small & medium enterprises (MSMEs) is designed for a small team which sometimes might have small number stakeholders as attendees. In contrast, the corporate e-training is intended for a much larger team which sometimes comprises hundreds or thousands of stakeholders as trainees across various places where the business operates.

b) E-training for micro, small & medium enterprises (MSMEs) have to operate on a much smaller budget due to financial constraints, whereas the corporate e-training usually has a bigger budget to spend a due higher amount of finance available for training & development departments.

c) E-training for micro, small & medium enterprises (MSMEs) has to be done to impart a smaller number of specific skills that can be simple. In contrast, corporate e-training can encompass many skills sets under broader categories, such as business management, communication, interpersonal, technical, IT skills, and others.

d) E-training for women digital micro, small & medium enterprises (MSMEs) can be much easier & quicker to design, develop, collate and implement. In contrast, the corporate e-training has to be designed to address complex goals and objectives.

Table 4.5.2

Comparison of e-training given to women digital MSMEs, with corporate e-training, South India

Responses a to h	Results
Response a	7
Response b	5
Response c	8
Response d	4
Total	25

Kruk et al. (2010) have explained that corporate e-training has been used in the industry for over two decades and has a much longer history than e-training for micro, small & medium enterprises (MSMEs) in south India. Hence, primary research data was collected from the digital

training providers to assess the parameters related to this area of e-training. About 28% of the research participants of this small-scale pilot case study expressed their opinion that e-training for micro, small & medium enterprises (MSMEs) in their businesses would be much smaller than corporate e-training in multi-national companies (MNCs). About 25% provided the research data to support that E-training for micro, small & medium enterprises (MSMEs) in their businesses must work within tighter budgets. In contrast, corporate operators would have larger budgets for innovation and training departments. About 32% of the participants thought that the scope of the e-training for micro, small & medium enterprises (MSMEs) in their businesses was much smaller. In contrast, the scope of the e-training for corporate giants would be much more prominent in magnitude. About 16% agreed that E-training for micro, small & medium enterprises (MSMEs) in their businesses can be designed and implemented quickly, whereas corporate training involves extensive & laborious work.

Kruk et al. (2010) explored corporate training ideas involving strategy determination and how the e-training institutes must undergo market adaptation. They emphasize the direction where the corporate e-learning strategy must incorporate a multidisciplinary training approach. Also, they highlight that the training institutes need to think independently instead of being influenced by corporate businesses while formulating the training programs on par with the industry standards. Hence, E-training for micro, small & medium enterprises (MSMEs) can facilitate ‘Athma Nirbar Bharath (Self-reliant India)’, an initiative from the national and state-level leadership supported from Prime Minister of India Mr Narendra Modi and other eminent leaders from south Indian states.

4.5.3 What are the comparisons between the e-training given to MSMEs and recreational e-training? Please select from the list below as it applies to digital businesses in south India.

a) E-training for micro, small & medium enterprises (MSMEs) aim to address business needs directly or indirectly. However, Recreational e-training might be related to primary or enhanced skills needed for sports or games.

b) Although, e-training for micro, small & medium enterprises (MSMEs), promotes healthy working patterns, it does not focus on the activities related to physical activities as a significant part of the e-training course.

However, a recreational training course involves getting the participants to learn and do more physical activities to promote health, such as classical dancing, freestyle dancing, yoga, pilates, meditation, fishing, cooking, boating, and others.

c) E-training for micro, small & medium enterprises (MSMEs) is predominantly enabled to provide specific, serious skills that aim to create value for the business & its clients. Thereby e-training for micro, small & medium enterprises (MSMEs) facilitate simple & comfortable ways of money making and money management in an ethical, legal, respectable, and honourable manner with gratefulness & empathy that are enjoyable and exciting (SC + MM + MM + EL + RH + GE + EE). In contrast, the recreational e-training facilitates fun activities for leisure, recreation, relaxation, and inspiration.

d) E-training for women digital micro, small & medium enterprises (MSMEs) are considered occupational training; hence it comes under the department of training & development that is more necessary for the business communities of south India, whereas recreational training

is more of an option in south India. It might be considered a secondary level of training unless that supports money making & money management (MM+MM).

Table 4.5.3

Comparison of e-training given to women digital MSMEs, with recreational training, south India

Responses a to h	Results
Response a	7
Response b	6
Response c	6
Response d	6
Total	25

Recreational e-training is gaining more recognition and popularity as the disposable income of the south Indian community members is increasing daily. Hence, comparative data and analysis in this area become prevalent while this small-scale pilot study intends to cover the areas of E-training for micro, small & medium enterprises (MSMEs). About 28% of the participants who provided E-training for micro, small & medium enterprises (MSMEs) thought that recreational e-training was related to sports & games. Hence, they might investigate that later for their needs rather than business purposes. About 24% deciphered that recreational e-training involved physical activity that promotes good health, whereas E-training for micro, small & medium enterprises (MSMEs) was not directly related to that area of training.

About 24% deciphered that recreational training involved more fun activities, whereas E-training for micro, small & medium enterprises (MSMEs) was related to women's digital businesses in south India. About another 24% thought that recreational training was not serious

educational or vocational training, whereas E-training for micro, small & medium enterprises (MSMEs) was directly related to vocational training.

4.6 Research questions to customers from developed countries

About twenty-five clients were requested to participate from various parts of Australia as research participants for this small-scale pilot case study based on qualitative research methods. Most of them would have started using the services from the women's digital enterprises from south India or have the idea to outsource part of their business services to the women's digital businesses in south India.

4.6.1 What are the advantages of outsourcing business services or hiring remote/virtual services?

a) Reduces or eliminates the office & related expenses required to recruit an onsite employee. When overseas clients outsource their business services or hire a remote/virtual staff from another country, there could be a substantial reduction in the expenses such as salary, taxes, provident fund contributions or superannuation contributions & employee benefits, as the outsourcing business or the remote staff usually takes care of all these additional expenses, themselves.

b) Outsourcing or remote/virtual staff are appropriate for start-up businesses as they can hire them on a contract basis that can be short, mid or long-term. Remote/virtual staff can work as small as 2 to 4 hours for one or two days a week to full-time 8 hours per day for all five to six days of the week to support overseas clients. However, on weekends and public holidays, they might charge extra.

c) Virtual or remote staffs have sufficient experience in their chosen field, so providing them with the relevant training on business-specific information can be done in a much shorter time.

d) Owners or the managers of small businesses can gain more time and focus more ‘on the business’ rather than ‘in the business’ when they hire remote/virtual staff because they can outsource the repetitive, tedious tasks, assignments, and projects to the team in south India.

The advantages of outsourcing business services or hiring remote/virtual services are one of the essential aims of this small-scale pilot case study, as the collection of qualitative research data and analysis can assist many stakeholders of the women's digital enterprise, including the persons of Indian origin (PIO) and the overseas clients. About 48% of the overseas clients who participated in this small-scale pilot case study informed that reducing the office & staff expenses was one of the primary reasons for them to hire a remote/virtual staff.

Table 4.6.1

Advantages of outsourcing business services or hiring remote/virtual services

Responses a to h	Results
Response a	12
Response b	4
Response c	6
Response d	3
Total	25

About 16% of the research participants found the remote/virtual staff's flexible working was useful for their businesses. About 24% of this qualitative research participants replied that they appreciated that the virtual/remote staff had extensive experience and that their transferable professional skills benefitted them. About 12% of the candidates requested to participate in this qualitative research responded that they could get their valuable time back by outsourcing mundane, repetitive work to remote or virtual staff. Hence, overseas clients find good value in outsourcing to remote or virtual staff (Holgersen et al., 2021). Thus, it can make a viable business model for women's digital enterprises in south India when done well (Holgersen et al., 2021). As some other researchers have observed there is no doubt that the previous outsourcing or offshoring is the new remote/virtual/work-from-home projects/contracts, which micro, small & medium enterprises (MSMEs) could efficiently handle in south India (Lojeski and Reilly, 2020).

4.6.2 What are the disadvantages of outsourcing the business services or hiring remote or virtual services?

a) Difficulty monitoring the employees as they carry out the tasks, assignments and projects remotely or virtually as they might work from home or in co-working offices. Hence, when an enterprise in a developed country decides to outsource its business services, it must be better organized, well-structured, and select & train an excellent team to handle its outsourcing projects.

b) When recruiting outsourced virtual or remote staff from other underdeveloped or developing countries, communicating in English can be a problem, as usually, English is a second language in these countries.

c) Cultural differences include more religious festivals in some countries that provide outsourcing or virtual or remote staff.

d) Disadvantages with the differences in the time zones as the remote or virtual staff from developing countries must stay awake during odd hours in the early morning and night to handle the tasks, assignments and projects for clients from developed countries.

Outsourcing business services to remote or virtual or work-from-home staff can take time and effort. It can act disadvantageous if the outsourcing management is not done correctly. Hence, the related primary and secondary data is collected from overseas clients to analyse them in this qualitative research. About 56% of the participants from the pool of overseas clients informed that they found it challenging to monitor their remote or virtual staff and had to align their business structure and do much pre-planning to accommodate the outsourcing concepts.

Table 4.6.2

Disadvantages of outsourcing business services or hiring remote/virtual services

Responses a to h	Results
Response a	14
Response b	6
Response c	2
Response d	3
Total	25

About 24% of the overseas clients who participated in the qualitative research project agreed that spoken English was one of the problems while communicating directly with the remote or virtual staff from overseas. Hence, it was found that outsourcing to someone from within their country or dealing with persons of Indian origin was a better means of communication. However, with the assistance from non-voice communication, such as chat boxes, messages and recorded messages, this issue has been addressed to a better extent. About 8% of the overseas clients inferred

that many festivals in countries such as India celebrated nearly half the year, i.e., more than 150 days a year, could distract the staff from focusing on their work. Although the numbers of public holidays are comparable to the western countries, the staffs from India are continuously asked to participate in religious festivals and spiritual get-togethers with their family and friends, which are a significant part of their cultural life in the local community. About 12% of the overseas clients who participated in this small-scale pilot case-study research thought that they found the remote or virtual staff from India or other countries found it difficult to cope with the differences in the time zones, at least during the initial stages because it affected their circadian rhythm. This area needs further research as the effects of working on weird timing to cater to the needs of overseas clients on the health of the staff in India must be ascertained in more detail.

4.7 Summary of answers to the research questions and research findings

Women's digital enterprises, themselves, were needed to ask specific research questions as the e-training provided by persons of Indian origin using 6D5PRFS-based business models had unique effects on them. Hence, they were asked if the 6D5PRFS-based business models were feasible and a very high percentage (about 92%) of the respondents answered positively. Hence, this research finding is promising on a smaller magnitude; hence, it needs to be re-ascertained with the help of a definitive, full-scale research so the model can be used on a much broader scale. Another question was asked to the respondents that were related to the suitability of 6D5PRFS-based business models to work from home or remote working, with-out much assistance from co-workers or managers and it was quite impressive to note that majority (about 80%) of them answered positively. Hence, the research findings state that it is a practical model to work with especially for women entrepreneurs in the selected locations of south India.

Owners of the women's digital enterprises in this small-scale case study were asked questions in regard to the savings or reduction of the travel time 'to and from' workplaces and the time to get ready and a substantial percentage (about 90%) answered that by adopting 6D5PRFP-based business models they could save around 1-4 hours per day. The findings from this answer are quite useful as it helps the women entrepreneurs especially married women and mothers with younger children. Another question was related to the comfortable nature and easiness of doing digital businesses from home or remotely and a bit more than half (about 60%) of the respondents answered that they were okay with the work from home or remote working concept. Hence, the research finding from the answers indicates that working from home or remote/virtual working is still in the process of getting acceptance in south Indian locations and there is a scope of further research, innovation and development.

Employees of the women's digital enterprises were asked questions on the availability of reliable internet/Wi-Fi (4G/5G) so they can perform their outsourcing or technological projects and a very high majority (about 90%) of the answers were positive. Hence, this a significant finding from small-scale case study research which reveals that south Indian states have sufficient digital infrastructure. Another question was about competency in handling computer & digital tools and majority (about 85%) of the respondents from selected, representative locations of south India answered that they were quite competent. Thus, the findings from this answer can be very encouraging to the digital services/products industry in south India, which includes the business process outsourcing and knowledge process outsourcing for developed countries. Hence, International business leadership in this area must be nurtured in a methodical manner.

Persons of Indian origin (PIOs) as guides or mentors for the stakeholders of women's digital enterprises were asked questions regarding the travel to and within India while starting and

running the women e-enterprises in south India. About a quarter of them answered that one of the main parameters that motivated them was being overseas in a developed country they can initiate and manage a business with the help of the online facilities in south India, now a days. The findings from the answers to this small-scale case study creates outstanding opportunities for doing international businesses in south India for persons of Indian origin and able to launch themselves as international business leaders.

Another question was asked to the persons of Indian origin which was related to the management of expenses that can be incurred in rupees which comes from the currency conversion advantage. One of the findings from the answers is that money making (MM) and money management (MM) which are one of the objectives of this small-scale case study can be achieved by persons of Indian origin using women e-enterprises as vehicles, in a much efficient manner.

Persons of Indian origin (PIOs) as guides or mentors for the stakeholders of women's digital enterprises were asked questions regarding the advantages of staying in an overseas, developed country and they answered that marketing activities can be handled by actively. The finding from these answers can be the pathway for persons of Indian origin to act as an ambassador for 'make in India' in their chosen developed country and actively make efforts for capacity development in international business leadership.

Digital training providers (both technical & business) for women digital enterprises to create minimum viable products (MVPs) using 6D5PRFS-based digital enterprise models were asked about the comparative advantage of using e-training with the academic learning. Majority of the respondents answered that the job readiness by providing customised, on-the-job e-training was better. Hence, one of the findings from this answer is on-the-job, customised e-training might be more practical in specific circumstances whereas academic learning has its own advantages.

Also, about a quarter of the respondents answered that academic training did not support the money making as its main objective but it was designed to provide knowledge and information on broader areas.

Digital training providers (both technical & business) for women digital enterprises to create minimum viable products (MVPs) using 6D5PRFS-based digital enterprise models were asked about the comparisons between e-training with the corporate training and about one third of the respondents answered that the skill set delivered for each set of target market had vast difference, i.e., corporate training involved a wide range of information, knowledge and skills covered in their e-training where as digital training rendered to micro, small and medium enterprises had a smaller range of specific skillset suitable for the particular business. This answer directs the researcher to the finding that e-training provided for micro, small and medium enterprises need to have a higher level of focus. About a quarter of the respondents answered that the number of participants of the e-training from micro, small and medium enterprises were much smaller as compared to corporate training programs. This answer enables the researcher to the finding that the e-training for the micro, small, medium and enterprises can be customised to a smaller audience.

Digital training providers (both technical & business) for women digital enterprises to create minimum viable products (MVPs) using 6D5PRFS-based digital enterprise models were given questions about the comparisons between e-training with the recreational training and about a quarter of the respondents answered that e-training given to micro, small and medium enterprises was related to business whereas the recreational e-training was related to games. This answer leads the researcher to the finding that there is a need for further research to find out the demand for each of the target audience. About a quarter of the respondents answered that e-training given to

micro, small and medium businesses was significant to the career development whereas recreational training was more about fun, and relaxation. Hence, the finding from this answer could be the need to explore further which type of e-training is necessary and relevant to the target audience in south Indian communities. About a quarter of the respondents answered that e-training for recreational audience was designed for physical fitness whereas e-training for micro, small and medium enterprises does not have this goal. Hence, the finding from this answer can be regarding the necessity for further research to understand the necessity of including areas of physical fitness in the e-training provided to micro, small and medium enterprises.

The clients of the digital women enterprises from developed countries - in this case, it is from selected places in Australia, were asked about the advantages of recruiting and working with outsourced or remote staff. About half of the respondents answered that cost effectiveness was the major advantage. This answer can lead us to decipher that small and medium business owners in Australia have the need to be good money managers and manage their expenses efficiently. Thus, the pilot case study can also arrive at the finding that there is a substantial need for cost effective outsourcing solutions. Another advantage was regarding the time efficiency small business owners can achieve by hiring trained remote staff.

Customers from Australia were also asked about the disadvantages of hiring remote staff and using their services. More than half of the respondents answered that monitoring remote staff was not an easy task. This answer leads to the finding that there is a need for a whole lot of support systems that can make the remote services to work better are in good demand. Also, about quarter of respondents answered that lower level of competency in English language led to significant problems. Hence, this can lead to a finding such as the necessity for recruiting staff that have good

English language skills. Also, another finding from this answer can be about the necessity of English language training for the remote staff.

4.8 Conclusions

Digital training and women digital enterprises are consistently increasing their presence in the tier-1, tier-2 and tier-3 cities or towns in south India, day by day. They need accurate data, information, knowledge, and support, so these institutions and business ecosystems are structured in feasible and sustainable ways (Flores, 2019). These results indicate that 6D5PRFS-based feasible business models can be of good assistance to the women entrepreneurs in south India. The findings of the current pilot case study in representative locations of south India can provide a head-start to the full-scale research studies and the development of feasible business models for creating minimum viable products (MVPs) in this area, as it endeavours to provide a more precise direction and indicative information for south India's women digital entrepreneurs as well as the current female employees and new job aspirants in women digital enterprises, Persons of Indian origin (PIO), training providers, and overseas customers, who want to add value to the industry or business ecosystems and local or global communities; (Flores, 2019).

While the results of the small-scale pilot case study paint a relatively optimistic picture of the current scenario for the digital training providers for women online start-up entrepreneurs, current 6D5PRFS business model-based digital enterprises and their female staff, based on the primary data secured by the participants of the qualitative research study, from the representative locations of five states of south India, it can only be considered as indicative, as further definitive, full-scale, longer-term, research study might be conducted to revalidate the findings while applying them in the real-life scenarios.

CHAPTER V

DISCUSSION

5.1 Discussion of results

There are various ways in which the same or similar meaning of e-learning is conveyed, such as web-based learning, digital learning, remote learning, online learning, virtual learning, distance learning, tele-learning, synchronous learning, e-training, e-teaching, e-tutoring, e-education, online education, virtual education, e-school, cyber school, and others. Also, when a business is conducted or uses information & communication technology (ICT), and digital transformation is enabled, it can be termed as e-commerce, e-business, digital business, web-based business, virtual business, or remote business and others. Furthermore, the employees of these digital businesses are generally known as digital employees, e-staff, remote staff, virtual staff and others (Nicholson, 2007).

Suitable and specifically designed questionnaires have been adopted from similar research in the academic and corporate areas. Newer questionnaires were created as research instruments and deployed among the micro, small & medium enterprises (MSMEs) stakeholders of representative places in south India.

5.2 Discussion on research questions for women digital enterprise owners/mgmt.

5.2.1 Were the 6D5PRFS – feasible-business model-based, digital training programs provided to the business owners, useful to their businesses and the trainers acted helpful (on a scale of 1 to 5; 5 being the most useful and helpful for the digital business)?

Since there are several other digital training programs or online training courses available in the market, it was a prerogative of this small-scale pilot case study to collect the primary data to

understand the niche or unique selling proposition (USP) of the digital training methodologies, programs and modules offered by persons of Indian origin (PIOs), which are tailor-made, easy-to-understand, appealing to the women-led, e-enterprises in south India.

Table 5.2.1

Usefulness of digital training programs and helpfulness of trainers

Scale of 1 – 5	Results
1 – Worse	2
2 – Not useful & helpful	3
3 – Neutral	10
4 – Useful & helpful	45
5 – Most useful & helpful	40
Total	100

Also, since digital training courses are the inventions of the new era that became more popular during or after the Covid-19 global pandemic, it matters how helpful the trainers are in providing these resources and what learning or training methodologies they use. About 85% of the interview participants from the selected places of South India reported that they felt the digital training provided to the women micro, small & medium enterprises (MSME) owners based on the 6D5PRFS enterprise model was useful as it had the necessary support and the trainers who handled the programs were helpful in facilitating them to reach their short-term business goals. Whereas 10% of the women business owners were neutral, and another 10% responded that the digital training provided was not useful and the trainers were not helpful.

Even though this is the smaller percentage in this pilot case study, further research must be done to analyse sufficient and reliable data.

5.2.2 Does using the 6D5PRFS feasible business model improves or increases the profitability of digital enterprises compared to the conventional, brick-and-mortar business (on a scale of 1 to 5, 5 being the highest improvement or increase in profitability of the digital enterprise)?

Table 5.2.2

Effects of digital enterprises on increased or improved profitability

Scale of 1 – 5	Results
1 – Worse increase or improvement in profitability	2
2 – Bad increase or improvement in profitability	8
3 – Neutral	10
4 – Good increase or improvement in profitability	40
5 – Excellent increase or improvement in profitability	40
Total	100

Digital services-based businesses built on the parameters of 6D5PRFS-based enterprise models and the related digital training provided to the owners have been designed to increase and improve the profitability of the already running conventional, brick and mortar businesses or if it is start-up business, comparably it is expected show improved business performance. Because the geographical area does not confine digital service businesses they are in, their target market and target customer reach can be much larger than a traditional, brick-and-mortar business. Hence, qualitative research methodologies such as interviews and personal observations were used to collect the primary data from the selected six places from five states of south India.

About 80% of the participants responded that 6DRS5P model-based, digital businesses had increased and improved their profitability in the short term compared to the conventional, brick & mortar businesses. About 10% of the participants in the research did not have anything to say.

Whereas about 10% of them felt that there was little difference between the two or there was no increased or improved profitability after implementing digital transformation to their businesses or starting a digital enterprise.

5.3 Discussion on research questions for women digital enterprise employees

5.3.1 How easy and comfortable was 6D5PRFS, business model-based, feasible, sustainable, reliable, custom-made, on-the-job, digital or online training designed for the job position (On a scale of 1 to 5, 5 being the easiest and most comfortable to learn)?

Table 5.3.1

Easiness & comfortable nature of working from home for employees

Scale of 1 – 5	Results
1 – Very uneasy & uncomfortable to learn	8
2 – Uneasy & uncomfortable to learn	4
3 - Neutral	4
4 – Easy & comfortable to learn	44
5 – Easiest & most comfortable to learn	40
Total	100

One of the significant practical problems with the employees or the prospective staff of the women digital enterprises and participants of digital training is the inertia and the negative mindset that makes them think that it is too hard and complicated to take up digital training or join as an employee in a digital organization. Hence, the training methodologies must have a good clarity

that it is easily & comfortable for most of the educated women in south India, who are sufficiently computer or digitally literate, to take up digital training and enter the digital workforce. Most participants, i.e., 84% of the qualitative research study conducted using interviews and personal observations, have responded that 6D5PRFS business model-based, digital training has been easy and comfortable, so they could perform well in their employment, whereas 4% of the employees who participated in the pilot case-study decided to remain neutral and not voice out their comments. However, 12% of the employees felt that they had a negative experience with the tailor-made digital training, so their expectations needed to be adequately met. Further, definitive, full-scale research needs to be conducted to decipher the information that is not clear. Hence, the results of this small-scale pilot case study could be considered only for indicative purposes to support the hypothesis, although it emphasises that the strategy is right.

5.3.2 Can 6D5PRFS - business model-based, viable, digital enterprises create an environment wherein the women e-staff or e-employees might find occupation in a tier-2 & tier-3 town and add more value to the local economy and the surrounding rural areas (Yes/No answer)?

Finding ways to minimize the unnecessary relocations to tier-1 cities, or towns from tier-2 and tier-3 cities, or towns for the sake of doing a job or doing business and coining relevant research question/s to review the literature of add to the academic literature has been one of the aims of the current pilot case-study. Hence, a mix of qualitative research methodologies such as interviews and personal observations were used to explore and collect primary data from the sample population comprising of employees of 6D5PRFS business model-based, digital enterprises who either worked from the comfort of their own homes or a co-working space, nearby their home.

The results of the research revealed that 68% of the participant reported that there was a possibility that digital learning and work-from-home or virtual/remote models of women's digital enterprises can eventually create opportunities for interested candidates who want to minimize migrating to the bigger cities to seek knowledge or join a job or start their own online business.

Table 5.3.2

Effects of 6D5PRFS business models on job creation and economy in tier-2/3 towns

States	Places	Interviews/Observations	Yes	No
Karnataka	Mysuru	30	20	10
Karnataka	Kodagu	5	1	4
Telangana	Hyderabad	40	26	14
Andhra Pradesh	Machlipatnam	5	3	2
Tamil Nadu	Ooty	10	9	1
Kerala	Wayanad	10	9	1
Total		100	68	32

However, 32% of the sample population of this pilot case study believed they did not feel that there would be any effect on knowledge/skill seekers or job aspirants or business start-ups moving to metropolitan cities of south India due to the introduction & expansion of digital training or digital enterprises, to tier-2 or tier-3 cities or towns.

5.3.3 Is custom-made, on-the-job training effectively provided with the help of digital methods, on par with face-to-face or offline training, and is it possible to facilitate a complete training program online? (Yes/No answer)?

The research question aimed to collect the primary data from the sample population of employees from the selected locations in south India to understand their responses on whether

online training could deliver similar experiences and results compared to the on-campus or in-office training by the training providers.

Table 5.3.3

Effectiveness of digital training for employees

States	Places	Interviews/Observations	Yes	No
Karnataka	Mysuru	30	25	5
Karnataka	Kodagu	5	3	2
Telangana	Hyderabad	40	35	5
Andhra Pradesh	Machlipatnam	5	4	1
Tamil Nadu	Ooty	10	9	1
Kerala	Wayanad	10	9	1
Total		100	85	15

About 85% of the research participants confirmed that the online or digital training provided was as good as the in-office training, and their experience has been positive. However, 15% of the sample population responded that the digital, remote/virtual training needed to improve. Hence, the indication from the small-scale, qualitative research used by the current pilot case study indicates that further primary and secondary data need to be adequately analysed to arrive at a suitable conclusion in this area of the research. Participants from the tier-1 cities or towns such as Hyderabad and Mysuru can have a few face-to-face sessions with the training providers if they have training centres in the selected locations, if possible, in order to mitigate these kinds of bottlenecks related to online training methodologies as well as the digital training delivery methods and any other perspectives to find out more solutions.

5.4 A comparative study between various universities, engineering colleges, medical colleges and the stakeholders of the micro, small & medium enterprises (MSMEs), from south India. This discussion of research questions and the comparative study is based on the primary data and the secondary data.

For over a decade, online teaching and training methods have been adopted by world-class universities or colleges to take care of the academic necessities of the learners who stay off-campus (Lewis, 2022). However, the direct & indirect assistance that the online teaching or e-training and online learning channels provided during the Covid-19 pandemic encompassed most universities, colleges, and affiliated students (Lewis, 2022). We can also find similar scenarios in the corporate world (Lewis, 2022). This pilot case study tries, on a small scale, to adopt similar techniques to duplicate the predefined scenarios and to explore the effectiveness of the online teaching, e-training or e-learning methods for the micro, small, and medium enterprises (MSMEs), in representative locations of south India, with the help of qualitative research methodologies such interviews and observations (Lewis, 2022). A comparative study has been made with the research study based on the online surveys conducted by Darius et al. (2021) on about 450 students from various universities, engineering colleges, and medical colleges in south India. This assists the current pilot case study to understand the similarities and differences, with the responses received from stakeholders of the micro, small & medium enterprises (MSMEs), from south India. Digital training programs designed for micro, small, and medium enterprises (MSMEs) in south India have made use of many methods such as animations, video training sessions prepared by trainers for instructions on a particular skill or skillset, a portal with knowledge repository and online discussion forums with fellow trainees (Paul et al., 2023).

There were some basic similarities with the digital or online training programs designed, developed and delivered for the university or college students and micro, small & medium enterprises (MSMEs) of south India. Support from student portals such as student information systems, a professional & well-organized set-up to work-from-home, chatbots, and online communication tools such as Google meet, Skype, or Zoom calls to interact with the trainers during training, online materials facilitated by the trainers and online quizzes with multiple-choice questions (MCQs) were some of the similarities with both the programs (Paul et al., 2023). Trainees and students felt that online or virtual classes have been practical because they allowed them to view the power point presentations (PPTs); presentations could be heard at their comfortable sound levels; and finally, commuting to the training venues or institutes was optional (Paul et al., 2023). The crucial components of digital or online training are digital classes or sessions; practice sessions that need to be done by the trainees, testing the effectiveness of the training programs and the trainees' performance, and communication within the team or the batch (Darius et al., 2021). Digital training can enable communication between the trainers & trainees, and between the trainees themselves (Darius et al., 2021). Digital tools for training need to be user-friendly, and the trainers need expertise, knowledge and experience to instil good morale in the team (Darius et al., 2021). The current pilot case study identifies & highlights the necessary digital identities, accessories & tools used for digital training programs and the methodologies of communication & information exchange between the people involved with women-led micro, small, medium enterprises (MSMEs), in south India (Darius et al., 2021). Qualitative methodology-based research conducted by Darius et al. (2021) using instruments like questionnaires has a similar focus and general to address the digital or online training participants' needs across various industry or business segments. Hence, the responses from the two qualitative

research studies, i.e., the online survey on digital or online teaching by Darius et al. (2021) on the universities and college students of south India and the current pilot case study on digital or online training for women-led MSMEs & their female staff, in selected, representative location of south India, have been used for the comparative study purposes, for similar interview questions or observational areas and discussed below as the secondary and primary data, respectively.

5.4.1 Discussion on digital methods for e-learning or e-training

Table 5.4.1

Digital methods for e-learning or e-training

Training Delivery Methods	Results
Individual assignment	35
Small group work (5 students)	45
Large group work (10 students or more)	5
Project based learning	15
Total	100

Secondary data from the qualitative research study conducted by Darius et al. (2021) on about 450 students from various universities, engineering colleges, and medical colleges in south India is compared with the primary data collected from the qualitative research from the selected, representative places of south India where-in about 200 stake holders i.e., employers and employees of women digital, micro, small, medium enterprises (MSMEs), were requested to participate in order to ascertain their options for training delivery methods. It was noted that most similar responses were received from both research studies, although they were not the same.

Furthermore, 23.3% & 15%, respectively, informed that they wanted to involve themselves in project-based learning, which has about 8.3% variation between the two research studies that highlight that students prefer it more than the stakeholders of digital enterprises.

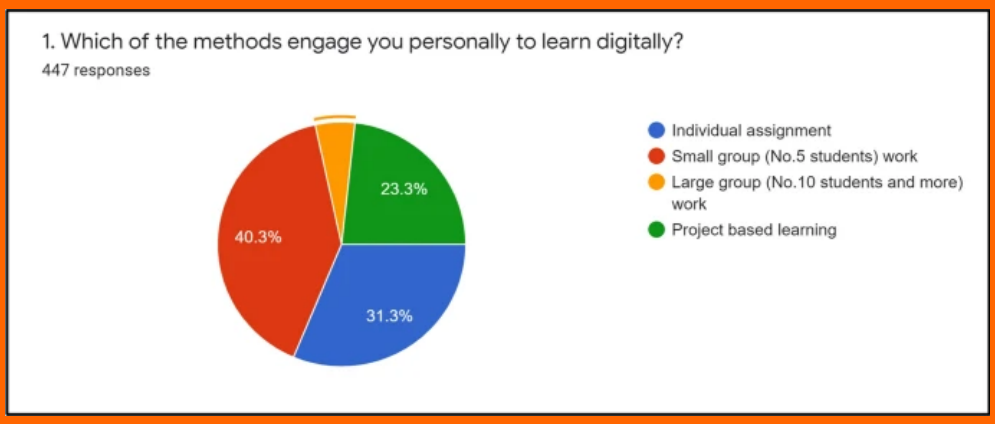

Figure 5.4.1

Digital methods for e-learning or e-training

Source: Darius et al., 2021. A survey on the effectiveness of online teaching–learning methods for university and college students. *Journal of The Institution of Engineers (India): Series B, 102*(6), pp.1325-1334.

5.4.2 Discussion on digital training approaches

Secondary data from the qualitative research study conducted by Darius et al. (2021) on about 450 students from various universities, engineering colleges, and medical colleges in south India is compared with the primary data collected from the qualitative research from the selected, representative places of south India where-in about 200 stake holders i.e., employers and employees of women digital, micro, small, medium enterprises (MSMEs), were requested to

participate in order to ascertain which digital approaches of training/teaching appealed to them the most.

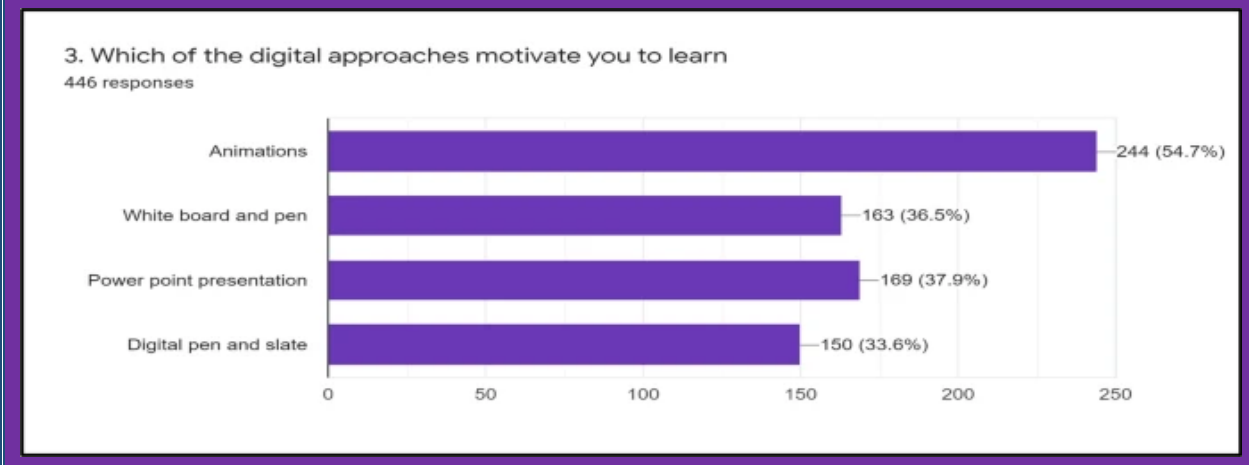

Figure 5.4.2

Digital training approaches

Source: Darius et al., 2021. A survey on the effectiveness of online teaching–learning methods for university and college students. *Journal of The Institution of Engineers (India): Series B*, *102*(6), pp.1325-1334.

Respondents of both groups informed that their highest preference was animations, i.e., 54.7% & 46%, respectively. Also, their second choice of training approaches was given as power point presentations or slides, i.e., 37.9% and 31%, respectively. In contrast, the lowest number of participants wanted to opt for the approach that included a digital pen and the slate for imparting the online training, i.e., 33.6% & 22%, respectively. One more parameter covered in the qualitative research study conducted by Darius et al. (2021), i.e., whiteboard and pen, has yet to be covered in the pilot case study for comparative study.

Table 5.4.2

Digital training approaches

Digital Training Approaches	Results
Animations	46
Digital pen and slate	22
Power point presentations	31
Total	100

5.4.3 Discussion on experience with online learning from home

Secondary data from the qualitative research study conducted by Darius et al. (2021) on about 450 students from various universities, engineering colleges, and medical colleges in south India is compared with the primary data collected from the qualitative research from the selected, representative places of south India where-in about 200 stake holders i.e., employers and employees of women digital, micro, small, medium enterprises (MSMEs), were requested to participate in order to ascertain how was their experience with digital-online training or teaching. It must be noted that there is a vast difference between the candidates who opt to join online learning as a student and the candidates selected as trainees in women's digital enterprises. Because the trainees in digital enterprises are selected after an extensive screening process, and their suitability regarding various parameters given in this pilot case study is already ascertained to a more considerable extent so they can deliver a good quality outcome to the clients when they start with their job responsibilities. The comparative study on the results of the two research projects is given as follows: About 42.5% and 75% of the research participants, respectively, informed that they were comfortably learning or training at their pace.

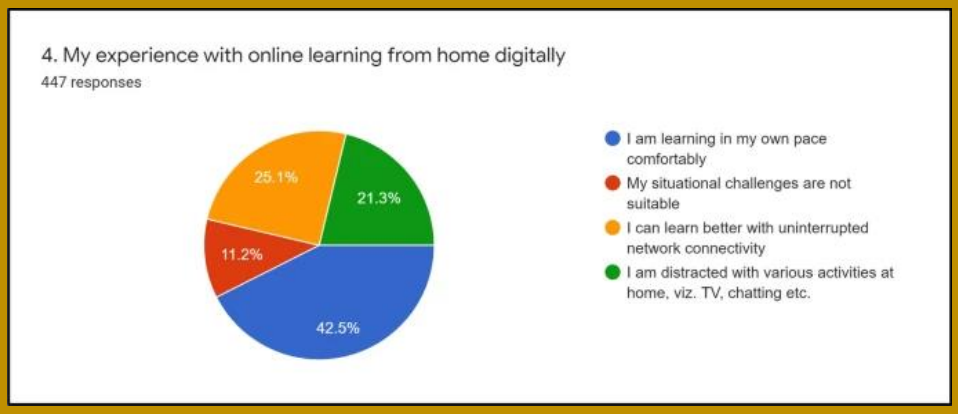

Figure 5.4.3

Experience with online learning from home

Source: Darius et al., 2021. A survey on the effectiveness of online teaching–learning methods for university and college students. *Journal of The Institution of Engineers (India): Series B, 102(*6), pp.1325-1334.

The percentage of trainees selected by 6D5PRFS business model-based, digital enterprises had a higher percentage of candidates positively answering because the management screened them with such parameters as a pre-requisite so they can perform well in the paid jobs shortly after the online or digital training. Although the trainees in digital enterprises could undergo training at their own pace, they might have to meet the tighter deadline at times to manage client expectations.

Also, most trainees have the financial resources to acquire the digital tools necessary for online job training. The women's digital enterprise management organizes such digital tools & accessories before they start the training with the organization. In comparison, the students can manage the parameters mentioned earlier according to their standards to learn and get through the assessments and examinations administered by the academic institutions.

Although the standards at universities and colleges are high, and the students need to maintain those higher standards, they are different from the standards that the employees of digital organizations have because they must cater to the needs of their clients in the real world. Hence, a higher difference is observed in the results between the two research studies using qualitative research methodologies in south India.

Table 5.4.3

Experience with online learning or training from home

Experience With Digital Training	Results
I am learning or training in my own pace comfortably	75
My situational challenges are not suitable	10
I can learn better with uninterrupted network connectivity	10
I am distracted by various activities at home such as TV, chatting, and others.	15
Total	100

Furthermore, about 11.2% & 10% of the research participants reported that their situational challenges needed to be addressed to perform in their chosen projects, i.e., studies or job training. These results are comparable because the situations might change, or sometimes people can make wrong decisions, and they realize that after starting the project.

About 25.1% and 10% responded that uninterrupted internet/Wi-Fi network connectivity was an issue. When the trainees are selected for the digital enterprises, they are informed about this pre-requisite for their job training program. Hence, only a tiny percentage of the candidates joining the micro, small and medium enterprises (MSME) digital training might need help in this

area. Suppose the internet/network/Wi-Fi connectivity problems continue with the micro, small and, medium enterprises (MSME) trainees, in that case, their job contract might be terminated, or they are advised to go and join a co-working space nearby their home, where uninterrupted internet/Wi-Fi facilities are available to enable them to perform well during and after their training periods. About 21.3% and 15% reported that they are distracted by various activities at home, such as TV, chatting and, others.

Micro, small and medium enterprises (MSME) e-trainees at digital enterprises are not immune to such disturbances; however, they are provided with the information and knowledge to address and mitigate such problems while working-from-home scenarios. Most of the e-trainees are made to understand that they will join a professional training program that enables them to handle professional responsibilities while serving clients, in the real world. Hence, even though they can work from home, they need to understand that compromising on a high level of work ethic and inability to deliver a good quality of service or product to the clients is unacceptable in today's business world.

5.4.4 Discussion on devices for online learning

Which of the following devices are used for online training or learning?

Secondary data from the qualitative research study conducted by Darius et al. (2021) on about 450 students from various universities, engineering colleges, and medical colleges in South India is compared with the primary data collected from the qualitative research from the selected, representative places of south India where-in about 200 stake holders i.e., employers and employees of women digital, micro, small, medium enterprises (MSMEs), were requested to participate in order to ascertain which devices that they were using for their online education/digital training purposes. There is a visible difference between the two studies since the

customized, on-job training for women in digital enterprises is a rigorous program and doing it on laptops or PCs are most appropriate. Hence, about 85%, 10% & 5% of the participants, while collecting the primary data for the pilot case study from the sample pool of the stakeholders of women digital enterprises from south India, responded that they are using the laptop or PCs, tablets & smartphones, respectively. However, a similar percentage of participants, i.e., 78.1% of the qualitative research study conducted by Darius et al. (2021), responded that they used a laptop or PC to do their online education in their college or university in south India, whereas 5.8% and 58.7% of the students informed that they used tablets and smartphones, respectively.

Students preferred to use more smartphones for their education as that might have been a suitable device for them. Personal observations during the qualitative research have also revealed a large pool of well-educated and duly computer or digitally literate women or female candidates available in South India, which positively reinforces the hypothesis of this pilot case study.

Based on further personal observations of the sample population, it has been revealed that many women had good college education on the undergraduate level, and some even had education at the postgraduate level. Most female students went through hard times to study well and secure good grades in their academic education.

Their families invested a lot of money & time so that their (female) children could complete their formal education successfully. The educational institutions in south India are good, and the academicians maintain very high standards while delivering a holistic educational experience to their students. The standard of education is also excellent, and we can rate it high on the global standards.

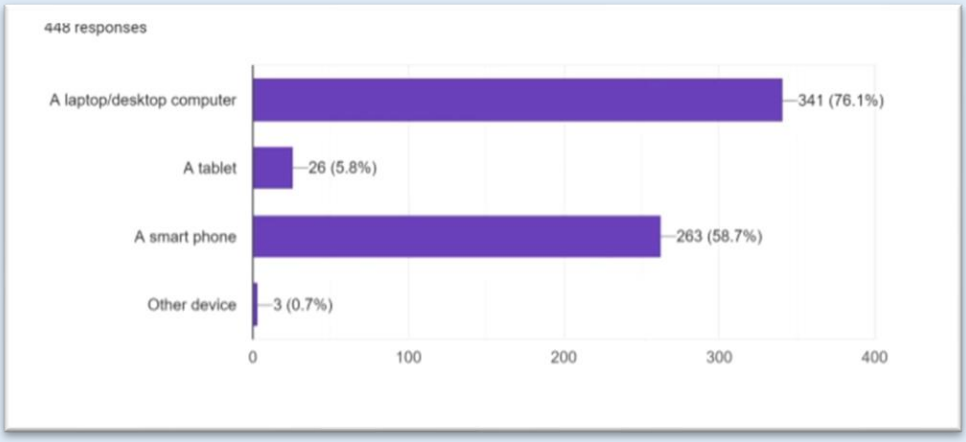

Figure 5.4.4

Devices for online learning

Source: Darius et al., 2021. A survey on the effectiveness of online teaching–learning methods for university and college students. *Journal of The Institution of Engineers (India): Series B, 102(*6), pp.1325-1334.

Table 5.4.4

Devices for online learning

Devices Used for Online Training/Learning	Results
A Laptop / Desktop Computer	85
A Tablet	10
A Smart Phone	5
Other Devices	0
Total	100

5.4.5 Discussion regarding off-campus e-learning or e-training

Which of the statements is true regarding online or digital learning while doing it off-campus?

Secondary data from the qualitative research study conducted by Darius et al. (2021) on students from various universities, engineering colleges, and medical colleges in south India is compared with the primary data collected from the qualitative research from the selected, representative places of south India where-in about 200 stake holders i.e., employers and employees of women digital, micro, small, medium enterprises (MSMEs), were requested to participate in order to ascertain what level of the disturbance they had to deal with while their online education or digital training was being carried out.

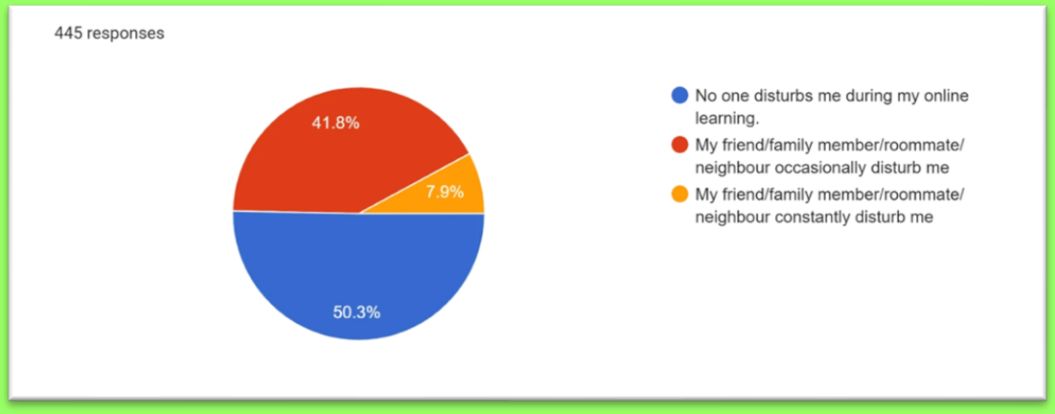

Figure 5.4.5

Off-campus e-learning/e-training

Source: Darius et al., 2021. A survey on the effectiveness of online teaching–learning methods for university and college students. *Journal of The Institution of Engineers (India): Series B, 102(*6), pp.1325-1334.

About 50.3% and 85%, respectively, replied that they had no disturbance from anybody at home. This substantial difference is because trainees of digital enterprises are informed and educated regarding how to manage or eliminate the disturbances in their work-from-home environment.

Hence, the family members and friends are given prior information and constantly advised that the e-trainees are undergoing professional training and doing projects; hence, it is not okay to disturb them during training or work timings.

Table 5.4.5

Off-campus e-learning/e-training

Online/Digital Training - Off-campus experiences	Results
No one disturbs me during my online/digital learning	85
My friend or family member/roommate/neighbour occasionally disturb me	10
My friend or family member/roommate/neighbour constantly disturb me	5
Total	100

About 41.8% and 10%, respectively, informed that their family member or friend occasionally disturbed them. This difference is because of the same explanation given above because it was a part of the conditions of the custom-made, on-the-job training program & job contract to educate & build awareness among the trainees that disturbance to digital training & work-from-home projects must be reduced to the minimum or eliminated as much as possible. Around 7.9% and 5% reported having a higher level of disturbance when learning online or acquiring digital training. Hence, it clearly shows that building awareness and good work ethics can have a positive outcome.

5.4.6 Discussion on responsibilities at home

How many responsibilities are there at home or place of residence?

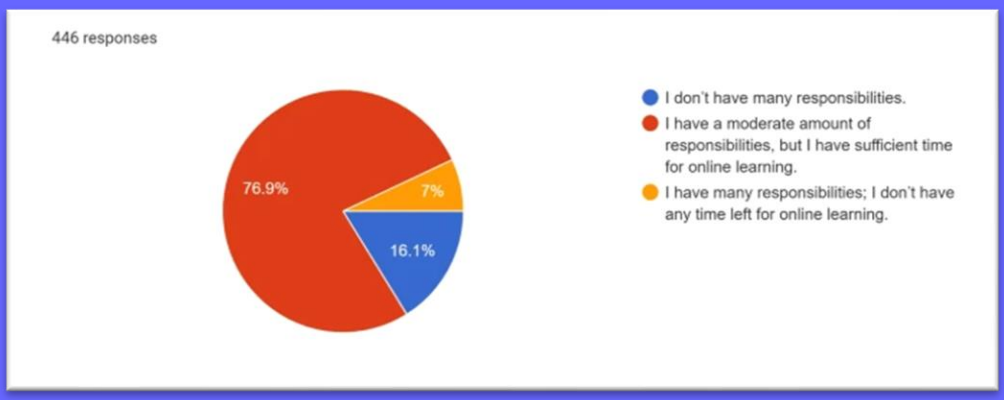

Figure 5.4.6

Responsibilities at Home

Source: Darius et al., 2021. A survey on the effectiveness of online teaching–learning methods for university and college students. *Journal of The Institution of Engineers (India): Series B, 102(*6), pp.1325-1334..

Secondary data from the qualitative research study conducted by Darius et al. (2021) on students from various universities, engineering colleges, and medical colleges in south India is compared with the primary data collected from the qualitative research from the selected, representative places of south India where-in about 200 stake holders i.e., employers and employees of women digital, micro, small, medium enterprises (MSMEs), were requested to participate in order to ascertain how many responsibilities do they have at your home or place of

residence, so if it is feasible and practical to study-from-home or work-from-home using online or digital methodologies

Table 5.4.6

Responsibilities at Home

Responsibilities at Home	Results
I don't have many responsibilities. I can focus fully on online/digital training.	10
I have a moderate number of responsibilities, but I have sufficient time for online or digital training.	85
I have many responsibilities. I don't have any time left for digital/online training.	5
Total	100

. About 16.1% and 10%, respectively, replied that they did not have many responsibilities and that they could focus adequately on remote learning or digital training.

Since an extensive screening process is followed while selecting the women digital enterprise trainee candidates, most had lesser responsibilities or organized their life to focus better on the training and the job role they were assigned.

Also, 7% and 5% reported that they had so many responsibilities that they needed help focusing on their on-the-job training or university studies.

Such candidates were advised to take a break to reconsider their decision to join the online or digital training or learning programs or join back when they have organized their time and personal commitments in a suitable manner.

5.4.7 Discussion on methods for clearing doubts

What is the most preferred method for clearing the doubts in online learning or digital training?

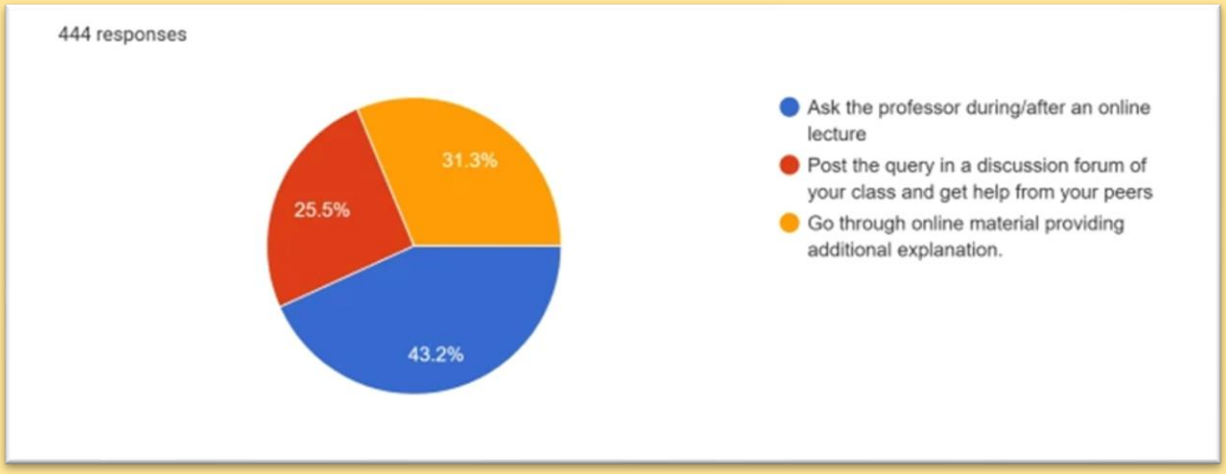

Figure 5.4.7

Methods for clearing doubts.

Source Darius et al., 2021. A survey on the effectiveness of online teaching–learning methods for university and college students. *Journal of The Institution of Engineers (India): Series B, 102(*6), pp.1325-1334.

Table 5.4.7

Methods for clearing doubts

Methods for Clearing Doubts	Results
Ask the trainer during/after the training session	45
Post the query in the discussion forum of the portal and get assistance from peers or teammates	25
Go through the online training material providing the additional information	30
Total	100

Secondary data from the qualitative research study conducted by Darius et al. (2021) on students from various universities, engineering colleges, and medical colleges in south India is compared with the primary data collected from the qualitative research from the selected, representative places of south India where-in about 200 stake holders i.e., employers and employees of women digital, micro, small, medium enterprises (MSMEs), were requested to participate in order to ascertain what level of the disturbance they had to deal with while their online education or digital training was being carried out.

About 43.2% and 45% respectively replied that they would ask the professor or the trainer during or after the online classes. These responses are similar. About 25.55% and 25% respectively replied that they plan to post their questions in the discussion forums and get guidance or assistance from their batch mates. These responses are quite similar between the two research studies, as well. About, 31.3% and 30% respectively, wanted to go-through the online learning or training materials and clear their doubts which are similar in both the qualitative research studies, conducted in south India on different contexts of using digital or online learning or training

5.4.8 Discussion on testing methods for digital training

Which type of quiz is more effective for testing understanding, in online learning/digital training?

Secondary data from the qualitative research study conducted by Darius et al. (2021) students from various universities, engineering colleges, and medical colleges in south India is compared with the primary data collected from the qualitative research from the selected representative places of south India where-in about 200 stake holders i.e., employers and employees of women digital, micro, small, medium enterprises (MSMEs), were requested to participate in order to ascertain the data.

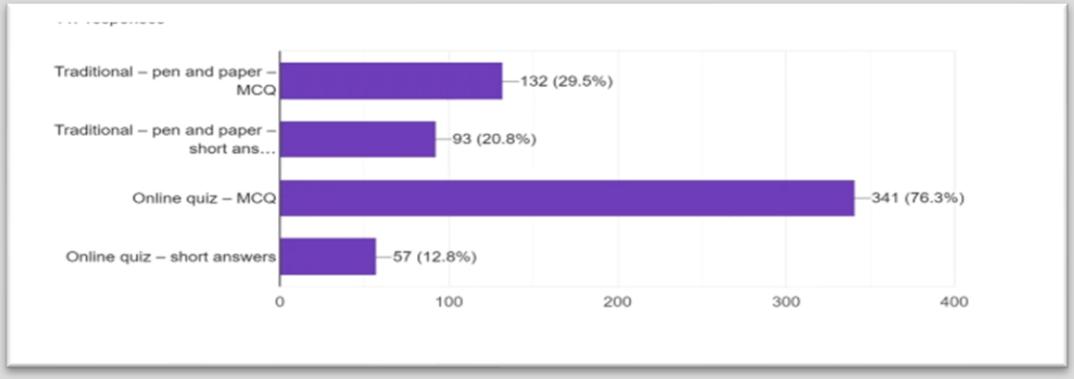

Figure 5.4.8

Testing Methods for Digital Training

Source: Darius et al., 2021. A survey on the effectiveness of online teaching–learning methods for university and college students. *Journal of The Institution of Engineers (India): Series B, 102(*6), pp.1325-1334.

Table 5.4.8

Testing Methods for Digital Training

Testing Methods for Digital Training	Results
Online quiz – MCQ	75
Online quiz – Short answers	15
Traditional – Pen & paper MCQ & Short answers	10
Total	100

About 76.3% and 75% responded that they preferred online quizzes using Multiple Choice Questions to test their understanding of online classes or sessions. About 12.8% and 15% replied that they wanted online quizzes involving short answers. Whereas about 29.5% or 20.8% and 10% replied that they were comfortable being assessed with the help of traditional methods with multiple choice questions or short answer questions, using pen & paper. This analysis supports the hypothesis that online methodologies of assessments are getting more acceptable within academia and micro, small, and medium enterprises (MSMEs) in south India, which have decided to adapt to digital transformation and the digital India pathway (Paul et al., 2023).

There are quite a few digital teaching tools in the market, and the stakeholders of both academia and digital - micro, small, and medium enterprises (e-MSMEs) can find this confusing at times to select the best technological tools to design and deliver the programs (Paul et al., 2023). Learning management systems come with various costs and features, and the trainees and the trainers can adopt them per their requirements. Learning management system (LMS) tools come as Software as a Service (SaaS) and are charged for a learner, for a month, for single use or a course or for a reasonable licensing fee wherein it can be downloaded from the internet (Paul et al., 2023).

5.5 Discussion on research questions for digital enterprises or businesses

5.5.1 Was doing a 6D5PRFS viable business model-based, digital enterprise from home profitable or not? (Yes/No Response)

Women digital businesses from the selected places such as Mysuru, Kodagu, Hyderabad, Machlipatnam, Ooty and Wayanad, represent the five southern states of India such as Karnataka, Telangana, Andhra Pradesh, Tamil Nadu and Kerala, have been interviewed and observed to collect the primary data on the profitability. As such, the investment has been mainly on computer hardware such as a desktop or laptop and a smartphone along with a good internet/Wi-Fi network as they predominantly operate from their home or affordable, co-working places. Most of the software that could be used for business purposes can be taken on easy monthly subscriptions; some are also free. Also, good ergonomically designed furniture to assist in working longer hours from home can be a good investment. However, only a few participants reported having such a facility in their homes, although most co-working facilities had ergonomically designed furniture.

Table 5.5.1

Profitability of 6D5PRFS business models

States	Places	Interviews/Observations	Yes/No
Karnataka	Mysuru	30	Yes
Karnataka	Kodagu	5	Yes
Telangana	Hyderabad	40	Yes
Andhra Pradesh	Machlipatnam	5	Yes
Tamil Nadu	Ooty	10	Yes
Kerala	Wayanad	10	Yes
Total		100 Respondents	

Most women digital business owners already had the prerequisites to start a digital service outsourcing business and could work remotely or virtually from home. These women digital service outsourcing businesses specifically relied on the parameters of the 6D5PRFS-based feasible, reliable & sustainable business models, which enables the pilot case study to arrive at the hypothesis to confirm the suitability of such an e-business model for the women to focus & implement – simple & comfortable, ethical & legal ways of money making & money management in an honourable & respectable manner with empathy & gratefulness that are enjoyable & exciting (SC+EL+MM+MM+HR+EG+EE).

Some of these women enterprises have been doing digital service outsourcing businesses for a while, and the e-training requirements were lesser as compared to the e-training requirements for a newer digital business start-up. Hence, collecting the primary data was easier, quicker, practical, and more reliable.

5.5.2 Does adopting a 6D5PRFS - viable business model-based, women digital enterprises facilitate a situation where the business owners & staff can reduce going out on the busy & congested Indian roads, and if more & more citizens follow this as their primary occupation method, can it minimize the overall air pollution? Also, can it reduce the number of women digital business owners exposed to the adverse effects of traffic congestion & air pollution? (Yes/No response).

This research question was community-based and focused on addressing one of the major research problems in south India, i.e., air pollution in metropolitan cities in south India. This pilot case study can indirectly add value in finding a solution on a minuscule manner. Working from home can reduce unnecessary vehicular traffic to minimise the resulting air pollution. This subtle

strategy can be one way of building sustainable businesses, which is necessary for today's and tomorrow's communities.

The stakeholders of the digital businesses, independent & qualified observers on environmental issues, i.e., air pollution in south India, assisted in providing the primary & secondary data. 85% of the participants responded in favour of the hypothesis and supported the concept that when women work from home, they may not expose themselves to air pollution and its adverse effects, such as fatigue, eye infections, skin irritations, and respiratory problems.

However, 5% of the participants disagreed that working from home can reduce air pollution or minimise the adverse effects on women digital entrepreneurs. Since the current qualitative research is a small-scale, pilot case study, further definitive, full-scale research needs to be conducted to verify this hypothesis in the longer run, which could highlight these advantages of digital enterprises for women and the community at large in south India.

Table 5.5.2

Effects of 6D5PRFS business models on traffic congestion & air pollution

States	Places	Interviews/Observations	Yes	No
Karnataka	Mysuru	30	25	5
Karnataka	Kodagu	5	2	3
Telangana	Hyderabad	40	37	3
Andhra Pradesh	Machlipatnam	5	3	2
Tamil Nadu	Ooty	10	9	1
Kerala	Wayanad	10	9	1
Total		100	85	15

These advantages for the communities in India explain the significance of one of the features of women's digital enterprises and how it solves the problem of air pollution in India in a factual, concrete, and measurable way.

The benefits of this pilot case study in this area can be very subjective, and they can appeal to the pains constantly experienced by office-going women in the cities of south India. This advantage of women's digital businesses is why this specific feature matters, and the benefits of the 6DRS5P business models are unique.

5.5.3 Does starting and managing a 6D5PRFS – based, feasible-business model, and working-from-home opportunity have given women entrepreneurs a chance to gain more time for taking better care of their health? (Yes/No response).

Table 5.5.3

Suitability of 6D5PRFS business models for promoting healthier workplaces

States	Places	Interviews/Observations	Yes	No
Karnataka	Mysuru	30	27	3
Karnataka	Kodagu	5	5	0
Telangana	Hyderabad	40	32	8
Andhra Pradesh	Machlipatnam	5	5	0
Tamil Nadu	Ooty	10	10	0
Kerala	Wayanad	10	10	0
Total		100	89	11

As given in this dissertation paper, an appropriate mix of qualitative research methods such as interviews and personal observations were used to obtain the primary data from about a hundred participants from five southern states of India to ascertain how they viewed the work-from-home

scenario in terms of the health benefits or hazards the can be attributed to the features of the 6D5PRFS business model based, digital enterprises.

About 89% of the participants responded that they could look after their health better in the work-from-home environment. Some of the participants from tier-2 and tier-3 towns in South India reported that they were comfortable sitting near a window to expose them-selves to the sunlight or even sitting near the greenery in their gardens or indoor gardens to be in places with abundant oxygen and cleaner air was available. However, city dwellers, i.e., participants from tier-1 and tier-2 cities such as Hyderabad or Mysuru, have responded that they might have lesser opportunities to sit outside in the garden, although they had the option to sit near the window and expose themselves to the sunlight which was not a choice if they worked in an office atmosphere. Many participants have downloaded pedometers on their smartphones. They have started walking more and more inside their homes to keep themselves physically active, while some others have been able to purchase a treadmill to do the same. Some participants could get physically active by doing household chores such as cleaning, cooking, and washing in their spare time. In contrast, some other participants opted to do yoga, free-style exercises, pranayama, and surya namaskar (sun salutation exercises) or even went to the parks near their homes, well-maintained by local municipality councils. Hence, the work-from-home environment has enabled the stakeholders of the women's digital enterprises to expose more to the sun because they can sit in a chosen place or even work outside in a calmer, greener garden or a balcony with indoor plants, so the professional hazards such as the obesity & D – vitamin deficiency, can be kept away. Nowadays, some co-working spaces have basic gym or exercise equipment in a well-ventilated room for digital entrepreneurs to keep themselves physically active. Some have a quiet and serene room dedicated to meditation to relieve themselves from the stress and strain of being in the fast phased, digital

business environment. Although now it is a well-known fact that being physically active and managing mental stress are some of the pre-requisites for keeping good health, more awareness as a part of digital training needs to be provided to the stakeholders of women digital enterprises to make these good habits, a daily part of their working lives or their lifestyle, in general. Being active was a regular practice just a few decades ago until the sedentary lifestyles took over the communities that has posed huge challenges to their health & well-being; hence, the stakeholders of the women enterprises, need to be made aware of this important parameter.

5.6 Discussion on research questions to persons of Indian origin (PIO)

About twenty-five persons of Indian origin (PIOs) were requested to contribute from various parts of Australia as research participants for this small-scale pilot case study based on qualitative research methods. Most of them would have already started businesses in India or have the idea to start a business in India. Some have acted as mentors or guides for digital outsourcing or remote working businesses and the associated digital training, as they have relevant industry experience.

5.6.1 What were the main problems of starting a traditional, brick-and-mortar business in South India while staying overseas in a developed (western) country? Please select from the list below.

a) Incompatibility with the time zones and related problems while dealing with the stakeholders in south India.

b) Corruption in the bureaucracy at Indian government departments.

c) Non-availability of local business funding or finance for persons of Indian origin from Indian banks or financial institutions.

d) Problems with English communication in the local communities of tier-2 and tier-3 towns, south India as English is normally a second or third language.

e) Undue Expectations of free money from parents, family members and community from non-resident-Indians (NRIs) or Persons of Indian origin (PIOs).

f) Dishonest behaviour the collaborators in south India and mismanagement of money.

g) Difficulty in receiving the money from India back to their country where they live & work.

h) Unfriendly behaviour of some of the family & community members in India filled with unnecessary comparison, competition, confusion, conflict, jealousy, hate and selfishness.

i) Necessity of travel and expectation to be physically available in south India often and unaffordable nature of frequent travel to and within south India.

Conventional, brick-and-mortar businesses come with many risks mainly associated with the initial investment amounts and managing the onsite staffs that need to be monitored constantly. Thus, persons of Indian origin who tends to live abroad can find it hard to take control of their businesses when they start a conventional, brick-and-mortar business unless a reliable and efficient team can manage the operations in south India. The primary and secondary data collected on the above topic has been given below that highlights the percentage of the participants from a sample of 25 persons of Indian origin (PIO) who provided the information.

Time zones play a major role while doing a physical, traditional business from overseas in south India, because the teams need to be able to work around odd hours of the day to communicate with the persons of Indian origin who wants to manage the business from overseas.

Australia has a time zone (AEST) wherein it is about five hours earlier to Indian standard time (IST) Indian team need to wake up much earlier than their normal time and get used to that. Other points are self-explanatory for qualitative data analysis as the details in the above list are focused on clearly defined, specific points.

Table 5.6.1

Problems for a PIO in starting a brick & mortar/conventional business in South India

Responses a to h	Results
Response a	4
Response b	2
Response c	4
Response d	3
Response e	4
Response f	2
Response g	3
Response h	2
Response i	1
Total	25

5.6.2 What were the major problems of dealing with women digital enterprises' stakeholders in south India? Please select from the following list.

a) Most stakeholders of the women digital enterprises from south India are well-educated in good academic institutions. However, a substantial percentage of them lack the skills required to run the business as they might not have practical experience.

b) Some of the stakeholders of the women's digital enterprises from south India might have arrogant attitude due to cultural factors because they might have higher academic qualifications as compared to their job profile. Hence, they might not be trainable due to their closed mindset.

c) Some of the stakeholders of the women's digital enterprises from south India had a long gap of a few too many years between their education and their occupation since they got married at an earlier age and were supposed to handle household responsibilities and were not allowed to work in a job or start their business.

d) Many stakeholders of the women's digital enterprises from south India were found to be educated in a field irrelevant to the digital business they wanted to start. Hence, years of academic studies in under-graduation or even post-graduation was unrelated to digital businesses, thereby creating a problem of unlearning older skills and relearning newer skills.

e) Some stakeholders of women's digital enterprises were looking for stable government jobs and were not interested in work-from-home or virtual jobs in digital enterprises as they might look unreliable.

f) Stakeholders of digital women enterprises might have wrong expectations of the job or the business regarding the salary or revenue.

g) Undergoing training to improve the skills in remote or virtual work and managing outsourced businesses needs patience, passion, and sufficient time, such as about one to two years although many stakeholders of women's digital enterprises tend to do it in a much shorter time. Some stakeholders do not want to get involved rigorously or show the necessary passion or patience.

h) Due to the nature of the job or business, women digital enterprises which can be managed from home or virtually or remotely are not taken seriously by the stakeholders in south India, as they do not think that digital businesses can be real businesses like a conventional brick & mortar business, yet. The stakeholders need to understand and believe in the strength of the digital business models; most of the time, it is seen that the potential of woman's digital businesses to generate good revenues are undervalued.

i) Family members of the women digital business owners in south India play a significant part in making decisions. Hence, having a system to build awareness and education in this area can be a challenge until this concept gets broader acceptance in the communities of south India.

j) Substandard levels of work ethics and a 'take it easy' policy from some of the stakeholders of digital women enterprises.

Dealing with the Indian stakeholders from digital women enterprises is difficult. It takes much patience. Hence, the business systems and processes need to be laid out to reach specific goals to make this journey comfortable and productive for both parties.

Thus, a mix of interviews and observations were used as a part of this qualitative research done with the help of the small-scale pilot case study to collect the primary and secondary data for analysis. It has been the experience of many persons of Indian origin that the egoistic nature of Indian women entrepreneurs due to their achievements in academic education came as an issue while dealing with them on business transactions. It was noted by about 16% of the participants. Some participants inferred that dealing with women's digital enterprises was sometimes challenging because of their lack of practical business experience and closed mindset. This observation was made by about 12% of the research participants. Some digital enterprise owners

were also qualified in another field on a master's or PhD level, and their chosen business was unrelated to their qualifications. Hence, they had to relearn most of the things to run the business. This parameter was observed by about 8% of the research participants.

Table 5.6.2

Problems for a Person of Indian Origin (PIO) in dealing with the stake holders of women digital enterprises, in south India

Responses a to h	Results
Response a	4
Response b	3
Response c	3
Response d	2
Response e	2
Response f	1
Response g	2
Response h	2
Response i	3
Response j	3
Total	25

This research also observed another parameter that relates to the cultural and social systems in south India that force women to marry at an earlier age. Thus, they get involved with their family responsibilities at an earlier age, which comes up with raising children and taking care of older parents and parents' in-laws at home. This parameter can lead to a knowledge gap that might work as a hindrance while working in a professional atmosphere. This parameter was observed by about

12% of the participants. Some women digital entrepreneurs have an employee mindset and look for stable jobs that the government sector can offer. Hence, introducing an entrepreneur's mindset requires much training time and patience. This observation was made by about 8% of the participants of this small-scale pilot case study research. Due to old-school thinking and unfamiliarity with the potential of digital businesses, many entrepreneurs were sceptical that money could be earned using much simpler ways and more efficiently by working from home. Hence, they need help assimilating the ideas around digital transformation in the current digital age. This parameter was observed by about 8% of the participants that need to be addressed by the practitioners in the industry.

Family members of the digital business owners created major bottlenecks while operating the enterprises due to their ignorance or arrogant attitude. This parameter was observed by about 12% of the research participants. Also, this family culture did not encourage the women to do professional work involving money making and money management, which was considered a man's job. This factor demotivated women entrepreneurs; however, their mindset is changing drastically in the last decade for the better. This parameter was observed by about 12% of the research participants while dealing with women's digital enterprises in south India.

5.6.3 Does providing digital training to women digital enterprises in South India can assist them in starting and establishing a feasible e-business? (If the answer is 'yes' - On a scale of 1 to 5, 5 - Strongly disagree, 4 – Disagree, 3 – Neutral, 2 – Agree, and 1 – Strongly agree)?

Training and skill development to eradicate ignorance about the newer digital technologies and making the women in south India business-ready or job-ready is an important exercise.

This goal can be achieved on a larger scale relatively quickly using digital training methodologies, programs and modules.

Table 5.6.3

Effectiveness digital training for e-businesses in south India, as per PIO

Scale of 1 – 5	Results
1- Strongly agree	16
2 – Agree	5
3 – Neutral	2
4 – Disagree	1
5 - Strongly disagree	1
Total	25

About 64% of the participants strongly supported that it was possible to support more entrepreneurs to start their digital businesses using digital training. About 20% agreed it was a practical idea to enable digital entrepreneurship among women in south India and promote the development of work-from-home opportunities. In comparison, about 8% wanted to refrain from saying anything about the appropriateness of digital training to start digital enterprises. In contrast, about 8% did not agree that digital training can be used to promote the starting of women's digital enterprises in south India.

5.6.4 Are the stakeholders of women digital enterprises in South India, training-ready and their level of education & computer/digital literacy suitable to receive the 6D5PRFS business model-based digital training? (On a scale of 1 to 5, 5 - Strongly disagree, 4 – Disagree, 3 – Neutral, 2 – Agree, and 1 – Strongly agree)?

Understanding the target audience by assessing their suitability of digital training and digital entrepreneurship is a major aim of this small-scale pilot case study.

Prior learning from formal education and computer or digital literacy are vital to undergo digital training in 6D5PRFS based digital entrepreneurship as it requires good hold on the basics and a good level of common-sense to think independently and understand newer concepts.

Hence twenty-five participants of persons of Indian origin (PIO) were asked to provide primary data in this area. About 60% of the persons of the Indian Origin (PIO) who attended this research study believed women entrepreneurs from south India were training ready. In comparison, about 20% inferred that the women entrepreneurs had good formal education and had good computer or digital literacy.

Table 5.6.4

Training readiness of stakeholders of e-businesses in south India, as per PIO

Scale of 1 – 5	Results
1- Strongly agree	15
2 – Agree	5
3 – Neutral	2
4 – Disagree	2
5 - Strongly disagree	1
Total	25

About 8% wanted to remain neutral and around 12% believed the women entrepreneurs were not yet ready for the digital training on 6D5PRFS based viable digital entrepreneurship.

This is a good indication from the current small scale pilot case study while understanding the target audience for the requirements of digital training for micro, small & medium enterprises (MSMEs), in south India.

5.6.5 What are the advantages for a person of Indian origin (PIO) in returning to India permanently or going back to India for a long term to get involved in building 6D5PRFS business model-based, digital organizations and digital training? Please select from the list below.

a) It assists in understanding the exact developmental scenarios in India currently existing in women's digital enterprises and digital training in south India.

b) It can enable persons of Indian origin (PIO) to communicate better with the stakeholders of the women's digital enterprises in south India.

c) It may minimize or eliminate the difficulties that arise from dealing with more mediators, which might lead to another layer in the outsourcing business that might create extra expenses and unnecessary communication problems.

d) It can allow the persons of Indian origin (PIO) to experience the positive changes happening in South India first-hand and analyse the extent to which the possibilities in women's digital enterprises and digital training are practical.

e) It might create an avenue to visit the family members for a longer time which otherwise would have been for a few weeks up to a month previously.

f) It might allow children born or raised overseas to be with other family members in India for a longer time, develop intimacy with them, or understand more about family or human relationships in south Indian communities.

g) It can create an opportunity for persons of Indian origin (PIO) to travel locally within South India and provide an opportunity to have a working holiday while enjoying the culture, food, geography, people, shopping and others.

h) 'Vocal for local' is the recent slogan in India, and another slogan is 'local is the new global' to make the local products & services globally available. One of the ways to understand what is local and to be able to be 'vocal for local' is to experience what is locally available in South India, personally.

i) Leadership from the current Prime Minister, Narendra Modi & the current generation of leaders (since 2014) in India has touched many more areas that encompass the lives of the grassroots communities in south India.

The explanation in the above list is quite self-explanatory that provides the primary data from the persons of Indian origin and the percentage of the participants that evenly covers the broader areas of advantages when they want to return to India to implement digital training or enable digital entrepreneurship for women entrepreneurs in south India.

Many parameters have created an environment where local and global citizens can participate and enjoy adding value to the communities in India and connect with the rest of the world meaningfully. 'Skill India' and 'Make in India' initiatives from Prime Minister Sri Narendra Modi that local and central governments are implementing are also well received by the local communities in south India.

The primary data obtained from this small-scale pilot case study can be analysed in a practical manner where it can give indicative information for further research in this area.

Table 5.6.5

Advantages for a PIO when he returns to India to do the 6D5PRFS business

Responses a to h	Results
Response a	5
Response b	4
Response c	3
Response d	1
Response e	2
Response f	2
Response g	2
Response h	2
Response i	2
Total	25

5.7 Discussions based on the research questions regarding digital training providers.

About twenty-five digital training providers from south India were requested to be respondents for this small-scale pilot case study based on qualitative research methodologies. Most of the participants were already in the digital training businesses in south India or have the idea to start a business in India. Some were associated with digital businesses and indirectly associated digital training as stakeholders, as they had extensive industry or business experience.

5.7.1 What are the benefits of custom-made or tailor-made e-training to micro, small & medium enterprises in south India? Please select from the list below which relates to the business.

a) Since some businesses are created as niche, most business process operations are unique or business-specific, and the required training might not be available in formal academic institutions. Hence, custom-made, or tailor-made e-training can be designed and implemented specifically for a business. These e-training modules can be in the technical or business-related categories.

b) Some business areas are done well when they are custom designed for the stakeholders so they can be delivered as smaller modules.

c) The time, resources and efforts to deliver a custom-built e-training program can be used more efficiently than the general e-training courses or programs.

d) Learning outcomes from custom-made e-training have been found more effective.

Relevant details are given in the above list which is quite self-explanatory and provides the primary data from the digital training provider and the percentage of the participants that covers the broader areas of advantages of the customised training for digital training or enable digital entrepreneurship for women entrepreneurs in south India.

The primary data obtained from this small-scale pilot case study can be analysed in a practical manner wherein it can give indicative information for further research in this area and acts a low-level guideline for the practitioners in the digital training industry of south India. However, definitive, full-scale research needs to be done to obtain more reliable information in these areas.

Table 5.7.1

Benefits of customised or tailor-made e-training given to micro, small & medium enterprises (MSMEs), in south India

Responses a to h	Results
Response a	5
Response b	4
Response c	10
Response d	6
Total	25

5.7.2 What are the advantages of on-the-job, e-training given to micro, small & medium enterprises (MSMEs), in south India? Please select from the following list which relates to the business.

a) On-the-job e-training can enable a quicker conversion of the student to a staff who can adapt to a higher level of work ethic to cater to global clients.

b) On-the-job e-training gives an overview of the work scenarios and the job requirements in real-time so the staff can be more productive when they do the actual tasks, assignments or projects when assigned the job responsibilities in a certain department of a category of business.

c) On-the-job e-training modules are designed, developed and collated in consultation with the stakeholders of the women's digital enterprises so e-training can be provided by the people who are already handling the specific responsibilities or have extensive experience in the specific skill or skillset.

d) Business owners or managers can get involved with the on-the-job training, so they can also coherently guide the progress, at least during the introduction or initial stages of the training program.

The primary data obtained from this small-scale pilot case study can be analysed so it can provide indicative information for further research in this area and the practitioners in the digital training sector of south India; although definitive, full-scale research must be done to obtain more reliable information in these areas. Around 28% of the participants agreed that on-the-job e-training modules can be done in consultation with the stakeholders of the women's digital enterprises so e-training can be provided by the people who are already handling the specific responsibilities or have extensive experience in the specific skill or skillset. Related details are given in the above list, which is self-explanatory and provides the basis for the primary data collected from the digital training providers and the percentage of the research respondents that covers the broader advantages of on-the-job training for digital training or enabling digital entrepreneurship for women entrepreneurs in south India.

Table 5.7.2

Advantages of on-the-job, e-training given to micro, small & medium enterprises (MSMEs), in south India

Responses a to h	Results
Response a	6
Response b	5
Response c	7
Response d	7
Total	25

5.7.3 Does the concept that the women who have already worked in a digital industry tend to start their digital business based on their experience in that field rather than those who get trained in the academic institution? (Yes or No response).

Undoubtedly, experience in digital enterprises and on-the-job training plays a significant role in someone mustering confidence and starting a digital enterprise. The primary data shows that this has been the trend in the last few decades regarding traditional brick-and-mortar or digital businesses. Several parameters need to be taken into consideration because there has been a massive improvement in the accessibility of digital tools and awareness about them as compared to the last decade or so.

Table 5.7.3

Research data on the candidates who start their own businesses

States	Places	Interviews/Observations	Yes	No
Karnataka	Mysuru	6	4	2
Karnataka	Kodagu	2	2	0
Telangana	Hyderabad	9	7	2
Andhra Pradesh	Machlipatnam	2	1	1
Tamil Nadu	Ooty	3	2	1
Kerala	Wayanad	3	2	1
Total		25	18	7

The ease of use for the end user of a digital tool and the ease of doing digital business has undergone a drastic upgrade in south India. Hence, many entrepreneurs have not adopted the previous era of doing business which involved taking enormous risks and using trial & error

methods. The data given in the above table is self-explanatory and highlights that some of the primary data obtained are specific based on the locations of south India, and it is spread unevenly on a broader area. The participants from the tier-1 metropolitan city like Hyderabad and tier-1 towns like Mysuru, Ooty and Wayanad felt that even though the experience in a specific digital industry act as a confidence factor to start a business, newer technologies and handholding from mentors or coaches from the digital industry can enable even a novice entrepreneur to start their digital enterprise.

Since the risks involved in starting a digital business on a micro level are low, more and more people from south India feel that they can take the plunge when proper guidance is available. Further research can relate to specific areas of starting digital enterprises in south India. There was a varying need for technical and business training when the research data was collected from different representative locations in south India. While in some locations of south India, the candidates came from business families and seemed to have prior knowledge of how a conventional, brick & mortar business is run; other locations from the tier-1 metropolitan city such as Hyderabad and tier-1 town like Mysuru, had candidates who were better educated in the technical areas. This information is highlighted by the primary data obtained by the digital training providers from south India in the selected representative locations.

5.7.4 What specific features must be included while providing e-training to women in South India? Please select from the list below which relates to the business.

a) South India is predominantly inhabited by people who use different languages, i.e., their mother tongue (Kannada – in Karnataka state, Telugu – in Telangana state & Andhra Pradesh state, Tamil – in Tamil Nadu state, Malayalam – in Kerala state). Some of them also use the national language – Hindi, to communicate with the northern states of India.

Typically, English is considered the professional language which can be a second language or third language. Hence, proficiency in the English language, especially on the spoken level, might not be good in south India. Hence, an English e-training course with global-level tests such as IELTS, Duolingo, or TOEFL must be included as a part of the e-training. Understanding the English accents in various parts of the world can be an issue with the staff in south India as they might not be used to them. Hence, when a client from any developed country, such as Australia or the USA, is assigned, their specific English accent must be introduced systematically to mitigate communication problems.

b) South Indian cities or towns have seen slower & on-going improvements compared to cities or towns in north India. Hence, many candidates seek steady, secure government jobs or similar types of jobs from the private sector, providing a long-term, stable career. They also look for a steady career progression and the title of designations matter a lot for them as they want to attain a series of promotions in their career similar to how they do in their academic journey. Hence, e-training programs leading to e-employment must be designed with similar features that are stable and show steady growth. Hence, freelance jobs, short term contracts or commission only jobs are not accepted or popular in south India.

c) The family members, such as parents and elderly siblings, have much influence in the decision making of the candidates of south India since they live in conservative, joint families compared to bigger cities of north India. Hence, work-from-home, or remote or virtual work concepts also need to be conveyed positively to their family members. Alternatively, the candidates need to be given clear information about the job expectations to communicate with their family members.

d) Candidates from tier-2 and tier-3 towns of south India are comparatively laid back, delicate, pampered and spoon-fed by their family members in their homes or teachers in their schools. Hence, they need on going assistance in handling more pressure or stress unlike the city dwellers, who are more used to demanding and faster lifestyles.

Hence, the e-training programs must be designed to include the learning methodologies that include the features for slower-paced training with smaller chunks of information while training candidates from tier-2 and tier-3 towns of south India. Thus, south Indian locations and its demographical characters in micro, small and medium enterprises come with their specific expectations for digital entrepreneurship and digital training. Primary and secondary data are collected to understand this on a smaller scale using this pilot case study.

Table 5.7.4

Specific features that must be included while providing e-training to women, in south India

Responses a to h	Results
Response a	6
Response b	5
Response c	7
Response d	7
Total	25

The primary data from the digital training providers that cover the specific areas where the south Indians might need their training programs to be designed for their individual needs and related details as the percentage of the participants are given in the above list, which is

self-explanatory. The primary data obtained from this small-scale pilot case study can be analysed systematically to obtain indicative information for further research in this area, and it can act as a guideline for the practitioners in the digital training industry of south India. However, definitive, full-scale research must be conducted to obtain more reliable information in these areas.

5.8 Discussions based on the research questions to clients and customers from developed countries

About twenty-five clients were requested to participate from various parts of Australia as research participants for this small-scale pilot case study based on qualitative research methods.

Most of them would have started using the services from the women's digital enterprises from south India for some of their services or plan to outsource some of their business services to the women's digital business in India.

5.8.1 What are the differences between outsourcing and hiring virtual/remote staff from own country and outsourcing or hiring virtual/remote staff in another country? Please select from the list below which relates to the business.

a) Work ethics

b) English language, local accent, culture & lingo

c) Ability to follow instructions, quickly

d) Knowledge gap – both technical and business

The remote/virtual/work-from-home industry has got a big push during the covid-19 times, and it has proven its strength and advantages for clients in developed countries such as Australia.

Hence, Remote/virtual/work-from-home staffs are available in developed countries (such as Australia) and developing countries in Southeast Asia. Clients from developed countries can also choose their Remote/virtual/work-from-home staff from any of these countries.

Thus, this small-scale pilot case study planned to collect primary & secondary data to understand the general parameters related to outsourcing from their own countries and other developing countries. About 48% of the interview participants reported that work ethics were the significant difference between the Remote/virtual/work-from-home staff from their own country and the developing countries such as India or other Southeast Asian countries.

Hence, many e-training modules had to be included in the programs to address this gap throughout the training delivery.

Table 5.8.1

Data on differences between outsourcing or hiring the virtual/remote staff from your own country and outsourcing or hiring a virtual/remote staff in another country

Responses a to h	Results
Response a	12
Response b	6
Response c	6
Response d	5
Total	25

About 24% of the participants thought that the English language, local accent, culture & lingo of the local remote/virtual/work-from-home staff were something they could rely upon comfortably compared to their counterparts from other developing countries.

This feedback is good, and the bar must be raised to a higher level. About 24% of the participants agreed that local remote/virtual/work-from-home staff could quickly follow the instructions. In contrast, it took much longer time and effort on the part of the small business owners to train the e-staff from developing countries. About 20% of the participants of the small-scale pilot case study supported the thought that there was a technical and business knowledge gap between the remote/virtual/work-from-home staff from local (developed country) and other Southeast Asian (developing countries) such as India. Further large-scale, definitive research studies are recommended to collect more reliable data and arrive at more concrete conclusions.

5.8.2 What are the differences between hiring virtual/remote staff from India and virtual/remote staff from the Philippines? Please select from the list below which relates to the business.

a) Remote/virtual Philippines staff members have English fluency and an excellent American accent compared to Indian staff. However, when higher pay is given, candidates with good English are also available from south India.

b) Remote/virtual staffs from the Philippines are suitable for clerical work, whereas Indian staffs are more suitable for knowledge-based business processing outsourcing work.

c) Remote/virtual staff from the Philippines can be suitable for call centre jobs, whereas Indian remote/virtual staff can be much more versatile.

d) Remote/virtual staffs from the Philippines are suitable for front-line job responsibilities, whereas Indian staff can handle managerial responsibilities.

The Philippines is another popular and well-known destination for call centres, and outsourcing services as remote/virtual staff are considered. Hence, the overseas clients of the

women's digital enterprise were requested to participate in the current small-scale pilot case study, so the primary/secondary data could be collected for analysis using qualitative methodologies. About 40% of the participants informed that remote staffs from the Philippines were good in their English usage. However, Indian staffs are catching up with this gap. About 24% of the research participants inferred that staffs from the Philippines were good with clerical work, whereas Indian staff were good with outsourcing business processes and knowledge processes. About 16% and 20% of the participants thought that Indian staffs were versatile and better educated; hence they could handle the managerial jobs compared to Philippines staff, who are more suitable for call centre or front-line jobs.

Table 5.8.2

Data on differences between hiring the virtual/remote staff from India and a virtual/remote staff from Philippines

Responses a to d	Results
Response a	10
Response b	6
Response c	4
Response d	5
Total	25

Hence, the outcome of the small-scale pilot case study has revealed in a small way that the remote/virtual staffs from the Philippines are made for specific tasks, assignments, and projects. In contrast, the Indian staffs are suitable for other specific tasks, assignments and projects.

Thus, overseas clients need to use proper discretion to select and allocate the work based on their business needs and the staff's skill set from other geographical locations.

5.8.3 What is the opinion?

a) Does the trend of outsourcing services & products to other countries and hiring remote/virtual staff locally or from another country get larger soon, which leads to expanded global connectivity, symbiosis & solidarity?

b) Could this trend of outsourcing services & products to other countries and hiring remote/virtual staff locally or from another country get smaller soon and stop altogether, thereby reducing or eliminating global connectivity, symbiosis & solidarity?

The trend towards globalization in outsourcing and remote/virtual/work-from-home opportunities is vital & interesting to analyse, even though on a miniature level, while conducting this small-scale pilot case study. It might not be indicative in any manner whatsoever. However, it could give a sense of how the phycology of the stakeholders comprehends the scenarios related to this area as they are constantly communicating with the stakeholders in the ecosystem and observing the market trend. Globalization is a general word to articulate how business & scientific progress has made this world a more miniature global village and created a sense of interdependence and independence to conduct the business & trade across various countries of the world. It is interesting to understand the resulting economic & social changes that happen as a part of globalization. This data is collected mainly based on the personal observations of the stakeholders and collated by the researcher while conducting the interviews and observations. This collection of data and analysis is not a significant part of the current small-scale pilot case study, and the results are given only as recommendations for further research.

Table 5.8.3

Research data on outsourcing or remote working services are going to get bigger or smaller

Response a or b	Results
a) Bigger	19
b) Smaller	6
Total	25

About 76% of the participants believed that the global connectivity and the resulting symbiosis and solidarity in the women's digital business area would get more prominent, which is a good research outcome when confirmed by large-scale, definitive research. However, about 34% of this small-scale pilot case study participants inferred that the global connectivity, interdependence and coherence might remain the same due to the local parameters such as political influences and people with closed or toxic mindset operating in certain areas and the economic imbalance created by the more prominent multi-national companies (MNCs). Thus, further research is recommended in this area. Hence, it must be emphasized that supporting small businesses in the local areas that can also create scope for economic growth locally and globally can achieve a win-win scenario.

5.9 Discussions on perceptions, priorities, prejudices, and provisions in the current small-scale qualitative research study

Perceptions differ from an individual to another individual, a place to another place, a region to another region, one language to another language, one culture to another culture, one community to another community; hence, right & wrong, understanding & misunderstanding,

prejudices & biases can be relatively subjective, when the qualitative research data is collected and analysed. This small-scale pilot case study has taken a lot of care to eliminate, minimise and address any kind of prejudices or biases. Prejudice can be an intention or thought arrived at without the having the authentication for its accuracy or value or reason or actual experience. In other words, it can be a point of view that supports having influence before the moment occurs. Hence, prejudice might highlight a feeling that stems from intolerance, suspicion or fear. Furthermore, bias is a form of prejudice supporting or opposing a particular object, individual, or a set of both that looks & feels discriminatory in comparison with other. The research data was collected in an independent, honest, transparent, impartial and scientific manner without any room for prejudices or biases and the interpretations are based on the hands-on qualitative data collected from the respondents of representative locations of south India. The qualitative data collected in this dissertation paper and the resulting qualitative analysis is solely for the research purposes alone and no indemnification is implied, whatsoever. The findings of current small scale pilot case study can be useful to the woman's digital enterprises and their stakeholders in the associated local and international communities. The outcome of the research can directly or indirectly promote international business leadership. The qualitative data also collects the perspectives of the respondents which is the angle and direction how they view a research problem. In other words, it is their point of view (POV). It is quite normal for research participants have different perspectives. Hence, trying to understand & empathise with other's perspective can change our perception of the research problems in specific communities and enable us to design better e-training solutions e-enterprise models.

The priorities of this qualitative research project and the outcome can provide indicative answers on why a specific intervention was successful or how a particular method was adopted in

a much efficient manner in e-training for women's e-enterprises in the selected, representative locations of south India. As stated before, this small-scale pilot case study is based on the qualitative methodologies with help of non-numeric data such as words and text. Qualitative data is used in obtaining the breadth of the topic and understanding in-depth indicative information about a small number of well-defined research problems to understand the social & behavioural practices/systems/processes related to digital training methodologies and digital entrepreneurship models in selected, representative locations of south India. Also as mentioned in the chapter III - methodology of this dissertation, an exploratory approach is used initially during qualitative data collection and an interpretative approach is used for qualitative data analysis. Because the qualitative data collected is subjective in nature and it is based on the answers from the limited sample size to observe a trend or a hypothesised effect on the outcome it might look biased, at times. As it is clearly stated in this small-scale pilot case study, qualitative data on research problems are collected and analysed with a purpose that is useful for a women's digital enterprise and provisions are made for amendments or adjustments; and suggestions are given for further research, that can create further clarity and make way for more accurate and authentic information based on impartial and truthful research. It is clearly stated in other sections of this dissertation paper that this is a small-scale pilot case study and hence the analysis or the interpretations are not necessarily conclusive; and hence there is a scope for further definitive, full-scale research. The qualitative research is conducted with in the normal boundaries of human perception i.e., with the assistance of the data collected with the observations & interviews using our senses and understood in a natural and systematic manner with the help of a small sample size to answer the research questions related to how and why things happen without any room for prejudices, biases or political views.

CHAPTER VI

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

6.1 Summary

The digital or online entrepreneurship for women in South India can be modelled to make it more interesting, attractive, appealing, accessible, resilient, reliable & sustainable by incorporating 6D5PRFS features, i.e., 'digital' services, 'decipherable', 'dollars', 'distant', 'delegable', 'duplicable', 'e-products', 'e-portal', digital or online 'platform', 'e-projects' & supported by 'physical' shop fronts, and testing using 'rupees' in India, before being able to 'franchise' or 'license' & 'scalable' (Goel et al., 2022). These realistic, practical business parameters & possibilities to develop them in an easy-to-implement digital enterprise model motivate us to decipher that it is at the right place at the right time in India, to do this pilot case-study research studies to envision, design & develop a few simple, small and yet effective models for micro, small & medium enterprise (e-MSME), where women in India could work from the comfort of their own homes, around their loved ones, while managing their household activities to some extent, and achieve better lifestyles & financial independence (Goel et al., 2022). At this stage, one crucial point must be clarified and emphasized as a part of this pilot case study. It must be noted that it is not sufficient for women entrepreneurs in India to receive training on Ethical and Legal (EL) ways of making money (MM) (Goel et al., 2022; Jalaja, 2022). They also need to learn the basics of money management (MM), using some simple common sense, so that can lead to a respectable and honourable (RH) way of living in the community around them that can give them contentment, gratefulness and proper meaning & purpose for their life (Jalaja, 2022).

Money management basics rules are given in a simple, pictorial manner below, which could be easily explained to women digital entrepreneurs in south India.

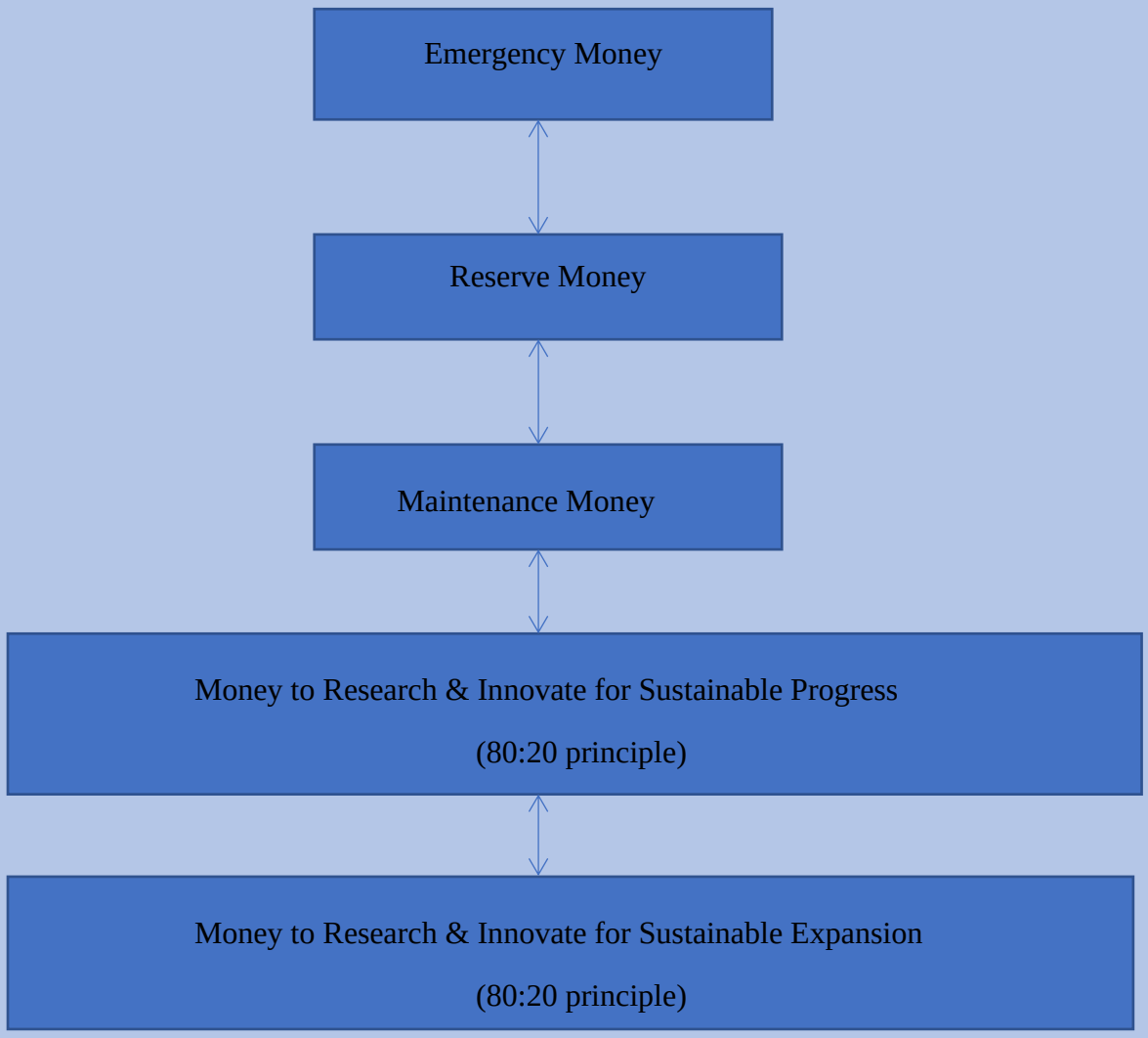

Figure 6.1 - Basics of Money Management

Goel et al., 2022. Fintech Unfolding: Financial Revolution in India. *Thailand and The World Economy*, *40*(2), pp.41-51.

Jalaja, L., 2022. Start Up Financing in India–Avenues and Challenges. *Pal Arch's Journal of Archaeology of Egypt/Egyptology*, *19*(2), pp.727-739.

Women entrepreneurs in south India are given the awareness and information to learn & implement (LI), respectable & honourable (RH) ways of money management (MM) which must be focused on ethical & legal (EL) ways of money making (MM), that are easy & comfortable (EC), exciting & enjoyable (EE) while expressing empathy & gratefulness (EG) with the help of digital training methodologies and online programs (Goel et al., 2022). This pilot case-study project consciously focuses on including these concepts in digital/online training for women entrepreneurs in south India (Jalaja, 2022).

As given in the diagram above, when sufficient money is generated using digital/online enterprises as vehicles, it must be safely saved in liquid assets such as cash or gold so that cash is available during emergencies (Jalaja, 2022). Because doing any business can come with various bottlenecks & challenges, hence, it is always prudent and intelligent to set aside money for emergencies (Goel et al., 2022). This emergency fund/money's size depends on the business operations' magnitude. It must be invested in liquid assets, not capital or real-estate assets, as they can take longer to convert into cash during emergencies. Also, emergency money/funds must be kept untouched, except during emergencies (Goel et al., 2022). Remember that this emergency fund/money must not be used as working capital or for any other purposes (Goel et al., 2022).

Reserve money amount must be defined properly & correctly, and it is set aside on a regular basis to reach the savings goals for the pre-defined amount. Reserve money is like the reserve of the patrol in a car tank, and when the reserve is reached, that is the time to top-up the money in that specified account and start focusing on working on building up the cash flows of the digital enterprise (Goel et al., 2022).

It is an excellent habit to reserve money for at least one year. In this game of digital businesses, more reserve is better. Hence, it is good to keep an aim of saving for two or three years

of expenses as the reserve amount (Goel et al., 2022). ‘Maintenance money’ is the amount required for the business’s working capital per the budget. Women entrepreneurs in South India are made aware of creating short-term monthly and yearly financial budgets for two to three years (Goel et al., 2022). It is possible to set the savings target so that the business keeps two to three years of maintenance in a current account, an interest-bearing account, or in reliable liquid assets (Goel et al., 2022). With proper due diligence and responsible management, digital enterprises can be initiated and grown organically, within a short period of one to two years, without the need for a large capital base or external borrowing and hence, getting into a debt trap by borrowing excess cash or getting carried away with extravagant lifestyle when the money comes in, must be observed, avoided and strictly eliminated with a high level of discipline (Goel et al., 2022).

Once a digital business has reasonable control over the maintenance of the business with good cash flows, the management can investigate growing the business organically in a steady manner, taking calculated risks, rather than growing exponentially using riskier ways (Jalaja, 2022). Hence, instead of getting carried away and taking emotional business decisions for business growth, sufficient market research must be conducted using reliable scientific methodologies for innovation & growth. Sufficient money needs to be set aside or can be raised from reliable sources with clear and defined goals for growth (Goel et al., 2022). Proper business education in these financial risk areas is included in the pilot case-study research as a part of the continuous professional development of the stakeholders of digital businesses in south India (Goel et al., 2022).

As per the well-known 80:20 principle, i.e., Pareto’s rule, 80% of the results come from 20% of the efforts. This principle can be applied across the board in the south India women’s digital business scenario implemented by the current pilot case-study project. By following 80:20

principles, women's digital businesses can be managed in a smaller, boutique or decipherable manner. Hence, jumping into making spur-of-the-moment decisions must be strictly avoided. Furthermore, data-driven, reliable decisions must be always followed methodically (Goel et al., 2022).

When a digital business wants to expand horizontally or vertically, it can follow established channels already opened for local and global businesses created by the highly innovative digital industry (Goel et al., 2022). With the technological advancements and fantastic support being given to ease of doing business concepts from governments across the globe, small businesses of today are seen as bigger businesses of tomorrow (Goel et al., 2022). The public listing of businesses is a possible destination while raising venture capital from investors or selling the shares for a handsome profit, or merging with a more prominent player in the market are some of the many options available for digital businesses that have created verified minimum viable products (MVPs) and a have a reliable track record, supported by an executive team. Hence, it is a matter of time, planning, preparedness and the decision of digital business management to decide on an expansion (Goel et al., 2022).

As the participants of the qualitative research have communicated through the interviews & observations conducted as a part of this small-scale pilot case study, the internet & Wi-Fi has opened newer, better business opportunities, particularly for women in south India. In this age of perpetual transformation in information and technology, businesses are born with an online presence through websites or social media marketing; therefore, businesses are born global citizens (Giudice & Straub, 2011).

Here, the pilot study is not referring to bigger businesses that are already scaled to cater to a national level market in India, such as Ola taxis - online-taxi booking platform, OYO hotel rooms

- online-booking platform, UpGrad - online university education platform, Byju's - online school tuitions, Swiggy – online food delivery platform, Zomato - online food delivery, Misho - online dresses & fashions, Paytm - digital money, or Practo – online doctors' appointments, or otherwise scaled to cater to international level markets such as Uber, Amazon, eBay, PayPal, Alibaba, Airbnb, Expedia, Facebook or even google!

The current pilot case study is focused on simpler, smaller, and easy-to-do, home-based, online/digital businesses that could enable our wonderful, respectable, capable women in south India to fast-forward their journey towards earning some basic good income. If possible, some extra disposable income so that they can work towards their dream of a better lifestyle supporting good health, continuous education, innovation and exploration (Goel et al., 2022).

Many research studies cover the overall e-learning methodologies and theories involved with it (Jakobus et al., 2022). Much research works of literature/papers on the global level address e-training methodologies for small & medium enterprises (SMEs) (Jakobus et al., 2022). Also, some relevant literature/papers are available nationally in India, covering various areas of e-training for MSMEs and the corporate sector (Jakobus et al., 2022).

However, most of them focus on the northern states of India, where the capital city of India – Delhi, is situated. Hence, due to the social, economic, cultural, and psychological differences and the necessities of tier-1 and tier-2 city/towns of southern states of India such as Karnataka, Telangana, Andhra Pradesh, Kerala and Tamil Nādu, the requirement for further research studies and literature that is focused on the women are covered in a small-scale under the scope of qualitative research of the current pilot case-study.

One of the research literature gaps that this pilot case study was able to fulfil has been about the e-training methodologies and modules for e-businesses in the selected locations of south India

since most of the research works of literature or papers are relevant to e-training methodologies for conventional businesses and not related to the e-businesses or digital businesses led by women entrepreneurs (Jakobus et al., 2022).

A vital research literature gap covered in the current pilot case study is about the persons of Indian origin (PIOs) from other countries guiding, facilitating & enabling e-training to women digital entrepreneurs who intend to do e-businesses or who are already running an e-business in selected, representative locations of south India (Jakobus et al., 2022).

Currently, the participation of numerous women led micro, small, and medium enterprises (MSMEs) in the path of progress of India is so enormous that adding value in this area, even on a smaller level, could make it much more valuable, for the simple reason of being at the right place at the right time, in India right now (Singh and Mallaiah, 2022).

Hence, not focusing on this area might lead to business & community problems that might become harder to rectify in the later stages of the nation's journey toward improvement (Singh and Mallaiah, 2022). Hence, how, where, and why the support or improvements are needed must be ascertained to find the areas of research problems that need to be addressed in a specific and defined manner (Singh and Pruthi, 2023).

This small-scale case study is not merely intended to be a theoretical or research exercise; because it aims to continue further and implement the research outcome in the real world of e-MSME or e-business in south India shortly (Geissdoerfer et al., 2022). Hence, a full-scale research study is envisaged to facilitate a more accurate, reliable, and adequate research outcome (Geissdoerfer et al., 2022).

6.2 Summarised analysis of hypotheses support or rejection

1) Reliable and robust Internet/Wi-Fi connectivity is available in the tier-1/tier-2/tier-3 cities & towns of south India (Arora, 2019).

One of the crucial observations is the availability of internet & Wi–Fi facilities in the selected areas, which was agreed upon by 90% of the research participants (employees) who provided the primary data. This finding is substantial and a parameter that can justify the hypotheses of this pilot case study. Pilot case study hypothesised the possibilities of reaching far away geographical locations in south India as the internet connectivity is under massive expansion and the upgrade of the networks from 4G to 5G are currently happening in many metro cities. Hence, the standard of digital training can be uniform across the board, and it can open quicker ways to provide learning & training opportunities for the knowledge seekers as it is technology based (Lewis, 2022); and the results of this pilot case study were quite promising.

2) Female candidates with formal school & college education and sufficient computer/digital literacy are available to work for the women's digital enterprises in the tier-1/tier-2/tier-3 cities & towns of south India (Radovanović et al., 2020).

As specified before, this small-scale case study intends to focus on the well-educated and sufficiently computer-literate population in the selected places of south India. Consequently, the results of the qualitative research indicated that 85% of the participants (employees) were well acquainted with working with computers or other digital devices or tools and they could confidently handle digital ways of business communications (Flores, 2019); these results support the hypothesis of this pilot case study or investigation. Observations were made to understand how easily the candidates who have good school or college qualifications & computer or digital literacy were accessible for joining the digital enterprises; however, the scope of this pilot case study did

not include the uneducated slum dwellers; and thus it can be stated that the results positively favoured one of hypotheses of this research that were made when the current pilot case study was initiated.

3) There is a positive trend supporting digital education, digital entrepreneurship and digital employment in south India (Gupta and Sengupta, 2021; Dana et al., 2021).

The research findings indicate a progressive trend that might assist the residents in south India and positively endorses a hypothesis of this study to a large extent. About 68% of the sample participant employees of women's digital enterprises supported the concept that digital enterprises might create job opportunities for the citizens of tier 2 and tier 3 towns in south India, locally, so they do not have to forcibly run around and migrate to tier-1 cities to find jobs. Since 85% of the research sample participant employees of women's digital enterprises advocated that the training provided using digital and online channels was as good as the face-face training, there can be an increasing demand for digital or online training or the online education industry in tier-2 or tier-3 towns of south India. When this is implemented correctly - a newer, better and stronger ecosystem could be developed that could level the playing ground, in the mid to long run, for the learners, or skill seekers across the states, immaterial of where they come from, i.e., rural villages, towns, or cities.

4) Women in the communities of south India are looking for ways & means of earning disposable incomes and getting financially independent. They are eager to learn & implement, simple & comfortable, ethical & legal ways of money making & money management in respectable & honourable ways that are enjoyable & exciting, while expressing their empathy & gratefulness (LI+SC+EL+MM+MM+RH+EE+EG) (Ram et al., 2019).

The huge disparity between individuals on their income levels and lifestyles in south India can be read in recent as well as past literature. We can witness this in poor class, lower middle class, middle class, higher middle class, rich class and the super-rich class in Indian communities unlike the middle class and the rich class in the communities of the developed countries.

This is the elephant in the room that can be addressed with the major disruption from digital education, e-learning, e-training, digital inclusion, digital transformation, digital entrepreneurship, and digital revolution (Rajan, 2022). Money is needed to buy anything in the communities that we have created this world. As it is said in business circles, “There is no such thing as a free lunch”. This concept makes an essential point for the argument in support of women entrepreneurs in south India, who require e-training to ‘learn & implement’ (LI), ‘simple & comfortable’ (SC), ethical & legal (EL) ways of money making (MM) & money management (MM) in a respectable & honourable manner that is exciting and enjoyable (EE) while showing empathy & gratefulness (EG)’ using feasible, 6D5PRFS-based enterprise models as vehicles for the paradigm shift.

This can create huge opportunities for the global digital education industry, when Indian population is forecasted to cross 1.5 billion in a decade and about one in six people on earth live in India, which emphatically supports the hypothesis made by this small-scale case study.

5) This small-scale pilot-study research has used 6D5PRFS criteria to design, develop, test and implement the feasible e-business models for creating minimum viable products (MVPs) for the women entrepreneurs in south India - i.e., 'digital' services, 'decipherable', 'dollars', 'distant', 'delegable', 'duplicable', 'e-products', 'e-projects', 'e-portal', digital/online 'e-platform' & supported 'physical' shop fronts, 'rupees', able to 'franchise' or 'licensable', & 'scalable' (Salvador et al., 2020). It is designed to work well on a smaller level. Further explanation on 6D5PRFS-based feasible business models are given in section 3.2.2.

Since 84% of the candidates (employees) from the qualitative research study conducted using interviews and personal observations in this small-scale, pilot case study have conveyed their opinion that 6D5PRFS business model-based, digital training has been easy and comfortable, it can be inferred that good percentage of the trainees have welcomed these training methodologies.

Hence, the aim of creating simple, accessible, custom-made, on-the-job training programs is opening an era of digital training or digital learning for skill or knowledge seekers across south India, which in turn supports the hypothesis made by this pilot case study.

6.3 Contributions of the pilot case-study

6.3.1 Contributions to the current knowledge & literature

As per the primary and secondary data received from selected representative places from south India, the small-scale, pilot case-study research has identified that it is not only possible but easy to build reliable & feasible e-business models for supporting women digital entrepreneurs (Rastogi et al., 2022). In other words, when women-led, digital, micro, small, and medium enterprise (e-MSME) models are better organized & implemented using the 6D5PRFS criteria, i.e., ‘digital’ services, ‘decipherable’, ‘dollars’, ‘distant’, ‘delegable’, ‘duplicable’, ‘e-products’, ‘e-portal’, digital/online ‘platforms’ ‘e-projects’, ‘physical’ shop fronts, ‘rupees’, able to ‘franchise’ or ‘licensable’, & ‘scalable’, it was found that the women digital businesses were relatively feasible, stable and profitable (Salvador et al., 2020). This supports one of the hypotheses of this pilot case study.

A step-by-step knowledge of the academic & business literature and relevant information can add immense value to the ease of doing business in south India for women’s digital enterprises & their female staff (Arun et al., 2004). Relevant custom-made, practical information on simple & effective ways of starting and running digital businesses are not available in the formal courses of

academia that are easily accessible by women entrepreneurs in tier-2 and tier-3 towns of south India because entrepreneurship is not made central to the curriculum in the formal school education or universities (Mitra, 2005).

Hence, this small-scale pilot case study could be considered as an outline or a blueprint for introducing e-entrepreneurship alongside the formal education system for building feasible & profitable digital micro, small, and medium enterprises (e-MSMEs) by women in south India (Shama and Mazhar, 2022).

6.3.2 Contributions to the methods

This small-scale pilot case study extensively uses an appropriate mix of well-known training/learning methodologies to design, develop, collate, and test the virtual, online, custom-made, on-the-job, e-training methodologies, programs, and modules for women entrepreneurs and their female employees, in southern India (Goodburn and Knoerich, 2022). Thus, even though the newer training methodologies for women digital enterprises are based on existing learning/training methodologies, they have been transformed to suit the needs of the specific e-business enterprise or its female e-staff.

One of the prominent contributions to the e-training methodologies involves adding substantial value in verifying the feasibility of e-business models that predominantly involves work-from-home or remote working by adopting digital/online training methodologies and creating a framework for minimum viable products (MVPs) for micro, small, and medium enterprises (MSMEs) in south India (Lenarduzzi and Taibi, 2016; Moogk, 2012).

Offshoring or outsourcing is a familiar idea as it has been in place for over last two decades in South India (Javalgi et al., 2013). However, the goal of the small-scale pilot case study has been

to research, analyse and understand if the same old concepts of outsourcing and offshoring could be duplicated with the help of stakeholders of micro, small, and medium enterprises (owners, staff, and others of e-MSMEs), who work remotely, virtually, or work-from-home (Javalgi et al., 2013).

In essence, the female staff can achieve location independence while they handle their role & responsibilities of working for a digital woman enterprise in south India. Hence, the primary and secondary data collected from the qualitative research methodologies have been tested and measured with the help of this small-scale pilot case study to ensure that the pre-defined goals are met (Javalgi et al., 2013).

6.3.3 Contributions to the research

This qualitative research has been planned to focus on the specific areas of women's digital enterprises and the related digital training programs with the help of this small-scale pilot case study (Topping, 2022). This dissertation paper gives many constructive ideas and suggestions to arrive at direct and indirect results in digital training by persons of Indian origin for women-led micro, small, and medium enterprises (e-MSMEs) & their e-staff in south India (Topping et al., 2022).

However, four crucial areas below are considered novel that adds value to the literature and the practitioners. These four unique areas or four pillars are based on not only the outcome of current pilot case-study research but also decades of practical experience of the researcher.

6.3.3.1 100% Digital/online training (customised & on-the-job)

The focused research in this area with the owners or management staff of the micro, small, and medium enterprises (MSMEs) has revealed that their requirement of some of the skills is different from the skills that are needed by the female staff, while male staff also had the

opportunities to work from home (Dang et al., 2022). Hence, the array of skills for the owners or the management staff to manage the business had to be customised (Dang et al., 2022). With the themes such as ‘small business is big business’ and ‘ease of doing business’ getting more popular in many parts of south India, it is evident that owners and management staff of digital enterprises need to be acquainted with the online/digital tools, as well as management and leadership skills (Dang et al., 2022).

For obvious reasons, the e-female staffs need to learn more about the technical areas of the service-based e-businesses and be able to deliver at their best (Dang et al., 2022). Complete e-training for owners, managers, and staff can be provided using commonly available digital tools; hence, they are much more accessible and comparatively quicker to implement (Dang et al., 2022). Having a goal of 100% online or digital training has its challenges; even though, online training methodologies can be quite powerful and novel after the initial bottlenecks are overcome.

6.3.3.2 100% guided by persons of Indian origin

Persons of Indian origin primarily work and live in developed countries, although many visit their motherland for short to medium durations for specific reasons (Kalam, 2014). Some might also move to their motherland for extended periods or permanently for family or professional reasons (Kalam, 2014). Persons of Indian origin (PIO) would have experienced a higher level of technological advancements and higher standards of living than the developing countries typically provide, such as cleaner, well-organised cities/towns with excellent town planning, well-maintained roads within the cities as well as on express high-ways; disciplined traffic; free & readily available public & private healthcare facilities; excellent educational institutions; jobs with minimum wages & supportive work environment; better customer service; lesser/well-managed population burden on cities; bribe-free service in government offices; cleaner

toilets & washrooms in public areas; a grateful, empathetic & responsible attitude portrayed by citizens; a lesser disparity between wealthy, middle class & poor class; general affordability of finer things in life such as holidays, better cloths and others (Kalam, 2014).

Thus, persons of Indian origin can probably visualise the better side of the scenarios to implement solutions and incorporate the improvements. In contrast, the local Indians might not be able to do the same and hence, end up seeing only the wrong side and continue to criticise, complain, or compromise with the existing scenarios or conditions (Pradhan and Hoda, 2022). Persons of Indian origin (PIO) also have access to a better disposable income than local people in South India (Pradhan and Hoda, 2022). Hence, persons of Indian origin (PIO) can invest in learning, continuous professional development, holidays, sports, research, innovation and charities (Pradhan and Hoda, 2022). Many persons of Indian origin, when they come to India, can aim to attain a state of location, time, and financial independence, to some extent (Pradhan and Hoda, 2022). Whereas the local people in India tend to work for thirty to forty years until they retire and have a meagre monthly pension or little retirement savings or must depend on their children for their financial needs (Pradhan and Hoda, 2022). Persons of Indian origin also understand the diverse culture of India and appreciate the intricacies and challenges of a nation of about 1.4 billion people and growing by the minute, which has over 22 separate official languages and is home to approximately 121 languages and 270 mother tongues (Pradhan and Hoda, 2022). Unofficially, more than 1600 dialects are spoken in India (Pradhan and Hoda, 2022). Hence, when Persons of India Origin want to add value to the communities in India or connect them to other communities of the world, they can be well positioned and capable of doing the SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) of communities in India (Ahamed, 2021).

Persons of Indian origin are time and again realising that, the citizens & especially the women of South India, need to be often made aware that they are in an era where they are in a real need to forget the industrial age mindset and adopt the information age or knowledge age or digital age, mindset (Hensellek, 2020). However, it is difficult to come out of the decades of conditioning that have gone into the older, unproductive, and inappropriate mindsets (Hensellek, 2020). As it is rightly said, ‘it is not about where we come from, but it is about where we are going’.

Hence, digital training by persons of Indian origin to women’s digital enterprises in south India and the research findings can be novel and invaluable.

6.3.3.3 100% Women digital enterprises

Although there are a good number of research articles and literature on digital enterprises and women enterprises in India, there are only a few of them on the digital enterprises managed and staffed totally by women in south India (Archana et al., 2022). Hence, this is a novel contribution to this research and professional practice area. For a long time, it has been necessary for women in South India to find a work-from-home job or business that pays them a good income and is easy to learn & manage. Service & products-based, business process outsourcing or knowledge process outsourcing, digital or online businesses are reliable and sustainable in the era of fast and robust internet/Wi-Fi (Archana et al., 2022). While doing the research, it was astonishing to experience fast and robust internet/Wi-Fi in remote, rural places, more than two hours' drive from tier-2 cities/towns like Mysuru. Also, well-educated women staffs with sufficient computer/digital literacy were available in good numbers, as there were plenty of good quality schools and undergraduate/postgraduate colleges in these locations (Neeley and Leonardi, 2022). Thus, e-staff could be recruited directly from these local educational institutions. Digital women's enterprises in these areas can escalate the financial freedom of the local women in South India and

improve their lifestyles within a few years (Neeley and Leonardi, 2022). Thus, implemented methodically, this valuable contribution to research can bring astounding results.

6.3.3.4 100% of the selected places for research are from south India

Why south India? What is so unique that makes this qualitative research compelling enough to initiate the pilot case study there? This parameter was observed and analysed step-by-step in the selected representative locations of five states of south India, with the assistance of the primary and secondary data collected from the pilot case-study research (Chavali and Sahu, 2008). The data collected from this small-scale pilot case study verifies that the selected places for research are digitally ready to transform & progress, making this small-scale pilot case study meaningful & worthwhile for the researcher. Another unique point is that the researcher hails from south Indian origin; hence, a high level of local knowledge and insights about this dissertation topic could be obtained easily and quickly (Hameed and Khalid, 2018).

This small-scale pilot case study makes a quick synopsis of the salient features of the southern states of India, and this makes a start for the valuable and categorised research contribution, with the primary data and secondary data, to reap practical benefits for the respective locations & the stakeholders of women-led micro, small, and medium enterprises (e-MSMEs) & their e-staff in south India (Hameed and Khalid, 2018).

‘The god’s own country’ – Kerala state in south India, has been well known for its 100% literacy and boasts lush green places full of nature and abundant oxygen with four international airports (Chavali and Sahu, 2008). Karnataka state, also called the ‘Silicon Valley of India’, has direct connections with the best of the locations in the world of technology and information technology; hence, they make things happen for the rest of the high-tech world (Chavali and Sahu,

2008). Tamil Nādu state in south India used to be the socio-economic-political hub & gateway of South India in the last century and the earlier part of this century when the British ruled India. The state with 'temple towns of India' continues to be an economic hub of India in the Southern Region, is also known as the 'banking capital of India' (Chavali and Sahu, 2008). Telangana state of south India called the 'rising state of India', is known for its high-tech industries & pharmaceuticals industry, which has the well-known Bharath Biotech that invented & manufactured the Covaxin for Covid-19 pandemic and distributed it all over India for the 1.4 billion Indians and across the globe for over few billion people to protect them against the global pandemic (Chaudhuri et al., 2022). Finally, the state of Andhra Pradesh, which is also known as the 'rice bowl of India', has one of the famous port cities of south India – Vizag (Vishakhapatnam), called the 'city of Destiny' that has a popular innovation hub for tech start-ups at sunrise towers and millennium towers, that are attracting the brightest and most brilliant innovators of south India (Hameed and Khalid, 2018). This type of intrinsic detail, specific to local areas of the southern states of India and how to navigate through them to bring out workable strategies for the benefit of local women's digital enterprises & communities, is one of the primary contributions to research in this area that involves the innovative ideas on systems, processes for leaders and team of a women's digital enterprise (Pio et al., 2013).

Another observation of the southern States of India states is that, except for Karnataka, all the other states are governed by regional political parties and leaders (Chaudhuri et al., 2022). Hence, this comes with many strengths, weaknesses, opportunities, and threats (SWOT) that need to be documented and analysed in more detail that is relevant to this research topic. However, this pilot case study makes efforts to cover only some essential points as its scope is much smaller in nature.

6.3.4 Contributions to the theory

This pilot case-study research has tried to examine and understand many existing theories related to the current dissertation topic. Also, it has been a privilege to learn some of the areas of these existing theories and develop outlines & suggestions for newer variations of theories regarding the central theme of the pilot case-study research. This pilot case study discusses further information about the theoretical framework in Chapter II - Review of Literature, in more detail.

Peer pressure theory was also observed & researched in detail while introducing e-training to the female owners and female staff of micro, small, and medium enterprises (MSMEs) (Adriani and Sonderegger, 2019). The researcher noticed that Indian communities in south India are very much susceptible to peer-group pressure (Adriani and Sonderegger, 2019). That means if someone in their neighbour's home does something or buys something, they are drawn to do the same to match their status, even though it might not be their cup of tea (Adriani and Sonderegger, 2019). For example, if the next-door neighbour's daughter has joined an MBA master's degree program or a PhD Program, there would be parental pressure derived from peer-group pressure to encourage their daughter to do the same (Mohnen et al., 2008). Hence, local people quip that there are so many MBA postgraduates or PhD scholars that some of them resort to riding auto rickshaws or driving taxis in some towns of south India. Suppose this similar kind of peer and parental pressure can be directed towards obtaining digital training to build or join a micro, small, and medium enterprises (MSME) and work-from-home (WFH), then more women could enjoy a higher level of financial freedom & a better lifestyle (Adriani and Sonderegger, 2019). This point was highlighted when the primary data was collected from the selected places in south India. These findings make an invaluable contribution to the theories that can change the communities in south India for the better.

A broader outline and detailed parameters for work from home (WFH) theory, systems and processes needs to be propounded by researching further in a definitive, full-scale study to collate a reliable repository of data & information (Darouei and Pluut, 2021). This current small scale pilot study has been able to make contributions to the information, knowledge and envisioning a theory, related to work from home and remote working.

Technological advancements in digital automation and digital communication drastically affect the nature of work in South India (Topping et al., 2022). Hence, the future of work relies on how the people of South India can participate in digital automation and get more acquainted with related technologies such as artificial intelligence (AI), remote operations using continuously improving digital communication devices, tools, portals and platforms (Topping et al., 2022). Thus, these simple observations as basic contribution of the current pilot case study to future work design using self-determination theory can be invaluable for creating an environment for further research studies (Topping et al., 2022).

During the pilot case-study research, it was noticed that local movie stars, political leaders, spiritual leaders, multi-national companies, and persons of Indian origin (PIO) as investors in most of the high-end real-estate holdings in tier-1, tier-2, and tier-3 cities/towns. As the well-known sage from India, Swami Vivekananda puts it, "education is the manifestation of perfection that is already present in a person". It is also said that “knowledge is power”. Thus, the small-scale pilot case study intends to propagate the idea that instead of having a single or a few b/millionaire/s or b/million dollars businesses in a particular place and having that creative knowledge, skill or power given to a small number of people, it is better to have that kind of knowledge, skill or power given to as many as possible. This vision can be achieved directly or indirectly by digital training and digital entrepreneurship, in south India (Rajan, 2022).

6.4 Valuable empirical findings of the pilot case-study

A feasible, 6D5PRSF women's digital enterprise model, with reliable, sustainable systems & processes supported by their female stakeholders, working in the synergy can employ or collaborate with the local people of south India. They can also reach a much wider area than it currently covers (Erickson and Norlander, 2022). The digital divide can be reduced drastically and quickly in a few years (Erickson and Norlander, 2022). The empirical findings of the small-scale pilot case study conducted at the representative locations in five south Indian states support this information.

Work-From-Home (WFH), remote/virtual ways of operating women's digital enterprises are easily possible in most tier-1, tier-2 and tier-3 locations of south India (Erickson and Norlander, 2022). The empirical research studies based on the primary and secondary data collected by the small-scale pilot case study support this.

Each one of the representative locations of south India is a picturesque, natural landscape and well-supported by the telecommunications infrastructure to provide internet/Wi-Fi facilities to support the women’s digital enterprises to recruit and conduct the digital training to their female staff necessary to handle their role and responsibilities of the digital service-based projects (Šmite et al., 2023).

The empirical study involved extensive travelling by the researcher, who experienced the infrastructure and information & communication technology (ICT) facilities first-hand, in most of the representative locations & surrounding fifty to hundred kilometres' circumference, covering some of the remote villages of south India.

The concept of connecting the postcodes of developed countries such as Australia to start with; to the postcode's representative locations in south India to implement the concept of ‘world as one family' (Vasuda Eva Kutumbakam), to enable the digital training from persons of Indian origin and local volunteers has been implemented in the small-scale, pilot case-study (Demetriou, 2022). Even though there is a time difference of about five hours between India (IST) and Australia (AEST), the communication happened quite positively and effectively when both parties predominantly worked from home (WFH) with the use of available information & communication technology (ICT) tools and online technologies (Šmite et al., 2023).

This small-scale, pilot case-study-based, empirical research highlights the current trend and future of work and the future of training/learning wherein every home can be changed into a school or a college, or a training institute, with global mentors, professors, scholars, subject matter experts, and coaches, who can provide customised and sustainable e-training, using one-to-one or one-to-many methods, appropriately, in south India (Šmite et al., 2023). Hence, when the findings of this pilot case study are used in definitive, full-scale research and adopted by professional practitioners they can act as a game changer in the women's digital training and women's digital enterprise ecosystems of south India.

Remote working or work-from-home concepts are more suitable for disabled people as they do not need to travel to and from workplaces (Das et al., 2021). Digital training can help them acquire the necessary skills from their own homes. On-the-job, digital training programs and modules can quickly prepare them for a paid job (Das et al., 2021). Hence, women's digital entrepreneurship can act as a boon to disabled people, wherein they can start as employees or even start their entrepreneurial journey to become employers (Das et al., 2021). This small-scale pilot study observed empirical data in support of introduction of various technological advancements in

facilitating occupation for disabled people and easier access to information about government initiatives in the south Indian states. The researcher observed many of these parameters first-hand during this small-scale case study based on qualitative methodologies. The investigator was happily surprised by the positive attitude of the physically disabled people in south India and their creative mindset in seeing every problem as their opportunity for a solution. Their enthusiasm was contagious. However, it must be clearly stated that the limited scope of the current small scale pilot case study does not allow further investigation or research in this area. Hence, this small-scale pilot case study has collected empirical evidence based on personal observations for further research or to offer recommendations for further research to empower the physically disabled people, in south India (Das et al., 2021).

6.5 Implications

The current small-scale pilot case-study research has been able to emphasize that global digital entrepreneurship business outsourcing/off-shoring or remote work models (GLOWW) for women in South India, can be put-together using the variations of 6DRSF5P, feasible, enterprise models, in a such way that, they are ‘global’ in nature & approach; run by, enthusiastic people who are full of life, i.e., ‘living’, with passion, creativity, resourcefulness and productivity; and the ‘organizations’ with various complex resources that are put-together to work in synergy; organizational structure and resources need to be carefully managed, so the whole thing works like a living organism rather than an artificial mechanism; the business-organization/s can serve the clients ‘worldwide’ and the systems & processes could be extrapolated to include women across south India, in a step-by-step manner, i.e., starting from the selected representative, locations of south India (Jakobus et al., 2022). Hence, it could be envisaged that digital business models with good systems and processes could be built to recruit, train and retain an entirely or predominantly

virtual women workforce to cater for clients in many suitable places across many countries, globally (Fleenor and Raven, 2002).

The observations made with the help of this small-scale pilot case study in the selected locations of tier-1, tier-2 and tier-3 cities/towns of south India revealed that except for some homes in metropolitan cities, India is still a predominantly patriarchal society. Most women in India live with their parents or parents' in-laws who belong to the earlier generations.

The people from older generations usually have unrealistic beliefs and are influenced by their mindset that the female members of the family are supposed to handle most of the household tasks, such as cleaning, cooking, taking care of the needs of children, their husband, older people and other relatives in the family. Hence, predominantly, men are expected to go to jobs, and they are the main or the only source of income for all the other family members. Most men are pretty responsible, work longer hours, and even do two or three jobs to help their family members. The income generated by one person in the family, usually the husband or the father, is insufficient to cater to all family members' needs. Women do not have enough money to spend on expenses such as continuous learning to improve their skills, buying things they want, or spending on their leisure activities (Pio et al., 2013).

Observations based on the small-scale, pilot case study in the representative locations of South India also revealed that most men are under tremendous pressure to earn more money and rise to expectations, as the expenses to support a good family lifestyle have increased multiple folds over a period, in India (Kaul, 2022). This undue stress for men has led to various health issues and increased earlier deaths. It was observed that men might be forced (directly or indirectly) to get into corrupt and unethical practices to earn extra money to fulfil the needs & wants of the family members and 'keeping up with the joneses' i.e., social/lifestyle expectations around them.

It was noticed that men have slowly started changing from safe, secure, lower income generating government sector jobs to higher income generating, flexible, private sector jobs. Some have even started small businesses to earn better incomes (Jakobus et al., 2022).

This small-scale pilot case study noticed that filthy roadsides due to the unavailability of washrooms & toilets poses huge problems as citizens are used to 'open defecation' in south India. Government agencies under the leadership of prime minister Sri Narendra Modi, are trying to build awareness in this area by educating people regarding making the public areas 'open defecation free'; hence, this small-scale, pilot case study endeavours to address these research questions broadly, to introduce e-training/e-awareness programs in these areas (Patel and Tripathi, 2022).

The pilot case study observed that more women in tier-2 and tier-3 towns of south India are going to jobs or starting private enterprises to become professionally active and support their family incomes (Kaul, 2022). Parents, parents-in-laws, and other family members are gradually starting to realize and slowly changing their mindset to understand that women can use their qualifications & skills to become more creative & earn money by joining jobs or starting work-from-home or online businesses, so the living standards of the family can be improved (Kaul, 2022).

6.6 Recommendations for future research

The review of various literatures on women entrepreneurship and internet-based online businesses in India reveals that digital entrepreneurship is a field that is currently taking the market & society by storm. However, it is an area that needs to be explored & more documented. Further research is needed, as the sustainability of such an endeavour is contingent on the ever-changing technological framework and the ability to devise sustainable models that can be made available to Indian women when they want to or need to use those (Bouncken et al., 2022).

Thus, the current qualitative research-based pilot case study is mainly done for the age group of women/female stakeholders of digital enterprises, between 20 years and 45 years, as they are well-versed with the usage of internet & Wi-Fi and digital tools and located in the representative places of South India (Kaul, 2022). However, with the spread of the internet & Wi-Fi and digital gadgets to much broader areas, we can see they are accessible to more people now. Hence, even children/teenagers studying in primary or high schools use these technologies & gadgets in their daily lives, including online learning purposes (Kaul, 2022).

Hence, this 6D5PRFS-based e-business-organization model for women digital entrepreneurs could eventually be extrapolated to include younger and older women in India in the age group of 18 years to 60 years (Kaul, 2022). Also, it can be re-designed to include the female members of the communities, in the comparable demographics, in other parts of south India (Kaul, 2022).

Several fully furnished, ergonomically designed, plug & play-type, co-working spaces are available for digital, start-up entrepreneurs who can rent a desk with Wi-Fi or internet connections in tier-1, tier-2 and tier-3 cities and towns of south India. Co-working spaces can be rented for short or longer durations, so there is not much burden on the e-business owner (Gagné et al., 2022). Remote staff can rent co-working spaces when they feel bored or get disturbed by their family members in their homes.

Awareness and education in this area would promote the positive spread of reasonably priced, co-working spaces across South India, which can create a fantastic ecosystem for a virtual women workforce, which could, in turn, cater to the needs of the western world in a better manner with the help of their digital enterprises (Gagné et al., 2022).

Nobel laureates Banerjee and Duflo (2011), in their book, ‘Poor economics: rethinking poverty and the ways to end it’, cover much ground, with their unique focus on analysing the

world's poorest and the adverse effects of being poor, although they decipher that being poor also means that one need to be an excellent economist to survive on their meagre incomes.

This current pilot study on e-training methodologies agrees with their observations & insights that escaping poverty and attaining financial freedom may not be easy for women in slum areas (Sulkers and Loos, 2022).

Moreover, providing a little encouragement and hope and helping with a planned approach can bring astounding results (Sulkers and Loos, 2022). However, instead of or alongside spending a few hundred thousand or millions of dollars and coming from the USA to India to analyse poverty-stricken women or researching on providing them with expensive micro-credit loans (25% per annum + 1% processing fees) in the slums of India, if a minor part of the resources used (such as money, time, human effort & intelligence), were allocated to provide appropriate awareness in the area of financial literacy with proper knowledge and skills, and proper training methodologies & custom-made training modules, to get them ready with simple & feasible models, methods & techniques of ethical, legal (EL) ways of money making (MM) & money management (MM), in a respectable & honourable (RH) manner, to secure good jobs or start their own MSMEs (Micro, small & medium enterprises), then poverty eradication and women empowerment (i.e., meeting their basic financial needs), would have been achieved, in a much shorter time (Alshebami and Al Marri, 2022).

Also, focused SF+EL+MM+MM+RH+GE+EE skills (i.e., simple & feasible, ethical & legal ways of money making & money management in respectable & honourable ways, with gratefulness & empathy which are enthusiastic & exciting), given to well-educated and computer literate female citizens in the lower-middle-class or middle-class suburbs in the surrounding areas of these slums, can improve their financial literacy and enable them to start a feasible e-business

or expand their micro, small & medium enterprises (MSMEs) and further create several, safe & secure jobs or work contracts, to the women in the slum areas (Alshebami and Al Marri, 2022).

Corporate social responsibility funds (CSR) which are about 2% of the net profits generated over the preceding three years by micro, small, and medium enterprises (MSMEs), can be used to provide awareness & training services to women on a subsidised cost or even free, in the slum areas with a public, private partnership (PPP) model in collaboration with the local and central or federal governments for wealth creation and financial independence for women in the slum areas (Roa and Villegas, 2022). This current pilot case study recommends extensive research in this area and, eventually, encourages the required efforts to achieve these aims and objectives with the assistance of grants, donations & other forms of funding from government organisations, non-governmental organisations, charitable foundations, or individuals, from India & overseas (Roa and Villegas, 2022).

On the contrary, instead of poverty, this pilot study recommends consciously deciding to focus on the ways, means, and methodologies by how innumerable people have become more affluent, wealthier, healthier & achieved abundance by taking responsibility for their own lives and steadily & forcefully moving out of their comfort zone, by adopting a life of on-going learning, leadership, creativity, innovation & intelligent work practices (Bender et al., 2022).

In addition, this pilot study recommends providing e-training methodologies and custom-made modules for e-businesses in the surrounding areas of the slum areas, so the stakeholders can follow the path of gratefulness and abundance and charge ahead towards multiple ways of - attaining a positive attitude, showing courage & confidence, making & managing money, enjoying better health, commanding safety & security, refresh in relaxation, build & sustain happy relationships, lead a life of fulfilment & contentment and leaving a legacy of generosity &

greatness, as much as they can (Fischer-Kreer and Brettel, 2022). Because where one focuses matters; the act of focusing makes things grow more robust and better (Prakash et al., 2022).

Banerjee et al. (2015), in their studies on the poor women in the slums of Hyderabad, in India, also observed that most of them did not start even a single business; however, they all wanted to start several or more than one business, and they were chasing many ideas at one time.

Hence, a firm & empathetic leadership, supported by clearly defined models, systems & processes, are needed in guiding the people to focus on a few things that are important and practical at any point in time, duly supported by a well-planned approach, instead of a fire-fighting approach (Prakash et al., 2022). If the focus is on analysing the solutions through creating abundance rather than on problems of poverty, the results would have been and would be much different (Ghosh, 2022). The time spent analysing reasons for poverty could be spent productively on walking on the path to wealth, health, and happiness (Ghosh, 2022).

Furthermore, time and again, the current generation of innovators, creators and leaders have proven and are proving that these positive mindset-based methodologies can work miracles within a short time of one's lifetime (Dwyer and Dunn, 2022; Yin et al., 2022). This pilot study encourages special attention to the persons of Indian origin (PIOs) and how best they can add value in enabling financially more vigorous and independent women in south India, leading to positive wealth building in the communities (Bhagavatula, 2021).

As previously mentioned in this dissertation paper, it is said that "necessity is the mother of all inventions". However, when people are motivated or encouraged to go out of their comfort zone, they can tap into a progressive mindset to innovate, create and find breakthroughs with a fighting spirit (Mishra et al., 2022). Until then, they tend to adapt or adjust to the existing circumstances as much as possible or as long as possible, even though they are highly

unacceptable, substandard or causing discomfort, such as living in an unclean slum area, which can be way below the living standards (Mishra et al., 2022).

As Sundar Pichai, the chief executive officer of Alphabet Inc. and its subsidiary Google, rightly puts it, “We try to work on the things which billions of people use every day”. These concepts can give tremendous motivation to go the long haul on this digital journey (Tamuli and Mallick, 2022). Hence, the e-training/e-learning can have far-reaching effects in the arena of financial stability of the individuals, which can lead to happiness in the family and harmony in the communities – locally, in south Indian states (Gagné et al., 2022). These factors can provide scope for further research studies.

The current small-scale pilot study is designed for educated and computer/digitally literate female citizens of south India; hence, further research could be done regarding the e-training methodologies and custom-made e-training modules using multimedia and videos from the trainers that could cater to e-training necessities of illiterate women in the slum areas or remote rural areas of south India, as well (Killemsetty et al., 2022). With this pilot case study, it is possible to demonstrate that e-training methodologies, programs, and modules based on empirical research data on virtual/remote, on-the-job, work-from-home e-businesses can be game changers in increasing digital literacy and improving lifestyles of women in South India (Gagné et al., 2022).

6.7 Conclusion

In conclusion, initial research has been done using the current small-scale pilot case study in the areas of online training for the stakeholders of digital enterprises, guided & enabled by persons of Indian origin, where relevant, essential, indicative research information could be understood, in the representative locations of five states of south Indian region (Gagné et al., 2022).

This project is a pilot case study on e-training by persons of Indian origin for women's digital enterprises in south India who badly need proper guidance and handholding while facing various intricate problems. These scenarios motivate the current small scale pilot case study to collect the primary data to design possible solutions. The overall objectives of the study were, learning & understanding the qualitative research methodologies and applying them using small scale pilot case study in conducting independent research around women-led MSMEs (micro, small & medium enterprises) & e-training for their stakeholders, enabled by persons of Indian origin, in selected places of south India (Kumar et al., 2022).

Researcher is a person of Indian Origin holding citizenship in Australia & has an OCI – overseas citizen of Indian status and he is also an active member of globalcitizen.org; hence efforts were made to align global objectives, locally in south Indian locations using this pilot case study project (Kumar et al., 2022). In the longer term, this research project can build up the capabilities for the researcher and the team to act as the experts in the south Indian Women-led, MSME (micro, small & medium enterprises) ecosystem (Kumar et al., 2022).

As explained in detail in this dissertation paper, this small-scale pilot case study has conducted the research in digital business models involving work from home, remote, virtual working environments – for women entrepreneurs and their female staff (Patel and Tripathi, 2022). As it has been covered in sections 3.2.1 and 3.2.3, in the current qualitative research, 6DFPRFS-based feasible & sustainable business models were used i.e., decipherable, digital, dollar, distant, delegable, duplicable, products, projects, portals, platforms, physical shop fronts, rupees, franchise, and scalable to build MVP - minimum viable products for women's digital enterprises in south India.

Customised, on-the-job, training modules using e-training/e-learning methodologies guided or mentored by persons of Indian origin have been extensively used all along this pilot case study to add value in micro, small & medium enterprises (MSMEs) in south India (Patel and Tripathi, 2022).

An elaborate study of literature related to the topic has been done and reviewed selectively for this dissertation paper. There are quite a few major & popular learning theories such as behaviourism, cognitivism, constructivism, humanism and connectivism.

There are no specific training theories however they are designed using the learning theories; for example, goal-setting theory, micro-learning theory, learning-curve theory, gamification learning theory, sensory theory, story-telling theory, social learning theory, and adult learning theory. Furthermore, there are no specific digital training theories; however, e-training theories are designed using the concepts from relevant learning theories & training theories.

Micro enterprises run by women and the effects of micro finance that were researched by scholars such as Nobel laureate in economical sciences Abhijit Banerjee and his co-researchers in the slums of Hyderabad have been studied in this pilot case study.

Articles on foreign remittances to India from persons of Indian origin (PIO) discuss how they affect the financial development in India. State governments are wooing non-resident Indians (NRI) for foreign direct investments (FDI). Scholarly articles on the shocking effects of traffic congestion and vehicle air pollution in South India has been studied because work-from-home solutions can add value in these areas, when applied judiciously.

It has been discussed in chapter III - Methodology, that qualitative research methodologies were extensively used; specifically, case study method and more precisely, pilot case study method. The research design can be briefly explained as follows: The timeline of the pilot case

study research was planned from the start of November 2022, for four and a half months (about 18 weeks) until the mid of March 2023.

The current pilot case study was done using instruments such as semi-structured or unstructured questionnaires. Exploratory approach is used initially to collect the primary/secondary data, although interpretative approach is used in the later stages during data analysis. Efforts are made to explore, understand & try-out a range of qualitative methods & models, i.e., interpretive, narrative, historic and descriptive.

Triangulation is used to collate the data from various sources to achieve synergy. Current research design also includes a comparative study between the online learning from students in the colleges & e-training to the owners & staff of women enterprises in south India.

A brief note on the data collection process can be given as follows: about 275 participants were asked to provide the primary data using qualitative research methodologies i.e., interviews & observations; from 100 women employers and 100 female employees between the age group of 20 to 45 years from 6 locations in 5 states of southern India; from co-working spaces, start-up incubators, women enterprise (WE)-hubs, Technology (T)-hubs, micro, small & medium, enterprise (MSME) associations, industrial parks, chambers of commerce, Innovation hubs and science & technology entrepreneurs parks (STEP); Also, 25 Persons of Indian origin (PIO), 25 digital training providers in south India, 25 overseas clients from Australia.

Being a small-scale pilot case study, the current research project had limited scope and hence, it was able to collect the following data: Primary data – online or offline answers or feedback to the research questions based on responses, facts, experiences, opinions and insights from sample participants.

Secondary data – government gazettes, scholarly articles, local & federal government websites, national informatics centres and online/offline data centres, anecdotes, stories, experiences about industry players, and the data collected earlier by the local businesses, such as their internal records.

A snapshot of feedback, opinions, narratives, biases and the general mindset of the women entrepreneurs regarding the e-training or online learning & e-entrepreneurship from representative locations of south India, is captured for qualitative analysis using this small-scale pilot case study.

The findings of the pilot case study show several factors about simple yet effective ways of supporting women digital entrepreneurs in south India. Results reveal clear opportunities for women's digital enterprises: economic freedom, greater social independence and acceptability, and a sense of self-worth (Hossain, 2018).

These findings support the need for full-scale, definitive research in the related areas. As specified in the previous chapters, women entrepreneurs from the micro, small & medium enterprises ecosystem who are ready for digital transformation from selected, representative places of south Indian states were asked to volunteer for this small-scale pilot case study. However, the current pilot case study did not focus on remote rural areas of south India.

As the billionaire entrepreneur & the co-founder and current chairman of Infosys Technologies Ltd, who initiated & led the world's largest biometric ID system project – 'Aadhaar' in India, emphasises in his book, 'Rebooting India: Realising a billion aspirations', "It is said that over-population is a major problem in India". "However, we have to believe that if we can view this number of people as the number of intelligences, then India can achieve wonders for itself and the rest of the world". "India should not be seen as a country of one billion people; it should be seen as one billion minds". e-education, e-training, digital inclusion, and digital entrepreneurship

for women can play a subtle but vital role in working towards this lofty vision of technology-enabled social transformation in south India (Nilekani and Shah, 2016).

Compilation of the list of e-businesses & e-business plan templates that can be successfully operated from home or remotely and which can make a million Indian rupees in profits per year is underway. Some of these e-businesses are already operating successfully whereas some others are yet to be tried & tested (Verma and Saraswathi, 2002).

The investigations from this small scale pilot case study research has collected empirical data and factual information on work from home or remote working that are generic in nature and hence efforts are being made to collate them as scholarly articles that can be submitted for the kind perusal of journal publications such as GBIS (Global Journal of Business and Integral Security from SSBM), Institute of Engineers-India, Australian Computer Society (ACS), and others.

The researcher is in the process of writing a draft for the book on women's digital entrepreneurship in a work-from-home environment, in south India.

Funding proposals are being made to private, government, non-government, and charitable institutions, to conduct much larger, full-scale, definitive research on the same topic or similar or related topics.

As given before, the original contributions of this pilot case study are: It was done in an environment where is it was 100% focused on women's digital enterprises; 100% of the selected places for this research are from south India; 100% guided & enabled by persons of Indian origin (PIO); 100% digital or online training was used to deliver the mentoring on the 6D5PRFS-based feasible business models.

Ethical considerations were adequately adhered to while conducting this small-scale pilot case study in the selected representative locations of south India. The current small-scale pilot case study had minimal or no risk, i.e., physical, psychological, social, or economic, to the participants.

There is limited research to answer the questions such as: has the previous outsourcing or offshoring industry is turning in to today's remote or virtual working or work-from-home industry that can support digital women's entrepreneurship in south India, especially after the Covid-19, global pandemic? This small-scale pilot case study made humble efforts to uncover this and surprisingly the answer has been a resounding 'yes'. Huge numbers of people are getting ready join to remote working, e-learning, e-training & e-entrepreneurship ecosystem. However, this outcome must be reconfirmed with the help of full-scale, definitive research. As this pilot study hypothesises that the reach of 4G/5G internet/Wi-Fi is far and wide and increasing day after day, in south India.

Another hypothesis being the 6D5PRFS-based women's digital enterprise models are feasible, sustainable and in line with the 'ease of doing business', which is a major expectation of local women-led MSMEs and championed by the initiatives of local & central governments in southern states of India. Viability of the business was endorsed by about 92% of the participants from selected locations in south India.

When the people from non-technical backgrounds are expected to work online using digital technologies it might come as a shock for them to work on their own from their homes or co-working spaces with-out the assistance from their colleagues or managers that they are used to when working onsite in the traditional or conventional brick & mortar offices or shop fronts.

Hence, it was necessary to understand how compatible they were in this change management process. The compatibility of 6D5PRFS-based enterprise models was supported by about 80% of the participants and this area can be enhanced further using e-education, e-learning & e-training.

When somebody arrives in India from a foreign country and comes out of an international airport into the city traffic, they understand the horrendous traffic congestion/conditions & air pollution. Hence, the travel time to & from workplaces or home offices, and the time taken to get ready were studied in this pilot case study to analyse if they can be reduced by switching to the 6D5PRFS-based, feasible & sustainable business models and adopting work-from-home.

It was an astonishingly positive response where around 90% of the volunteers in this research reported saving around 1 to 4 hours daily when they started working from home and 85% reported escaping from exposing themselves to risky traffic conditions and unhealthy air pollution.

persons of Indian origin are drawn by the idea of adding value to their motherland and the theme of India's G20 presidency "Vasudhaiva Kutumbakam" or "One Earth · One Family · One Future", which will work to promote this universal sense of one-ness. This information about G20 summit has been taken from the ministry of external affairs of Government of India.

Hence, the advantages and disadvantages of getting involved with a digital enterprise and mentoring a women entrepreneur in south India, by being in their own country has been addressed to collect the primary data. Various points such as cost efficiency, reduced travel to India and ability to focus on local marketing to attract overseas clients topped as the advantages whereas the disadvantages include the time zone problems, fluent English communication issues and concerns related to work ethic & efficiency.

Digital training providers for MSMEs in south India and the overseas clients from Australia had mixed views although they appreciated the path of research and the progress.

The empirical findings of this small-scale pilot study were comparable to other literary papers and scholarly articles on the similar topics, even though there were obvious differences that were specific to the demography of south Indian locations and the various stakeholders involved in this research project such as women entrepreneurs, their female staff, persons of Indian origin as mentors, overseas clients from Australia and other digital training providers.

As a continuation of the current pilot case study, another project has been initiated that involves systematically connecting women entrepreneurs from post/zip codes of India, such as from 570023-Kuvempu Nagar in Mysuru, Karnataka state, India to 2155-Kellyville in Sydney, NSW state, Australia, or 1213-Petit-Lancy, Geneva, Switzerland, or CT3-Ash-Canterburry-United Kingdom or 94088-sunnyvale, San Jose, California, USA; so they can virtually or remotely communicate, ideate & implement the simple & easy ways of money making & money management concepts using digital tools & digital entrepreneurship. This endeavor can also lead to a steady knowledge, cultural exchange leading to a vibrant women-led, micro, small & medium enterprises (MSME) ecosystem and sustainable global communities (Dy et al.,).

Quite a few women-led, micro, small & medium enterprises (MSMEs), in south India, already had the information & communication technology (ICT) infrastructure included in their business models, although in a smaller proportion (Crozier, 2022).

Most female stakeholders had the positive mindset to undergo online training and improve their skillset required to implement the feasible 6D5PRFS-based digital enterprise models in their hometowns, thereby improving their personal or family incomes and adding value to their local economy (Crozier, 2022).

As the father of the nation Mahatma Gandhi, who led the grassroots people in India to join the fight for political freedom using non-violent means that took the world by storm, once said: "In a gentle way, you can shake the world ", meaning you cannot underestimate the little things which can make a big difference. This inspiring concept was re-iterated by the outcome of the qualitative research methods used in this small-scale pilot case study, such as personal observations and interviews, conducted with the local female owners of micro, small, and medium enterprises and their female staff, in south India (Malar, 2019).

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APPENDIX A

SURVEY COVER LETTER

Dear …… Thank you for agreeing to participate in the research on a pilot case study on e-training by persons of Indian origin (PIO) for women digital enterprises in south India. This pilot case study is a part of the Doctor of Business Administration (DBA) program with the Swiss school of business and management (SSBM), Genève, Switzerland. The time and effort you are willing to commit to support and help in this research are acknowledged with thanks and wholeheartedly appreciated. As discussed over the telephone, we are attaching a word document with questions for your response. You are encouraged to respond in full detail, and if there are any questions, please let us know. The questionnaire will take approximately thirty minutes, and you are requested to submit the responses within seven days if it is okay with you.

Further, we need to organise an in-person meeting to get your responses to a set of semi-structured questions attached here for your reference. We can schedule this at a mutually convenient time and place. If meeting in person is not convenient, then a video conference or a zoom call could be organised at a mutually convenient time. This meeting should take about thirty to forty minutes. We might record the conversations or capture the information for doctoral research purposes. Please note that all the information will be kept confidential. However, we might use the data from this research to support this study. Thank you again.

Guruprasad: .....Date: .....

(Source: Swiss school of business & management, Geneva, Switzerland)

APPENDIX B

INFORMED CONSENT

Pilot case-study on e-training by persons of Indian origin (PIO) for women digital enterprises in south India

I, ……agree to be interviewed for the research which will be conducted by……a doctorate student at the Swiss school of business and management, Geneva, Switzerland.

I certify that I have been told of the confidentiality of information collected for this research and the anonymity of my participation; that I have been given satisfactory answers to my inquiries concerning research procedures and other matters; and that I have been advised that I am free to withdraw my consent and to discontinue participation in the research or activity at any time without prejudice.

I agree to participate in one or more electronically recorded interviews for this research. I understand that such interviews and related materials will be kept completely anonymous and that the results of this study may be published in any form that may serve its best. I agree that any information obtained from this research may be used in any way thought best for this study.

Signature of Interviewee: .....Date: .....

(Source: Swiss school of business & management, Geneva, Switzerland)

APPENDIX C

INTERVIEW GUIDE

Participants identified were contacted through telephone, mobile phone, messages or email to discuss their interest in participating for the research on the ‘Pilot case-study on e-training by persons of Indian origin (PIO) for women digital enterprises in south India’.

During the preliminary conversation the objectives, process and confidentiality aspects are explained, in detail. Then, each participant is given the reason for choosing them, their roles in the research and the expectations from them in terms of responses and time commitments.

Upon receiving confirmation of participation, they would be briefed on the process of primary and secondary interview process. Structured primary interview questions would be sent to participants and they will be given about a week to respond to them. If some of the responses are not clear, then the interview participants are contacted for further clarification. The approximate time to respond to primary questions is expected to be around thirty minutes. The secondary questions which are semi-structured need a conversation which is either in-person or via videoconference using a zoom call or Skype call. The approximate time scheduled for this meeting is thirty to forty-five minutes.

The meeting place or the video conference would be scheduled as per mutual convenience. Entire conversation is captured during this meeting by recording, or by writing down the minutes of conversation. Participants will be informed prior to the meeting and consent taken for recording & capturing the conversation. Participants would be thanked and appreciated for their time and participation.

(Source: Swiss school of business & management, Geneva, Switzerland)

APPENDIX D

LIST OF INDICATIVE DIGITAL SERVICES, E-PRODUCTS & SaaS (SOFTWARE AS A SERVICE) THAT CAN BE OUTSOURCED TO DEVELOPED COUNTRIES

Category	**Cluster**	**E-Services**	**E-Products**	**SaaS** [Software as a Service]
Health care	Dental	Accreditation & Compliance	E-Diaries	Practice/ Clinic Management Software
		Admin & Operations	E-Manuals	
		Finance & Accounts		
		Training & Development	E-Books	
		Research & Innovation		
		Marketing & Sales	E-Marketing Plans	
		Websites & Social Media		
		It & Technical Support		
		Business Strategy & Planning	E-Business Plans	
		Business Mentoring & Coaching	E-Courses	
		HR & Recruitment	OH&S Manuals	
Based on the primary and secondary data collected from the current pilot case study				

APPENDIX E

DATA ON THE EMPLOYEES OF WOMEN DIGITAL ENTERPRISES, IN SOUTH INDIA

Locations [State]	**Age**	**Formal Qualifications**	**Digital Literacy**	**Experience**	**Sample Size**
Hyderabad [Telangana]	a) 29 b) 6	a) 3 b) 5 c) 24 d) 3	a) 35 b) 35 c) 35 d) 35 e) 35 f) 20	a) 10 b) 14 c) 8 d) 2 e) 1	35
Machlipatnam [Andhra Pradesh]	a) 4 b) 4	a) 1 b) 1 c) 5 d) 1	a) 8 b) 8 c) 8 d) 8 e) 5 f) 2	a) 3 b) 3 c) 1 d) 1 e) 0	8
Mysuru [Karnataka]	a) 20 b) 5	a) 2 b) 6 c) 15 d) 2	a) 25 b) 25 c) 25 d) 25 e) 25 f) 10	a) 12 b) 7 c) 3 d) 1 e) 1	25

Kodagu [Karnataka]	a) 5 b) 2	a) 0 b) 2 c) 5 d) 0	a) 7 b) 7 c) 7 d) 7 e) 7 f) 2	a) 4 b) 3 c) 1 d) 0 e) 0	7
Ooty [Tamil Nadu]	a) 10 b) 5	a) 2 b) 2 c) 10 d) 1	a) 15 b) 15 c) 15 d) 15 e) 15 f) 4	a) 5 b) 6 c) 3 d) 1 e) 0	15
Wayanad [Kerala]	a) 6 b) 4	a) 0 b) 1 c) 7 d) 2	a) 10 b) 10 c) 10 d) 10 e) 10 f) 5	a) 6 b) 3 c) 1 d) 0 e) 0	10
Total Sample Size = 100					
(Based on the primary data collected from the current small scale pilot case study)					

Age: a) 20 To 35 b) 35 To 45. Formal qualifications: a) SSLC (Grade 10th) / PUC (Grade 12th) b) Diploma/Vocational courses c) Under Graduation d) Post Graduation

Digital Literacy: a) Computers b) Internet/Wi-Fi usage (Websites, blogs and other online info) c) Emails d) Online Meetings/Webinars e) Microsoft Office f) Other Software Tools

Experience: a) 0 To 1 Years b) 1 To 2 Years c) 2 to 3 Years d) 3 to 4 Years e) 4 to 5 Years

APPENDIX F

DATA ON THE POPULATION DENSITY OF THE STATES & REPRESENTATIVE LOCATIONS OF THIS PILOT CASE STUDY IN SOUTH INDIA

States & Locations	Population Density	As On
Telangana State	38.08 million	2023
Hyderabad	10,534,000	2022
Andhra Pradesh State	53.15 million	2023
Machlipatnam	226,000	2022
Karnataka State	67.6 million	2023
Mysuru	1,261,000	2023
Kodagu (Coorg)	560,000	2022
Tamil Nadu State	76.8 million	2023
Ooty	1,022,198	2023
Kerala State	35.77 million	2023
Wayanad	853,000	2022
Total population of south India = 271.4 Million (Approx. as on 2022-23)		

Sources:

National Informatics Centre, Data Centre, Government of India.

Unique Identification Authority of India, Government of India.

APPENDIX G

DBA STUDENT INFO/BIO

Guruprasad is a person of Indian origin (PIO) who holds Australian citizenship and an overseas citizen of India (OCI) status in India. He intends to be on the path of lifelong learning (LLL). GP is curious about learning & understanding - how the financial management side of different organisations work, i.e., from a minor organisation to global organisations, including private, public, & social organisations. Furthermore, he spends his time associating with specific projects to witness the innovation, creativity and add-value aspects of ethical & legal ways of money making & money management in an honourable & respectable manner that are enjoyable & exciting which can be done by showing empathy & gratefulness. He is an ardent observer of small to medium business segments & ecosystems in both the commercial and social sectors. He has been directly or indirectly involved with various micro, small, and medium enterprises (MSMEs) and related projects, assignments, services & products.

He has a bachelor's degree in industrial & production Engineering and over 25 years of experience in general management, business/organisational analysis, advising, consulting & investments. He has worked across many countries, i.e., India, Australia, New Zealand, Singapore, USA and others. Guruprasad is an active member of www.gobalcitizen.org. He has an enormous belief in individual human beings' innate potential & creativity and the synergies they can bring together as communities – both local & global. As the story goes in business circles, Henry Ford had envisioned a motor car in every home, and Bill Gates had envisioned a PC in every home; hence, the goal is to envision a creative genius & a leader who is a b/millionaire in every road, every home and every person, who can add positive value to the communities.

Guruprasad's LinkedIn profile: https://www.linkedin.com/in/guru-prasad/9215861aa