

"BUSINESS IMPACT OF EFFECTIVE TRAINING AND DEVELOPMENT IN PROFESSIONAL SERVICES IN THE SOFTWARE INDUSTRY"

Research Paper

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Abstract

Although retention of employees has been one of the most relevant topics in Human Resource Management, companies are still failing to address or even understand it effectively. Over the past years, numerous research pointed out to Training and Development ("T&D") as a mechanism for improving business performance, motivation and retention.

However, how specifically set in place T&D practices that are meaningful to the business and individuals is not yet well known. There is also little known around what effective T&D looks like.

The purpose of this paper is providing a specific definition of "effective" T&D and a model for Professional Services organisations in Software or SaaS companies that improves business performance, quality of delivery and protects tacit knowledge while also constructs a better world for their employees by creating a much better work-life balance, empowering their careers and maximising their own potential and satisfaction out of their jobs.

Keywords: Professional Services, PS, Consulting, Information Technology, IT, Software as a Service, SaaS, Motivation, Revenue, Retention, Training, Development, T&D, Performance.

1 Introduction

The cost of not being able to retain highly skilled employees has been a major problem for many companies for a long time. Even nowadays, most of the companies are unaware of this cost; according to the CIPD (2021), only 30% of the CEOs had talent management as a key priority over the last 12 months and only one in five calculate the cost of labour turnover.

The Society for Human Resource Management ("SHRM") quantified the cost of losing an employee through different studies. In one of those studies, the SHRM discovered that the per-employee turnover cost was \$3,500, which translated to \$1 million for a turnover rate of 10 percent. The SHRM reported that the cost of replacing an employee, on average, costs a company 6 to 9 months of the salary of an employee. In 2000, for an employee making \$60,000 per year, that translates into \$30,000 - \$45,000 in recruiting and training costs only, while the overall cost can be anything between 90% and 200% (Joinson, 2000). According to the U.S. Bureau of Labour Statistics, the median annual wage for computer and information technology occupations was \$97,430 in May 2021, which was more than double than the median annual wage for all occupations of \$45,760 ("Computer and Information Technology Occupations", 2021). This figure indicates that losing an Information Technology ("IT") Consultant costs in average between \$87,687 and \$194,860. An attrition rate of 10% in a workforce of 100 employees, means loses that range from \$876,870 up to \$1.94 million every year.

Professional Services ("PS") firms also face an additional challenge in the form of potential tacit knowledge loss. According to Maister (1993) for PS organisations, tacit knowledge is essential for professional skills. Morris and Empson (1998) said that the most valuable knowledge is the tacit knowledge of Full-Time Employees ("FTEs") in PS organisations as it is based on experience

acquired during a prolonged period of time and is hard to communicate in a codified language. Similarly, long-lasting relationships with clients are often based on close personal contacts among individuals making it complicated to reproduce (Alvesson, 2011). As per its un-codifiable nature, tacit knowledge is not protected by trade secrets laws (Liebeskind, 2009) making the retention of FTEs even more relevant.

Continuous Development of personnel has been proven to be effective for both increasing retention and impacting positively the business performance of organisations. Crnomat (2008) identified that companies in the IT industry must invest in continuous training and skill development as mechanism for increasing employee retention while Pržulj (2021) discovered the need of aligning strategic goals with training to maximise both motivation of employees and business performance; Pržulj (2021) also states that it is key to create an environment that favours and rewards employees who participate in training and motivate them before, during and after training. In this regard, Johnson (2005) said that aligning career growth with company goals becomes key for maximising employee loyalty; career growth is not only about getting promotions within a company, but more about acquiring new competences. Bartel (2000) analysed various studies on the Return on Investment (“ROI”) of Training and Development (“T&D”) and estimated ROIs ranging from 7% to 200% per year depending on skills depreciation rates; although the study does not specify the range for the IT industry, it is safe to assume that it is on the higher end as skills in technology depreciate faster compared to other sectors (Park et al, 2006); the study also points to the fact that few companies calculate ROI of employee training.

1.1 Research Problem

Firms having the main revenue stream coming from Professional Services have less financial flexibility as per the financial model under which they operate. This is the reason why the intention of this research is to focus on firms having PS as the non-main contributing factor to the revenue of such companies, being software licences the main revenue contributor. Although SaaS companies display this model, there are other software companies with the same financial model on where software-licenses is the main source of income meaning that this research is applicable to them too.

There is no question about the benefits that T&D brings to both organisations and individuals; what it is not clear is if T&D can be implemented effectively in Professional Services organisations in the IT and/or Software as a Service (“SaaS”) industry.

This study pursues finding out a valid definition for effectiveness in the context of Training and Development in Professional Services organisations that belong to companies with a business model based mainly on software licenses. The focus is around looking at if Training and Development practices can exist in a way that they do not affect their ability to attain all of their PS business targets.

Current research does not offer a definition of what effective look like when it comes to training and development in this type of organisations. There has been little work around finding a definition for “effectiveness” that can be easily used by other organisations; Bronet (2023) proposes using the concept of “markers”, making it easy for organisations to take advantage of the specific markers identified in his study.

Revealing effectiveness of these policies has to also be linked to their influence on specific business KPIs. This research looks at identifying markers that protect business KPIs when present. One example would be having billable utilisation with low Variance and a Mean that is on target as this allows for time to be invested in T&D, building resources that are better trained and prepared for their day-to-day jobs, present and future, and also enabling more predictable businesses. Another example is the influence that certain markers identified in this study have on attrition and on the quality of the service, as these are directly linked with two of the three big Rs, Revenue and Retention.

1.2 Purpose

The main purpose of this research is to find a model for effective T&D, in the context of Professional Services organisations in the SaaS industry, that can be used by other similar organisations worldwide. For this, this research aims to discover a set of organisational T&D markers, which when present, make a positive impact on the business and the people.

Different segments with different approaches to T&D have been analysed over a period of four fiscal years with the objective to see how these different T&D approaches impacted business KPIs: billable utilisation, services sales, recognised revenue (also known as delivered revenue), attrition, service quality and other relevant metrics derived from the previous ones such as Variance and Mean.

Crosschecking the different T&D Policies with the business performance of each of the segments gives an insight about potential markers that can have a positive impact in business KPIs and people.

1.3 Significance

The findings of this study will benefit all PS organisations in the SaaS industry around the world and the employees working for them. The ability to produce an ecosystem on where individuals can experience continuous growth supported by the company, enables a new space that has never been developed to this extent before. The promotion of better prepared and more motivated individuals, that are also more committed to the company, works in the benefit of the enterprise too; an example would be a reduction of costs related to attrition and the ability to protect and preserve tacit knowledge better. Nevertheless, the impact does not stop there; the positive impact also affects Revenue, directly in the PS unit as a way of selling PS days or packages to customers and also, indirectly, in the bigger business goal of these companies: the revenue coming from software licenses.

Highly prepared and motivated personnel contribute to an increase in expands and renewals of software licenses, in monetary terms, which in the long run builds businesses that are more stable and resilient through time, and also even through highly challenging events out of the control of the organisation.

The ultimate impact affects employees working for these organisations by creating a much better work-life balance while at the same time empowering them towards a more resilient future with more opportunities and better self-satisfaction out of their jobs.

This research will unveil a model for effective T&D based on markers, this model can be used by PS organisations around the world to build Training and Development practices that have a positive impact not only on these Professional Services organisations' main metrics and indicators such as services revenue, quality and employee retention but also in the bigger goal of SaaS companies in the form of increased licenses software revenue in renewals and expansions.

It will also be shown how effective T&D practices can be achieved without the ability to attain all of the business targets quarter after quarter and year after year, and the relationship between this and services sales.

1.4 Research Questions

The purpose of this research is to define effective T&D by creating a model that can be reused by other PS SaaS/IT organisations to produce effective T&D policies that not only do not compromise achieving business targets but also have a positive impact on them.

The goal of this study is not to prove if T&D can be an effective method for motivation and retention in PS organisations in IT companies as this has already been proven (Crnomat, 2008; e Cunha, 2002; Fletcher et al, 2018; Johnson, 2005; Maslow, 1970; Pardee, 1990; Susomrith et al, 2019). The focus of this research is to understand if T&D can be achieved without impacting the ability to attain all business targets in PS organisations in the SaaS/IT industry and what does effective look like when it comes to T&D. Hence the three research questions of this paper:

1. What is effective Training and Development?

2. What metrics can be used to measure effective T&D?
3. What is a model for effective T&D that can be used by other Professional Services organisations in SaaS companies?

1.5 Hypotheses

In order to determine if Training and Development can exist in Professional Services organisations in software-licenses based companies in a manner that produces a positive impact in the business and their employees, this study proposes two hypotheses:

1. “Effective T&D” can be defined as the presence of certain markers. When these markers exist, the organisation has an “effective” T&D practice.
2. There is a model for T&D that can be used without impacting the ability to attain all business targets in Professional Services organisations that belong to companies with the main revenue stream coming from software licenses.

2 Literature Review

2.1 Motivation theories

Maslow (1970) postulated based on his observations that there is a general pattern of needs realisation that people tend to follow in the same order; for someone to start looking at satisfying needs from a higher section in the hierarchy, the ones below must be substantially or completely satisfied. McLeod (2007) highlighted the fact that Maslow clarified that satisfaction of needs is not an “all-or-none” phenomenon which means that a need does not need to be satisfied 100% before the next one emerges.

These needs are grouped in 5 layers and represented in the form of a pyramid, these needs follow the following general rule: A need motivates an individual until this need is fully or significantly satisfied. However, there is an exception to this rule on the “Self-Actualisation” section at top of the pyramid; in there, needs follow the opposite pattern, motivation keeps increasing as this need is satisfied. Self-Actualisations is all about personal growth which can be achieved by T&D; in this sense, effective T&D should exploit this aspect by keeping employees more motivated for longer periods of time.

The Two Factor Theory of Herzberg (Herzberg et al, 1959), or also known as Herzberg’s motivation-hygiene theory and dual theory, tries to explain how different factors at work affect job satisfaction. Motivated by Maslow’s Hierarchy of Needs, it describes two sets of factors that contribute to job satisfaction, series of Satisfiers and Dissatisfiers and how work must be done on increasing satisfaction and decreasing dissatisfaction simultaneously. In this sense, effective T&D should be able to increase satisfiers and decrease dissatisfiers.

2.2 Professional Services in SaaS companies

Professional Services mechanics is a field that has been studied deeply; the majority of the renowned authors agree on the following common metrics as mechanism to measure business performance (Maister, 1993):

- Billable Utilisation: This is the number of hours worked on customer paid for engagements divided by the number of available hours for a period of time.
- Bookings (Services Sales): This is the money that customers will pay (or have paid) for services.
- Recognised Revenue: Typically, Professional Services organisations recognise revenue depending on the services contract. This can be, for example, time and materials, fixed or recurring.

However, when it comes to success, Maister (1993) also says: “Above all else, what I, the client, am looking for, is that rare professional who has both technical skill and a sincere desire to be helpful, to

work with both me and my problem. The key is empathy—the ability to enter my world and see it through my eyes.”

There is an additional aspect rarely highlighted that applies in PS to the software industry, not only billable personal need to know very well the software that they implement, but also the IT systems that their software interacts with; effective T&D practices should be able to identify those IT systems and train billable personal on those so that these employees understand better the problems they solve.

From a financial point of view, Professional Services organisations in SaaS companies differ from the Professional Services firms mainly in the revenue streams. The first ones (PS in SaaS companies) have two types of revenue streams, the one that comes with the software they sell which tends to be the main revenue stream and the one generated by PS itself. The second ones (PS firms) have only one revenue stream, the one that comes directly from selling services. For the first type, there is more flexibility in their ability to invest in T&D; both in time with reduced billable utilisation targets and in money with the ability to self-fund their T&D needs.

2.3 Revenue, Retention and Cost

Recruiting, Retention and Revenue are the big three Rs of successful group practice management (Allen, 2004). Allen presents this idea in the area of medicine; however, medicine is a subset of highly skilled Professional Services organisations.

Bartel (2000), studied the return on the investment in training; looking at the existing evidence he discovered a wide range for ROI, from 7 up to 200 percent; effective T&D should be able to produce ROIs closer to this 200 percent observed by Bartel.

A PS organisation in the Software industry with 100 employees and an attrition rate of 10%, the yearly cost could sit in the range of millions, going from \$1.08M to \$2.41M every year (“Computer and Information Technology Occupations”, 2021; Joinson, 2000); these figures are big enough to take the aspect of retention in the software industry seriously; this also makes the definition of effective T&D to be one that contributes to reduced attrition costs due to better retention rates.

Motivation and T&D are a key factors to boost employee performance (Khan, 2012). In his study, Khan (2012) found that the two factors influencing the performance of an employee are training and motivation.

T&D influences many elements of an organisation; Pržulj (2021) highlights profitability, efficacy, productivity, cost reduction, quality and quantity enhancement, employee fluctuation and reputation of the company among others.

Even during challenging times, on where companies have to work on cost reduction policies executing layoffs as part of their strategies; after a downsizing stage, these companies panic about losing employees, especially when it comes to highly skilled employees and that one of the characteristics that help retain employees is to offer them opportunities for improving their learning (Logan, 2000).

Susomrith et al (2019) studied the impact that continuous T&D has on PS organisations, observing Innovative Work Behaviours (“IWB”) when T&D was present.

Motivation and performance of employees can be also impacted by a Life-Long Learning (“3L”) approach of leaders; 3L has been defined as: “All organised systematic education and training activities in which people take part in order to obtain knowledge and/or learn new skills for a current or a future job, to increase earning and to improve job and/or career opportunities in current or other fields” (Collin et al, 2012).

When leaders display a Life-Long Learning (“3L”) mindset, they influence motivation of their employees through inspiration (Caves, 2018). This is of especial relevance because leaders have the choice between managing their employees by forcing compliance or by motivating and inspiring (Kotter, 2012).

It is commonly accepted that training influences positively employee performance by offering better services quality. According to Buckley and Caple (2009), training is defined as “a planned and

systematic effort to modify or develop knowledge, skill, and attitude through learning experience, to achieve effective performance in an activity or range of activities.” This definition offers more clues on what effective should look like when it comes to T&D.

Expert knowledge is a key asset to Professional Services firms (Morris and Empson, 1998), while some knowledge can be transferred to the company and other employees in a programmatic manner, other knowledge cannot be transferred fully (Teece et al, 1997); this depends on the codifiable nature of the knowledge (Alvesson, 2011; Liebeskind, 2009).

Tacit knowledge is non-codifiable knowledge, Vaiman (2008) highlights the value of tacit knowledge in Professional Services Firms stating that intangible resources are more likely to give a bigger competitive advantage than tangible resources.

Maister (1993) also points out to how essential tacit knowledge is for Professional Services organisations.

The loss of tacit knowledge is associated to soft-costs, and although it is true that it is difficult to measure with precision the cost of losing tacit knowledge, many specialists agree that in monetary terms, the loss of tacit knowledge would add up to at least the same amount as the ‘hard’ cost. In the end, the actual cost of replacing an employee is about double than what many companies estimate (Vaiman, 2008).

The most effective strategy to prevent the loss of tacit knowledge is the retention of employees.

2.4 Depreciation of Technological Knowledge and Quality of Service

In their study, Shen and Tang (2018) cover how training is vital in improving quality of service: “it is key for organisations to provide training to employees and to help employees transfer new knowledge and skills” and also how relevant that is for training to be effective.

Ensuring quality control of service delivery is a key task for Professional Services firms (Stumpf et al, 2002). Stump provides a mechanism to measure quality for continuous improvement after each engagement with customers. The study, however, fails to address a critical aspect of quality-of-service delivery, the technical ability to the job to the required standard. For that, employees have to be up-to-date with their technological knowledge (“TK”). Software based companies face a complex issue, the pace at which knowledge becomes outdated.

In this regard, Park et al (2006) studied the rate at which knowledge is depreciated in technology. The study uses the Technology Cycle Time (“TCT”) method in an empirical analysis to assess depreciation rate. The paper reveals that the industry that has the highest rate of depreciation is Software. Thus, making a clear strategic intention of creating an effective model for Training and Development in the Software and SaaS industries becomes key.

2.5 Novelty

Professional Services is typically approached using a classic and traditional perspective on where these organisations are being seen in isolation. Authors like Maister (1993) devise professional services firms as a whole even when the main the revenue stream does not lie in Professional Services itself but in other areas of the company, as it happens in SaaS companies; in this research, this gap is exploited by proposing using the main revenue stream that comes from Software as an advantage to understand Professional Services as a contributing factor to that stream and model and govern these types of PS organisations differently. The new idea proposed here is avoiding maximising profit in Professional Services in a way that once targets have been met, instead of focusing on overachieving, the priority should immediately shift towards using all possible resources to invest in T&D as a mechanism to increase Revenue (not only from Professional Services itself but from Software too), increase Retention, improve Quality of delivery, protect of Tacit Knowledge and reduce Cost.

This study reveals a new model of effective T&D, a list of markers that give a definition to effectiveness on Training and Development and two additional Professional Services derivative KPIs that companies around the world can use as a way of building effective T&D.

3 Methodology

The research method selected for this study is Design Science Research or DSR. DSR is a relatively new research method with a clear objective of producing artefacts to solve a problem or problems.

DSR focuses on understanding the context (environment) and discovering business needs to then apply knowledge with the aim to produce artefacts or theories (including models, frameworks) to solve one or more problems. The fact that this starts at the business needs enables this framework for use in the business management field.

According to Hevner et al (2004), the result of design-science research is creating a purposeful IT artefact (or a series of) to address a key organizational problem. It is crucial to understand the definition of an IT artefact in the context of DSR can be a model, which is an outcome for this study.

Analysing the data comprises the following components:

- Segmentation (this will be per Region).
- Defining variables for measuring business attainments vs. targets.
- Identifying T&D policies for each segment. Including written and unwritten policies.
- Compilation of data for all defined variables for each segment.
- Analysis of compiled data for business results achievement vs. targets.
- Validate effective T&D policies against business performance for each region.

3.1 Measuring Business Health in the context of this study

Measuring Business in the context of this study has been done by looking at the following three KPIs: Billable Utilisation, Delivered Revenue and Services Sales.

As a multinational Business Unit (“BU”), it is segmented into Geos and Regions, being the latter the most granular in this case; for this reason, the “Region” has been used for defining the different segments and for each of the segments, numbers have been reviewed to try to find a region (if any) that achieved the 3 components listed above year after year through 4 Fiscal Years (“FYs”).

The data for all metrics described above was stored in FinancialForce, a subsystem of Salesforce (“SF”). Accessing this data was done through SF reports and queries. The raw data of these reports was put into excel sheets for data for analysis.

Giving an answer to the question of defining what effective looks like in the context of T&D in PS organisations in the Software/SaaS world requires:

1. Calculating the attainment of Services Sales against each target for each region.
2. Calculating the attainment of Delivered Revenue against each target for each region.
3. Calculating the attainment of Billable Utilisation against each target for each region.
4. Calculating number of hours of training per billable Full Time Employee (“FTE”).
5. Reviewing Services Warranty for each Region.
6. Reviewing Attrition numbers for each Region.
7. Reviewing written T&D policies for each Region.

8. Interviewing all Regional Leaders to unveil potential unwritten T&D practices.

A T&D policy can be only effective if it happens on a Region that has achieved all targets consistently year after year, this study covers the four consecutive fiscal years, starting from the first day of the fiscal year 2019 (29th July 2018) until the last day of the fiscal year 2022 (29th July 2022).

The following data, comprising 192 Full-Time Employees (“FTEs”) across four fiscal years (FY19 to FY22) and 9 different segments (Regions), has been compiled and analysed:

- Billable Utilisation.
- Delivered Revenue.
- Services Sales (Bookings).
- T&D time.
- Attrition. This metrics shows employee fluctuation; finding segments of low attrition is a positive marker of effective T&D policies (Pržulj, 2021).
- Warranty. Time given back to customers due to bad executed engagements. High warranty is a marker of poor quality of delivery.

3.2 Interview Methodology

Interviews were designed to discover the meaning of the term “effectiveness” in the context of Training and Development of Professional Services Organisations in the software industry. The goal was discovering the presence of a set of markers that could reveal an effective T&D policy. During these interviews, the following markers have been identified (see the Discussion section for more details on the reason why of these markers):

Number	Question/Marker
1	Common regular space for T&D
2	Frequent regular space for T&D
3	Conscious T&D
4	Intentional T&D
5	Strategic T&D
6	3L mindset of a leader
7	Billable Utilisation with low positive MDfT and low Variance
8	Low Services Warranty with Low Variance
9	4DW

Table 1. *Markers of effective T&D*

A common regular space for T&D refers to a day (or a time range) that is common to all FTEs, so that they can use this common timeframe to work in groups in a way that knowledge sharing and collaboration is maximised.

A frequent regular space for T&D would be something that happens every week or every other week. Monthly or quarterly spaces are not frequent enough.

Conscious T&D points out to leaders knowing how much has been invested in T&D and what the outcomes of that investment have been.

Intentional T&D means that leaders set clear well-defined T&D objectives in advance.

Strategic T&D means that leaders work with FTEs on multi-year plans containing multiple elements for T&D instead of being opportunistic deciding what to do after each achievement and also as Johnson (2005) said, aligning company goals with employee goals.

Low positive Mean Distance from Target (“MDfT”) for billable utilisation means that leaders understand that overachieving is as bad as underachieving and that the objective is to hit target, making use of the extra productive time for T&D. A low variance means that it is consistent and predictable.

Low Services Warranty means less time fixing errors as a consequence of lacking the ability to deliver. A low number with low variance means a robust, consistent and predictable high quality of delivery.

3L mindset of a leader is all about a leader practicing continuous development to motivate billable FTEs through inspiration (Caves, 2018).

4DW stands for 4-Day-a-Week; It has been found that the best performing regions in terms of ability to deliver against targets, attrition and services warranty are sustained under a model that makes Consultants and Architects work 4 days a week for customer billable work, leaving the 5th day (in the case of this study it has been Fridays) for T&D.

In order to add context to the data compiled from internal systems (Salesforce), interviews have been defined as mechanism to understand the context behind the data.

Regional leaders were interviewed using an open-ended approach with a list of structured questions.

4 Results

4.1 Research Question One – What is Effective Training and Development?

Effective T&D in the context of Professional Services organisations in SaaS companies is defined as the ability to produce a positive business outcome.

This study reveals that effectiveness in T&D is specifically the presence of markers from Table 1.

Below is the summary of the presence (or not presence) of each of the nine effective T&D markers.

Region / Marker	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
SER-MEA	P	P	P	NP	NP	P	P	NP	P
UKI-NOR	P	P	P	P	P*	P	P	P	P
ANZ	P	NP	P	NP	NP	NP	NP	NP	NP
West	NP	NP	NP	NP	NP	NP	NP	P	NP
East	P	P	P	NP	NP	NP	NP	P	NP
Central	P	NP	NP	NP	NP	NP	NP	P	NP
Singapore	P	NP	P	NP	NP	NP	NP	NP	NP
INDIA	P	NP	P	NP	NP	NP	NP	NP	NP
CEER-CIS	P	P	P	NP	P*	P	NP	P	P

Table 2. Presence of effective T&D markers per Region

P = Present ; NP = Not Present; P* = Present at a low scale and limited to one element per PDP.

4.2 Research Question Two – What metrics can be used to measure effective T&D?

After the analysis of the business performance as per defined in section 3, it has been revealed that the only one region that attained all business targets through all of the 4FYs, which included two EEFs (COVID19 and BREXIT), was UKI-NOR. UKI-NOR also displayed the presence of all markers of Table 1.

Billable Utilisation has been the biggest discriminating factor and, in many cases, high services warranty has impacted the ability of certain regions to attain this target. Services warranty is not a billable activity meaning that every hour spent in compensation for poor quality is one hour that has to be compensated for billable utilisation leaving one hour less that can be used to improve quality of delivery through T&D.

Additionally, it has been observed that UKI-NOR had the lowest Variance for the targets studied. Same applies to MDfT on where UKI-NOR had the lowest positive ones.

Region SER-EMEA only failed one target in FY through the four FYs, it failed billable utilisation in FY20 attaining only 68.84% against a target of 71%. It is important to highlight that both UKI-NOR and SER-MEA displayed the marker 4DW, in the Discussion section it will be explained why if SER-MEA had displayed 4DW+ instead, it would have been possible for it to also attain all its targets. SER-EMEA has been the second-best performing region and also the third best region in terms of displaying markers from Table 1.

Another observation is that all regions in America (East, West and Central) experienced a decreasing attainment in services sales and billable utilisation, lower quality of service (due to higher warranty) and highest levels of attrition of personnel (average of those 3 regions through the four FYs is 26% which is exceptionally high) while at the same time having the least number of markers from Table 1.

In terms of attrition, the best performing region through the four FYs was SER-MEA and the second best UKI-NOR, this also correlates with the presence of markers from Table 1 of these two regions.

Hence, Effective Training and Development can be defined as the presence of markers from of Table 1 and also, the metrics proposed for measuring Effective T&D are: the classic ones proposed by Maister and common to PS organisations plus Services Warranty, Voluntary Attrition and the two derivate metrics Variance (or Standard Deviation) and MDfT applied to the previous ones.

4.3 Research Question Three – Model of Effective T&D

Figure 1 shows the innovative Bronet Model of Effective T&D (Bronet, 2023) and how it does influence the different parts of the business, not only within Professional Services itself but also more broadly on the company as a whole (in our case the revenue generated by software-license).

At the very centre of the model lies all markers from Table 1; when those markers are present, different benefits will occur:

- Increase on employee Retention levels, which leads to two benefits: The first one is reduction in cost coming from attrition cost savings. This also impacts positively margin as margin is calculated as a ratio between Delivered Revenue and Cost of Delivery (“COGS”); higher retention levels means that fewer employees have to be hired to cover for the leaving ones which translates in less initial onboarding times on where employees can’t deliver revenue. The second direct benefit of increased Retention is the protection of Tacit Knowledge.
- Increase in Quality of Delivery. This increase will have a positive effect in Services Sales and lower service warranty will be observed. The Quality of Delivery increases, value realised by customers from purchased software increases maximising license renewals and expansions.
- Services Warranty is a non-billable activity so the more you have the more difficult that is to attain Delivered Revenue and Billable Utilisation targets; additionally, as Retention improves, investment on onboarding of personnel (which is also non-billable) decreases meaning that the presence of these markers help protect PS organisations attain their targets.

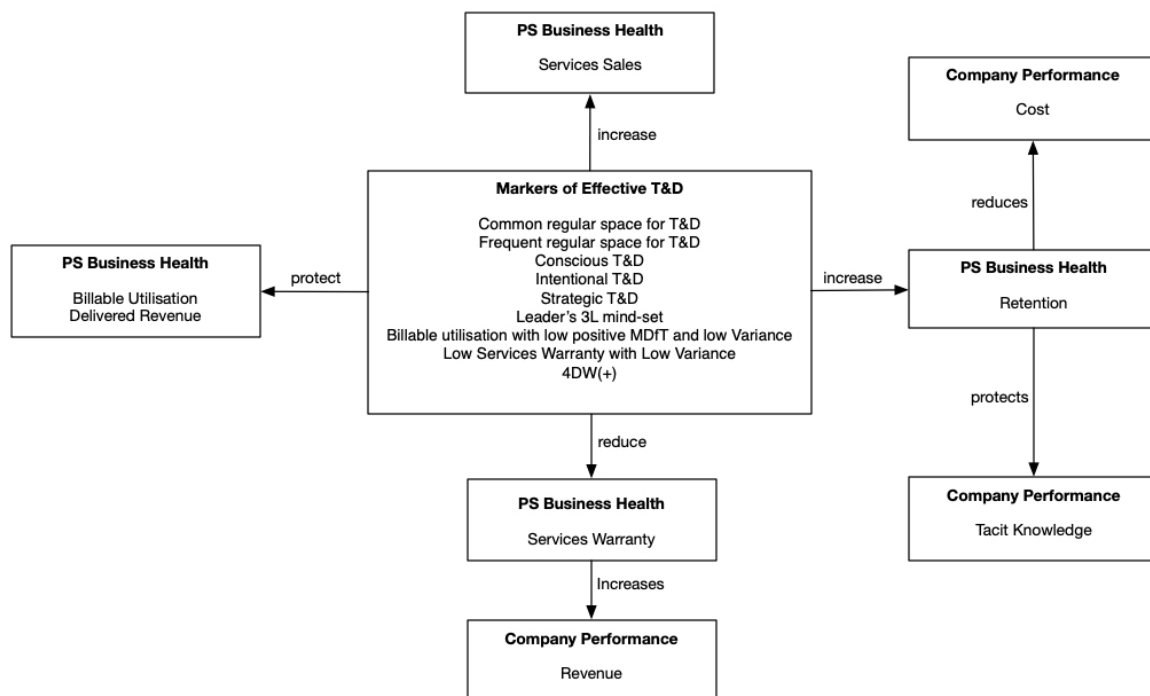


Figure 1. *The Bronet Model of Effective Training and Development (Source: Bronet 2023)*

5 Discussion

Understanding what does “effective” mean with regard to T&D is complex; probably giving one single static definition of it would not produce any meaningful answer. An alternative and more feasible option is finding markers, this approach helps other organisations discovering if their practices have signs of effective T&D and what to look for when building effective T&D policies.

It is also required to understand how different regional leaders in charge of the different segments dealt with T&D, what things they have in common and if those different approaches display behaviours that align with the literature covered in the literature reviewed in section 2; for example, if a leader displays a life-long learning mindset (Caves, 2018; Kotter, 2012) or if the leadership teams take a proactive and strategic approach to T&D.

The intention has been to discover a meaningful “starting” guide that can serve others. For this purpose, after reviewing all interviews and analysing all available data, Table 1 was built as a guide. This table contains a list of markers that help reveal, when present, the existence of effective T&D.

Caves (2018) and Kotter (2012) pointed out to the relevance of having leaders mind a Life-Long Learning (“3L”) mindset, this allowed a potential marker to be considered and therefore a question specifically designed to discovered this has been added to the questionnaire.

Developing Plans that are multi-year becomes relevant, especially if they align individual goals with company goals (Johnson, 2005). Recruiting, Retention and Revenue should be key company goals for building successful services organisations (Allen, 2004). For this reason, having a goal for average tenure per FTE seems a good practice; this means that, for example, setting a target of 4 years for average tenure should require building 4-year long as by doing so, retention could be maximised towards the target 4-year target; therefore, justifying a strategic approach to PDPs.

Employees in Professional Services firms tend to join for careers, rather than just for jobs (Vaiman, 2008); unfortunately, Professional Services firms are limited by their own structure in terms of promotions, the career path is limited and often represented as a pyramid on where higher roles are

more scarce affecting the career paths available to employees (Maister, 1993). Although companies cannot offer higher roles for all employees, they can support the development of employees towards acquiring the skills necessary to make FTEs ready for those higher roles; this is the second fundamental aspect of the Strategic aspect of PDPs. Building plans that align employees towards becoming ready for their next level from an early stage in a multi-year format maximises retention in terms of average tenure affecting ultimately all other relevant metrics. This also means that leaders of the organisation have to be conscious and intentional when it comes to devising an effective T&D culture through Strategic PDPs.

Knowing if effective T&D can exist in PS in SaaS companies without compromising its ability to attain all business targets for a long period of time (in this research four fiscal years) needs to be answered with regard to the specific context of this research. The common approach to measure the business performance of Professional Services in SaaS organisations, is by using the following three KPIs: Billable Utilisation, Services Sales (Bookings), Delivered Revenue.

When assessing these three targets, two additional derivative variables have been included: Variance and Mean Distance from Target (“MDfT”). The reason for this is that a consistent pattern that exists for a prolonged period reveals intentionality and proactivity (it is unlikely to be consistently lucky for a long time); it is also a sign of healthy business as it does also enhance predictability; having a business indicator that is stable and predictable is an indication of good business health.

Services Warranty is one way of measuring Services Quality as better trained teams make fewer mistakes as they work more effectively as per the higher quality (Khan, 2012; Pržulj, 2021).

Attrition is also a key parameter; it has been already pointed out in the literature that T&D enhances motivation and how this links back to the work of Maslow and Herzberg. A region with effective T&D should have attrition levels lower than the average of the others (Crnomat, 2008; Salas et al, 2012).

Instead of trying to find a specific number of hours as a marker of effective T&D, a different approach was taken, and that was the 4DW marker, reserving a weekly space of one full day for T&D. There is however, a specific consideration to consider. When it comes to contracts, not all countries specify the same number of hours per week. While the majority of the countries specify 40 hours per week there are some that set it at 37.5 or even 35. This has implications when it comes to calculating the billable utilisation attainment of individuals. An example is the U.K., which has contracts of 37.5 hours per week for all billable resources. In this instance, a resource that works 8 hours a day 4 days a week on billable work is achieving a billable utilisation of 85.3% for that week, while the same model on a country with 40 hours a week will produce just 80%.

The region SER-MEA did not qualify to progress in the analysis for failing in achieving its billable its utilisation target in FY2020, falling short of 3 points. As the 4DW model seems to work well for contracts of 37.5 hours a week or less, the equivalent to a 40-hour per week option would have been not having the 5th day for T&D in full (8 hours) but only 6 hours while using the other 2 hours of the day for billable work (which could be invested in billable activities such as follow-ups, report writing and preparation for the following week). Had SER-MEA chosen this approach (4DW+) it would have probably attained its billable utilisation for all of the four FYs.

6 Summary

During this study it has been reviewed if effective T&D can exist in Professional Services organisations in SaaS companies without a negative impact in the business and certain markers have been discovered; these markers can help identify the presence of effective T&D policies in these type of companies.

Business metrics have been analysed on different segments and only one region, UKI-NOR, achieved all targets through 4 FYs consecutively displaying also effective T&D markers. It is relevant to highlight this achievement happened under two EEFs: A global pandemic and BREXIT.

By setting in place Effective T&D Practices as per Figure 1, PS organisations around the world in SaaS (and some software ones) will produce better results both in services and licenses sales; they will

also build a better environment for their employees by empowering their careers for a better future while enjoying a better work-life balance at the same time.

6.1 Recommendations

Recommendations for future research are mainly around two areas: Markers and Applicability. For markers there are two components: the first being understanding what markers exist that have not been identified in study and secondly, what weight each of the markers has. From an Applicability perspective, that would be if the model from Figure 1 can be applied to other areas of SaaS/Software companies such as Education or Technical Support and even going further, if the model can be applied to PS organisations in other industries (probably industries with highly skilled employees) like Health.

6.2 Conclusion

To date, companies pay little attention to the financial costs of attrition and all implications that this has on other business metrics, much less to the soft-costs produced by the loss of tacit knowledge linked to attrition; and while research has proven that T&D can have a positive impact in either personnel or the business, there has been so little work done around combining both with the purpose of understanding what does “effective” look like when it comes to T&D in Professional Services in SaaS companies.

Companies, especially in the IT industry, do not understand how effective T&D practices can influence both Revenue and Retention; and when speaking about Revenue it is not only about services sales revenue but also about software-license sales revenue too.

The motivation of this work has been about changing the world two-fold, first by building a new model for Professional Services organisations in SaaS/Software on where people can have a more balanced and purposeful life while enjoying an always knowledge-growing career and secondly, on where companies can benefit from better business results in the form of increased Revenue, Cost reduction and protection of Tacit Knowledge.

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