

Knowledge Management Challenges in Start-up Companies in China's Great Bay Area

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Abstract: China's Great Bay Area covers Hong Kong S.A.R, Macau S.A.R, Shenzhen, and many other cities in Guangdong Province and is one of China's most economically prosperous areas. Thousands of people start their businesses in this area every year. It is a well-known belief that knowledge management can help business success; however, start-up companies may face many issues in applying knowledge management to achieve their success. Therefore, this study examines the challenges and problems of knowledge management implementation in start-up companies in this region. Conducting a series of semi-structured interviews with owners of start-up companies, this study tries to find several challenges of these companies, such as a lack of knowledge management systems and expertise in the domain. To the best of our knowledge, this is the first study investigating the knowledge management challenges of start-up companies in China's Great Bay Area. It also provides significant managerial implications that can help these companies to embark on the knowledge management journey successfully.

Keywords: knowledge management practices, entrepreneurship, start-up company, small-medium size enterprises

1. Introduction

China's Great Bay Area, which encompasses two special administrative regions of Hong Kong S.A.R, Macau S.A.R, and several important cities and areas such as Shenzhen and Guangzhou in the Guangdong Province, is one of China's most economically prosperous areas. It applies regional advantages of Hong Kong S.A.R, Macau S.A.R, and Shenzhen to facilitate the development of other cities in this area. As one of the most economically developed areas globally, millions of entrepreneurs started their businesses in this region in the 1980s, when China initiated an open-door policy. Some have now become leading companies in their industries, such as Huawei, Tencent, and DJI. Table 1 shows the GDP and number of SMEs in China's Great Bay Area.

Table 1: GDP and number of SMEs in China's Great Bay Area

Cities of China's Great Bay Area	GDP 2021(100 million yuan)	Number of SMEs as of 2021
Hong Kong S.A.R,	23748.98	1,375,172
Shenzhen,	30664.85	2,410,484
Macau S.A.R,	1929.27	81,060
Zhuhai,	3881.75	303,482*
Foshan,	12156.54	961,392*
Dongguan,	10855.35	1,144,800*
Zhongshan,	3566.17	215,694
Jiangmen,	3601.28	627,848*
Huizhou,	4977.36	265,387
Zhaoqing,	2649.99	283,663

One of the ever-present concerns is that SMEs are fragile and face many challenges because of their characteristics (Durst & Edvardsson, 2012). The latest Covid-19 pandemic, by and large, has manifested such fragility. The way to survive in an increasingly uncertain environment is a vital issue for many entrepreneurs. It is widely believed that knowledge management (KM) can help an organization to be successful (Inkinen, 2016), and KM is vital for start-up companies to identify their business strategy and success (Chaston, 2012). However, the KM practices of start-up companies remain poorly understood, despite some studies have been carried out on this topic.

It can be found that some studies have investigated KM of new SMEs (Cerchione et al., 2016), KM and entrepreneurs (Maalaoui et al., 2020; Paoloni et al., 2020), or KM and entrepreneurial activities. For example, Li et al. (2020) reported that dynamic capabilities partially mediate the relationship between KM practices and entrepreneurial performance. Similarly, Shuja et al. (2020) found that KM can improve fintech start-ups' dynamic capabilities. In addition, Cardoni et al. (2018) found that the entrepreneur, acting as a knowledge broker, plays a significant role in the knowledge transfer process. Yasir et al. (2017) also argued that if people's entrepreneurial intentions for entrepreneurial behavior are more robust, their entrepreneurial knowledge can contribute more to entrepreneurial activity.

So far, the earlier scholarly works have neglected the challenges and difficulties of SMEs, especially start-up companies in terms of KM implementation. It raises a significant question about the challenges and difficulties of the start-up companies in China's Great Bay Area. How to help these start-up companies in China's Great Bay Area to embark on KM and obtain competitive advantages through KM becomes a critical issue in the context of Covid-19 prevalence. Thus, this study aims to first outline the challenges and problems of the start-up companies regarding KM initiatives, especially in China's Great Bay Area; second, this study is looking to provide some managerial implications for start-up companies to initiate their KM journey.

After introducing this study's objectives and research gaps, a research method is presented in section two. Section three shows findings and section four provides practical implications for these start-ups. Finally, this study concludes with limitations and future directions.

2. Research methods

We adopted a deliberate sampling technique (Patton, 1990) to ensure that the selected research objects are start-up companies in China's Great Bay Area. This research adopted a semi-structured interview approach as this method allows interviewers to explore deep insights from interviewees (Saunders et al., 2000). After conducting 15 interviews with the founders or chief executives (CEOs) of these companies, we conducted a deep content analysis (Duriau et al., 2016) to identify the challenges of KM implementation in these organizations. Then, managerial implications are proposed for these start-up companies to embark on KM.

3. Findings and discussion

3.1 Lack of knowledge about KM

Most of the interviewees understand the importance of knowledge in today's business development. Still, more than half of them (8) know little about KM, while others know KM differently. It is not easy for them to take advantage of KM to enhance companies' competitive advantages due to these top executives' lack of understanding of KM. For example, they seldom demonstrate KM leadership styles, so they cannot be considered the role model for KM practitioners. Their subordinates either have the chance to imitate their superior's behavior to facilitate KM for their daily work.

On the other hand, two companies' CEOs fully understand KM and are receptive to KM. Nevertheless, in one case, the CEO of CubeNest (a wireless charger provider), Mr. Zhang, mentioned: "I always support knowledge sharing activities; for example, we even informally discuss our product research and development ideas during lunch. I try to provide an open speech environment to motivate innovations".

3.2 Misperception of KM

Many individuals or SMEs are vaguely familiar with the concept when defining KM. Not only because the KM term may sound new to them, but more importantly, those who claim to know about it are talking about information management (IM). Being misjudged as IM has created new obstacles in adopting KM as they may find it as an outdated topic to pursue or event for the long run.

3.3 Lack of resources

Start-up companies are always SMEs lacking resources, such as funds, talents, and time. Some of the examined companies considered that their priority is development and growth. They have to invest such limited resources in more critical tasks rather than just focus and allocate them to KM. They also thought that KM is a more advanced managerial practice that does not match their current status. As one interviewer said, "In the next step when we have enough funds, we will consider expanding the company and carrying out KM".

On the other hand, among these 15 companies, only one company's R&D director is a KM expert with a master's degree in KM. There are no professional KM experts in these companies, bringing more difficulties to KM implementation. In addition, Mr. Zhang mentioned that "As we are a small company, everyone is extremely busy. It's challenging for us to initiate KM".

3.4 Lack of formal procedures

The start-ups are so new that their business procedures are simple and not well established yet, especially for KM. Based on our survey, none of the companies has managed their knowledge at the strategic level. Their KM strategies are not clear. Consequently, they failed to take good advantage of knowledge assets in their companies, and KM did not well support their business. The start-ups also face a higher turnover rate because employees feel unsafe in these companies, which makes these companies even harder to retain and use human capital.

3.5 Fragmented human resource management practices

Most start-ups provide training programs to their employees. Still, few encourage KM activities, such as knowledge sharing through other human resource management (HRM) practices, such as visible or invisible rewards to their employees. For example, knowledge-sharing behavior is not encouraged and rewarded. KM activities, such as knowledge sharing, are not indicators of employees' performance appraisal.

3.6 Lack of KM system

The start-ups highly depend on social instant messaging tools, such as WeChat, and WhatsApp to communicate. They don't have a KM system to support knowledge codification and personalization, which brings high risks of knowledge loss.

4. KM initiative recommendations for start-ups

Although start-ups have many challenges in initiating KM, there is still a way to embark on the KM journey to be successful. First, management teams should be aware of KM and support KM activities (Gang Liu et al., 2022) to foster a knowledge-friendly organizational culture in which knowledge sharing, learning, innovation, mutual trust, and collaboration are highly valued (Liu et al., 2021). Building a knowledge-friendly organizational culture and demonstrating KM leadership (Liu et al., 2018) don't need much monetary investment. Such practices are easier for start-ups because the number of employees is small.

Second, it is also feasible for these new companies to start knowledge-based HRM. Besides training programs, they can provide a bonus to motivate employees for KM activities, such as knowledge sharing and creation. It is also necessary to include KM activities as individual performance appraisal indicators. Third, the companies should apply information technology (IT) to facilitate KM activities. Instant messaging tools can be used for implicit knowledge sharing and free IT platforms, e.g., google drive, can be used for explicit knowledge storage and sharing. Finally, executive teams of start-ups should manage the company's intangible assets at the strategic level (Gang Liu et al., 2020) that established KM strategies can support business strategies (G. Liu et al., 2020).

5. Conclusion

This study analyzed the challenges regarding KM implementation of start-ups in China's Great Bay Area and provided applicable guidelines for these start-ups to initiate KM. Besides significant managerial implications for practitioners, several limitations deserve further investigation. First, as the primary stage of this project, this study only interviewed 15 start-ups. The generalisability of the findings may be limited. Second, the proposed recommendations are based on the work of Liu (2021) without considering the specificity of the start-ups. Therefore, for the second phase of this study, an extensive survey will be carried out. Quasi-experiment for KM initiatives will be conducted to examine the impacts of KM on the success of start-ups. Future research also can explore the implications of background characteristics of the CEOs of these start-ups on KM implementation intention and their company performance by using upper echelons theory (Hambrick & Mason, 1984). It is also interesting to know the KM implementation challenges of start-ups in other countries because KM is also different in various national contexts (G. Liu et al., 2022).

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