

Building a Knowledge-Based Competitive Advantage in Service Firms: Role of High-Performance Work Systems

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Abstract: The contemporary Professional Service Firms (PSFs) have enormously contributed to the advancement of the global services sector in general and knowledge-based economies in particular. Being knowledge-intensive firms, the PSFs are usually faced with the challenge of continually enhancing the knowledge competencies of their staff that form the basis of organizational Intellectual Capital (IC) and derives competitive advantage for them. This makes the role of High Performance Work Systems (HPWS) indispensable for managing IC resources in these firms. Therefore, by presenting a qualitatively-validated conceptual framework, this research offers a linking mechanism on how strategic HRM systems i.e. HPWS guide IC development in service firms. By empirically testing these in (Ability, Motivation & Opportunity)-enhancing bundles, the results demonstrate that HPWS play strategically significant role in building knowledge capital in the service firms.

Keywords: High Performance Work Systems, Knowledge Capital, Organization Intellectual Capital, Sustainable Competitive Advantage, Professional Service Firms

1. Introduction

The paradigm shift from traditional management to strategic management of human resource has become a strong basis for gaining a competitive advantage. Hence, the idea of having skilled human resource has drawn widespread attention in the strategic HRM literature, particularly in the IC context (Rehman et al., 2020). HRM scholars claim that capable staff contributes to firm effectiveness owing to their core knowledge and skills (Sikora et al., 2016). In today's business environment, contemporary firms endeavour to mobilize their people, work processes, systems and technologies with an aim to enhance their operational performance and efficiency (Kong, 2010; Pomerantz, 2003). The primary objectives of Professional Service Firms (PSFs) is to provide optimum quality services based on the efficient utilization of their knowledge capabilities that eventually aid in achieving self-sufficiency and sustainability, thereby supporting their core organizational mission (Kong, 2010). This makes strategic management of PSFs extremely important for managing client expectations that necessitate knowledge-based innovative solutions.

Professional Service Firms, in view of their reliance on the staff capabilities, the intellectual capital offers promising ground for building and sustaining a competitive advantage (Adele et al., 2019). This is because of the tacit and complex nature of knowledge which can't be easily imitated by the competing firms. This leads us to the key argument that IC has an enormous potential to assist service firms in truly harnessing organizational knowledge to derive organizational innovation and achieve corporate objectives. Consequently, the business firms are busy differentiating on the basis of their in-house intellectual resources in order to maintain market competitiveness (Rehman et al., 2019; Hatch and Dyre, 2004). PSFs can achieve long-term success by implementing HRM strategies that support exploration and exploitation of their IC assets (Adele, 2019; Kong, 2010). In view of this, PSFs must increasingly focus on improving and innovating HR policies, systems and practices so as to enable them to attract and retain skilled human resource and ultimately create robust intellectual capital in their firms (Kong, 2009; Youndt and Snell, 2004).

As a whole, the underpinning question that formed the basis of this study was "how does an optimum application of high performance work systems in bundles enable IC development in the service firms?". Towards addressing this question, a thorough review of SHRM and IC literature was conducted to understand and evaluate the role of HRM systems in building intellectual capital in PSFs. These investigations led to the development of a conceptual framework that was empirically-tested through qualitative data gathered via face to face interviews with the managers in Australian Professional Service Firms. The subsequent portion of this paper deliberates on the relevant research literature and methodology, followed by the results and discussions on how the qualitatively-validated framework could be applied in the knowledge innovation context with an aim

to direct the strategic advantage in the service firms. In the end, research limitations and future research directions are suggested.

2. Literature Background

2.1 High Performance Work Systems (HPWS)

Also termed as High Performance Work Practices, High Commitment Practices, Strategic HRM Practices, the High Performance Work Systems (HPWS) refer to a set of practices that enhance employee performance, skills and productivity at workplace in a manner that these lead to a competitive advantage (Fareed et al., 2016; Appelbaum et al., 2000; Huselid, 1995). Common HRM systems include practices such as: self-managed teams, employee job security, task ownership, selective staffing, performance-based incentives, work design, skill development programs, merit-based promotions, information-sharing (Appelbaum et al., 2000; Huselid, 1995).

HPWS support the creation of corporate culture, shared norms and values that collectively shape employee productive behaviour at workplace, enabling the organizations to get tasks done efficiently and effectively (Özçelika et al., 2016). In this regard, while the organizational information systems, communication tools and collaborative technologies may augment work processes and activities, nonetheless, these support systems would be least effective if the organizational members are not equipped with appropriate skillset and encouraged to utilize these. This is because organizational members play a central role in achieving the firm competitiveness goals (Rehman et al., 2020). Hence, by implementing HPWS, firms would be able to effectively acquire, develop and retain their human resource. Subsequently, the developed human resource would help build firm-exclusive knowledge and tacit capabilities enabled through effective communications, knowledge exchange and social interactions, paving the way to organizational success (Fareed et al., 2017).

2.1.1 AMO Framework in HPWS

There is a broad agreement among the strategic HRM scholars that a 'bundles or systems' approach to applying HPWS is far more effective than the autonomously applied work practices. Appelbaum et al. (2000) highlighted that a configuration of three bundles of HRM practices form the holistic High Performance Work Systems (HPWS). These are called: A - Ability-enhancing practices (e.g. selective staffing, training & learning); M - Motivation-enhancing practices (such as: staff autonomy, reward system, promotions policy etc.); and O - Opportunity-enhancing practices (for instance: information sharing, open communications, grievance mechanism). The AMO framework offers an effective mechanism for classifying and measuring the collective efficacy of the distinct practices when applied in bundles.

2.2 Intellectual Capital (IC)

IC incorporates a collective pool of organization's assets covering tacit & explicit knowledge imbedded in its individuals, organizational systems and external relationships including its intellectual property that form the basis of its value creation (Bontis, 2002; Roos et al., 1998). Common examples include human knowledge and skills, physical assets, records, databases, information systems, copyrights, patents etc (Subramaniam and Youndt, 2005). Intellectual capital when viewed in the context of knowledge-based firms, it is a strategic organizational asset comprising of rare internal and external knowledge that is utilized by these firms to attain, maintain and sustain a competitive market positioning (Rehman et al., 2019). It is worth noting that the attributes like uniqueness, rarity, inimitability and exclusivity of the resources form the basis of long-term survivability in these firms (Youndt and Snell, 2004). Being context-specific, firms must differently capitalize on IC based on the specific nature of their business attributes and offerings as what is considered unique resource for one firm might not be for the others (Subramaniam and Youndt, 2005; Bontis et al., 2000). In view of measuring the effects of HPWS on IC, we considered Human, Structural and Relational capital as IC dimensions as suggested by the scholars like Bontis (2002), Roos et al. (1998) and Stewart (1997).

- **Human Capital:** Comprising of the tacit knowledge ingrained in the human minds, the human capital involves employee skills, experience and innovation capabilities (Bontis, 2002; Roos et al., 1998). When an organisation recruits new staff members, they add to the organizational stock of tacit knowledge pool, however, when they leave the organization, they take their skills, talent and creativity along with them, resulting in the loss of the organizational memory (Grasenick and Low, 2004). This volatility in human capital makes it the most challenging IC dimension to manage (Chen and Wang, 2013; Kong, 2010).
- **Structural Capital:** Also regarded in the IC literature as organization capital, the structural capital denotes an organization's physical infrastructure, assets and resources that take the form of

organizational culture, routines, records, databases, automation tools, information systems etc. (Kong, 2010; Roos et al., 1998). In other words, it represents what is retained by the organizations after the individuals are no more part of the organization (Grasnick and Low, 2004). Unlike human and relational IC dimensions, some part of the structural capital can be legally preserved and transacted by the organizations and becomes their intellectual property, making structural capital the only IC dimension that remains part of the organizations in all situations (Chen and Wang, 2013).

- **Relational Capital:** In addition to being referred sometimes as customer capital, the relational capital indicates organization's association and relationship with its external network involving clients, suppliers and partners and their viewpoints about the firm (Bontis et al., 2000). Specific examples include: customer loyalty, brand perception, competitive intelligence, business collaborations, strategic partnerships etc. (Kong and Thomson, 2009). Since it exhibits the type of knowledge that is external to the firm, this makes it hard to measure, codify and control the relational capital (Kong, 2010; Bontis et al., 2000; Roos et al., 1998).

2.3 Professional Service Firms (PSFs)

Management of the PSFs has always been a challenging endeavour. Successful service firms do acknowledge that there are no magic pills to improved service quality and performance (Baschab and Piot, 2005). After all, when it comes to measuring their success, the metrics like long-term inimitability, profitability and survivability are the lifeblood of any contemporary services firm. Therefore, a service firm that continually evaluates performance, reward and empower their staff is able to create high-performance knowledge workers that contribute to the advancement of the organization's knowledge capital (Rehman et al. 2020). Such initiatives also facilitate retention of the best and brightest staff. Hence, PSFs that adopt a flexible and creative work culture are better positioned to maintain and sustain growth on a long-term basis than their competitors.

2.3.1 HPWS in PSFs.

The performance effects of HPWS on firm effectiveness are quite apparent in the prior research. In this regard, the scholars like Tregaskis et al. (2013), Messersmith and Guthrie (2010), Combs et al. (2006), Appelbaum et al. (2000), Huselid (1995) and other have notably contributed to the research literature. However, as suggested by the researchers like Fu et al. (2017; 2015), Teo et al. (2014), McClean and Collins (2011), the research governing HPWS operationalization in IC context in the service firms is still inadequate and needs more empirical evidence. Prior HPWS studies have mostly focused on routinized business and manufacturing firms (Fu et al., 2017), hence the service firms offer a relevant context for practically examining HPWS effects in building knowledge capital as their competitive standing is predominately based on the knowledge capabilities of their employees.

2.4 HPWS and Intellectual Capital

Research literature recognizes that HPWS foster employee performance and innovation by enhancing their knowledge, skills and abilities. Needless to say, HPWS role in enhancing organizational performance and effectiveness has been remarkable, nevertheless, it is still argued that the linking nexus between HPWS and IC needs more investigations (Jiang and Liu, 2015). Intellectual capital via its human, structural and relational capital elements offers a holistic mechanism for effectively operationalizing these practices.

- **HPWS and Human Capital:** Skill development and mutual learning abilities of the staff create firm-exclusive competencies which are difficult to replicate by the rival firms because of their being specific and intellectually unique (Hatch and Dyer 2004). A firms' ability to create, apply, share and store its knowledge first necessitates possession of the right set of skills and competencies by its staff so that these could constitute in the development sustainable knowledge base. Moreover, by enhancing employee degree of freedom, the human capital supports staff mutual learning and exchange of knowledge that lead to the creation of new knowledge and organizational innovation (Rehman et al. 2020; Kong, 2009).
- **HPWS and Structural Capital:** HPWS have a potential to significantly contribute to the growth of structural capital. The structural capital provides supportive infrastructure for the strategic development of the firms owing to its ability to augment the utility of the human and relational capital resources, thereby resulting in an overall development of the firm's intellectual capital (Kong, 2010). The key aspect of structural capital is to internally support employee collaborative relationships and work activities enabled through effective utilization of physical infrastructures and resources (Rehman et al., 2020).
- **HPWS and Relational Capital:** As part of its external relationship building strategy, a firm often have to deal with its external agents like clients, vendors and suppliers. In this regard, McClean and Collins (2011) argue that HPWS, if designed properly, promote social interaction and trust-based partnerships and

hence boost the firm's external network of partners. This is particularly indispensable in the knowledge-based firms like PSFs that primarily emphasize on fostering client relationships. Therefore, relational capital assists the firm in meaningfully sustaining and growing its relationships by enabling it to understand the characteristics of external knowledge ingrained in the stakeholder network (Rehman et al., 2019; Kong, 2009).

2.5 Resource Based View (RBV) – Linking HPWS and IC

The RBV underscores that the resources possessed by the firms must be rare, non-substitutable & unique if they ought to achieve a competitive business advantage on a long-term basis (Wright and McMahan, 1992; Barney, 1991). According to RBV, HR departments of the firms are primarily responsible for ensuring the attainment of their corporate goals via effective human resource utilization. Consequently, the employee aptitudes and competencies if optimally utilized may lead to sustainable value advantage in the firms (Haslinda, 2009). Furthermore, when it comes to knowledge-intensive firms, employees possess varying mix of cross-functional knowledge and core competencies, making it critical to retain the multi-skilled employees owing to their being in possession of key expertise and flexibility to adjust in a dynamically-changing business situation.

3. Research Methodology

Most of the previous research in HPWS were quantitative with an exception of a few studies for instance Özçelika et al. (2016), Tregaskis et al. (2013) etc. who adopted qualitative or mixed method approaches in their research design. To address this methodological gap, we employed qualitative research methodology via face-to-face interviews. Accordingly, we qualitatively evaluated HPWS in three bundles. The identification of HPWS from the strategic HRM literature was based on their potential effectiveness and appropriateness towards building IC capabilities in the service firms.

3.1 Sample Population & Data Collection

The data for this research were collected during a period of January-April 2019. A total of 12 face-face interviews were conducted and the sample population was drawn from the Australian Professional Service Firms (PSFs). All participants and their respective firms were assigned with a unique identifier code for the purpose of maintaining anonymity and for their future reference. The respondent particularly included HR Managers, IT Managers, Heads of Accounts/Marketing Departments and Project Leaders in different categories within the chosen service firms.

3.2 Data Analysis Approach

In view of analyzing qualitative data generated from the face-face interviews, we utilized 'Thematic Analysis' approach. In this regard, we followed Ferlie et al. (2005) recommendations that involved externally validating the research by taking into account the additional analysis of the contributing researchers on the qualitative data. The process initially commenced with the coding and analyses of the thematic codes by the lead researcher, followed by the additional endorsement and insights on the coded themes by rest of the researchers. Conceptualized themes were then further evaluated to finally come up with empirical associations among the key themes.

4. Results and Analyses

4.1 High Performance Work Systems

While evaluating HPWS within three AMO bundles, we observed a varying influence of each bundle. In this regard, Opportunity-enhancing practices (n=134 mentions; 41%) appeared to be the most influential bundle, followed by Motivation-enhancing practices (n=97 mentions; 30%) and lastly the Ability-enhancing practices (n=94 mentions; 29%). To evaluate in detail, we specifically enquired participants about each practice within their corresponding AMO bundles as follow.



Figure 1: Influence of Individual AMO Practices

4.1.1 Ability-enhancing Practices

Ability enhancing practices indicate how employees improve their knowledge and skills in the performance of their duties. Interview responses on ability enhancing practices of PSFs converged in two major practices which included employee training and development (ETD) (n=44 mentions) and employee knowledge sharing (EKS) (n=50 mentions).

- **Employee Training & Development:** It was observed that the managers in PSFs developed a work environment that focused on continuous staff development across all the functional areas. Participants revealed that employee training & development involved refresher trainings, mentoring and guidance (n=8 mentions). ETD also involved offering specialized trainings to develop unique skills required to perform specific job functions (n=10 mentions). Firms sought to provide a mixture of mandatory and optional training programs (n=3 mentions). Some firms fully supported flexible work arrangements for the employees as they undertook those training programs (n=3 mentions). For example, one participant explained: *“So there is a lot of training culture especially for people who are starting at the junior level. Over two years, there is a bunch of trainings delivered at 6 months as well as refresher and e-learning as well to kind of supplement that. For existing employees, there is a mixture of industry-update training, refresher start training, compliance training and a lot of that sort of things”* (Employee Engagement Manager at Firm-D).
- **Employee Knowledge Sharing:** At the center of the employee ability-enhancing practices was ‘Knowledge Sharing’ among the employees, which involved three major themes i.e. use of document sharing tools (n=19 mentions), use of interactive & collaborative tools among the teams (n=7 mentions), and encouraging employees to share experiences with their peers (n=8 mentions). One participant enlightened: *“We have a repository kind of thing where we always put whatever knowledge has been created. We have our own knowledge sharing softwares, for example, we use LOTUS which is only for knowledge sharing. We also do video-conferencing and telephonic conversations as part of our knowledge sharing activities on a day to day basis”* (Senior Technology Lead at Firm-C).

4.1.2 Motivation-enhancing Practices

Using the interviews, the three motivation-enhancing practices such as Employee Empowerment (n=32 mentions), Performance-Based Rewards (n=39 mentions), and Shared Leadership (n=26 mentions) were evaluated. Motivation-enhancing bundle covered the practices that induced a feeling of responsibility within the teams to contribute to overall progress of the firms.

- **Employee Empowerment:** Employee empowerment revolved around confidence building practices that allowed employees to perform better. We derived nine codes indicative of employee empowerment practices, but the most revealed practice was autonomy and inclusive decision making (n=12 mentions). In addition employee empowerment was achieved through task delegation to inculcate a spirit of responsibility early enough in employees’ professional development (n=5 mentions), encouraging self-management during task execution (n=3 mentions), running employee consultation sessions (n=3 mentions), and a flexible working environment (n=3 mentions).
- **Performance Based Reward:** Upon evaluation of Performance-based reward, we observed that the focus was mostly on the recognition of employees’ contribution towards the achievement of firm objectives. Overall, participants pointed out that performance-based reward culture was a strong motivator for improved performance (n=12 mentions). Performance based reward usually involved rewarding outstanding performers (n=19 mentions) and rewards for goal attainment or unique contributions (n=4 mentions). However, informal recognition like a ‘thank you’ from supervisor or an

applause from the team motivated employees as much as formal performance recognition (n=4 mentions).

- **Shared Leadership:** Shared leadership practices involved allocating leadership responsibilities across all levels of project teams in the service firms. The majority of participants (11 of 12) indicated that encouraging shared leadership induced a motivational effect that specifically involved consensus decision making (n=5 mentions), building collective responsibility (n=5 mentions), creating flat leadership structures (n=7 mentions) and fostering servant leadership style (n=3 mentions).

4.1.3 Opportunity-enhancing Practices

In PSFs, Opportunity enhancing practices created a platform for employees to work well with peers towards achieving team outcomes. Among the evaluated three opportunity-enhancing practices, the most prevalent was Open and Collaborative Communication (n=60 mentions), followed by Teamwork Quality (n=50 mentions) and lastly, the Interpersonal Trust (n=24 mentions).

- **Open and Collaborative Communication:** Open and collaborative communication is mainly aimed at achieving interactivity across the teams, departments and management hierarchies. Informal communication is often preferred to improve team collaboration. One participant explained: *“It’s often informal communication. I can go up to meet any team member and they can come to me and don’t need to seek appointment necessarily. So I think the communication is very open and fair”* (Head of Market Research at Firm-G). The most prevalent category in open and collaborative communication was related to establishing a flat organisation structure that enabled frequent interaction and faster communication (n=25 mentions). The participants also explained that enabling conversations and dialogic communication improved employee involvement (n=11 mentions), while some emphasized on building strong communication channels to support frequent contact and broader discussions (n=10 mentions).
- **Interpersonal Trust:** Although not as heavily pronounced as other practices, participants were convinced that without trust employees would not be able to deliver to the best of their capabilities. All twelve participants underscored on the importance of trust, with one stated: *“Our industry can’t work without trust it’s as simple as that. So everybody trusts each other as a shared responsibility which brings an overall sense of trust among the people at all levels”* (Senior Technology Lead at Firm-C). Participants believed that there were opportunities for operating better when there was reasonable level of trust (n=11 mentions), which revolved around employees trusting their colleagues’ intentions, abilities and actions (n=5 mentions). Interpersonal trust had been associated with minimizing information hoarding, creating better relationships with the superiors and increased transparency (n=11 mentions).
- **Teamwork Quality:** The participants attributed Teamwork Quality to be related to flexibility, support and motivation (n=8 mentions), frequent and sufficient communication and coordination (n=5 mentions), building a team culture (n=3 mentions), and fostering a sense of connection, bonding and common vision (n=7 mentions). One participant accordingly explained: *“We have a type of team structure where leaders and managers motivate their team members to take charge and lead. I think the cooperation and mutual support maximize employee performance and productivity and contribute to the overall quality of the output, because our team members leverage from each other’s strengths, provide opportunities for personal & professional growth, and act as a support system for the other employees”* (National Technology Lead at Firm-A). Some participants also opined that the teamwork quality played a supportive role in achieving consensus and conflict resolution (n=3), well defined goals, responsibilities and feedback such that all employees knew what their roles were (n=1), adequate and unique contributions (n=2), strong leadership (n=1) and proximity of team members (n=1).

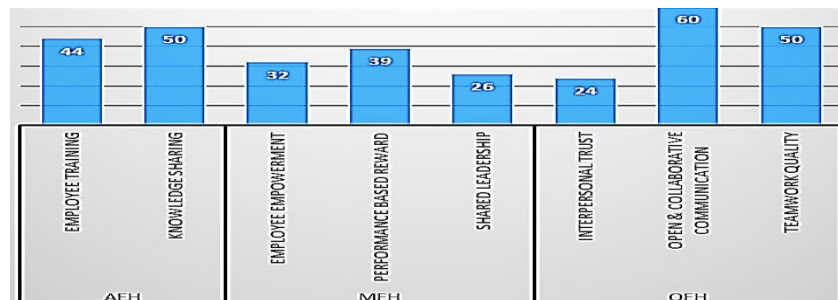


Figure 2: Total Number of Mentions for HPWS Within AMO Bundles

4.2 Intellectual Capital

On IC, participants were encouraged to think about various types of the knowledge capabilities possessed by their firms in the form of human skills, structural systems & external relationships and how these helped create value. Regarding the three knowledge dimensions, participants indicated that their firms focused mainly on structural capital (n=56 mentions; 46%), followed by relational capital (n=40 mentions; 33%) and lastly the human capital (n=25 mentions; 21%). When asked specifically about each IC dimension, participants mentioned as follow.

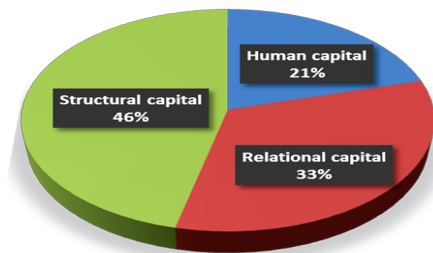


Figure 3: Influence of Intellectual Capital Dimensions

- Human Capital:** All participants affirmed that human capital revolved around employee experience, skills, knowledge, and competencies which supported creativity & innovation and consensus-based decision-making and facilitated the creation of organizational knowledge. We generated four codes to represent the nature of human capital in PSFs, i.e., employee skills and knowledge (n=17 mentions), employee creativity (n=3 mentions), organizational knowledge (n=4 mentions, and knowledge enabled decision making (n=1 mention). In this regard, a participant expressed: *“Our people skills & abilities are the primary pillar for our company. Without having right sets of people at the right places, we won’t be able to move and progress as we are doing right now”* (Project Manager at Firm-I).
- Structural Capital:** Participants were of the opinion that the structural competencies created value by building sufficient IT capabilities (n=15 mentions), developing and utilizing Data, Information and Knowledge (DIK) systems (n=17 mentions), collaborative technologies (n=3 mentions), and deriving technology-based innovations (n=5 mentions). For example, one of the participants explained: *“I think the firm’s resources are important in two ways. So from a systems point of view, the technology of data storage and market storage is very effective. Other thing is the way we collect information is dependent on the use of technologies”* (Head of Market Research at Firm-G).
- Relational Capital:** From the viewpoint of the participants, relational capital was tied in their working relationships and engagements with the stakeholders (n=20 mentions). Other indicators of relational capital development included: developing opportunities for collaboration and partnerships with enabling companies (n=6 mentions), customer goodwill, loyalty and brand image (n=5 mentions), maintaining working relationships with customers and suppliers (n=7 mentions), and creating forums for supplier and customer input (n=2 mentions). Among the participants, one explained: *“Company relationships are quite important. It’s equally important to the loyalty and the trust that we maintain within the company itself. Being a small and medium company, our growth pace is much higher than the big corporate firms because, we have more capacity to expand”* (Project Manager at Firm-I).

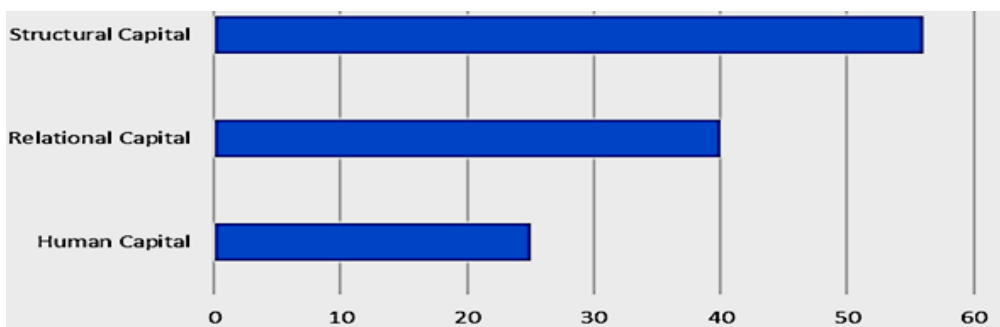


Figure 4: Number of Mentions for Individual IC Dimensions

4.3 HPWS and Intellectual Capital

Participants were asked to elaborate on how AMO bundles of HPWS enabled growth and promotion of IC in their firms. The results suggested that the Ability-enhancing HPWS involving Knowledge Sharing and Employee Training & Development were associated with the firm’s structural capital and human capital development respectively. Some participants (3 of 12) explained that knowledge sharing was associated with the firm’s structural capital development because as they continuously encouraged knowledge sharing among the employees, this supported the building of their in-house knowledge infrastructure, systems and sharing tools.

For Motivation-enhancing HPWS, we found that the practices like ‘Shared Leadership’ and ‘Employee Empowerment’ had more or less the same effects on the firm’s structural & human capital respectively. Some participants (3 of 12) mentioned that motivation-enhancing practices like Employee Empowerment were achieved through employee training and shared leadership concepts and that such practices improved employee knowledge sharing behaviour which enhanced firm’s human capital.

Lastly, for Opportunity-enhancing practices, some participants (2 of 12) mentioned that the practices like ‘Interpersonal Trust’ and ‘Open and Collaborative Communication’ were positively associated with the growth of human and structural capitals. Open and collaborative communication was not only strongly linked to the growth of the structural capital, it also stimulated firm’s human capital (4 of 12 participants). Two participants explained that staff collaboration encouraged transparency and trusting culture and promoted the free flow of ideas, mutual learning and problem-solving abilities.

5. Discussions

This study supports the notion that the HRM strategies aimed at attracting qualified workforce and the efforts made in the development of employee knowledge capabilities are central to building intellectual capital in the service firms. Our findings are in conformity with and offer additional perspective to the prior studies such as: Soo et al. (2017), Kong (2010; 2009), Youndt and Snell (2004). Accordingly, we may reasonably claim that the strategic HRM practices suggested herein offer a working mechanism towards the development of intellectual capital, leading to long term competitiveness and sustainability of the service firms.

Therefore, based on the available qualitative data, interpretations and results, we suggest the following conceptual framework. The qualitatively-validated framework presented here advocates that High Performance Work Systems via open communication, knowledge exchange, empowerment, reward system, improved teamwork culture and shared leadership practices support the development of in-house IC capabilities in PSFs in terms of enhanced staff knowledge competencies, improved organizational core capabilities and better client relationships. When viewed at a glance, the framework presents the suggested HPWS as a structured system/configuration that could be plugged-in with the firm’s IC as part of their intellectual knowledge management strategy to derive knowledge-based competitive advantage.

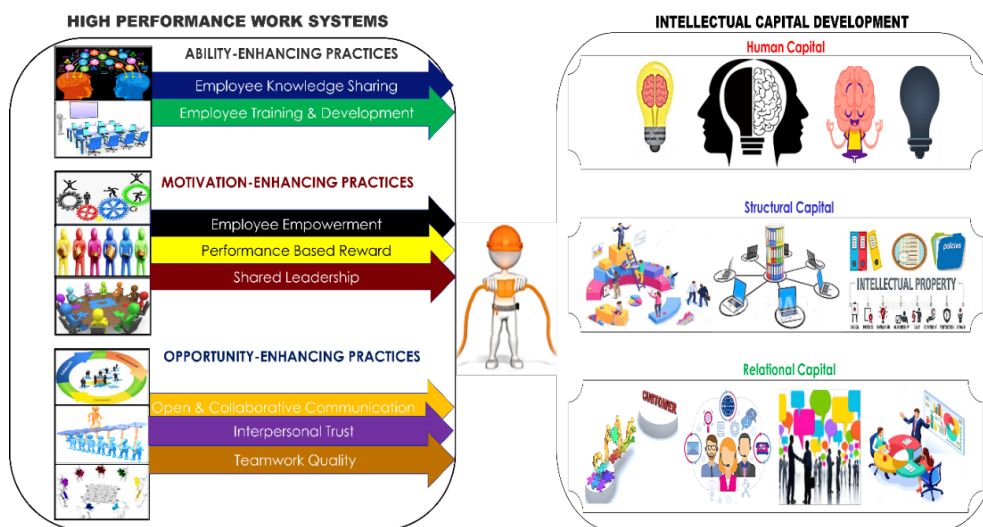


Figure 5: Qualitative Conceptual Framework

6. Research Implications

6.1 Theoretical Implications

Having reviewed the literature and based on the understanding from the rich qualitative data, it can be suggested that IC offers huge potential to be utilized as a strategic management tool for achieving knowledge-based transformations and innovations in the service firms. Since, the IC concept is still evolving in the strategic HRM context therefore it is open to further research and application, particularly, in the context of knowledge-based firms. Besides, the suggested conceptual framework would enable IC building in the service firms through sustained communications, trust-based interactions, knowledge exchange and empowerment coupled with quality of teamwork and collaborative leadership. The framework also unveils the black box by strategically guiding the formulation of knowledge-based innovations in PSFs. In other word, the framework assists in flexibly and optimally utilizing the intellectual assets, leading to the growth of knowledge capital in the service firms.

6.2 Managerial Implications

Owing to knowledge and skill-based competitiveness of the service firms, the strategic management of their intellectual assets is an indispensable organizational reality. Hence, an IC strategic management framework should be put into action to deal with complex mechanisms through well-chalked out strategies. From practical perspective, this research has following implications to make:

- The proposed qualitative framework offers a thorough understanding on HPWS-IC nexus in the PSFs. By applying these empowerment work practices in bundles in the IC context, the managers in service firms would be better able to recognise the strategic implications of the firm's IC assets and KM activities.
- Secondly, as the IC comprehensively takes into account intellectual aspects of both internal & external knowledge assets that are ingrained in the organizational individuals, work processes and external relationships, the suggested framework offers a holistic understanding of the internal knowledge dynamics and external market intelligence to the service firms.
- Lastly, the framework enables service firms to capture a holistic picture of what resources, assets and capabilities they are in need of or should be equipped with. Therefore, by having a detailed understanding on the organizational competencies and capabilities required, managers would be able to prioritize and re-adjust their resource control levers towards the attainment of the corporate goals.

7. Conclusion, Limitations and Direction for Future

This research aids the service firms in visualizing the significance of organizational knowledge as a basis for attaining sustainable market competitiveness. Since beginning, knowledge has maintained its status as a powerful tool. The significance of knowledge can't be underestimated so it is still being considered a key strategic asset in the knowledge-based firms. In short, PSFs would be able to achieve bottom-line success by adopting flexible work culture coupled with a system of reward to promote employee knowledge exchange, mutual collaboration and ownership, thereby making it easier for them to smoothly navigate through future, even in the testing times.

While this research was primarily aimed at investigating the effectiveness of HPWS in developing and enhancing the knowledge capabilities in PSFs, however, little is known to what extent the specifically-recommended HPWS bundles are applicable to PSFs and to other sectors and industries. Also, given the dearth of mixed-method and qualitative-focused research, the future scholars should consider methodologically enriching the research literature by applying a blend of qualitative & quantitative research approaches in the context of research problem under discussion. Overall, this research suggests novel insights that open-up new vistas for future empirical studies.

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