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Understanding the impact of organisational learning on human capital at Technology start-ups in India

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Abstract

The learning culture in start-ups is considered to be trivial for their sustainability. With the fast-paced technology start-ups rising in India, there is a real need to understand the impact of organisational learning on human capital. Promotion of effective learning focuses from strategy to execution. The factors that impact the human capital are identified as motivation, job satisfaction, loyalty, brand value, and knowledge management. The research presented the distinct connection between intrinsic and extrinsic human capital factors being studied. Literature and research confirm the impact on individual learning models, thereby justifying the relation organisational learning and motivation, job satisfaction, and loyalty. The modern workplace culture requires constant upskilling to stay focused with the market expansion. Organisational learning is no longer an individual learning experience. It is about what the organisation offers to its employees, and builds the connection between both entities.

In a volatile environment like technology start-ups, why organisational learning is important? Can employee performance be tracked without organisational learning? Would technology start-ups in India grow in revenue and by workforce without offering a learning environment? This study looked at literature to share thoughts and inputs of other scholars. In addition, focus group discussions were conducted to obtain critical and direct information from technology start-up workforce from India. The study observed there is disconnect to prove the impact of brand value and knowledge management on organisational learning. Hence, further research is recommended. This disconnect might be because these factors have an influence on the external factors of organisational set up. In technology start-ups, it is critical to stay focused on the vision. These would help on innovation, produce quality service and products, and fast forward expansion plans. Investigation is required to expand knowledge from individual to shared approach through effective knowledge management repositories.

Keywords: Organisational learning, Technology, Start-ups in India, Human capital, Impact of learning

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Introduction

Context

In this everchanging business world, start-up economy created revolution. As Mark Zuckerberg, Facebook Founder stated "The biggest risk is not taking any risk… In a world that's changing really quickly, the only strategy that is guaranteed to fail is not taking risks". This resonates with the aspirations of technology start-ups position in India. They are formed in a platform of challenges and competition, yet different from each other. There are a number of activities involved in start-up formation. Organisation formation occurs specific to a business context (Gartner, 1985; Schoonhoven & Romanelli, 2001). It is important for all individuals concerned with the formation of start-up activities to contribute in a significant manner (Ruef, Aldrich & Carter, 2003). The behaviour involved of all concerned needs to be rigorous. Significant futuristic approach and planning are critical for success. This research, focuses on technology start-ups specific to India. The goal of these start-ups is innovation. In the late 20th century, the concept of "national innovation system" emphasised on driving innovation (Lundvall, 1992). While we know that successful technology start-ups begin with idea, formation of skilled individuals, futuristic vision, and innovation; most of the times there is something missing in this puzzle. Thereby, leading to dissolving of start-ups, or unutilized human capital. To establish growth and credibility in start-ups it is essential to create organisational learning (OL) avenues. It is a strong belief through literature that this yields greater results through impactful performance. There is limited research on studying the relationship of OL. Understanding its impact on human capital is critical to create a sustainable workplace at technology start-ups in India.

As stated by Biz Stone, Twitter Co-founder "Timing, perseverance, and ten years of trying will eventually make you look like an overnight success". Technology start-ups require solid rigour and effort to flourish. They consider innovation and their unique business portfolio as their selling point. Hence, it is pivotal to add the appropriate human capital at the right time to succeed. This research, analyses the factors of human capital that are impacted by learning in technology start-ups, specific to India. Curran *et al*. (1996), acclaims of the evidence that is built through entrepreneurial firms that they succeed largely through creating "social skills". There are three levels in OL: "individual, group, and organisation" (Crossan *et al*., 1999). This is well inferred from the study, as we see the impact of learning on human capital who are individuals and groups. The study critically evaluates the impact on some of these employee-oriented attributes (motivation, job satisfaction, and loyalty), along with the externally accredited factors (knowledge management, and branding). It analyses the five constructs independently with OL. Dodgson (1993) acclaims by increasing the ability of OL, the organisation is more effective, efficient and capable to manage sustainability. Argyris and Schon (1978) pointed out that knowledge in organisations is created only by its people. This is acknowledged by Grant (1996, p. 121) emphasising the role of individuals in "knowledge creation" and being the principal custodian of knowledge. Thus, this research expands to ascertain the impact from different perspectives.

Research problem and question

This research concentrates to address the problem of OL in the technology start-up economy. Based on this, the following research questions are identified focusing on the impact of OL on human capital.

RQ1: What is the impact of organizational learning on employee motivation in Technology start-ups?

The objective of RQ1 is to identify the factors that improve employee motivation through learning (example: performance improvement, organisational growth (revenues)).

RQ2: Does employee retention have a correlation to organisational learning?

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The objective of RQ2 is to identify the factors that reduce employee voluntary turnover (job satisfaction, rewards and recognition, career progression). Analyse the impact of organisational learning on retention.

RQ3: Considering the restrictions in finances, how is learning promoted?

In a start-up economy, finances are dependent on investors. It is stage wise and expenses are prioritized. The objective of RQ3 is to identify the opportunities available to promote and encourage organisational learning (technology).

RQ4: What factors attract employers to invest time and money in organisational learning?

Learning is highly important in technology start-ups. It is critical that employees are trained and available to manage unique scenarios to stay ahead of the market. The objective of RQ4 is to identify why would the employers invest in learning. Details the benefits that it links to workforce. Also, discuss the demerits that it can impose (like, can be a top talent in a similar market).

The following null hypotheses are proposed based on the constructs identified to analyse the impact of OL on human capital:

Constructs	***Proposed null Hypotheses***
Employee motivation	***H_0 – Organisational learning has no relationship towards motivation***
Loyalty	***H_1 – Employee loyalty is not correlated to organisational learning***
Employer brand value	***H_2 – Organisational learning does not have an impact on Branding***
Knowledge management	***H_3 – Organisational learning does not build knowledge management***
Job satisfaction	***H_4 – Learning does not relate to job satisfaction***

Table 1: Proposed null hypotheses for the study

H_0 – Organisational learning has no relationship towards motivation

This research analyses H_0 and inferred to refute, thereby establishing the relationship. There is significant motivation developed, showcasing impact on human capital through OL. Senge (1990, p. 13) mentions about the learning organisation as a place where people establish reality. Further, it suggests that people have the onus and can change it. While people are given the responsibility and space to learn and develop, they are naturally motivated. On the lines of Deci's (1975) theory of intrinsic motivation, people display "high interest and enjoyment" when they have suitable opportunities to learn and grow. This was evidenced and supported by the theory inside a laboratory (Swann & Pittman, 1977; Zuckerman *et al*., 1978; Iyengar & Lepper, 1999) and outside (Lepper *et al*.,1993). Evaluating experiences from employees and literature, people who are in learning organisations show positive behaviour in workplace. Thereby, exhibiting motivation at work. According to the research, the participants consciously admitted being motivated in a technology start-up environment in India. They recognise that as a place to upskill themselves and welcome learning initiatives.

H_1 – Employee loyalty is not correlated to organisational learning

The hypothesis H_1 is studied and it establishes connection between OL and loyalty. Thereby, building a significant impact. Organisations focusing on learning gain a competitive advantage than its competitors. The result of OL is the progressive development of a company's resource capabilities (Armstrong, 2009). Based on the research, it is evident that employees' value learning opportunities. In an uncertain environment like technology start-ups in India, there are pre requisites like budget and investment to initiate OL practices. Given, the environment to learn, there are higher chances to be committed and loyal. It is observed that loyalty supersedes commitment. Being loyal to the organisation is to be in alignment and submissive to its vision, mission and objectives.

H_2 – Organisational learning does not have an impact on Branding

Based on the research, the hypothesis H_2 is supported. This study infers that there is no direct relationship between OL and brand value. It becomes an extrinsic factor for the organisation and primarily not focusing on the key factors of human capital. Doyle (1989, 2001, p. 276) clarifies that "innovation in many ways" and "getting there first" reflects branding; further, building an efficient customer preposition creates the brand. Hence, I consider focusing on innovation through OL interventions can have an impact on brand value. To support, the respondents in the study did not emphasise on the impact branding has in technology start-ups in India through OL. I suggest that this is a consideration for future research, keeping in mind the importance of brand value for start-ups. Brand creation is a core objective of the start-up during its inception and initial stages. Considering the long-term vision of the start-ups, it is necessary to focus on branding from early phase and link it with learning interventions.

H_3 – Organisational learning does not build knowledge management

The hypothesis H_3 supports the research conducted. Knowledge management system and tools are not considered as a priority in technology start-ups in India. The study reveals that knowledge as a human capital asset has an impact on individual learning but not on preserving it for the future and sharing. Knowledge is seen as an important resource for the organisation, and helps to create competitive advantage (Conner and Prahalad, 1996; Gold, Malhotra, and Segars, 2001; Grant, 1996; Jaworski and Kohli, 1993). It is observed that effective knowledge management processes enable higher organisational performance. Further, (Darroch, 2005), confirms that knowledge management is an antecedent for innovation. Literature recommends the significance, which is not observed through the research. I recommend further research to establish the impact of OL on knowledge management. It is important for technology start-ups to possess futuristic outlook beyond individuals to continue the learning journey.

H_4 – Learning does not relate to job satisfaction

This research refutes the H_4 and supports the relationship between OL and job satisfaction. One of the biggest take-away of an efficient learning method is to comprehend and interpret by creating meaning. Dialogue is identified as an important attribute to OL (Isaacs, 1993; Schein, 1993; Dixon, 1997). Further, (Oswick *et al*., 2000) affirms the link between individual and organisational learning. Appropriate learning methods promote understanding through dialogues in the form of interaction. This reflects in tasks through implementation. In a technology start-up environment in India, where learning is an everyday activity, it creates a sense of accomplishment and satisfaction. Employees feel valued as they have new offerings quite often. This is well presented in the study through responses from the discussions. Job satisfaction has an impact on OL.

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Literature review

Definition of start-up

Start-ups begin with an aim to grow fast (Wang *et al.*, 2013). They are usually with a high technology focus (Swanson & Baird, 2003). They operate in market conditions of extreme uncertainties with a vision to introduce new product or service (Bosch *et al*., 2013). Researchers have analysed activities of start-up that led to their disruption (Cantamessa *et al*., 2018; Mueller *et al*., 2012; Wang *et al*., 2016); while periodic emphasis is on OL to create competitive advantage, promote knowledge sharing, and operational excellence (Brockman, 2013; Chandler & Lyon, 2009; Chen, Lin, & Yen, 2014; Lumpkin & Lichtenstein, 2005; Tam & Gray, 2016).

There is lack of research to infer the different stages in which OL are used in start-ups. Cosenz & Noto (2018) mention it is available for entrepreneurs and founders; thereby, reiterating the thought that OLis viewed as a continuous learning process. Brockman (2013) created a development model, further incorporated by researchers as the process of OL combing three stages; a) Pre-start -up, b) Start-up, and c) Growth. Start-up begins with intuition. And in this is the ability of the entrepreneur to learn, analyse, consider and implement into their business. There are multiple factors to be considered at this stage (internal and external environment). These initial periods are called incubation period. Apart from learning by doing, analysing mistakes, solving problems, and exploring solutions; participation in communities is an effective learning approach. Soetanto (2017), mentions network is an important learning source to promote transfer of knowledge and skills within the team. Further, for an entrepreneur, during their connection with stakeholders build an interpretation which develops into a business model. Group connection evolve from an individual to the overall organisation. Opportunities of learning at this stage of the budding start-up are still informal and have not yet been institutionalised.

In a start-up growth, due to "combined mental models", learning becomes a robust activity for the entire start-up. The process and activities of start-up are constantly changing, this provides immense scope for learning. The trend of collective learning could be to drive connected OL mechanism, which makes knowledge sharing easier and produce innovative solutions. Callahan (2003), mentions that OL focuses on collection of valuable insights from various sources to enhance the capability of the organisation to adapt to different situations. In a start-up, OL is derived from multiple sources (internal and external) to create, promote and generate new ideas; where it is facilitated by the entrepreneur or the Founder (McAdam & Galloway, 2005).

What is human capital in start-ups?

In start-ups, human capital consists of assets like training, intelligence, skill development, and intangible assets which employers value such as employee loyalty, punctuality, and various stakeholders who help the start-up to grow. Human capital in start-ups have two dimensions, on one side it is accredited to contribute to an important part in the "recognition and development of new innovative entrepreneurial ideas (Ardichvili et al., 2003; Gruber et al., 2012; Shane, 2000; Ucbasaran et al., 2009). Another dimension is the ability of what the entrepreneurs or the "founders can do" (Colombo & Grilli, 2005, 2010; Cooper & Bruno, 1977; Eisenhardt & Schoonhoven, 1990; Gimmon & Levie, 2010). Literature contributes to human capital in the similar sense, as in large multinational companies. From the inception until its journey as start-ups, there are various places when capital is utilized. It might be financial capital, intellectual capital, venture capital, so is human capital. In technology start-ups in India, specific human capital refers to unique "skills and capabilities" that can be applied and contributed in the organisation's context with immediate effect. Colombo & Grilli

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(2005, p. 796), directs to their framework on "industry-specific human capital" which are obtained by through meticulous OL and prior work experience. Shane (2000) clarifies that digital start-ups formed by "high human capital individuals" would have aroused from their ability to "perceive better opportunities". Kirzner (973), attributes "Kirznerian alertness" to the specific knowledge gained by human capital in a specific sector which may be used by individuals to evaluate unforeseen business opportunities in same or different sectors (Dimov, 2010; Klepper, 2001; Marvel & Lumpkin, 2007; Shane, 2000; Shepherd & DeTienne, 2005; Ucbasaran *et al*., 2008). It also supports competencies that are used to convert business ideas and opportunities in technology driven start-ups.

The various phases of human capital depict the introduction of workforce in firms other than start-ups. With the increase of employee count and moving to an established and stable organisation, the assets counted as capital are converted to workforce in the firm. The OL strategies in technology start-ups are deep driven to the benefits on human capital. These are further categorized as being impacted by motivation, job satisfaction, knowledge management, and branding. The higher investment in human capital and "sustained increase" in foreign investment as part of funding for the start-up, bridges the gap to build the country's technological capability to contribute to its own research & development (R&D). Lucas (1988), suggest the formation of human capital is key and by itself "could create endogenous growth". For the purpose of this study, human capital is associated with a culmination of skills, knowledge, cognitive traits, learning, and behavioural attributes for the development of technological start-ups. The human capital on whom these factors are invested will be transformed as an asset in the organisation. They are called as the workforce or employees of the technology start-ups in India. Concepts through OL practices are formalised to human capital to produce results for the organisation through revenues and profits. Chesbrough (2003), mentions about start-ups using open innovative strategies to address the spike in technological development and shorter span for market in technology start-ups. At the same time, (Muscio, 2007) points out technology start-ups must innovatively combine knowledge from multiple sources. The existing human capital, the workforce of the start-up has to acquire new knowledge as an initiate of OL technique is critical to success; rather than gaining from hiring new talent, this model largely helps start-ups with limited workforce (Nooteboom, 1994; Rothwell and Dodgson, 1991). Specific human capital has the ability to "assimilate and exploit" new knowledge from external sources, as they have technical capabilities that can be applied to a job in start-ups (Colombo and Grilli, 2005). Further, this is a key requirement for OL as it possess "analytical and problem-solving skills" that can be transferred across fields (Ucbasaran, Westhead, and Wright, 2008).

Learning culture of Indian technology start-ups

Foster *et al*., (2013) recollects the statement made by World Economic Forum in 2013, that start-ups depend on human capital, investment, and market accessibility. Further, factors associated with availability of manpower, policies, funding for research, and collaboration with institute or centres have a significant influence on start-up's learning outcomes. Ability to gather external knowledge helps organisation to acquire new skills and handle challenging situations; this attitude improves business growth (*Lasch et al*., 2007). An organisation's dynamic capability is measured by its efficiency to innovate, continuous improvement and expand knowledge (Sulayman *et al*., 2014). In OL, exploratory and exploitative are two learning methods which are crucial and influencing (Wang and Zhang, 2020). Exploratory leaning presents firm behaviour towards innovation, experiments and exploration. Whereas, exploitative learning emphasises on firm ability to implement, refine and measure efficiency from learning. For the purpose of this study, we will consider OL has both exploratory and exploitative and will not differentiate them.

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There is a perception in India that there is commendable progress in the start-up economy and that graduates are encouraged to present their ideas to be funded by government institutions and private investors. However, this is not true. Start-up economy in India, is not balanced and there are barriers that exists in the ecosystem on their survival. Dossani and Kenney (2007), helps to recollect the spike in technology offshoring to India from mid of nineties to early twenties. As a result of this, global technology companies have become competitors for Indian start-ups and challenge their survival (Krishna and Mitra, 1998). The success of start-ups is based on their strategies. Many failures attribute to lack of control and ideology by the entrepreneurs. Hsu (2008) pronounce that start-ups into high end technology are in the niche sector and take pride to leverage organisational flexibility. This arises from their ability to manage the organisational commitment through well-equipped learning methodology. Thereby, increasing job satisfaction and motivating their workforce.

OL facilitates performance through innovation, development of human capital, preservation of knowledge through knowledge management and to become a sustainable firm (Calantone *et al*., 2002, Bhaskar and Mishra, 2017; Cerasoli *et al*., 2018). Organisational leaders and practitioners have begun to invest in creating an ecosystem of learning organisation and to measure the learning outcomes in the organisation. Organisation Development (OD) literature emphasise on individual learning as they are the fundamental change agent in any transformation. OD leaders believe OL as a shift from self or individual learning to collective and collaborative learning. These may be inter-organisational or external to the organisation, still bringing value back to the firm through outcomes. Fernandes and Machado (2021) clarify knowledge management (KM) is different from OL; KM is concept driven whereas OL combines all forms of knowledge and information from data inside the organisation.

Organisational learning on motivation

Kolb (2014) and Schunk (2012) shared their belief about learning which happens through self-experiences, reflections, and by building concepts around changing ideas. More recent research works confirm learning organisations trigger positive work culture (Blasdel, 2015; Fredrickson, 2001), thereby enhancing their confidence, motivation, and job satisfaction (Baruch et al., 2005). Quite relevant to the start-up culture, continuous efforts to sustain OL helps employees to acquire new skills and handle constant workplace challenges and industry changes. This facilitates proactive behaviour and enable them to be confident to try new innovative ideas (Malik, 2023). In the technology industry, there is regular learning that is mandatory to be able to be competitive. This learning culture supports workforce to have constant interactions and helps them to discover their improvement areas and enhance performance.

Creating a lifelong learning environment focusing on employee development and knowledge upliftment will increase competitive advantage for the company. For start-ups, they have healthy fight for survival with companies who are in the same ecosystem. Further to mention, survival and success of technology start-ups depends on its competitiveness (Ajitabh and Momaya, 2004). Prior researchers have brought to light on the challenges faced by start-ups and that they deal with lot of uncertainties across various dimensions before they are successful. It is assumed that successful technology start-ups in India, are those who have been able to emanate from managing the challenges in their initial years of formation, operation, and pass through years of progress (Bala Subrahmanya, 2017; Krishna, 2019).

Start-ups focus on technology enhancement and invest on time, money and efforts on OL for their organisation. Rather than being an acceptor of already available, they focus on enhancement of skills and knowledge through OL. It is essential for start-ups to be more focused on OL, compared to well

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established organisations or large firms. This is because, employees need to stay motivated and cherish their experience in the company to be retained. Startup Genome Report (2017), learning is the fundamental requirement for a founder as it drives success, further benefitting the start-up ecosystem (Watson, 1998). In a way, the importance of learning in the start-up goes with the geography too. The western world, considers failure as a learning opportunity and an accepted working style, whereas the eastern world sees it as a do or die situation (Cotteril, 2012).

It is important for the entrepreneur to be a good learner to build the culture of learning as a lifelong requirement for the start-up. The founder believes that start-up is not always about success and there are many instances where they see only failure, especially in the initial days of inception or funding. As they convert the experiences to learning, they concentrate on two kinds of learning; a) entrepreneurial learning which focus on personal development and the change at personal level, b) learning that brings change at business level and enhance the changes of better sustainability and success. Cope (2000) clarifies that both learning is parallel and requires the entrepreneur to be proactive and reflect on their learnings. As a leader, exhibiting positivity is the key to success. And the ability to unlearn, learn and relearn should be the vision for the entrepreneur. In the start-up environment the employees observe the founder to learn on business and organisational performance. This way, the founder shares positive vibe and also convert the organisation into a continuous learning environment.

Start-ups need to invest on strategic learning to process new information and prepare scenarios to learn from them to be able to mitigate risks of uncertainty. The learnt information has to be preserved and stored in a repository to be able to revisit by employees and use as a training material for successors. In the frame of technological relevance in technology start-up use of novel digital tools like cloud computing are cost effective (Marston *et al*., 2011). However, organisations need to evaluate the scope of incorporating the learning into deliverables, in order to encourage the workforce to benefit from such learnings. Apart from formal learning, start-ups have a unique advantage of assimilating collaborative learning through people experiences. Especially, technology has different dimension and perception at operating level. And a start-up of that nature comes with past and present experiences of people which provides a competitive journey in the market.

Kuwada (1998); Thomas *et al*., (2001) mention process of learning involves "strategic knowledge acquisition, interpretation, and implementation". Further explaining strategic knowledge acquisition is an "exploratory" process where employees expand their learning by collecting strategic information from the environment. Kuwada (1998) says interpretation adds new information to already collected information from various people, especially on the market. The critical point is how the new information is synthesised. Tippins and Sohi, (2003) clarifies the information is filtered based on relevance to enhance the knowledge by creating meaningful context, to enable strategic impact. Implementation focuses on the process to "institutionalisation" of the knowledge developed in the earlier processes. The strategic change and impact created are termed as "organisational memory" (Walsh and Ungson, 1991); quite relevant to the organisational vocabulary they are called as knowledge management.

The key attributes of healthy OL are a) employee learning-entered approach, b) prepare for lifelong learning and implementation, rather than short learning outcomes, c) understand industry requirement and latest technology with focus on innovation, d) combing different learning techniques (like e-learning, mentor, industry experts on technology relevant to the start-up), e) ensure to prepare learning with a competitive advantage to generate best ideas for the business. The above-mentioned attributes help gain command on the skills relevant for the business. Needless to say, it would in turn

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increase employer creditability in the start-up community. One of the best approaches, that especially technology start-up take is to encourage learning by doing or on the job training to enhance learning abilities. This is prevalent because employees are coping with the start-up environment and its ever-changing requirements. As people upskill, they share their experiences through learning for bottom line to build the workforce of tomorrow.

It is quite reasonable to state that the founder and his team are both responsible and affect the start-up relationship. The effectiveness of innovation and learning is an important stream in human capital. This means the creation of knowledge that has an impact on business performance, which is the key and attributes to the success of the technology firms (Beckman et al., 2012; Exposito & Sanchis-Llopis, 2018; Zhou & Verburg, 2020). However, it is clarified by technology firms that innovation does not only lie in development but it also related to non-technological interventions (for example, innovation in organisational engagement) (Exposito & Sanchis-Llopis, 2018). It is concluded that human capital is a critical area in innovative technology firms (Rangone, 2017). Learning is a necessity in today's competitive and volatile business world. While there are prevalent organisational theorists who have considered "cognitive approach" to determine the reason of need for OL (e.g., Crossan, Lane, & White, 1999; Hayes & Allinson, 1998; Hinsz, Tindale, & Vollrath, 1997), applying motivational theory to this area is yet to be explored (e.g., Adler & Kwon, 2002; Kang, Morris, & Snell, 2007). This also helps to dwell into different dimensions of why learning outcomes are varied among groups, individuals, and organisations.

Defined as a "willingness to act as an individual or unit" (Rothschild, 1999; Siemsen et al., 2008), motivation is certain with corporate entrepreneurship as it encourages creation of knowledge and promotes knowledge sharing in an organisation (Stevenson and Jarillo 1990). It is observed that OL is a process by which organisations enhance their mental models, knowledge, decisions, means to improve performance (Chiva, Ghauri, & Alegre, 2014, p. 689). OL is a driven process which focuses on specific outcomes (Templeton, Lewis, & Snyder, 2002). Relevant to the technology start-up scenarios, OL is critical for organisations working in the adoption stage as it helps them to respond to unforeseen business challenges well before their competitors (Garvin *et al*., 2008). To make the learning impactful it involves planning and effective implementation. It is important to understand the requirement of the organisation and to initiate creation of the learning content or identify available resources. It is very crucial to internalise the learning by using approaches that are appreciated and useful by workforce. OL requires management of knowledge and purpose to create positive impact on performance (Cheng *et al*., 2014). Researchers have identified the intersection of KM and OL as they relate to knowledge retention, creation, and effective transfer (Loermans, 2002; Reich, 2007; Vera & Crossan, 2007; Wu & Chen, 2014).

Organisational learning on job satisfaction

Learning is a complex process. Understanding the learning journey of an employee is relevant to understand the learning of the organisation (Wang & Ahmed, 2003). However, the learning context of an organisation is complex compared to the individual learning context. Wang & Ahmed (2003), p. 15, OL is not only about collectively focusing on individual learning process but focuses on engagement between individuals in organisation and organisation at an entity level along with this business context. Researchers comment OL as a simple process, however when we look at it happening simultaneously when the organisation is growing it is seen as "richer and more heterogenous phenomenon" (Rerup & Levinthal, 2014, p. 38). Organisations have limited clarity on what defines organisational design and

OL (Real et al., 2014; Schilling & Fang, 2014). It is critical to think it is concerning for established organisations, start-ups are no exception; that there is lack of evidence for successful OL implementation (Vera & Crossan, 2004). Researchers have brought different dimension to OL which includes Communities of Practice (CoP; Hoegl & Schulze, 2005). It is inferred that knowledge and strengthening the learning culture are the end result of implementing an effective OL intervention in the organisation.

OL is important as it encourages informal interactions between individuals or employees, which has key impact on the effectiveness of organisational culture (Sutton, 2021). Organisational competitiveness is increased through improvement in work performance (Flaherty, 2010; Stone, 2007). Once this involvement is built, it attracts the employees as they become aware of the benefits that relates to the learning environment. This awareness is identified as the foundation for employee motivation. It makes them engage in the learning process.

It is well noted that unsatisfied work environment would not only increase the unpleasant situation at workplace, at the same time would also harm the organisational morale (Amiri, 2010). While it is known that a happy worker is someone who give their best at work, it is important to understand what makes them happy and how does the organisation contribute to it. Lo and Ramayah (2011) state there are numerous factors that affect job satisfaction and these factors keep fluctuating among workers and change across time. Among them the important factor which influences job satisfaction is OL capability. Chiva *et al*. (2008) emphasises that OL capability determines what facilitates OL in the organisation. There is a most influential theory which bring the relevance of OL capability and job satisfaction through "Hackman and Oldham's job characteristics theory" (Hackman and Oldman, 1980). Job satisfaction, being an outcome of work, is diagnosed by organisational structure and culture (Egan *et al*., 2004). Relating to the "conceptual model" based on Chiva et al., (2007); there are five factors which impact OL capabilities. They are risk taking, interactions with external environment, experimentation, decision making, and dialogue. Research on this model reveals employees have higher level of job satisfaction, if working conditions promote positivity and allow them to propitiate their abilities.

The implication of an employee's job satisfaction corelates to their cognitive reactions and responsive behaviour to their job at workplace (Huang *et al*., 2016). The quantum of job satisfaction is also dependent on the impact learning brings to the employees. It can also be said, that organisations need to consider innovative ways in which learning is imparted. For start-ups, these are additional new and richer ways to enhance employee experience in the firm. As said, the first learning experience can create long lasting satisfaction experience for the employees. Further, it facilitates interaction across departments in the organisation. Technology start-up have varied work units where employees normally cope with new challenges and collaborate with peers. In a learning driven organisation like the technology start-ups, employees are encouraged to utilize the learning culture by upskilling themselves and transferring knowledge to colleagues, thus being open to adapt to transformation (Sidani and Reese, 2018). To keep satisfaction levels high, organisations consistently provide various forms of learning programs, such as e-learning, discussion led training sessions, instructor led programs, courses through university with financial aid and so on, to develop their employee's competency competitively (Confessore and Kops, 1998).

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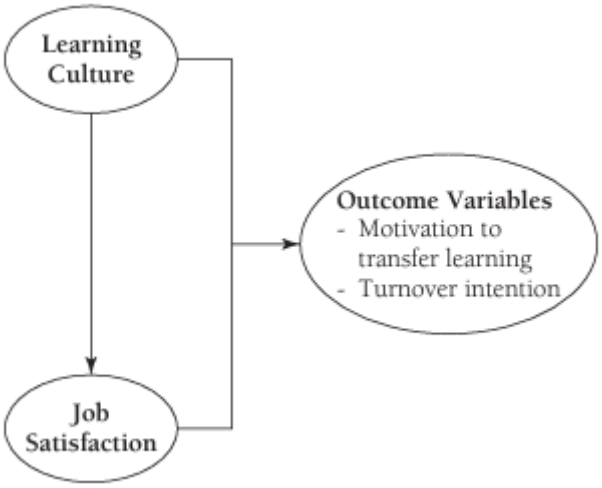

Figure 1: The outcomes from learning culture and job satisfaction

Conceptual model of the effects and learning culture and job satisfaction

Ilgen *et al*., (1979) conducted analysis to clarify that learning programs at organisations improve knowledge and results in skill development for workforce which influences job satisfaction and enhances and develops their competence. This satisfaction builds "psychological attachment" for workers (O'Reilly and Chatman, 1986, p. 492). Further, employees feel valued if they experience being supported and care by; in turn increases organisational commitment (Rousseau, 1998). It is observed that employees become committed to the organisation, if they have been provided with benefits and opportunities to learn and indulge in self-development (Ng *et al*., 2006). Critically, OL programs informally signal to employees that the organisation is interested in establishing a long-term relationship with them (Allen *et al*., 2003). There are conceptual links that are established between various stages of start-up and the learning associated with each of them. This reveals the guideline that OL is not a common approach, especially in technology start-up as it emerges in specific stages. This could also be associated with their growth patterns and the impact to be ahead of technology and competition. Organisational blueprints for start-ups observe differences that among industries entrepreneurs articulate similar strategies.

Start-up create opportunities through employment, generate productivity and help economy grow, and stay as a backbone for innovation (Van Praag & Versloot, 2007). The key to the success of technology start-ups is the capability of the leaders or the key stakeholders to understand the deployment of OL practices. They see it as a journey towards accomplishment of the organisation vision and strategy. While there is often a debate on assigning tasks and taking ownership of planning for learning, it does find a strong place in technology start-ups in India. The primary reason is because start-ups believe to hire, train and deploy employees under various tasks, despite the fact they need experienced skills for the job. Quite relevant to adopting to the learning journey conceptualised in small firms like the start-ups (Zhang *et al*., 2006), tries to bridge the gap between individual and organisation wide entrepreneur learning. This is widely adopted for technology ventures who are start-ups and look forward to compete from inception in the marketplace. A crucial area for technology start-ups in India is allocation of resources and investments for effective OL practices. It is important to realise that it is not a one-time cost and hence requires periodic review and the need to translate OL to objectives. And the cycle repeats itself as the need is identified.

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The training budget helps to position the technology start-ups in India bearing in mind the investment and its shortfall, thereof to be able to bear the training expenditure. A good practice for start-ups, is to conduct this analysis at the early stage of inception to ensure employee hiring, and their readiness in the job is met. Providing enough time for the training and conduct of feedback and assessment to qualify them to handle tasks at workplace is critical. Given the high demand and the need to establish, unlike established organisations, start-ups do not possess longer duration starting from training to deployment on the job. A well conducted LO program definitely increases employee morale and confidence to deliver the job; yielding to motivation and job satisfaction. Technology start-ups in India utilize technical resources to help employees fetch required skill and knowledge.

Talent management is a critical phase in start-ups. It is not only about hiring the right talent, talent development should also focus on opportunities for proficient employees to be retained and allow them to add back value to the organisation (Beech and Brockbank, 1999; Gannon and Maher, 2012; Festing and Schäfer, 2014). Introducing talent management in technology start-ups must motivate workforce, encourage them to collaborate and stay committed to the team, and enable them to maximise productivity. Therefore, motivation and commitment are essential attributes of talent retention strategy in a technology start-up. Focusing on retention from OL perspective is key to organisation, and more so for start-ups. Innovative measures are used to operationalise learning method to practice. At the same time, these techniques have to contribute as results to the organisation through return on investment from employees. A motivated employee will not only invest high effort to fulfil organisational objectives, also gain satisfaction to remain loyal (Ferreira *et al*., 2006). It is observed that even in highly competitive work environment like the technology start-ups in India, people who find meaning in work will feel "emotionally rewarded and maintain positive behaviour". This can be achieved by providing them multiple avenues to learn and contribute in an efficient manner. Employees remain motivated if they are allowed to work in an environment that enables self-motivation (Swailes and Blackburn, 2016; Tatoglu, Glaister and Demirbag, 2016). This is seen as a key strategy for retention by encouraging OL practices across technology start-ups in India.

A study conducted to find the positive and direct effect on organisational commitment (Diana et al., 2020; Hakim, 2020; Kim et al., 2019), stated work environment affected organisational commitment by 22.6%. This contributed to study the impacts of possessing a safe and engaging work environment and providing a learning culture. Establishing such a work environment results in commitment to the firm's business results. Employee fell the onus of being a part of the business revolution. In start-ups contributing to the growth of the company starts from inception till stability. Learning at each stage is different and requires contribution from the employees to the stakeholders for its implementation. The drive to keep it intact and rigorous take a long way in retention. Technology start-up companies demand high contribution and productivity. Typical technology start-up environment is seen as volatile and "as a short-term investment to achieve high quality business" (Rydell & Andersson, 2019). Analysing the training and development of employees in start-ups, due to the focus on growth and "cash-strapped" nature, there is minimal attention given to learning environment. Technology start-ups believe the experience employees gain within the organisation is a form of training and development for the workforce. Smruty Shah (2017), investigated the relationship between organisational culture and employee retention. If learning becomes a core component of the organisational culture, employees feel accomplished and value their relationship with the organisation. At the same time, start-ups who ensure new employees fit in well by offering OL techniques, do employee effective retention strategies; they create high "work group cohesion" (Gialuisi & Coetzer, 2013).

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Organisational learning on knowledge management

Knowledge is recognised as an essential element in organisations to compete and gain competitive advantage (Lee, 2000). It is of importance to manage and develop knowledge to keep abreast with the change internal and external environment of the business conditions (Davenport and Prusak, 1998; Jarrar, 2002). Analysis of knowledge management (KM) focuses on these factors to advice of its benefits to organisations. As per (Demarest, 1997) the factors are, a) means by which management views the value of knowledge, b) the knowledge journey (creation, used and transferred) within the company, c) benefits of KM on workforce and company, d) the current management of KM at the organisation, e) institutionalising KM, and f) application of information technology on KM systems. In technology start-ups, the learning journey is always of primary focus as observed. OL understands the importance of introducing, conducting, streamlining and adapting learning practices in organisations. Needless to mention, it is more appropriate for start-ups to focus on learning to withstand the market competition. While doing so, both organisation and its learners have to ensure a sustainable method to protect the knowledge. There are various means to secure them in repositories known best to organisations. This varies based on the organisation growth plans, business context and usage. All these sum up to KM. Organisations that are able to learn fast and use the learning effectively, sustain as leaders (Pemberton and Stonehouse, 2000; Smith, 2008). Knowledge management help organisations to identify, select, execute, spread knowledge, and transfer the expertise for strategic purposes like decision making, planning, and critical thinking (Gupta *et al*., 2000).

Organisations encourage KM by focusing on group and collaborative learning, yet allowing individual attention for growth and enhancement of knowledge and continuous improvement (Wang and Ahmed, 2003). There is a strong connection and link between KM and OL. Rather, KM evolves as a "high-order OL where organisation progress from single-loop learning to double-loop process" (Pemberton and Stonehouse, 2000; Rowley, 2006; Bennet and Tomblin, 2006). Single-loop learning means incremental learning where learns learn from errors and self-correction methodology, while double-loop process means further innovative approach of learning. Another extensive heavier learning occurs through "transformational or triple-loop learning" in which organisations make initiatives and step forward to make learning automatic, this is called "learn to learn" as they are not forced into the process and it is natural. This is considered as the ideal OL state, wherein they can critically ascertain organisation trends and its process, technology and products and make appropriate transformation initiatives before setbacks force change and initiate corrective learnings. As shown in Figure 1; OL and KM are interlinked. Initially, widely called as "first-generational KM mode" is particularly used as a storage system mostly by IT for knowledge transfer (Firestone and McElroy, 2004; Zuber-Skerritt, 2005). Later, widely called as "second and third-generation KM mode" prospered and established a partnership between both of them (Pemberton and Stonehouse, 2000; Bennet and Tomblin, 2006).

As explained through Figure 1, in technology start-ups setting up the organisational context is of paramount importance. As there are multiple priorities and differences in a volatile environment like start-up, focusing on organisational attributes provides distinct credibility. The synergy between OL and KM educates the need for culture, structure and infrastructure as underlining factor. Relevant to the technology start-ups in India, there are two approaches to this. One is on creation of "new knowledge assets" and the second is on "current knowledge assets". OL focuses on generating fresh knowledge through different forms of learning, which attracts a procedure to be formalised to become KM. This could be through use of IT systems for data storage and shared system for knowledge transfer to help in coordination of KM. Further, technology start-ups in India after creation of new knowledge

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identifies opportunities to update them. It is at this time, there are enhancement programs and skills to add and become a current repository for the organisation's learning database. This enhanced version encourages collaborative and innovative learning approach. Thus, making way to "store, distribute, and share" knowledge through KM.

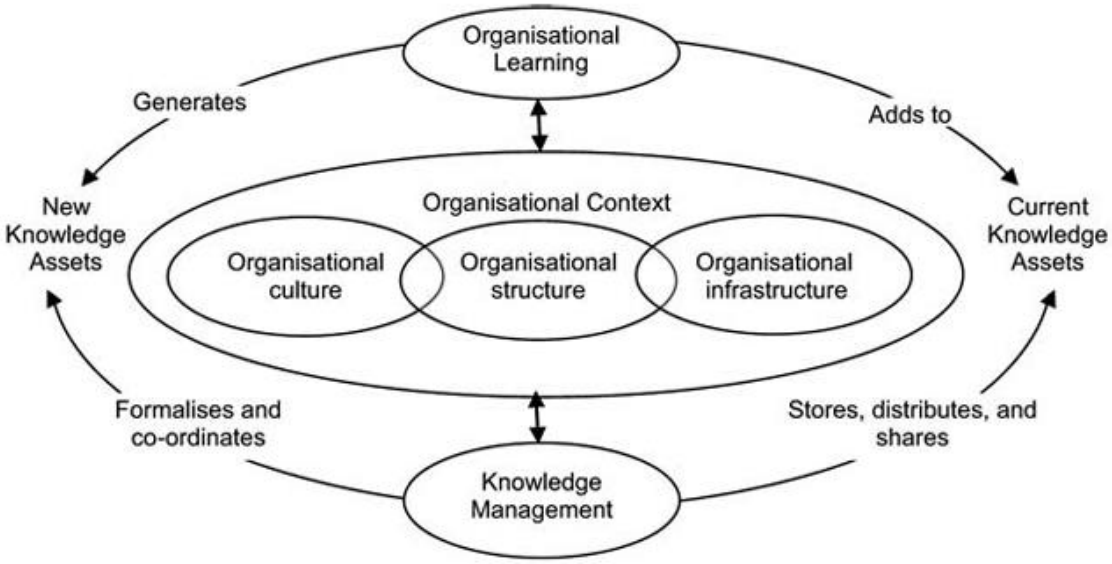

Figure 2: The relationship between OL and KM

Source: Adopted from the abstract (Pemberton and Stonehouse, 2000).

Liao *et al*., (2012) suggests the introduction of capital or investment into the link between OL and KM; mentioning it should be aligned with OL and KM to produce the best results for the organisation. It is seen as a great insight for technological start-ups in India, as OM, KL and capital development are factors which contribute to the sustainable development and competitive edge for the organisations. In India, start-ups are growing in number and they present lot of information to create their brand image. Technology is the distinguishing factor among these technology start-ups, which is considered as key to the learning process. This process creates behavioural change that leads to long lasting improvements in performance (Sinkula, 1994, p. 43).

While researchers have identified the linkage between OL and KM, there forms a difference which defines the purpose of KM. Argote (2005, p. 43), mentions that OL focuses on obtaining the knowledge, while KM focuses on managing the knowledge or creating new knowledge. This signifies that improvement in the OL process would enhance KM, thereby contributing to a better and effective learning practices. Indian technology start-ups use KM to advance innovations across domains such as social, business, environmental, and finance. In these organisations, KM allow knowledge sharing interactions between stakeholders which helps them to accomplish strategic business goals (Moser *et al*., 2017). The benefits that OL brings from uplifting motivation levels of workforce through structured and organised learning, to creating job satisfaction when these learning are adopted in work environment and business scenarios is of great importance to technology start-ups. Maintaining business process are an integral part of KM as they reach great levels of efficiency when they follow a structured model. Start-ups encourage the use of KM and factors affect this positively and negatively. The specific nature of knowledge in Indian technology start-ups are predominantly impacted by

humans and possess financial resources through funding. Several tools are available in the market for start-ups, to integrate KM into their business process. These tools do not require huge investments and advanced skills to encourage socialisation within the groups. Studies of digital start-ups in India using knowledge sharing shows improvement in the firm's performance. They build competitive advantage in the ever changing and dynamic environments by creating "innovative ideas".

Organisational learning on branding:

Building the brand for the entrepreneurs initiate from understanding the "organisational models or blueprints" that they intend to bear in launching their start-ups. This further interested to understand that the entrepreneur of a technology start-up, embraces a different mental method of an ideal organisation. Petkova, Rindova and Gupta (2008), mentions gaining reputation and control over the start-up is a challenge which organisations face due to their new existence. Technology start-ups in India are in plenty and each have their unique business and operating model. The technology they operate on is also a core factor to build their awareness among customers. Organisations identify themselves as an opportunist to succeed in the start-ups race. Comparing to large firms (Bresciani and Eppler, 2010), start-up organisations are dependent on interactions and communication from stakeholder to build their brand (Witt and Rode, 2005). As the start-ups grow, the brand is associated with their organisational culture, strategy, hiring, talent development, learning, and engagement. Corporate brands are built with cautious efforts to strengthen their sustainability and competitiveness in the marketplace. Technology start-ups in India, pay lot of attention on branding in their growing stage. This includes assigning a core team and communication around branding initiatives. It is an ideal approach to plan for branding activities from inception till growth stage, as it varies from stage to stage. This is not only for the organisation but also for its workforce. Employees who understand and relate with the company's values, behave in a manner that is in alignment with the start-up's strategy (M.J. Eppler and S. Bresciani, 2010).

Branding has an alignment from corporate strategy to employee morale. At each stage of the organisational cycle, branding plays a critical part. To alert in a start-up environment, it is not easy to agree to branding as a one-time activity. It calls for interventions at each stage from ideation, inception, formation, hiring, talent development through OL and training, and engagement. Branding as an exercise is conducted in different ways at each stage and requires collaboration from all its stakeholders. This enables the firm to conduct business as usual amidst portraying its efficiency. Urde (2003) reminds innovation in technology start-ups is a result of constructive and improved work and trust among all the stakeholders involved in an organisation's formation and existence. While branding relates to the image of the organisation, it also has a strong influence in building the culture of the workforce. It is widely acclaimed that corporate behaviour, communication, corporate culture, and design all form part of the overall identity of the organisation. There are effects of presenting a strong mission statement which has an impact on motivation which supports human resources concerns (Denison, 1984; Calori and Sarin, 1991; Wiedmann, 1992). An aspect of branding is corporate behaviour which focuses on the human aspects with relevance to conduct of branding activities and its impacts. It refers to how the human resources activities are managed along with identity and includes "empowering and supporting" employees (Lingenfelder and Spitzer, 1987). At each stage of analysis of branding activities, its further associates with assisting employees in their upliftment in the organisation. In the digital world, technology start-ups focus on branding to build the opportunities to enter the market and position themselves in a competitive manner. This is relatively a short "window of opportunity" (Timmons, 1999: 83).

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An enriching OL environment is the one that can be visualised as the one that provides complete experience and reflection (Spector, 2014). In technology start-ups it is effective as it improves learning experience through adaptation of understanding business situations, access to knowledge including media or visual aids, engagement, learning through "real-life" or "on the go" coaching with technologies (Singh & Hassan, 2017). While adopting the required OL mechanism brings credibility to the organisation to have an impact on branding, it is also important to consciously access the learning impact it contributes to workforce. As the start-ups, have limited access to funding or investment at the initial stage of set up, detailed analysis of critical planning is required. To encourage a branding promotion, firms cannot be lenient in cash outflows to achieve learning outcomes. For this purpose, digital start-ups in India, use internal resources to promote encouraging OL outcomes and it does have a visibility of the organisation's performance in the marketplace. Hwang and Fu (2020), comments a smart way of OL to be adopted is personalised learning. In an environment in discussion for this study, this method of personalised learning is key. The technology start-up would have varied OL requirements based on the progressive development of the firm. At the same time, the availability of time and funding would not make it possible for all employees to be accommodated in OL practices. Hence, depending on requirements for projects, business context, prior knowledge on the technology, and ability of the employee to learn are parameters considered to make a decision. Personalised learning can be approached by effectively using smart learning environments (Peng, Ma & Spector, 2019).

The use of OL in technology start-ups in India have wide opportunities of varied learning instructions and modes. Choosing the most appropriate learning model for the business is key, bearing in mind the nature of business, purpose of its establishment and its target audience. Promoting a brand in this space, need to be people centric as not everyone would understand technicalities of the technological start-up in India. People would focus on the OL that the organisation offers to its workforce and the motivation that it brings to them. Feidakis *et al*., (2013) mentions that social interactions bring in new knowledge; the technical set up of the smart learning environment does not bring that naturally. Effective OL mechanism promotes social interaction and develops emotion and cognitive thinking, which are essential for the psychological response in human beings. This method of OL is prevalent in technology start-ups as there are no designated learning platform or procedure. They concentrate on personalised learning techniques and adaptive learning models. It has a strong impact on branding as it suited for individual needs. More so, it is not a guideline to be followed and is flexible and adaptive across start-ups. Based on the context of the technological start-up in India, the learning patterns and requirements change and so is the method of personalised learning. Encouraging workforce to analyse their own training requirements in start-ups is common. This attributes to the OL practices of the organisation as the workforce have the flexibility to decide on their own learnings. One of the important reasons for self-directed OL methodology is due to the absence of a learning directory. In the context of technology start-up in India, these personalised learning form part of the OL catalogue. Workforce develop motivation and satisfaction as their learning experiences turn encouraging.

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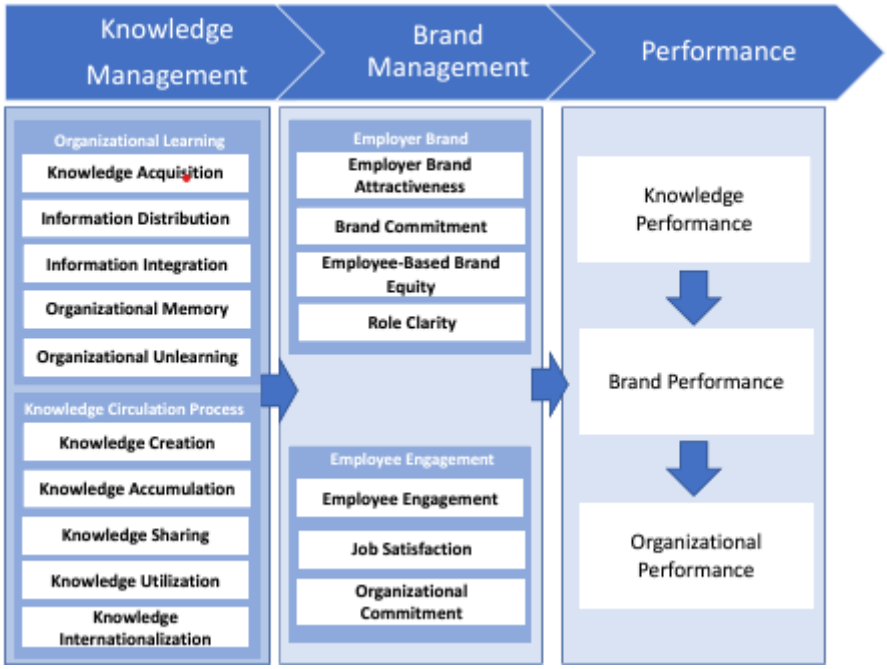

Figure 3: The Proposed Knowledge-Brand-Performance (KBP) Model based on Theurer et al. (2018)

The proposed conceptual model inking knowledge and brand management

In effect of the improvised OL experience the organisation's brand value increases. Digital start-ups in India critically rely upon social interactions and social branding to develop their ventures. These could be investor meets, start-ups meet, incubation forums, and so on. The current functioning of the start-ups is discussed and it is treated as the right forum to present their OL strategies to gain attention among like-minded people. These spread across employees who wish to work with start-ups. They develop interest and approach for suitable opportunities with the organisations. In the start-up economy, branding needs to be initiated through its workforce as they engage in OL. This also pays way to develop Communities of Practices (CoP) to understand and support learning through KM, cooperation, and collaboration (Brown and Duguid, 1991; Osterlund and Carlile, 2003; Allatta, 2003). Research on CoP focus on "situated learning" on a daily basis among working groups, encourage active participation, and facilities "in-group awareness" (Lave and Wenger, 1991). These promotes inclusion in these communities for collective learning and identity and shared meaning. This approach innovates branding strategies through CoP, which becomes the start-ups OL methodology. Identifying the appropriate social practice refers to the explicit and not actually said knowledge and competencies. Like any social forms it integrates all forms associated with individuals like their values, perceptions, motivation, behaviour, and assumptions. In common terms, CoP combines intellectual and expert's discussions and ideas on topics that may be trivial for the success of the technology start-ups. Such discussion is critical to comprehend the way forward and wellness of the organisation. Further, these identify new opportunities to build OL methods and concepts for the firm.

New techniques of OL can also be through effective CoP, which can bring in internal subject matter experts within the firm, industry experts from the industry, peer leaders from other technology start-

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up to facilitate healthy discussion on situations and issues that cause derail in the progress of the business. These methods of learning can also be treated as effective OL mechanisms as they are guided by experts in their respective field. It can contribute to be converted into the learning method that can be best suited for the organisation. Adoption of the practice applicable for the organisation itself becomes the success of the start-ups, as it provides flexibility and ownership to its workforce. This culminates as a step ahead in branding bringing credibility to the business and its operation. In addition, the experts in the industries add to the promotion of branding being a part of the CoP within the company. Duguid (2003, p. 8), states "knowledge and learning in CoP" are not independent rather are dependent models "between a person and the world". The ideation of CoP is to focus on communality and individuality. Applicability of social practice to this nature is the "collective phenomenon" pertaining to the community, and "individual phenomenon" related to the identity of its members. Thus, the branding related to identify building and participation of community are focused on collaborative learning. Adding a new perspective to OL, collaborative learning through CoP promotes brand building for the technological start-ups in India.

Huber (1991) contributed through his work on OL and defines it as the development of new skills, competencies, and knowledge; thereby gaining the "potential to influence behaviour". Adapting to the nature of technology start-ups, Slater and Narver (1995) points to a different approach through OL on market orientations. For this purpose, Slater and Narver (1995, p. 67) comments market orientation as the culture of considering all the stakeholders of the organisation, at the time ensuring to achieve profitability and maintain "supreme customer value". Further, they also mentioned that market orientation can enhance the performance of workforce, when combined with conscious efforts to apply learnings. This improves organisational capabilities and builds innovation. The criticality applied to the ability of use and act of learning and the information derived from that is the success to performance. Without information market orientation might not have an impact on performance or capabilities. This depicts market orientation encourages OL. They encourage the firm's ability to learn and innovate, thereby enhances growth through performance. The technology start-ups in India, needs to spend brainstorming in the initial stages of inception to identify the skills and capabilities to be build. This forms the blueprints for applied learning. For start-ups, OL strategy is built as they progress through the stages in growth. Having said this, it grows with the organisation and undergoes multiple iteration depending on the change in the business model and growth plans. However, the underlining factor of technology and the need for the right skills does not change.

OL strategies of technology start-ups in India link to innovation and creativity. The number of booming technology start-ups, need to have a unique concept of ideation. In addition, the human capital needs to be equipped with skills and demanding knowledge to provide brand value for the organisation. The workforce commands platform to implement the learning and this pose a challenge in start-ups. Hence, learning is applied in collaborative platform to share and promote learning across groups. This helps to picture the start-ups brand across geographies. The cutting-edge technologies of start-ups in India play a vital role in providing unique consulting model for multi-national companies. This also attributes to the upskilling and constant PL culture imposed in start-ups. Thereby, enhancing the brand value of the start-up. Slater and Narver (1995), points "shared interpretation" with reference to the information shared in the organisation. Through OL strategies, information is wide spread throughout the firm. It is critical to ensure consensus of the meaning from the information. Understanding of information among the members of the start-up, impacts the organisation's business strategy. Exhibiting accurate information influences branding.

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Organisational learning on loyalty:

The future of organisations is dominated by the need to manage learning in an effective manner, thereby making the organisation flexible to handle planned and most importantly, ad hoc changes. This has made the idea of OL more popular. In technology start-ups in India OL is considered as a "strategic concept". This is especially due to the concentrates on market value and shares, growth prospects, operational efficiency, quality standards, and combining the business success with the idea and the organisation. Cunningham, Gerard (2000), claims the learning culture of the start-up organisation in India is critical to be merged with the organisational culture to contribute to the competitiveness and improvement of the firm; further becomes risk friendly and adapts to business challenges. The OL techniques of start-ups in India are dynamic and critical to its growth. At the early stages of the technology organisation, there are ambiguity and uncertainty. It is an art to combine strategies to effectively link OL curve to employee loyalty. A happy workforce will be motivated and satisfied in accomplishing their tasks. While there are number of factors to lead to the effect of contended workforce, the top of the list bears maintaining a learning and progressive culture. The business environment for start-ups become difficult to grow and be profitable especially in the initial stages of establishment. Leaders and key stakeholders are under pressure to handle change and plan for the transformation. The foremost affected stakeholders in these volatile situations are the employees. The most pivotal asset in an organisation is the human capital as they are key for the business to be successful, strive excellence and launch credibility (Maylett & Wride 2017, 19, 24).

It is observed that start-ups in India who consciously make efforts to offer "continuous learning opportunities" for its workforce align with the future demands and create a competitive advantage (Farrukh & Waheed 2015, 73-75). The business culture of technology start-ups in India are often demanding. It is mostly unpredictable and uncontrollable due to the changing needs of the business environment. As there are multiple stakeholders, external regulations, start-up community, and mentors being involved in its progress, they are always evaluated for performance. This emerges for OL to be trivial in this community. The huge impact that learning opportunities bring for start-ups is incomparable to large organisations. In India, workforce consider it great upliftment in taking up opportunities with technology start-ups, mainly because of the OL that it offers. It turns to be a win-win situation. The firm considers it as a need to handle the demand and business conditions, whereas human capital consider it as self-development. Start-ups are required for all economies to bring in innovation in the form of products and services; creating financial progress (Hill 2016, 18, 19). On the contrary, (Flood 2014, 2) points out the risk in business ventures and its complexity, further emphasising that human capital has "limited capacity" to anticipate the future and to understand business and environment. It is evident that employees intend to be loyal to organisation who provide them with opportunities and learning to excel. The demand in technological start-up in India, is to identify human capital who have the zeal to learn, committed and motivated (Hoffman, 2021, 25-27). It is not easy to find workforce like that in start-ups, unless they have clear OL strategies and techniques. It is seen as an opportunity to learn and grow with the organisation, which also bring an important discussion on nurturing the talent.

Human capital is associated with skill development, for which OL is considered as a key component. While making efforts to enforce learning habits and behaviour, the start-ups need to address concerns on talent nourishment. Ideally, there would be no purpose to provide scope for leaning and lose them to the industry. For which, measures have to be taken to protect employee interests. It is critical to prepare learning culture understanding the demand from the workforce. This would primarily motivate them to be loyal as they see a reason to develop themselves through learning and contribute

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to the start-up. Not linking the OL preparation with employee expectation on learning does not yield success in employee retention and also growth. Human capital being the core of any start-up, it might be impossible to execute business operations without the required talent and teams (Da Costa & Correia Loureiro, 2019). While there are challenges prevailing in attracting the right talent and also to nurture, technology start-ups in India see creating a learning culture and a unique OL model as the right approach to promote employee loyalty. Focus on "innovative business model" and skilful learning will increase revenue (Tech, 2018). The workforce, thoughtful of joining technology start-ups in India, consider it as a learning platform to build a long-term career path.

What impact does organisational learning create on human capital?

Human capital is invaluable and most appropriate to a specific start-up and gives optimum benefits to the organisation where it is developed (Hitt et al., 2001; Klein, Crawford, and Alchian, 1978; Lepak and Snell, 1999). The workforce, who are typically called as human resources of start-ups have the flexibility to move between firms, with the ocean of opportunities available in the technology start-up market. It becomes difficult to protect this human capital from rivalries in the market. Does not this affirm the need to create a unique retention strategy for the workforce? To sustain business competitiveness, retaining the human capital becomes a critical requirement for technology start-ups. Amit (1986,) points out the impact early firms gain against their rivals if they stay ahead in the learning curve, thereby earn competitive advantage. For employees, providing them immense scope to enhance their skills and knowledge through creating OL interventions remain constant desire. They see themselves being valued, thereby increasing their motivation and creativity. There are situations when the benefits of learning do not "materialise" (Abernathy and Wayne, 1974; Alberts, 1989; Hall and Howell, 1985). Technology start-ups in India ensure they have the budget to create learning environment for their human capital. This is seen as a mandate to be able to handle business situations in an assertive approach. Understanding the reasons why benefits of the learning is not satisfactory or the learning outcomes do not meet expectation, attributes to non-availability of business situations to experiment the learning. Many times, just learning without being able to implement is also no good. As a part of their funding model, technology start-ups have ample possibility to create simulation environment. This provides feasibility to evaluate the results of learning.

OL is increasingly important as it is being used as a mechanism to renew an organisation's strategic position (Kang and Snell, 2009). Interestingly, the researches on OL focus on two kinds of learning; they are exploration and exploitation. Explorations involves learning outside of an organisation's "current knowledge domains", while exploitation refers to "refining and extending a firm's existing knowledge stocks" (March, 1991). Conducting an exploration and exploitation learning methods demand different administrative execution and behaviours (Lubatkin *et al*., 2006). Start-ups in India allocate tremendous effort and resources to create and stabilise learning culture. It is also because of huge investment that goes into each technology start-ups in India from various geographies including venture capitals. Choosing the appropriate strategy for OL is pivotal to establish the connection of its outcome with human capital. The benefits that it would yield depends on the kind of learning the firm looks to create. In the view of innovation and sustainability for which technology start-ups are aspiring, a combination of exploration and exploitation will add maturity to the organisation. While the entire model is approached from a firm perspective, the learners are its workforce. They see it as an advantage to attain external knowledge beyond their current scope of work, in addition to enhancing their existing knowledge. This definitely helps the human capital to reap the benefits of learning through internal progressions or expand their creativity by contributing in challenging business scenarios. Morgeson, DeRue, and Karam (2010), identifies the role of leadership to be significant in managing human capital

during the OL process, through "transitional functions" and "actional functions"; which helps teams to critically analyse and adapt the suitable behaviour towards the organisational goal (Morgeson *et al*., 2010, p. 5).

Transitional and actional functions are actions associated with organisation from strategy to managing team. Quite relevant to technology start-ups, they are defined as transitional functions as defining mission, establishing goals, training the team, and providing feedback. While actional functions are performing task as a team, solving problems, challenging the team, and encourage socialism. Apart from imparting competencies required for human capital development in start-ups, OL promotes heathy technological competition in the Indian marketplace. Leaders of the start-ups play a critical role in identifying the resource and the time to undergo the transformation and manage the change effectively.

Summary

Start-ups are business venture which are created through innovation to solve the problems of the society (Sopjani, 2019). They develop a link between knowledge and "commercialization of technology" (Braunerhjelm, 2010; Okrah *et al*., 2018; Singh *et al*., 2019a). Researchers admit that knowledge is created by its human capital. And it exists outside of the organisation too. However, OL develops from his workforce addressed as human capital and its associated intangible qualities. Knowledge is formed through its journey in the organisation as a passage. It is beyond the collection of individual learning in a start-up environment (McKee, 1992). OL is a continuous effort and very critical for technology start-ups, considering their nature of business and the market condition.

How a technology start-up in India is formed?

An idea is appreciated and converted into a business plan. This is further discussed with a group of people with similar mindset. The idea is then approached to be identified with a business prospect. There is need for investment in the form of venture capital, or funding to deploy technology, tools, services, resources, and logistics to nurture and sustain the start-up. Technology start-ups require to equip necessary skills and practices to be able to run their organisation. For which, necessary skill assessment and management need to be conducted in the firm against the market. This will clarify the gap and the possibility to identify how it can be mitigated.

How OL strategy is identified and linked to learning plan?

Learning is identified as an essential element for technology start-ups. The nature of business for India start-up are to provide global services, it becomes all the more important to be abreast with technological advancements. While learning is critical for all start-ups, its in the pulse for technology start-ups. Organisations make huge investment for technology and ensure it is well positioned to train the workforce. OL strategy in technology start-ups in India are core for the firm's growth. They are created and developed as a first few initial plans of the organisation. They are explained to all the hires who are the key human capital to the firm. Their selection to the start-up would also depend on their interest to learn and enhance their skills to provide effective performance and improve the start-ups revenue. This strategy remains the core until the organisation is stabilised and a talent development or management plan oversee these requirements. Until such time, the strategy remains in the firm. This is linked to the learning plan as a continuous measure. These are in turn linked to each employee's individual development plan. The workforce of technology start-up in India cannot stay away from the learning process. There is a need for periodic and constant enhancement of knowledge and learning of new skills.

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Which factors of human capital does OL impact?

Human capital differs in significance under the OL criteria. The benefits of learning culture encourage motivation in workforce and they seek opportunities to learn and develop their competencies. Enabling them to approach business situations from different lends gives them immense job satisfaction, as they see value in their learning. As the human capital assets of the technology start-ups are prioritising learning for self-development, this gives them contentment. Employees find multiple opportunities to add value to their tenure in the organisation, thereby increasing loyalty. Learning is not complete unless it is well protected and secured. As we saw, learning can be individual and collaborative. When analysing the situation of technology start-ups in India, learning is mostly individual considering the size of the organisation and later converts to a collaborative approach. All the said learning is culminated in knowledge management which are systems and process to act as a repository. The great impact that effective OL can bring to human capital is significance in brand value. The workforce of the start-up organisation has multiple connections with external forums, networks, community, start-up economy, and stakeholders. Displaying a strong OL technique attracts human capital through branding.

This paper focuses on establishing connections of all the mentioned impacts to human capital through OL in technology start-ups in India.

Research design and methodology

The research is undertaken to analyse and find out results in a systematic way, which increases the knowledge (Saunders *et al*., 2012). This research is conducted in a technology start-up environment specific to India. Therefore, for the purpose of this analysis the technological start-up companies are approached. As mentioned by Bryman and Bell (2015), "research is a careful inquiry or examination to discover new information or relationships and to expand and to verify existing knowledge". My research topic is to determine the impact of OL on human capital, specifically in technology start-ups in India. This research topic has five constructs that would be researched to derive at the findings. They are motivation, job satisfaction, knowledge management, branding, and loyalty. Understanding the need to analyse multiple constructs of the independent variable, which is the impact of OL, I decided to approach the study from a qualitative perspective. A number driven approach cannot be conducted for a sensitive topic related to organisation learning. The study would need to understand the implications and therefore, would require to interact with various stakeholders of the technology start-ups. Such discussions and valuable information can be gathered only by engaging participants in a fruitful conversation. Qualitative research explains people emotions, experience and perspectives, without using statistical measure (Strauss and Corbin, 1990). As my research involves understanding the impact of OL on human capital who are the workforce or their skills or their competencies. And for this purpose, I collect information from employees of technology start-ups in India. It is a wide spread economy, and most of it are flat structured in a hierarchy context. Hence, employees across the organisation may be considered for the study, irrespective for their role, designation, department or function, and their location in the organisation. The only criteria that are considered is to be from the technology start-ups in India. The operational definition of start-ups are companies in existence up to 10 years from the date of incorporation. The turnover must be less than USD 12.5 million is any of the previous financial years (conversion of 1 USD is 83.39 INR, source – Bloomberg as on 20/04/2024).

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Why qualitative research was chosen for this study?

Kirk and Miller (1986) mention that traditionally qualitative research is used for social sciences; dependent on the "researcher's observation" and the participants involved. This is strengthened by the argument of Bradshaw *et al.*, (2017) supporting the use of qualitative research design to obtain relevant information from the participants "who experience a particular phenomenon". This research is critical in understanding the underlying emotions of workforce on motivation, job satisfaction, knowledge management, branding, and loyalty. Qualitative research "is a form of social action" that stresses the way the researchers interpret, and makes sense of their experiences; thereby, understanding the "social reality of individuals". The intention to choose this method for the study, is to frame new concepts from the viewpoint of the population being studied. Viswambharan & Priya (2016), mentions choosing the research method is based on the questions raised to be addressed.

Why qualitative research is recommended for organisational learning and for start-ups?

Studies of start-ups are diverse considering their early stage, un stabilised process and market proposition. They have been defined as "organisations established in an uncertain and volatile environment with the intent to bring a new opportunity to the marketplace" (Radojevich-Kelley & Hoffman, 2012, p. 54). The success of start-ups is attributed to their ability to integrate with ecosystem and collaborate (Battistella et al., 2017; Chell & Baines, 2000; Chesbrough & Brunswicker, 2014; Eftekhari & Bogers, 2015; Rothschild & Darr, 2005; Waguespack & Fleming, 2008; West & Bogers, 2013). This culminates to state the success or failure of start-ups are due to the learning challenges they face. The OL in start-ups require creation from the scratch and take efforts from the organisation, workforce and technology. Considering this, there are emotions and expressions in the form of experiences from human capital. The best way to bring that out would be through qualitative research. The information pertaining to start-ups keep changing based on business situation. A numerical approach to quantity the research question would not answer the perceptions of human capital that is being addressed. Conversations with the workforce to understand their intentions and experiences of OL, in the technology start-up economy in India would provide a complete view to the study. It is important for start-ups to start the process of learning where they "identify and install" to coordinate, which allow them to "integrate efforts towards a common goal" (Aldrich & Ruef, 2018; Patzelt et al., 2020; 19). Hence, the learning process integrates within the organisation culture, thereby, enhancing multiple factors for human capital.

Data Collection:

While there are many methods to collect data for a qualitative analysis, the one more apt for my research was "Focus Group Discussions". This is a very critical and new research for technology start-ups in India. There is research conducted on OL, however very few have detailed on the factors that impacts the human capital in the firm. To bring out the intrinsic voice of participants this method of data collection is chosen. The population were chosen from the available start-ups database like Nasscom, Department for Promotion of Industry and Internal Trade (DPIIT), and Startup India. These are verified and qualified leads to be considered as the target population. Information as per DPIIT as on 31st December '2023, states that India has 1,17,254 technology start-ups. The total population are a combination of leaders and workforce across departments and functions from technology start-ups in India. The good mix of human capital was targeted as the target population to ensure there are no bias in the findings to be derived. The list of population for my research was obtained by March 2024. The data even if was maintained well by the companies on the start-up platforms has the risk of abnormalities due to it being a volatile market.

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The target population was a conscious mix of human capital with multiple skills and behaviour relevant to be investigated in the study. I was watchful, that I am focusing on the technology start-up market of India and it is wide spread. I was prepared to conduct the focus group discussion either in person or virtual based on the situation. To derive the sample from a huge population, I used random sampling. The details were captured in a Microsoft excel file. They are name of the participant, name of the start-up, year of incorporation, how many years of experience in technology start-up. These details are maintained with utmost privacy. To eliminate bias in the research, attempts were taken to select participants through random sampling. Again, Microsoft excel was used to derive the participants using random sampling technique. The steps I followed were: a) a column was created as Random_number, b) the first cell of the column, RAND() was typed underneath the heading row, c) a random number appeared in the cell when enter was pressed, d) the formulae was copied to all the cells in the column, e) each row had a random number and the column was sorted. This generated a random sampling of participants to be picked for the research. The plan was to conduct 3 focus groups discussions with 8 participants in each group. Hence, a total of 24 participants have been identified through random sampling for this study. Saturation is key in qualitative research. It is important for the researcher to confirm when to conclude collection of data. For this research, I believe 24 participants providing their perception and expression from 3 focus group discussion provides required information to analyse and share findings. In case, a particular participant shows disinterest to participate, the next participant picked by the random sampling is considered. It is ideal to have participants from different location across India to obtain rich data for analysis. And also, to have them from different companies.

Due respect is given to participants to be a part of this research from various locations. The focus group discussion accommodated participants across India and was available to conduct the discussion in virtual mode too. I identified participants based on random sampling and split them to 3 groups randomly, in the same order the sample was generated. The first group was a face-to-face mode conducted in a co-working office space. This involved members from across the levels of the organisation and functions. However, as a challenge I was ready to accept the participants mix through random sampling. Sometimes, it might end up people from same organisation and functions. Nevertheless, the idea is to ensure an unbiased participation. The second and the third focus group discussions was conducted virtually through zoom platform. Before the focus group discussions, the participants were given a brief of the research topic, the hypothesis, and the findings from the research. They were informed of the implication from the findings for managers and start-up community. The focus group happened in April 2024. I, as a moderator probed questions during the discussion to collect more details on participant's perceptions. Each group of 8 members had varied experience working in technology start-ups in India. Additionally, they belonged to various departments of the firm, this added value to the discussions as they presented different perspectives to how OL is impacted. I made a note of all the discussions and ensured that I do not judge any participant based on the information shared. My responsibility as a moderator was to provide equal privilege to all in the group to share their thoughts and views on the topic being researched. I moderated and collected their ideas on how OL impacted in their job, personal development, professional development, and overall growth of the organisation. I did not restrict my questions and probing specific on the impacts that I wish to hear and allowed them to have a free discussion. This research used a validated questionnaire from the study on the "Correlations among Organisational Learning, Dynamic Capabilities, and Innovation Performance of Innovative Firms. I used this questionnaire as an aid, in addition to my set of questions to moderate the discussions.

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Data Analysis Methods:

I used Nvivo for the data analysis to make an impactful analysis for the research. Considering, the nature of study being in technology start-ups which is an uncertain and ambiguous environment, this method of data analysis will bring the exact discussion point on to the paper. This method uses phrases from discussion to make inferences and findings. Bazeley (2008), mentions the following analysis for Nvivo. They are managing data, manage ideas, querying data, and displaying them visually. I transcribed the discussions as extracts using Nvivo method of data analysis and retained the key points mentioned by participants. The method I followed was to analyse the extracts and create descriptive codes for those. From these, formed interpretative codes. These codes are a culmination of the two or more descriptive codes. It was feasible for me to create themes and patterns from them. This brought a thematic analysis to my findings.

Ethical Issues:

I followed consciously the ethical standards to conduct this research. All participants information through responses during in person focus group discussion and virtual discussion were made notes only after seeking their permission. No discussion was recorded as the participants were not comfortable to record the meeting. They did not want their name to be quoted in any reference, and their privacy and anonymity was maintained all through the research. I did not ask nor collect any private or offending information from participants relating to their personal or professional space. I have not disclosed any financial or critical information pertaining to the technology start-ups in India.

Reliability and Validity:

I have conducted focus group discussions for a diverse population; hence the reliability is achieved. I have obtained the participants information from authentic and trusted sources who maintain start-ups details of Indian technological firms. The sample size might be less; however, I feel this would not impact the findings. For the purpose of this study, sufficient details have been collected.

Results, analysis and evaluation of findings

Focus Group Discussions:

I conducted three focus group discussions during the whole of April '2024. Their responses were varied and interesting to analyse. As I mentioned, the participants were taken from verified sources possessing start-up data. The diverse fields and experience of the participants brought rigor and strength to the discussions. Even if the research is related to technology start-ups in India, the selected participants for the discussions came from multiple departments and roles. I would say the strength of the discussion were that. Considering the wide spread geography of India, I received immense perceptions and voice of participants. I converted the extracts of participants experience and responses to codes. Many themes came through from the discussions and each revealed the relation between each construct. Each focus group discussion lasted for 30 minutes. This excludes a briefing for 5 minutes before the discussion. This is to reiterate the purpose of the research and an idea of the topics under which the discussions would be framed. The instrument used for briefing and the topics covered during the discussion are provided in the appendix.

I analysed the data from various dimensions. I looked at the responses of participants as their inner expressions to share the true condition of OL on humans which are the greatest assets for technology start-ups in India. The first way to analyse was to use Nvivo to interpret the languages used by

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participants and identify the appropriate themes evident from the transcripts of the interview. Unlocking the interpretations of the participants the following themes emerged. They are, a) Self-development, b) External insights, and c) Business acumen. The discussions I held echoes what is evident and observed through the academic literature. Further the themes evolved from the focus group discussion relates well to the constructs identified from the independent variable to be researched.

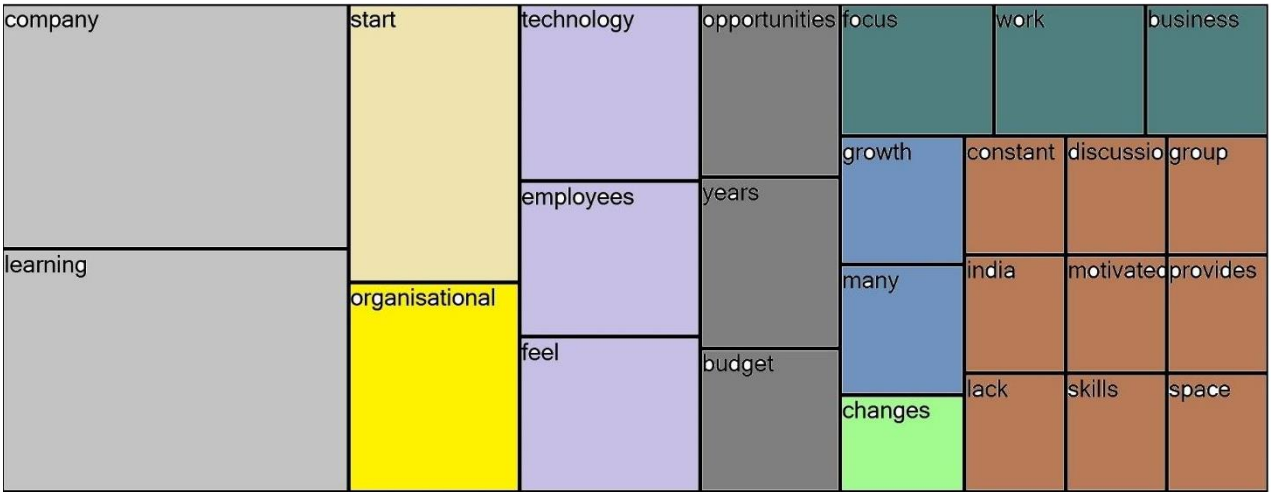

Figure 4: Tree Map on codes from the focus group discussions

While looking at the responses of the participants from the focus group discussions, the codes provide a diverse frequency of occurrence in the discussions. I arrived at the codes not on their number of occurrence but on the relevance, it has to the study. The primary focus was to relate the codes against the constructs and derive conclusions accordingly. These codes emphasise the academic literature and the perceptions of employees in technology start-up specific to India. The representations from individual focus group discussions bring that there are expressions pertaining to the consumption of OL in the start-up companies. The extracts are transcribed and codes are identified which are descriptive in nature. These are further, combined to arrive at themes. Broadly, three themes are identified. They bring together the experience and perspectives of individual participants from the focus group discussions. For example, I analysed the expressions of skills, lack of opportunities for learning, budget, inter departmental collaboration, emotional expressions of employees or human capital during learning process and so on under self-development. They all combine to talk about an individual or employee's skill enhancement and development as a result of OL journey. The extracts transcribed from the discussions were approached in an unbiased manner. The participants shared both reflections of OL and I would it consider as one of an efficient method of moderation. They have shared their own individual thoughts without prejudice and this platform helped to collect diverse and impactful conversations. As I did not interrupt them and probed questions only to extract more information, the discussions were genuine and provided insights to detail the findings. A complete overview of the word cloud, a diagrammatic representation of the three focus group discussions can provide a synopsis of the findings. This collaborates well with the themes identified earlier and also sinks with the tree map presented above.

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Figure 5: Word cloud representation from the three focus group discussions

The next important analysis was the interpretations from individual focus group discussions using word cloud. Considering the responses from 24 participants in 3 focus group discussion, it was pivotal to capture important inferences about the impact of OL on human capital. Word cloud is used to provide a first-hand view of perceptions based on the frequency of use of words. In this case, they are codes. However, they could not be inferred only with the creation of word cloud from the focus group discussions. It provides only first-hand information of the codes based on their frequency of occurrence. Further, analysis of creation of themes provides a detailed view of the findings. Below in figure 6 is the word cloud representation of the first focus group discussion. A good summary of the research topic is evident from this graphical representation. Compared to the other two group discussions, the first group was less interactive and was not more expressive in sharing perspectives, even if probed. One of the participants mentioned lack of collaboration among departments. This affected planned OL initiatives as it lacked visionary outlook for the technology start-up. While the other participants, each shared why and how the OL interventions help them to be motivated. They also shared the role of managers in enabling betterment through supporting learning.

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Figure 6: Word cloud representation from the focus group discussions 1

The cloud diagram of the second focus group discussion is presented in Figure 7. This discussion witnessed unbiased responses from participants. They believed to have shared true perceptions about the OL conditions at technology start-ups in India. The participants were a varied group from start-ups ranging from 2 to 6 years of incorporation. In addition, they belonged from difference functions in their organisation. Hence, it was a good mix of employees or workforce from start-up community. Participants spoke about how OL strategies contribute to their self-development. It makes them motivated and satisfied in their job. Availability of budget as a constant need in technology start-ups was also brought as a point of concern by a participant. This defines the possibility of a continuous learning environment. As a moderator, I connected some of the opinions shared by participants to my analysis. A participant shared that their start-up values employees as their biggest assets. On a deep dive conversation by probing, it revealed that the company is framing OL strategies and currently offers self-paced OL based on technological demand in the market. This proves that the organisation is working towards a sustainable approach.

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Figure 7: Word cloud representation from the focus group discussions 2

The next interesting discussion from the third focus group brought in deeper insights to the research topic. The figure 8 shows the work cloud diagram of the expressions from participants. This was an in-depth and informative focus group which deliberated on unbiased discussions. As a moderator, I probed as often to extract more information on their feelings and thoughts on the OL practices and its impact on human capital. The participants from this focus group have immense experience in corporates and minimum of 3 years in start-ups. I discovered from the discussions that some of the participants have undergone various OL experiences and have felt the impact on their development. One of the participants shared the impact of OL because of changing business model, and the need to be able to suit the demand through its adaptability model. A participant spoke about the need of budget to continue OL practices. The rise in demand for technology, creates the need to maintain budget for continuous learning. A participant clearly stated that the lack of protecting the learning through a system or repository. Further, not more than 2 participants shared their perspective or experience on KM in technology start-ups in India. In spite of probing, others did not have any viewpoint to share on protecting the learnt knowledge through OL techniques. Two participants were appreciating of the innovation each learning brings and enhances their skill. Start-ups nature deals with daily firefighting and a participant felt that this situation reduces the opportunity to learn. And that, there is no designated person or stakeholder to monitor the learning need and requirement.

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Figure 8: Word cloud representation from the focus group discussions 3

Summary of the Focus Group Discussions:

The opinions and feelings of respondents such as "My company concentrates on growth and products. Learning has taken a back seat after the initial 3 years. We are in the technology space for AI and blockchain. The company is a 5-year-old start-up in India", proposes how human capital of the firm consider the need for OL. It also relates to the challenges faced by technology start-ups in India, to maintain the learning model and ensure sufficient funding and investment to set up the same. The initial rigor in contributing to OL models, must continue as they expand. The perspective of this interviewee, echoed with many other "I feel overwhelmed. Organisational learning makes me feel motivated and satisfied with my job". In a summary, many participants of the focus group discussion felt that they are motivated and satisfied as OL impacted their work life. As a correlation this would consider them being loyal to the start-up. The organisation sees value, thereby promoting retention among workforce. An interviewee said "I feel allocating budget and introducing new learning opportunities increases the brand value of the company". The respondents did not have a strong opinion OL impacting brand value. However, this remains to be a concern. Further, interviewee also shared the lack the resources available to protect and save the learnt knowledge. Overall, the perceptions of interviewees in the focus group discussions presented qualitative approach to answer the research question. They created thoughts for future analysis. As there were uninterrupted discussion, all voices were heard and inferred an unbiased finding.

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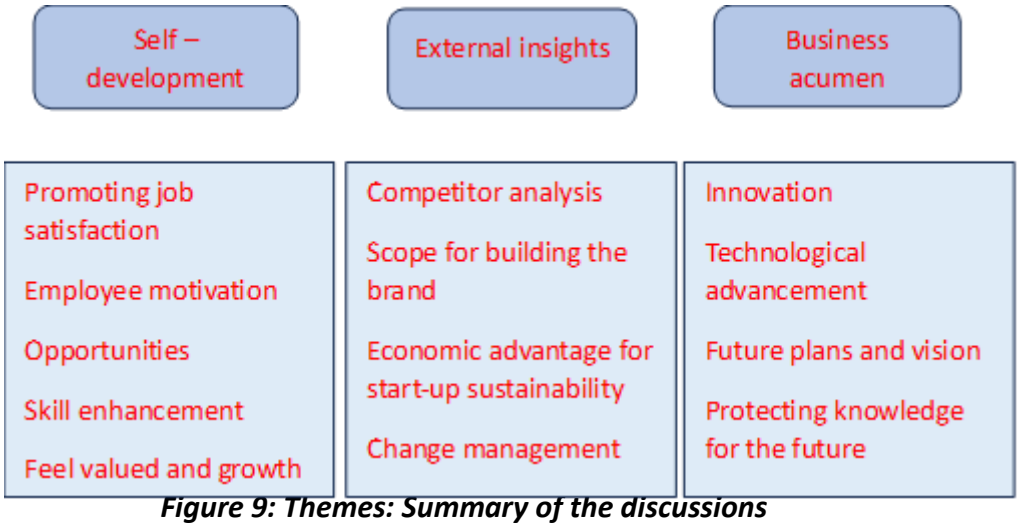

Figure 9: Themes: Summary of the discussions

Discussion and Recommendations

I thoroughly experienced the flavour of technology start-up economy in India, through this study. I met a sample size of 24 participants through focus group discussions who brought out the real and in-depth views of learnings and its practices in the start-up culture. The finding or the results of the research acknowledge the literature review. Studies reveal that OL practices and strategies implemented in the organisation have a strong impact on human capital. I observed that the findings resonate with the technology industry trend in start-ups. When start-ups begin, they have tremendous opportunities to conquer and rule the industry based on the trend they bring in. In my opinion, in the technology start-up fraternity in India, they have scope for establishing each factor like skill, technology or systems, identify sources of funding, allocate the investment into each line of business and assets, identify ways of improving talent, create business improvements, and manage challenges. The advantage start-ups get is to create things from scratch. I feel this is not best utilised in most of technology start-ups in India. Further, the understanding of benefits or impact created by OL on human capital is also understood only on a limited basis. I felt the participants consider it safe by sharing their individual impacts on OL, rather than thinking from a cumulative or at a bigger picture. I feel the lack of visionary on what, even the employees really need from the start-ups is haunting its progress in the larger platform.

This study is limited to analysing the findings from technology start-ups in India. It cannot be generalised with start-ups around the world. However, the need of OL practices and its impact on human capital could not take a complete deviation from the reality. Wherever the technology start-up could have originated, the requirement of OL is a deemed necessity. The extent of OL determines the nature of benefits it brings to human capital in the firm. I observed from the participants that they consider it related only to individual benefits. Mostly on self-motivation, contentment and satisfaction from job, which leads to extended service in the firm. I look at it from a self-centric approach. I recollect the discussions to mention that participants were not focused on their long-term vision of the start-up, rather was concentrative on the situations at hand. It was focused to deal with the need for OL

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practices and its benefits on human capital assets of the firm (start-ups) limited to individual benefits. The innovation and creativity that the practices would bring was not emphasised. It was discussed that learning interventions are critical for technological companies. It might not be the same for other industries. The discussions held did not clarify on the impact on creation of knowledge system or tools required for KM. It is my perception, that individuals working or leading start-ups are inclined towards the moment rather than being future oriented. This is realised in their foresight towards creating a brand value.

The primary objective of start-up would be to attract skilled, efficient, and knowledgeable workforce from the technology industry. Further, it would also concentrate on ensuring people are trained in the relevant technology required for the running of the start-up. In addition, since the start-ups in conversation are from India, there might be upskilling sessions required to cope with the technological demand to suit the business. It is imperative to state that building a brand value for the start-up, helps in attracting top talent available in the market and industry for the start-up. Based on the discussions, I recommend the start-up should foremost analyse the intention of creating OL models. They should also spend time in understanding how their competitors match to the demand in the technology industry. This will help to define their unique learning model. Most of the start-ups in India, come with investment or funding from multiple foreign investors. Unless there is a value creation, sustainability becomes a concern. In my opinion, I recommend the model to start from branding, where OL framework is defined to engage with human capital. This generates positivity in the firm and increases collaboration. The engaged workforce creates value for business and results in individual development. This extends to creating systems for protecting the value generated through OL, for the company's future assets.

Recommendations:

The impacts on human capital discussed in this research are selective. These could further be expanded to include other human capital assets like skills, employee welfare, punctuality to name a few. I considered researching on motivation, job satisfaction, loyalty, branding, and knowledge management as it gave me a good balance between employer and employee equation. Since start-ups are growing in numbers in India, expanding the research would benefit other industries and sectors other than technology. Keeping in mind the diverse culture in start-up organisations, further research can add value to similar industry of start-ups in other countries. This research used qualitative method for data collection and analyses. I would be interested to see, if a similar correlation exists while approaching it from quantitative perspective. Another interesting area of further research would be to understand the impact on OL given today's work schedules. Considering remote, hybrid and gig being quite common in technology start-ups in India. Could that be different from full time or part time or their impact on human capital, from that perspective. Thus, there are handful of scope for further research identified on this topic. This is a niche and creative topic for start-ups as they grow, simultaneously allowing their human capital also to grow.

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Conclusions

This research topic covers the insights of technology start-ups in India. The overall study has concluded the need for OL practices in technology companies and most importantly in start-ups. It has also evidenced that it promotes employee benefits through self-development and enhances their learning. This develops their skill and knowledge through periodic OL initiatives. I infer from this research, that learning interventions through OL initiatives need to be a continuous schedule. Typically, in a technology start-up culture the need for growth, expansion and revenue comes as a priority. These hampers learning opportunities as the focus deviates to handle profitability and business conditions. The idea of the research is to analyse, observe, and interpret the impact of OL on human capital, which are the core assets of the organisation. I adopted the best possible research methodology to bring out human interpretations. These were achieved through interactive focus group discussions. I considered qualitative research design to present employee feelings and emotions. While the research is conducted on a rigorous platform of technology start-ups in India, the topic being dealt is sensitive. I was prepared to receive unbiased responses to be able to interpret the real expressions of participants. The inference portrayed the lack of futuristic approach of start-ups in India. I felt the pressure to grow and succeed in the organisation, is more intense for stakeholders rather than on focusing on the long-term vision of the start-up. This is also contributing to the lack of security that is intrinsic on human capital.

I conclude to state, technology start-ups in India invariably provide OL opportunities to keep workforce abreast with the changing nature of business. They lose focus on building the brand and preserving the learnt knowledge. It is a good idea to create a system and organise management of knowledge while the organisation is at the initial stage of growth. It is evident through literature and experience that as technology start-ups expand there are limited time and effort spent on activities discussed above. I emphasise the need to derive plans on OL strategy and implementation before imparting it on workforce. The impact on human capital must not be self-centric, as it infers to be. In addition, the observations from discussions also detailed that it lacks collaboration among departments and stakeholders. Moreover, they mostly seek investments from global investors of organisations. Hence, futuristic vision on their sustainability in the marketplace is critical. This requires stable and periodic cascading through communication and engagement from top-down approach. It becomes a great way to pass identification of learning needs as per the industry trend and demand to employees. I see approaching this way would build brand value for the technology start-up. And in India, employer brand value is critical to attract top and qualified talents. This extends opportunities for future research to critically analyse the other factors that could affect human capital, other than the ones studied in this research. In my opinion, those could be employee welfare, punctuality or regularity to work, working model (remote or hybrid). Skills enhancement and knowledge gained through OL methodologies in technology start-up in India is an importance future research that can be conducted. I would be interested to see how KM progressively increases as start-ups grows. I observed in this study that KM has limited understanding and importance in technology start-ups in India.

Thus, I conclude my research with the findings that OL impacts human capital intrinsically. Further research is required to validate extrinsic influence and impact of OL on human capital within the technology start-up economy in India.

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Appendices

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