

INTRAPRENEURSHIP AT A STATE-OWNED ENTERPRISE IN CHINA

(An explorative and qualitative study in a state-owned enterprise in China)

A Dissertation Presented

by

Anselm A.M. Vermeulen

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ABSTRACT

INTRAPRENEURSHIP AT A STATE-OWNED ENTERPRISE IN CHINA

The purpose of the dissertation is to get a better insight into the needs of an education program related to intrapreneurship at a State-Owned Enterprise in China and based on these needs to come up with a customized education program for a specific State-Owned Enterprise in China and ultimately to improve intrapreneurial activities at conservative companies in China.

Although there are many issues related to intrapreneurship, the following were selected for the literature review: the role of foreign direct investment in SOEs, the role of mixed ownership at SOEs, the role of incentive systems at SOEs, the effect of bureaucracy at SOEs and personality characteristics and their impact on intrapreneurial activities at SOEs. A conceptual framework was made to visualise the structure and flow of this dissertation. Besides the extensive literature review about the role of foreign investment, the role of mixed ownership, the role of incentive systems at SOEs, the effects of bureaucracy at SOEs and personality characteristics and their impact on intrapreneurial activities at SOEs, a substantial part of the literature review is about intrapreneurship in general, about communication in China and about how to conduct research at a SOE. The company where both the survey and the interviews were conducted was CRRC, a major State-Owned Enterprise in China. The survey was answered by 32 people working at CRRC and the interviews were done with 8 people working at CRRC. Both the survey and the interviews gave a clear understanding for the need of an intrapreneurial mindset at the company and more specifically helped setting up an educational program to improve intrapreneurial activities at the State-Owned Enterprise.

A major constraint of this research is that the findings are limited to CRRC and to optimize the educational program for a wider use more research needs to be conducted at other State-Owned Enterprises in China as well. Another constraint is that the researcher had to select inputs to use for his research. This selection was based on relevance to the research and were specifically, current level of intrapreneurship at state-owned enterprise, ownership issues at SOE, bureaucracy at SOE, incentives and intrapreneurship at SOE ad personality characteristics and their impact on intrapreneurship at SOE. Other inputs like management and leadership styles, the role of government and other institutions, tax incentives, financial strength of company and cultural dimensions could have been considered as well and could be subject to future research. This dissertation can be used by any conservative company in China to engage employees and improve intrapreneurship in general and can form a basis for a more specific and customized program later.

Keywords: Intrapreneurship, Corporate Entrepreneurship, State Owned Enterprise, China, Educational Program

LIST OF ABBREVIATIONS

SOE =	State owned enterprise
SOEs =	State owned enterprises
FDI =	Foreign direct investment
CRRC =	China Railway Rolling Stock Corporation
VUCA =	Volatility uncertainty complexity ambiguity
SAMR =	State Administration for Market Regulation

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CHAPTER 1

INTRODUCTION

After the reform and opening-up of China in 1978, the Communist party of China carried out gradual and orderly reform measures and has now emerged as a rapidly growing manufacturing base and exporting country. These economic reforms had profound implications for state-owned enterprises (from here after SOEs). Before the reforms SOEs were the dominant form of enterprise in China, but over the last two decades the importance of SOEs has declined rapidly. The share of output produced by SOEs decreased from 78% in 1978 to 28% in 1999. Moreover, from the late 1990s until 2008 the SOE sector had showed losses (Girma et al., 2009). Still, the livelihoods of hundreds of millions of people in China depend to a large extent on the success of SOEs. Therefore, reforming SOEs to increase efficiency and promote entrepreneurship and innovation is vitally important for SOEs to become more competitive and sustainable in the domestic and international markets.

According to Li (2009): “China’s transition from being a command-and-control economy to an economy that allows marketization and privatization has been a gradual, incremental and experimental process”.

The problem with the Chinese Constitution was that it did not recognize the legitimacy of private companies until 1988 (Li, 2009). Since 1988 private businesses have achieved unprecedented growth and surpassed SOEs in economic activity (He, 2009). All this resulted in great challenges for Chinese SOEs, when compared with private businesses.

1.1 Motivation for the study

With the world becoming increasingly complicated day by day, organizations must adapt to changes with increasing agility. The aim of this research is trifold. Firstly, to explore

transforming conservative, often highly bureaucratic SOEs in China using one particularly transformational method - intrapreneurship. Intrapreneurship is the process of fostering entrepreneurial spirit among the employees of an enterprise and increase the levels of innovation and creativity by this method of motivation (Investopedia, 2021). Secondly, to discuss what contributions intrapreneurship might contribute to conservative SOEs in China and finally, to explore how to educate and facilitate SOEs in China to become more entrepreneurial. The ultimate motivation is to support SOEs in China to become more intrapreneurial.

1.2 The importance of intrapreneurship at SOEs in China

SOEs would benefit from becoming more intrapreneurial as this is linked to performance of both company and employees. Moreover, directly impacting the state of the economy in China.

1.3 Problem statement and research questions

As SOEs in China are conservative companies and therefore somewhat less innovative it is obvious that SOEs in China want to become more intrapreneurial.

The research questions are:

- How to improve Intrapreneurship at an SOE in China?
- What does a suitable educational program to promote and improve intrapreneurship at an SOE in China look like?

Objectives

The main objective of the study is to explore the level of intrapreneurship at an SOE in China and to develop an educational program for this specific SOE to become more intrapreneurial. Another more general objective is to make conservative companies in China more intrapreneurial and therefore improve the national economy of China.

CHAPTER 2

LITERATURE REVIEW

The literature review is focused on nine areas that influence intrapreneurship. The first part of this literature review is about intrapreneurship and gives an overview of definitions and explains the importance of intrapreneurship in general. This to make a clear distinction between what is intrapreneurship and why it is so important at SOEs in China.

The second part of this literature review is about the contribution of intrapreneurship to firms in China, and earlier research on the impact of intrapreneurship on company performance in China and demonstrates that intrapreneurship is needed to improve companies and employees at SOEs in China.

The third part of this literature review is about intrapreneurship in China in general and analyses China's recent transformation from being a command-and-control economy to an economy that allows marketization and privatization. This to illustrate that the economy in China is changing fast and intrapreneurial activities are needed to continue economic growth.

The fourth part is about the role of Foreign Direct Investment in SOEs, because FDI affects innovative and intrapreneurial activity at SOEs in China. FDI is an important topic in the economy of China these days and opinions of both government and management of companies might differ. Therefore, it is important to include this in this study.

The fifth part is about the role of mixed ownership of SOEs because there is a positive correlation between the increase of the share-holding ratio of institutional investors and the extent of levels of innovation and intrapreneurship. Mixed ownership is another way to create a positive impact on SOEs and therefore is also included in this study.

The sixth part is about the role of incentive systems in SOEs because it has been proven that incentives increase productivity and more efficient resource allocation at SOEs in China. As employees play an essential role in the process of intrapreneurship, they should be incentivized adequately so that both SOE and employees' benefit.

Part seven is about bureaucracy at SOEs in China and its effect on intrapreneurship because it is commonly known that bureaucracy is a barrier for intrapreneurship and innovation. The level of bureaucracy at SOEs in China might differ because this level of bureaucracy can be positive or negative it is included in this study.

Part eight is about personality characteristics of the entrepreneur and their impact on intrapreneurship, as certain personality characteristics are essential for their enterprise activities and performance. As employees at SOEs have different personality characteristics, an intrapreneurial program must be customized and is therefore a relevant part of this study.

Part nine is about the organization structure of SOEs and the current situation of SOEs in China and in particular the reforms of the state sector in recent years. This part of the literature review is included to demonstrate that the role of government in SOEs is substantial but also subject to changes.

Lastly in this chapter the conclusion of the literature review and the conceptual framework in which the researcher visualizes the structure and flow of this dissertation.

2.1 Corporate entrepreneurship - intrapreneurship

Intrapreneurship is generally assumed as a broad field of research that includes different areas such as innovativeness and pro-activeness, but there is little agreement about its definition. Some examples from various researchers: Intrapreneurship is defined as a process of corporate renewal in established firms. The goal of this process is to increase profitability, to enable strategic

renewal and to foster innovativeness (Fisher, 2011). Other researchers describe the concept as bottom-up, proactive work-related activities of individual employees who could turn ideas into business success (Moriano et al., 2014; Pinchot, 1987). Berzin et al. (2016) described intrapreneurship as “The process of entrepreneurship within an existing organizational structure and speaks of intentions and behaviors that are distinct from traditional practice’. Moreover, there is also no consensus about the dimensions of intrapreneurship or its determinants and conditions (Farrukh et al., 2017; Urban and Wood, 2017). The conditions in which intrapreneurship is facilitated could serve as a basis for developing business practices, such as development and rewards, which would stimulate intrapreneurial behaviour (Schmelter et al., 2010).

The concept of intrapreneurship has effect at many different organizational levels (individual, team and organizational) (Antocic and Hisrich, 2003; Hayton and Kelley, 2006). Behaviours of the intrapreneurial employees generate initiatives that can lift and impact the performance of teams and (Fellnhofer et al., 2017; Kollmann et al., 2017) and organizations (Maritz, 2010).

All this is asking for a kind of definition that also emphasizes differences between the organizational aspects and individual aspects of intrapreneurship. A proposal for a definition like this was made by Neessen et al. (2018). Intrapreneurship is a process whereby employees recognize and exploit opportunities by being innovative, proactive and by taking risks, in order for the organization to create new products, processes and services, initiate self-renewal or venture new businesses to enhance the competitiveness and performance of the organization.

Intrapreneurship has gained popularity. Especially small and medium enterprises are often thought of as the epicenter of entrepreneurship. However, also established, conservative

companies have potential for this development. Therefore, leaders of companies are looking for employees with intrapreneurial skills.

This relatively new concept of intrapreneurship is a powerful driver for business growth and conservative companies in China. Therefore, they should encourage employees to be intrapreneurial.

Intrapreneurs do not start a new business in a competitive market, rather they are internal entrepreneurs who work within the structures of an established company.

Encouraging intrapreneurship is essential to the development of a company. However, there are both advantages and disadvantages of fostering intrapreneurship at a company for both the company and the employees.

The main advantage of taking an intrapreneurial role for the employee is that the financial risk is eliminated and there is potential reward in the future. The main disadvantages for the employee include the risk of losing face or hurting a reputation if the idea goes wrong.

From the company's point of view, the advantages and disadvantages are different. The big advantage of intrapreneurship for the company is that it can lead to offering new or improved products or services. Intrapreneurship can also include anything that generates profit or improves the overall solution for the customer which should in turn lead to profit. Companies that promote intrapreneurship understand the ability that their employees have, and they encourage them to develop their ability by finding new innovations into what the company produces and how it operates. The main disadvantage of intrapreneurship for the company is that when the intrapreneurial project meets scepticism and disagreement by the management the intrapreneur may be unable to solve these issues, this can cause conflict and/or division within the company.

(Hiwarkar, 2019; Davis, 1999)

2.2 Contributions of intrapreneurship

Since the reform of the economic system, to enhance the vitality of SOEs, the CCP has adopted a series of policy, economic and administrative measures to enable the CCP to play the role of the main body of the national economy. The establishment of intrapreneurship has achieved some success like autonomy, but there are still problems in some aspects such as learning organization in SOEs and freedom of employees.

One of the critical contributions of intrapreneurship is the performance of the organization. The improvement of performance can be achieved by both formal and informal intrapreneurship. Intrapreneurship creates new knowledge and understandings that can be used as a link to bridge existing performance and new competencies. An intrapreneurial mindset encourages organizational learning, which is defined as "continuous learning and use of knowledge, which can serve as a critical key to success for facilitating individual, team, and organizational learning leading to continuous improvement and innovation in business operations" (Harrim, 2008; Watkins & Marsick, 1996). It creates foundations for building innovation which "has a significant and positive relationship with profitability, growth and shareholders' wealth" (Alipour et al., 2011). Evidence from China also provides support for such theories. The research among Chinese SMEs shows that "the intrapreneurship was found to be positively related to growth" (Antoncic et al., 2018).

Another contribution of intrapreneurship is employee satisfaction. Employee satisfaction is employees' satisfaction with their jobs or the degree to which employees like their jobs (Spector, 1997). Employee satisfaction is usually considered an essential element of organizational management and has direct or indirect connections to company operations. According to the research of Antoncic & Antoncic (2011), the results show that there is a

positive association between employee satisfaction and intrapreneurship. The factor of employee satisfaction is determined by several distinctive dimensions like general satisfaction, employee relationships, remuneration, benefits, organizational culture, and employee loyalty. Research supports the claim of how intrapreneurship could help companies to improve employee satisfaction in various dimensions. A possible explanation of such an increase in employee satisfaction is that intrapreneurship could influence the revolutionary progress in enterprises' structure. Intrapreneurship within the enterprises suggests a structural innovation of changing the hierarchical structure into a flatter structure. This could be particularly significant in the Chinese enterprise environment where hierarchical structures are still quite common within various enterprises. Conclusively, changing enterprise structures as an intrapreneurship act could benefit a firm's sustainability in the Chinese business environment by positively affecting firm operations through increasing employee satisfaction.

More research has shown that there are additional aspects of intrapreneurship outcomes that may or may not intersect with the contributions discussed above. According to the measurements provided by Heinonen & Korvela (2003), all the three variables of appreciation of work and job satisfaction, perceived customer satisfaction, and external satisfaction in work demonstrate a larger scale than the critical value, which means intrapreneurship is likely to have potential outcomes of all three variables. This research shows the potential of how intrapreneurship could help with multiple aspects of company performance.

2.3 Intrapreneurship in China

Popularized by Steve Jobs in 1985, the term “Intrapreneurship” has regained worldwide attention recently. Entrepreneurship in well-established, middle-sized to large companies is usually termed as intrapreneurship. As a result, it could be concluded that the formation of

intrapreneurship is based on the existence of entrepreneurship. According to Li (2009), “China’s transition from being a command-and-control economy to an economy that allows marketization and privatization have been a gradual, incremental, and experimental process”. However, the problem is that the Chinese constitution did not recognize the legitimacy of private companies until 1988, though personal owned businesses had flourished before (Li, 2009). Since then, private business has achieved unprecedented growth and surpassed a myriad of SOEs (He, 2009). Compared with private businesses, it is often far harder for SOEs to advocate and execute intrapreneurial behaviors. Traditional beliefs and practices commonly adopted by these SOEs often hinder the cultivation of intrapreneurship. Lack of cross-culture interactions, a deficiency of incentives for risk-taking behaviors, and difficulty selecting appropriate candidates as intrapreneurs are urgent problems that the majority of Chinese SOEs must confront in face of intrapreneurship.

There was little competition in Chinese SOEs, so that they did not have huge pressure for supporting intrapreneurship. Indeed, in China, from 2001 to 2012, the top 10 enterprises were all state-owned, such as China National Petroleum Corporation and China Mobile Communications Corporation (Cendrowski, 2015). But in contrast with SOEs, private businesses have much more motivation to support entrepreneurship. Indeed, this is true. But the case is that nowadays SOEs no longer limit themselves in the field of entrepreneurship but instead start to seek intrapreneurship. Paul Coyle, director of Entrepreneurial Mindset Network, asserts that adopting intrapreneurship is crucial to the long-term financial sustainability of companies (Kavensky, 2018). He also points out that if certain companies cannot keep up with the pace of the rest, they will soon get out of business. The current situation for SOEs is that though they have a rising consciousness of adopting intrapreneurship, they face a series of obstacles.

A simple organizational structure discourages SOEs to pursue intrapreneurship. Each department works separately and opportunities to work interdisciplinary are rare. Such an arrangement deprives communal learning and prevents employees from forming a comprehensive understanding of the company and the markets it serves. Though from a company's perspective, this ensures high efficiency and high-quality work, since employees specialize in their field, it also implicitly discourages the acquisition of new knowledge about the market and technological advancement by employees, consequently denying them the chance to exercise business acumen which is pivotal for intrapreneurs. External factors such as the government's interference also led to the failure of executing intrapreneurship in SOEs. It is well-known that the communist party always has direct control over SOEs. What's more, after Xi took the presidency, he dramatically strengthened the party's role in the SOEs (McGregor, 2019). It's hard for SOEs to freely follow the free-market economy structure and promote intrapreneurship under the control of the Chinese government.

Both monetary and non-monetary incentives are necessary to facilitate intrapreneurship in Chinese SOEs. High power distance exists in most Chinese companies. In such an environment, employees tend to let their top management make decisions and ask for permission before they do anything. Companies will appreciate employees' subordination, but it demotivates employees to implement autonomy, and increases learned helplessness, which is adverse for the development of intrapreneurship. As an old saying goes, when one gets a job in Chinese SOEs, it is equivalent to getting a "golden bowl". Though it is only a metaphor, it's a truth that employees in SOEs receive good salaries, profit sharing, and benefits under the support of the Chinese government. Their good treatment can be a disincentive and barrier for intrapreneurship, as it results in complacency. Huawei, a Chinese private enterprise, is famous for its "wolf business

culture” while ZTE, a SOE and one of the three giants in the communication industry, is notoriously known for its passive “ox culture” (Lam, 2017). In other words, Huawei employees spend lots of effort winning projects while ZTE staff are less stressed in gaining business. This is due to the difference in the corporate system. Given the current situations of Chinese SOEs, the old welfare system should be modified, and new strategies should be made to foster an intrapreneurial spirit. China Daily reported that “an incentive policy has been released so that eligible technological SOEs could grant share and dividend incentives to their employees” (Hu, 2017). The result of this policy has not been clear since intrapreneurship is a relatively long process. But one thing is clear that this policy would provide and encourage a more intrapreneurial spirit in Chinese SOEs.

It is always challenging to single out intrapreneurs from existing employees. Identifying appropriate persons with the right skills is essential to promote intrapreneurship in SOEs. Companies often live under the misconception that current outstanding employees will also be high-performance intrapreneurs. However, the reality is that 70% of successful entrepreneurs got their business idea while working for previous employers (Govindarajan & Desai, 2014). Intelligent workers will choose to leave when they realize that their company can no longer support their intrapreneurial work. In case to avoid such kind of loss, many Chinese SOEs offer incubation centers in their organization and have a strict rule on selecting their intrapreneurial team. In 2018, as a traditional SOE, Beijing BBEF Electronics Group Co Ltd announced the establishment of a company for technological incubation and in 2012 (Yu, 2018) GE set up its China Technological Centers in Chengdu, Xian, and Harbin. Besides avoiding brain drain, the establishment of incubators also lessens potential intrapreneurs’ stress of failure. Chinese have a high sensitivity toward failure, since they view it as a blemish on their reputation (Vorhauser-

Smith, 2012). Being afraid of losing face is one of the biggest concerns for intrapreneurs in China. Under the protection of incubators, companies take the burden of failure so that intrapreneurs can fully exercise their capacities and pursue their mission. Also, it is imperative to ensure that intrapreneurs have a high level of integrity and company loyalty, excellent leadership, and interpersonal skills. Incubators are the perfect places for companies to select their intrapreneurial team, since incubators have all kinds of resources which are necessary for the success of intrapreneurship. Besides ensuring selecting a good team, because SOEs are less sensitive than private enterprises to capital utilization, stricter rules on monitoring of intrapreneurial work should be put in place. For instance, China Telecom has a special team which is paid to monitor the finances and financial risk associated with intrapreneurial projects to avoid future disaster (Shah et al., 2015). Intrapreneurial strategy and planning are guided by an expert team to make sure good progress is made.

Relying on diverse cultures to create more opportunities or transform current systems to generate a more intrapreneurial spirit, or refine selection processes, these are all means which current Chinese SOEs can think about when considering becoming more intrapreneurial.

Though it is well acknowledged that SOEs begin to recognize the importance of intrapreneurship, they need a lot more practice and experience. According to Professor Wei, Professor of Chinese Business and Economics and Professor of Finance and Economics at Columbia Business School, the policy reformation and embrace of globalization are institutional changes that boost China's economic growth and development (Wei et al., n.d.). Therefore, intrapreneurship and innovation are highly encouraged by the Chinese government; at the same time, there are more new enterprises in the market. The Number of Registered Firms report in China (1995-2014) stated the annual growth rate for private enterprise is 11%, and the annual

growth rate for SOEs is negative 5% (Wei et al., n.d.). What does this number indicate? If intrapreneurship is supported, why is the number of SOEs dropping? The policy of “Grasping the Large and Letting Go of The Small” (Wei et al., n.d.) is a governmental strategy. The government is privatizing small SOEs and focusing on developing big SOEs. Thus, the numbers present that consolidating SOEs is essential for Chinese developmental strategy.

Intrapreneurship is vital for such a big SOE development. However, it is not easy for SOEs to reform and innovate. If intrapreneurship is measured through the growth of patents, then the private enterprises are more innovative because the reports show they have more patents, and they also tend to invest more (Wei et al., n.d.). What are the difficulties of intrapreneurship in Chinese SOEs? Interviews with CEOs from China show that most SOEs recognized the importance of innovation. The research found that most enterprises adopted incremental innovation instead of radical innovation because radical innovation could be too risky. Even though incremental innovation is implanted, intrapreneurship’s success rate is relatively low. The research also highlights the urgent part of intrapreneurship in SOEs, which is managerial innovation (Kang, 2020).

There are some general suggestions to increase the level of intrapreneurship and innovation in SOEs. The first is to establish an efficient intrapreneurship and innovation system with the government (Kang, 2020). The system will provide standards and requirements that lead employees to imagine and create new things. Moreover, government involvement can provide extra resources and channels for the intrapreneur. The second is the learn and adapt to new management concepts (Jiang, 2015). Future enterprises need professional entrepreneurs. Therefore, the entrepreneur and the enterprises are closely linked. The people who run and make important decisions need to be intrapreneurial. The third is the innovation of management

organization (Jiang, 2015). SOEs are usually large and complicated, and they have many different departments. But not all the departments are necessary. Therefore, intrapreneurship and innovation could happen by re-organizing departments to make management more efficient. Finally, is the innovation of the future development strategy (Jiang, 2015). Improve and innovate new technologies and products, so the company will be competitive in the market.

2.3.1. Government policies related to intrapreneurship and innovation in China

In general, the Chinese government is promoting entrepreneurship and innovation strongly to achieve economic growth. This is clearly shown in several policies coming from the Central Government.

The first policy related to this is the 14th five-year plan (see English short version in appendix).

In the 5-year plan the focus of innovation is on nine fields:

1. Quantum information and computing
2. Brain science
3. Semiconductors
4. Seed industry
5. Genetic research
6. Regenerative medicine
7. Biotechnology
8. Clinical medicine and health
9. Deep space, deep sea and polar exploration

Other important themes relevant for entrepreneurship and innovation are:

- Upholding the central role of innovation in the modernization of China.

- Promoting scientific and technological self-reliance as a strategic pillar for the development of China.
- Promoting new industries, new energy, modern services, new infrastructure, and a digital China.
- Encouraging Research and Development spending and introduce related tax incentives.
- Enhancing intellectual property protection.
- Become a global innovation leader in 2035.

For the company subject in this dissertation, it is also important to mention that one of the industries policies of the 14th five-year plan is to develop a new generation of IT, biotechnology, new energy, new materials, high end equipment, new energy vehicle, aerospace, marine equipment, and other industries.

The year 2035 is considered an important year for the development of China. This year is also clearly mentioned in another policy initiated by the central government relevant for entrepreneurship and innovation: Made in China 2025 (see appendix Made in China 2025). This policy is a long-term view from the central government on how to modernise the economy and society in China.

Among many issues relevant for this dissertation is that the central government clearly mentions innovation capability in national manufacturing. Specifically, that they want to enable enterprises to play a leading role and universities and research institutions a supporting role to establish several innovation coalitions and promote collaborative innovation involving government, production, education, research, and operations.

Another specific policy is related to intellectual property, the government wants to encourage and support enterprises to compete with intellectual property, cultivate enterprises

with globally competitive intellectual property and form coalitions to promote collaborative use of intellectual property among domestic enterprises.

A third specific part of this Made in China 2025 document is related to quality and branding. In general, it is the intention of the central government to increase the overall quality of industries. This to increase added value in manufacturing. Related to branding the central government wants certain brands to internationalise to establish the image of Chinese brands.

A fourth specific part of the Made in China document is about Advanced Rail Transportation Equipment. Application will be made of new materials, technology and craft focusing on systematic security, energy savings and environmental protection, and digital technology to develop advanced and reliable products and lightweight, modularized products. Furthermore, the central government wants to develop a next generation green, intelligent, high speed and heavy load rail transportation equipment system to provide customers with a total solution focusing on system life cycle. And the central government wants to build the world's leading rail transportation industry system.

A fifth and final part of the Made in China 2025 document is about strategic support and supply in general. Relevant for this dissertation is that the central government wants to deepen reforms at state owned enterprises by perfecting corporation governance structures and developing the mixed ownership economy by further dividing industry monopolies and cancelling unreasonable restrictions on the private economy. Also relevant for this dissertation is that the central government wants to set up incentive mechanisms and increase recognition and rewards for excellent talents.

A third and final policy document coming from the central government relevant for this dissertation is the One Belt One Road initiative. This initiative is an economic development and

commercial project that focuses on improving connectivity and cooperation among multiple countries spread across continents of Asia, Africa, and Europe. Initially the Belt Road Initiative was announced by President Xi in 2013. It involves building a big network of roadways, railways, maritime ports, power grids, oil and gas pipelines and other infrastructure projects. Although many different goals are mentioned by the central government, consensus is that the main goal of this initiative is to boost domestic economic growth in China. The Belt Road Initiative will aim not only to boost domestic economic growth but also enhance the reputation and branding of the several industries and companies mentioned in the Made in China 2025 document and enhance the reputation of China in general in the belt road countries.

2.4 The role of FDI in SOEs

Intrapreneurship and innovation allow firms to develop a new process to operate more efficiently and develop new products that can expand sales and improve market performance. Firstly, we will analyze how foreign direct investment (FDI) affects SOEs' intrapreneurial and innovative activity. The influx of foreign capital can relieve SOEs' financial constraints that may hinder innovation, and it may bring in new technology that improve process and product innovation. Evidence shows that SOEs with some foreign capital participations are more likely to engage in product innovation, however, the relationship between foreign capital participation and innovation is concave. It means the innovation of the company will increase to a critical value at the beginning, but after that, the marginal effect of innovation will decline. That is because generally, multinationals undertake their innovative activity in the headquarters, rather than in China.

Therefore, gradually, further increase in the foreign ownership share may lead to innovation activity being relocated to the parent company abroad. However, to some SOEs that

are focusing on export, human capital investment, and prior innovation R&D, the influx of FDI will lead to a positive effect on companies' innovation. By contrast, SOEs with a higher level of absorptive capacity may be “neck-and-neck” with foreign multinationals and their innovation activity is stimulated by FDI (Girma et al., 2009). From the effect of FDI on SOEs, we can conclude that foreign capital brings capital and technology to SOEs, but this does not automatically encourage intrapreneurship and innovation in Chinese companies that are structured for centrally directed operation which is neutral to or even actively discourages a culture of decentralized innovation. Therefore, SOEs need to go through enterprise structure reform to improve talent discovery mechanisms, intrapreneurial and innovative activity, and core competitiveness.

Innovation is the power of economic development, while intrapreneurship is the foundation of innovative activities. Intrapreneurs develop new products and create efficiencies through the reorganization of different kinds of resources, which is a process of creative destruction that stimulates the development of society. Although intrapreneurship is still alive today, it is always bonded with bureaucratism. The growing government and big business bureaucracy will be a threat to kill intrapreneurship, and then strangle the dynamic development of the market economy. Especially for SOEs enterprises, since they are more easily constrained by the government culture, greater efforts are needed to stimulate SOE's intrapreneurship and vitality. Traditionally, affected by the previously planned market, SOEs found it easier to rely on the government to drive innovation, but in today's market economy, to achieve sustainable development, the SOE needs to rely on its own intrapreneurship (Qian, 2016). The reform of SOE mixed ownership is the most important path to promote innovation and intrapreneurship, based on the idea of streamlining administration and delegating power.

2.5 The role of mixed ownership in SOEs

Mixed ownership reform of SOEs - introducing non-state-owned shareholders and their appointed executives - not only impacts the ownership structure of enterprises but also affects the allocation of control rights. Since the interest appeals and risk preferences of the non-state-owned shareholders are different, this reform is going to have an impact on the original innovation strategy.

Based on the research analysis of Chun Ling Li and her team, the empirical results found a significant positive correlation between the increase of the shareholding ratio of institutional investors and the extent of investment into exploratory innovation, especially in SOEs controlled by the central government or in competitive industries. To a large extent, this promotion is achieved by improving the proportion of executives with a professional R&D background in SOEs (Li et al., 2020).

The core problem that needs to be solved in the mixed-ownership reform of SOEs is “insider control under the absence of owner”. Because of the absence of owners and lack of effective supervision, the few insiders, who control SOEs, become a typical example of what Friedman called “spending other people’s money to do other people’s business’ (Zheng, 2020). This absence of owner does not apply to the market mechanism into the enterprise but emphasizes the concept of “state-owned”, which restrains the enterprise’s internal motivation and market vitality, and leads to bureaucratism. In fact, in the past 40 years, SOE reform has been actively exploring how to solve the problem of the “absence of owners”. From the first stage of enterprise internal capital socialization to the second stage of SOEs listed and capital socialization in the whole society, are both in line with the above idea. However, although these

two stages introduced external capital into SOEs, compared with the private capital of the same scale industry, the efficiency of SOEs is still lower (Zheng, 2020).

Therefore, the development of SOEs cannot simply rely on the inflow of capital, and the socialization of capital. It is more important to transform the operating mechanism and improve the corporate management system to have effective supervision, and make the SOEs become a real market player, thus stimulate innovation activities through the market incentives and intrapreneurship.

2.6 The role of incentive systems in SOEs

After the reform and opening-up in 1978, Chinese Communist Party carried out gradual and orderly reform measures on SOEs. To build a modern enterprise system and a market-oriented operation mechanism, as well as cultivating outstanding entrepreneurs, intrapreneurship has been widely applied to the reform. For SOEs, intrapreneurship is mainly reflected in autonomy, independence, human resource management and establishment of learning organizations.

During the planned economy, the government provided SOEs with raw materials and formulated unified production plans. The profits obtained by the enterprise are uniformly handed over to the state, and the final products are also distributed by the state, so the enterprise has no rights in production and management. In the initial stage, the reform of SOEs is mainly reflected in enhancing the autonomy and independence of enterprises. From 1978 to 1983, enterprises were encouraged to complete their plans and increase production and income by expanding their autonomy in management and increasing SOEs' profits. Through this stage of reform, enterprises begin to become independent. In case intrapreneurs have no ownership or control over the company to some extent, it may cause them to miss out on market opportunities. The purpose of

expanding the autonomy of SOEs is to improve the production and management efficiency and enhance the vitality. “Through the government’s granting of more managerial autonomy and introduction of reform measures, it is demonstrated that the SOEs have recorded significant success, and the strengthening of state workers’ incentives has heightened productivity” (Hong, 2014).

Labor productivity, which had risen by 6.1% in 1991 relative to the previous year, rose by 19.5% in 1992. The improvement of labor productivity of workers in incentive mechanism has an obvious promoting effect. From the data, industrial output value owned by the whole people increased by 3.7% in 1989 compared with the previous year and was 2.9% in 1990. This indicates that after the expansion of enterprise autonomy, the resource allocation efficiency of the state-owned industrial sector has increased to a certain extent.

Intrapreneurship is closely related to the enthusiasm and efficiency of inspiring employees. On the one hand, the reform focuses on the incentive system for employees. According to Özsungur (2019), “individuals with high levels of work engagement are expected to have high levels of success and intrapreneurship levels. Studies have shown that high level of work engagement strengthens proactive and entrepreneurial behaviors” (Gawke et al., 2017; Hahn et al., 2012; Parker et al., 2006). This shows that allowing employees to effectively participate in intrapreneurship is very important.

Also, different from the traditional salary system, the incentive mechanism of the reform includes the positive evaluation of innovation activities, the incentive policy for innovation, and the tolerant attitude towards the failure of new undertakings to keep the intrapreneurial and innovative passion of the employees in the enterprise. In the past, jobs at SOEs were stable, unemployment was low and the wage gap between employees was small. It is obvious that such

a system is seriously out of step with the market salary incentive, so employees lack the ability to take risks and innovate, and enterprises lack competitiveness in the market. Afterwards, SOEs should formulate a salary system in accordance with the technical requirements and work intensity of their employees. The establishment of a fixed wage plus a floating wage system, stimulated and affirmed the enthusiasm of the work of employees. An area where intrapreneurship is still lacking in SOEs is giving the employees freedom to experiment. The leadership should give them the opportunity to practice and provide ample personal time. Only when sufficient conditions are provided for them can intrapreneurial activities be carried out within enterprises more effectively. Giving executives, especially managers of departments with high demand for innovation, appropriate decision-making power is conducive to stimulating employees' enthusiasm for innovation and promoting the formation of intrapreneurial teams (Chakrabarty, 2021).

2.7 Bureaucracy in SOEs and its effect on intrapreneurship

Intrapreneurship requires the identification of information and the perception of opportunities to be extremely rapid, and the traditional bureaucratic organization system in the SOEs obviously cannot adapt to this change. Bureaucracy is defined as a system of administration, red-tape, and proliferation ([merriam-webster.com/dictionary/bureaucracy](https://www.merriam-webster.com/dictionary/bureaucracy)). One of the most obvious problems of bureaucracy is that there are too many unnecessary meetings that require a lot of human resources. Constant meetings do not serve the purpose of learning from each other. Besides ineffective meetings there are other bureaucratic constraints for intrapreneurship at SOEs, such as lengthy procedures in decision making, lack of transparency and lack of employee empowerment because of hierarchical management structures (Reeves et al., 2020).

2.8 Personality characteristics' impact on intrapreneurship

After discussing how crucial intrapreneurship could be to companies' performance, a corresponding question naturally arises – what characteristics contribute to intrapreneurship? Personality characteristics of the entrepreneurs are essential for their enterprise activities and performance (Antoncic, 2012). "Personality characteristics may be valuable for the acquisition of knowledge, skills, development of capabilities, selection between choices, the advancement of activities, and the results attained by a person and their enterprise" (Antoncic et al., 2018). An entrepreneur, or intrapreneur, is expected to be innovative and creative. One way of looking at this is through psychological models. For example, the big five personality factors can be important for the manifestation of entrepreneurship. As the findings of studies indicate, the openness personality factor may be the most important of the five factors for differentiating real-life entrepreneurs from other people (Antoncic et al., 2014).

People who score higher than other people in personality traits of openness, that is, those who can be described as creative, imaginative, philosophical, intellectual, complex, and deep, tend to have a greater probability of becoming successful entrepreneurs or intrapreneurs than other people. Organizational elements could also benefit the development of intrapreneurship within companies. Organizational elements that can contribute to intrapreneurship are open communication, formal control, a thorough analysis of the environment, organizational support, organizational values, and cooperation via strategic alliances (Antoncic, 2008). These elements could be developed in enterprises of different sizes. However, in small and medium-sized enterprises, the development of intrapreneurship and organizational factors can still depend on key decision-makers - namely entrepreneurs and intrapreneurs, since they are the ones who generally perform the role of managing the company.

Another interesting aspect of intrapreneurship in China is how “guanxi”, the socially embedded personal relationships, could enable managers to initiate specific types of intrapreneurship initiatives in their organizations. According to Zhang et al. (2020), it is revealed how "the women managers draw on three forms of guanxi (external, within and back-stage) to display intrapreneurial actions as well as the firm-specific factors that constitute important determinants of women intrapreneurship". One of the implications of such findings could be that intrapreneurs in China, especially female intrapreneurs, still need support from different dimensions, or they would not depend so much on their personal guanxi.

2.9 SOEs in China

Since the WWII, SOEs have played an important role in China’s economy and business world. To better understand the characteristics of SOEs, one should look at the big picture of China’s economy first.

Nowadays, there are six types of business in China. The first one is called wholly foreign-owned enterprise, which is exclusively established by foreign investors without any direct connection to a Chinese investor. The second one is called joint venture, which refers to the companies that are registered in China and controlled by both China and foreign parties. The third one is called representative office, which has very limited capability as it is only representing a foreign company in China. The most common type of business in China is called private enterprise, which is registered by individuals. The presence of private enterprises successfully transited China’s economy from “inefficient state-controlled monopolies and government handouts to a high-growth, vibrant modern economy” (Slater, 2021). Another kind of business, similar to the private enterprise, is called sole trader, which refers to relatively small

companies owned by individuals. The last type is the main subject of this paper, the SOEs, which are owned and dominated by the government.

Before the reform in 1980s, most of the enterprises in China were state-owned. After the reform, the number of private enterprises drastically increased while SOEs decreased sharply (Slater, 2021). However, SOEs still constitute an important component in China's economy today. In 2018, the employees in SOEs still constituted 15.8% of the total labor force, which offered great support to China's economy (www.gov.cn, 2021).

SOEs in China are organized in the following way: all SOEs are under the supervision of the Central Government. Under the Central Government large SOEs, 117 of them, are under the supervision of the State Asset Supervision and Administration Commission which was established in 2003. Local SOEs; around 20.00 of them, are under the supervision of local SASACs which report to Local Governments (en.sasac.gov.cn, 2021). These 117 centrally supervised SOEs are what China calls in seven strategic factors, these are: defence, electricity generation and distribution, petroleum and petrochemicals, tele-communications, coal, civil aviation, and waterway transport.

The SASAC is a ministerial level organization directly subordinated to the State Council. The party committee of the SASAC performs the responsibilities mandated by the Central committee of the Chinese Communist Party.

The eight tasks of the SASAC are:

- Supervising and managing the state-owned assets of enterprises under the supervision of the Central Government and enhancing the state-owned assets.
- Shouldering the responsibility of supervising the preservation and increment of the value of the state-owned assets of the supervised enterprises. It is also responsible for the

management of wages and remuneration of the supervised enterprises and formulates policies regulating the income distribution of the top executives of the supervised enterprises and organizes implementation of the policies.

- Guiding and pushing forward the reform and restructuring of SOEs, advancing the establishment of modern enterprise systems in SOEs, improving corporate governance, and propelling strategic adjustment of the layout of the state economy.
- Appointing and removing top executives of the supervised enterprises and evaluating their performances through legal procedures and either granting rewards or inflicting punishments based on performance.
- Organising the handover of state-owned capital gains to the State and working out the state-owned capital operational budget and final account and their implementation in accordance with related regulations.
- Urging the supervised enterprises to carry out the guiding principles, policies, related laws and regulations and standards for safety production and inspecting the results in accordance with the responsibilities as investor.
- Working out draft laws and regulations on the management of the SOEs assets, establishing related rules and regulations and directing and supervising the management work of local state-owned assets according to law.
- Undertaking other tasks assigned by the State Council.

(en.sasac.gov.cn, 2021)

Lots of information about SOEs in China has been integrated in this dissertation, the following will provide a better insight about the current affairs of SOEs in China in general and in particular the reforms of the state sector in China in recent years.

Additional information on the SASAC website sets forth the “Policies, Laws & Regulations: Guidelines to the State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities.” These Guidelines are intended to “give impetus” to the centrally – supervised SOEs (i.e., the CSOEs), the largest state-owned enterprises in China’s key industries, “to earnestly fulfil corporate social responsibilities (CSR)...for promoting the socialist harmonious society and... thoroughly implement(ing) China’s new ideas about economic development, social progress, and environmental protection. While SASAC’s guidelines for CSOEs explicitly relate to the large centrally managed SOEs, SASAC retains authority for the supervision of China’s local SOEs. According to SASAC’s mandate, “SASAC is responsible for the fundamental management of the state-owned assets of enterprises, works out draft laws and regulations on the management of the state-owned assets, establishes related rules and regulations and directs and supervises the management work of local state-owned assets according to law.” In practice, it is likely that local governments that exercise direct day-to-day control over local SOEs, at least in principle, are subject to the corporate social responsibility principles set forth by the central government.

A substantial number of SOEs in China are operating outside the industrial sector in fields ranging from banking and insurance to hotels. The four largest commercial banks are all state-owned. The largest of the industrial SOEs reside within one or another of the approximately 110 state-owned conglomerates administered by SASAC.

The Chinese government has designated certain industries as ‘strategic’, such as defence and energy, or “pillar”, such as the automotive and telecommunications industries, with the implication that state ownership will continue to play a significant ownership role in these

industries. Such industries may, for example, serve national industrial or geopolitical goals, including national security or technological advance.

This section of the dissertation outlines three phases of China's SOE reform: (i) entry and competition (1980-85), (ii) "retain the large; release the small" (1995-2010), and (iii) restructuring the large enterprises (2000 to present).

Entry and competition:

From 1978 to 1994, the number of reported industrial enterprises grew dramatically from 348,400 to 10.02 million.

This rapid surge in new entry was accompanied by the growing marketization of China's domestic economy through the unfolding of the "dual track system." Marketization and competition were further heightened by the liberalization of trade and foreign investment, during which China's trade ratio grew from 13% in 1980 to 38% in 1995.

Retain the large; release the small:

Following 1995, largely motivated by the determination to ready China for membership in the World Trade Organization, China initiated two transformative reforms. The first was "xiagang," the furlough of workers, which led to the dramatic layoff and decline in the size of the SOE workforce. Between 1995 and 2001, the year China joined the WTO, the number of jobs in the urban state sector fell by 36 million—or from 59% to 32% of total urban employment. The second initiative was the "jueda fangxiao" initiative in which the State Council endorsed a policy to retain the large SOEs while authorizing the transfer outside the state sector of the majority of smaller SOEs. In 1997, the State Council approved a huge shift of ownership from the central government to municipalities with the explicit goal of expediting conversions to non-state

ownership. By 2004, the number of above- scale state-owned and state-controlled enterprises had fallen from 118,000 in 1995 to 24,961.

The result of the “retain the large; release the small” policy initiative has been the sale or ownership restructuring of tens of thousands of former SOEs. While most of the smaller SOEs were outright privatized, with ownership transferred to managers, workers, or private investors, among the larger SOEs, forms of mixed ownership evolved in which the state retained majority ownership and control. According to Gan (undated), “between 1995 and 2005, close to 100,000 firms with 11.4 trillion RMB worth of assets were privatized, comprising two-thirds of China’s SOEs and state assets and making China’s privatization by far the largest in human history.”

Restructuring the large SOEs:

The reform of China’s centrally state-owned and state-controlled enterprises has proceeded along two important dimensions.

The first is their consolidation into a limited number, approximately 110 conglomerates. Among the Chinese companies on Fortune Global 500 list, 135 companies are based in China. That places China second only to the U.S. Comparing these 2021 figures with the recent past, China’s rise is even more spectacular. China had just 46 companies appearing on the list in 2010 and only 10 in 2000.

The second on-going reform, associated with the first, is the increasing concentration of SOE assets and business activity in a limited number of sectors that are most closely related to the public and corporate responsibility goals, guidelines set forth by SASAC. Among China’s largest companies, approximately one-third of the state-owned and controlled assets are in the energy sector, another one-third are in the finance sector, and the remaining one-third are largely distributed over just three other industries. The largest of the Chinese SOEs includes banks and oil

companies that are under the supervision of SASAC, which appoints CEOs and makes decisions on large investments.

Notable highlights of these guidelines are:

1. SOEs will be divided into two categories – for non-profit entities with a mandate to provide public goods and services – and for-profit entities, dedicated to commercial operations.

2. The new guidelines include specific provisions: i) SOE boards of directors are intended to have more autonomy, in part facilitated by restrictions on government agency intervention, ii) managers will be more strictly supervised while professional quality and compensation will be upgraded; and iii) mixed ownership will be encouraged through public offerings, share sales to employees, and means for non-state companies to employ convertible bonds, rights swaps and other measures to acquire SOE assets.

3. The timeline for achieving major reforms is 2025, as clearly stated in the document ‘Made in China 2025’.

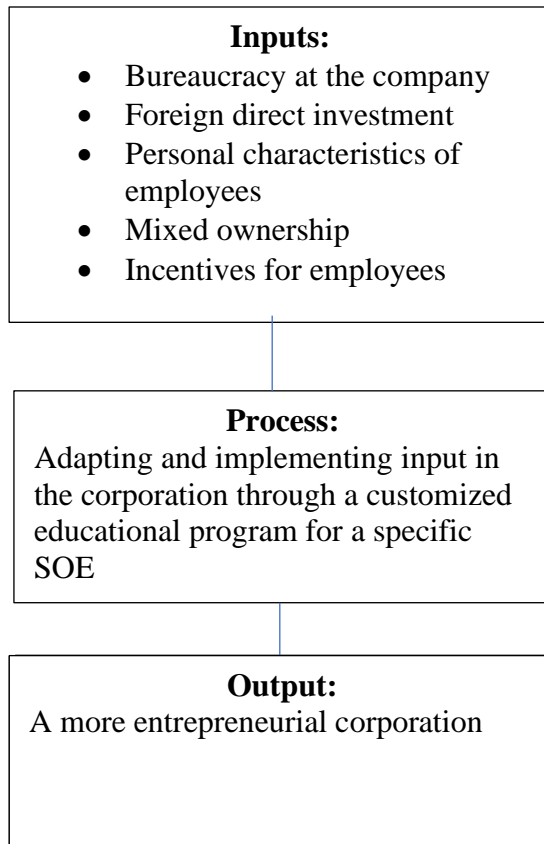
2.10 Conclusions on literature review

This literature review shows that past studies have already explored Intrapreneurship contributions from various perspectives in extent. However, most of the progress has focused on how intrapreneurship could help a company in a general context. What is missing from past studies is an in-depth analysis of how intrapreneurship can be improved and enhanced at a SOE in China by development and implementation of a customized educational program for this particular SOE.

2.11 Conceptual framework

To visualise the structure and flow of this dissertation the researcher has made a conceptual framework as follows:

Figure 1 *Conceptual Framework*



The inputs and the theories applied in this dissertation are bureaucracy at the company; the researcher tries to understand the level of bureaucracy at the SOE, so that in the process of implementing the educational program this can be addressed.

Other inputs applied in this dissertation are the level of foreign direct investment and the level of mixed ownership at the SOE. Both levels can have impact on the output and need to be addressed as well in the implementation of the educational program. The researcher also applies the personal characteristics of employee issues currently existing at the SOE. These characteristics will also affect the educational program.

The last input applied by the researcher are incentives for employees. These incentive systems could have a major impact on the outputs as well, so they need to be addressed in the educational program.

Based on these inputs the researcher adapts, develops, and implements an educational program customised for the specific State-Owned Enterprise in China.

The output will be a more intrapreneurial State-Owned Enterprise.

CHAPTER 3

CASE STUDIES OF INTRAPRENEURSHIP IN SOEs IN CHINA

In the case studies two examples of Chinese SOEs which have implemented intrapreneurial practices. The third case study presented in this chapter is the SOE which is the objective of the primary research of this dissertation.

3.1 Qian Jin Pharmaceuticals

Qianjin Pharmaceutical Group is a state-owned public enterprise that initiated an operation method called the “Qian Jin Operating Method” to improve their managerial system. This method increased net assets by 108.24% and the operating income by 224.95% from 2010 to 2017 (Yan et al., 2019).

The “Qian Jin Operating Method” strived to achieve a person-organization fit, which is beneficial for its proactive behavior, employee performance, and organizational performance. The following four components contribute to a person-organization fit: performance-based pay, building group incentives, making employees stakeholders, and the consistency of modules (Yan et al., 2019).

“Performance-based pay” is common in many other companies as well, but the “Qian Jin Operating Method” allows more freedom in their company. Different regional marketing teams are seen as independent in the company. They will complete the project passed by the headquarters, and then it will transform into their team benefit. The regional team will then become a minor organization responsible for its profits and losses. Manufacturer teams from the manufacturer system are also seen as independent; they will gain more when they complete tasks outstandingly. Likewise, they are also responsible for losses if they don't. A performance-based

pay strategy can assess every segment of the enterprise, motivating each team to perform the best, and improve the overall effectiveness (Yan et al., 2019; Varma, 2017).

“Building group incentives” is about distributing virtual shares to employees. A group of employees will sign a virtual equity agreement and grant part of the virtual equity to their working stores. So, they will participate in sharing the corresponding profit at the end of the year. In this way, employees will be motivated to improve their performance; simultaneously, the cost of training and encouraging employees will decrease because they intrinsic motivation. More importantly, the group will work together more efficiently toward their shared goal (Yan et al., 2019).

“Making employees stakeholders” is related to “Building group incentives” but emphasizes giving appropriate power to make decisions by employees. Employees who work in the front line, which is in the selling store, can propose procurement schemes accordingly. So that employee will consciously and voluntarily control the expense and increase output level. By empowering employees, they are built into strategic business units. They will be capable of operating, accounting, and running independently. On the one hand, the enterprise can attain a more organic structure. On the other hand, the enterprise can improve its overall performance (Yan et al., 2019; Chakrabarty, 2021).

“Consistency of modules” is an organizational concept that brings “Performance-based pay,” “Building group incentives,” and “Making employees stakeholders” together. The main enterprise goal is to create profit value; therefore, all the components are profit oriented. Based on this consistency, all the components will lead in the same direction, which matches the enterprise’s main goal (Yan et al., 2019).

The four components will therefore achieve the person-organization fit model. “Qian Jin operating methods” improve employees’ job satisfaction. Research shows that when employees are given the power and capacity to make their own profit, they will be more motivated to perform well. Hence, employees are bonded tightly with the mission and goal of the enterprise (Yan et al., 2019).

The “Qian Jin operating method” is a uniquely successful example among SOEs in China. The Qian Jin case study shows the idea of building flexibility and organic structure in the SOE. Community autonomy is what the government is proposing. It is unsurprising to see some autonomy in a SOE (Feng, 2019). The outcomes give confidence in intrapreneurship and innovation at SOEs in China.

3.2 China Telecom

“Facing unprecedented needs for innovations, in 2012, China Telecom officially launched its hundred-million-yuan program to encourage employees to be intrapreneurial. Intrapreneurial teams were formed with each team consisting of at least three members over a 2-year period, with fifty to one hundred thousand yuan invested in each team at the outset” (Shah et al., 2015). However, as the authors of the book *Innovation, Entrepreneurship, and the Economy in the US, China, and India* illustrated, there are still many challenges China Telecom faces. Many Chinese employees considered finding a job in SOEs as a “golden bowl,” and this means stable incomes and well-covered insurance. As a result, the motivation for an employee to struggle for a better company future is less likely.

To overcome this problem, China Telecom could hire new employees or reward intrapreneurship. Furthermore, access to intrapreneurial projects will need to be direct and open. For a state-owned company, there will likely be a hierarchy system subconsciously, which will

result in information inequality, potentially decreasing the enthusiasm for employees to participate. Facing such a potential risk, China Telecom should use new forces (employees or technologies) to break down the old structure. Although it may seem like an adventurous step, the reward could be enormous. So, introducing new employees could be a viable measure for Chinese SOEs to practice intrapreneurship (Shah et al., 2015).

Besides local intrapreneurial practices, Chinese SOEs also need to step forward toward the international markets. Intrapreneurship in some sense is a synonym to become more international and enforce globalization since opening businesses in unknown environments is entrepreneurial.

"The Chinese SOEs pursue their globalization in the context of constantly changing dynamics with the Chinese state. At the same time, they need to adjust to the political and social contexts of the corresponding hosting country in Africa. In parallel, individual Chinese SOE expats' personal trajectories influence and are influenced by, their SOEs' globalization processes. The three-forms of embeddedness – Chinese, African, and managerial – shape the Chinese SOE globalization process in Africa simultaneously across time and space" (Lam, 2017).

According to Lam (2017), there is triple embeddedness in the Chinese SOEs globalization process in Africa. Specifically, as a firm with an intrapreneurial spirit, China Telecom is largely associated with foreign explorations. Since there is a large market available in African countries, the Chinese government promotes projects for China Telecom to develop in Africa. On the one hand, it is a win-win and strengthening the relationship for both countries. On the other hand, China Telecom gains profits and facilitates its own growth. However, there is also an impediment present at the same time. The income level of citizens in African countries is

not balanced with the demand for the internet. Since the broadband access price is relatively high, there is a possibility that citizens cannot afford such costs. To solve this problem, China Telecom can reach economics of scale by undertaking a large amount of the infrastructure needed in African countries in the name of The Belt and Road Initiatives. Indeed, they did that and there was significant government involvement. In a nutshell, even though promoting intrapreneurial projects in foreign countries could be hard with the presence of government supervision for Chinese SOEs, the government could also be a strong support in terms of raising funds.

To sum up, by analyzing both local and foreign performance of a Chinese SOE firm's intrapreneurial projects, we could conclude that it is relatively successful, and the problems could be overcome by hiring new employees and getting the support from the government.

3.3 CRRC

The subject of research of this dissertation is CRRC Corporation Limited (CRRC, 2021). CRRC is a Chinese state-owned and publicly listed (on the Shanghai and Hong Kong Stock Exchanges) manufacturer of railway rolling stock and locomotives. In terms of revenue, it is larger than its main competitors, Alstom (France) and Siemens (Germany). As of May 5, 2021, the market cap of CRRC is approximately US\$ 160 billion.

3.3.1 Brief History

CRRC's history goes back to its formation in June 2015 with the merger of two rolling stock manufacturers, namely CNR Group and CSR Group, which were themselves formed in 2002 by splitting a single company, China National Railway Locomotive and Rolling Stock Industry Corporation. In 2015, the two entities decided to merge again in the interest of increased efficiencies and the desire to better compete in international markets, subject to the approval of

the Chinese state. This was done under the auspices of a holding company called CRRC Group, a SOE supervised by the Assets Supervision and Administration Commission of the State Council (SASAC, 2021), which owns 55.92% of CRRC. The State Council also owns additional shares in CRRC through China Securities Finance and Central Huijin Investments. The remainder of CRRC is owned by the public.

CRRC soon became the largest railway rolling stock manufacturer in the world, with a market share of about 90% of the domestic market. Post re-merger, CRRC started competing more actively in international markets, successfully bidding for a 284 vehicle (later 404 vehicles) for the Massachusetts Bay Area Metro's Red and Orange Lines. To manufacture cars locally, the company constructed a new assembly facility at an abandoned factory formerly owned by Westinghouse. Manufacturing started in 2018 at the plant.

In the meantime, CRRC's first overseas manufacturing plant was started in 2015 in Malaysia and started production for export under the name CRRC Zhuzhou Locomotive. It had also taken over *Emprendimientos Ferroviarios S.A.* in Argentina after supplying many locomotives and rolling stock for both passenger and freight operations, as well as subway cars for the Subte (Buenos Aires' Metro). In 2016 the company started maintenance and production in the plant, and in 2017 it was awarded a contract for an additional 200 EMUs (Electric Multiple Units) by the Argentine government.

CRRC also established a freight car manufacturing facility known as Vertex Railcar in Wilmington, North Carolina as a minority partner with Hong Kong-based Majestic Legend Holdings, a private equity firm. In 2016, when it had started production, Vertex was subject to an investigation by the US Treasury Department, on the basis that the Chinese government was unfairly subsidizing the venture, but the investigation concluded that the partial ownership of

CRRC in Vertex did not present a national security risk and therefore, the operations of the company were not affected.

In 2016, CRRC subsidiary CRRC Qingdao Sifang was contracted to supply 400 of their 7000-Series cars to the Chicago Transit Authority with a further option for 446 more (with a total contract value of US\$ 1.3 billion, for which the company started development of a factory in Chicago.

In 2017, CRRC received two contracts in the United States in quick succession, the first from SEPTA (South-East Pennsylvania Transport Authority) to build 45 bi-level rail cars with an option for 10 more, beating out both Bombardier and Hyundai Rotem (both former suppliers to SEPTA) in their Springfield MA plant, with the car shells being built at CRRC's Tangshan Plant. This was followed by an order from Los Angeles County Mass Transit Authority (LACMTA) to provide 64 HR4000 cars with a further option for 218 more, resulting in setting up of a factory in LA for this contract.

In addition to the North American and Argentinian contracts, CRRC and its various subsidiaries also acquired contracts in several other countries including India, Malaysia, Thailand, North Korea, Iran, Colombia, Saudi Arabia, Brazil, Ethiopia, Pakistan, Bangladesh, New Zealand, Australia, and Israel, to name a few. CRRC, through CRRC Zhuzhou Locomotive, also attempted to acquire Czech-based Skoda Transportation in 2016, albeit without success.

3.3.2 Controversies

Apart from the US Treasury Department investigation, CRRC (at the time its predecessor CSR Corporation) was implicated in allegations of bribery to obtain a 2012 tender to supply US\$ 6 billion worth of locomotives to the state-owned Passenger Rail Agency of South Africa (PRASA), a contract that still languishes as of 2020.

In 2020, several US trade and manufacturing associations requested the US government to sanction the CRRC which it perceived as competition after several contracts with different US Cities had been awarded to it, on the basis that the CRRC was allegedly a supplier to the People's Liberation Army (PLA) of China, and that the Chinese military backed the CRRC in addition to several other companies operational in the US. Sanctions eventually placed by the Trump administration barred American investors from holding securities in CRRC and 7 other Chinese companies which were alleged to have links with the PLA and the Chinese military.

3.3.3 Conclusions

CRRC grew into the largest supplier of rolling stock in the world with revenues of US\$ 2.27 billion in 2018. However, in 2020, the ongoing Covid-19 pandemic resulted in a dip in revenues for the first time in its history, as customers either cancelled their orders or deferred deliveries due to the prevailing uncertainties in the transportation sector. However, with CRRC having 90% market share in the Chinese market and a leadership position in China's rapidly expanding High Speed Rail network, the company no doubt has the resources and the ability to weather such times. This leadership position in China is protected because there is no competitor on the domestic market, which is involved in the train industry. This lack of competition in the domestic market is related to the very strong ties of CRRC with Mr. Li Keqiang, the Chinese premier in the current government, who is a strong advocate for the CRRC (<https://www.community.kingdee.com/case/51324>). One of the interviewees unofficially mentioned that the best salesman of CRRC was Mr. Li Keqiang. One can say that there is an unwritten law in China, not to compete with SOEs. However, officially the State Administration for market regulation (<https://samr.gov.cn>) is the ministerial level agency directly under the State Council of the People's Republic of China. SAMR oversees regulating areas such as market

competition, monopolies, intellectual property, and drug safety. The SAMR was created in 2018 by Mr. Xi Jinping and is a merger of several previous agencies, among which the State Intellectual Property Office. Lately, the SAMR has become more well-known in the world because of its aggressive approach to technology companies in China. Although the SAMR is an important regulator in relation to market competition CRRC is strongly protected by that unwritten law of SOEs strength in China. In chapter 2.3.1. the present and future role of CRRC, as outlined in the 14th five-year-plan and the Made in China 2025 policy, can be found.

CHAPTER 4

RESEARCH METHODOLOGY

In this section of the dissertation, the methods and sources used to gather the collected data to answer the research questions are explained in detail. For the validity and reliability of this research, all the evidence of the data collected, such as survey design will be kept and analysed.

4.1 Purpose of the research

There are three different research purposes which justify the reason why a piece of research is conducted. Exploratory research consists of finding new insights on ambiguous situations and is often done as initial research to define and clarify the nature of the problem (Saunders et al., 2012). Descriptive research, describes and explains a phenomenon to bring more insights and provides additional information to a topic. Explanatory research focuses on the understanding of cause and effect of the phenomenon, explaining the relation between these variables to predict outcomes with accuracy.

The purpose of this study is to explore intrapreneurship in SOEs in China and to develop an educational program to improve intrapreneurship at that SOE and in China in general. Hence this dissertation is based on exploratory research as it touches a new phenomenon where there is a great lack of information. The subject can provide a foundation for future research. Future research could be done at more SOEs in China to get a better understanding of intrapreneurship at SOEs in China, SOEs such as state-owned banks or insurance companies could be researched as well. Another suggestion for future research is to include more inputs, such as role of management and leadership styles, the role of government and other institutions, tax incentives, financial strength of company and cultural dimensions, could be considered as well.

4.2 Research approach

There are three types of research approaches: deductive, inductive, and abductive. The deductive approach is a process that starts with the use of theories, a hypothesis is then developed. The inductive approach on the other hand, starts by observations and tests which will lead to a pattern and in result a theory is developed according to the outcomes. Ultimately, the abductive approach is a third alternative that associates both deductive and inductive approaches, starting with incomplete observations that cannot be directly explained by existing theories to an explanation with the best reasoning. This research uses both the deductive and inductive approach, as the theoretical framework is developed through existing theories but will result in an educational programme.

4.3 Research methods

There are two distinctive research methods, quantitative and qualitative. Quantitative research is associated with the collection of data into numerical measurement, based on the statistical data analysis conclusions can be drawn. Quantitative research is done through the test of large sample size, generalizing the population mean with the usage of statistical computer software and giving critical results which show the relationship between variables. On the other hand, qualitative research emphasizes the holistic perspective of a phenomenon in which reality inheres the perception of individuals. This method focuses on the interpretation, understanding and analysis of simultaneous data collection without relying on numerical data. It uses small sample and in-depth questions to obtain profound exploration of the research study. The research method that is being used consists of the combination of both qualitative and quantitative research (Park & Park, 2016).

4.4 Data collection through primary data

Primary data is the type of data that is collected directly with participation of the researcher and taken directly from the place of research. It is not the kind of information that was accessible and thus not retrieved from research from other researchers (Glaser, 1998).

Advantages:

- Directly related to the study
- Better control of the information
- Crucial and reliable data
- More compelling and powerful
- Recent data-
- Provide multiple perspectives

Disadvantages:

- The quality of the data depends heavily on the researcher's skill
- Time consuming and longer process
- Involves feelings which can lead to bias case
- Ethical considerations
- Might be pricy

4.4.1 In-depth interviews

In-depth interview involves intensive individual interview done face to face or through telephone which give the opportunity to capture rich qualitative data, allowing a deep exploration of the respondent perspectives or situation. In this research three in-depth interviews will be conducted by semi-structured interview form with open-ended questions, a clear set of questions will be listed while still allowing new ideas and perspectives to emerge. All three interviewees covered all the required questions, tape-recording was used then transcribed and can be seen

more in detail in the appendix. 1. GM Assistant Gao Chao of CRRC Datong Co., Ltd. 2. Director of Products R&D Department Liu Hui of Qingdao Sifang Rolling Stock Research Institute Co., LTD. 3. Assistant General Manager William Sun of CRRC Changzhou Auto Parts Co. LTD.

4.4.2 Survey

A survey is a powerful tool that allows the collection of quantitative data on a large scale. It is the analysis of the outcomes under numerical data and the application of these data to the theoretical framework. A survey will be developed after consultation with CRRC. This consultation will be done in the form of these three interviews previously mentioned.

The reason to discuss the content of the questionnaire before the questionnaire is conducted is related to the different cultural dimensions in communication between China and the West. Across industries, Chinese and Western managers say their main difficulty doing business with each other stems from poor communication. Both groups need to understand the cultural differences in business communication, etiquette and how their actions may be interpreted. This part of the dissertation introduces some of the most important cultural dissimilarities and suggests strategies for communicating effectively while respecting these differences and is based largely on Harvard Business Review Press's *A guide for managers worldwide*.

Communication serves culturally determined, fundamentally different purposes in the East and the West. In Western culture, due in part to its history of formal contractual dealings, managers see business communications as an exchange of information that often ends when a deal is completed. The Chinese, on the other hand, regard communication as an integral aspect of building and maintaining long-term relationships. In each, the role of communication is framed in a distinct cultural context. In Chinese (or "high-context") culture, verbal communication is most accurately interpreted in the context of nonverbal communication (such as gestures, stance, and tone), social

hierarchy and other background information. Social roles and a concern for respect and harmony inevitably have a bearing on communication. In fact, it is possible for the nonverbal aspects of communication to override what is being stated explicitly.

In contrast, in Western (or “low-context”) cultures, the verbalized message is the principal source of information, rather than the context, delivery or implications. Business interactions are expected to be direct and forthright — indirectness in communication may be considered devious or, in extreme cases, even deceitful. Given these fundamental differences in the role and context of communication, it is important for both Chinese and Westerners to understand the assumptions of the other culture.

To get a sense of the Chinese cultural context for relationships, consider Guanxi, a type of connectedness achieved through relationships that are based upon trust, respect, reciprocity, and shared experiences. For the Chinese, wealth is measured in terms of connectedness. In short, you are who you know. In this way, social networks are business resources and vice versa. For example, when introductions are made, the Chinese want to know how a person fits into contexts that they recognize and to which they relate. Thus, the Chinese expect people to situate themselves immediately in a conversation, both professionally and socially. Westerners might try to find mutual acquaintances or ties through schools or professional organizations.

While providing reference for where one fits into the social structure is certainly not the same as having guanxi, it may offer the basis for pursuing the development of guanxi between parties. Guanxi is usually strongest among family members, but it may also occur among people who have shared significant experiences. In general, the Chinese prefer to do business with friends and people they know, so they devote much energy to creating and nurturing relationships with

people they see as having *guanxi* potential. Westerners doing business in China have the greatest potential when they invest in the relationship as a long-term end, rather than a means to an end.

Another important influence on communication in China is Confucianism and related to this, Chinese group harmony. Accordingly, the Chinese style of communication aims to preserve harmony. Strong displays of emotion, especially negative feelings, are seen as disrupting the balance. Thus, the Chinese tend to rely on indirect comments and the larger context for communicating a message. In general, they seek to show respect toward everyone who holds the same social status in business culture, and they tend to speak in terms of “we” rather than “I,” reflecting their fundamental value of the group as their primary social unit.

Moreover, because the Chinese do not want any individual to lose “face” in the eyes of others, they will not blatantly blame or call out another person for having committed an error. Rather, the group deals with the problem in a nonthreatening, face-saving manner. Westerners should realize that face is a subtle concept, and it’s possible for people to lose face with various degrees of severity. It might seem obvious that people could lose face if they failed to win a crucial negotiation, but they can also lose face if they are embarrassed or contradicted about even a minor issue in front of others. Loss of face can cause serious damage to relationships and business opportunities. Given this belief, the Chinese are also concerned about saving Westerners’ face, whether or not Westerners are themselves concerned. In helping Westerners maintain face, then, the Chinese are keeping open the possibility of doing business by building a relationship based on mutual respect and reciprocity.

The emphasis on building *guanxi*, promoting group harmony and maintaining face also explain the reluctance of the Chinese to say “no”. The meaning and usage of the word “no” represents a fundamental difference between Chinese and Western communication practices.

Westerners interpret and use “no” literally, as an indication that something will not happen, that a request will be denied, or that the issue should not be pursued further. From the Western point of view, “no” usually means “no” — end of story. This meaning presents certain challenges in the Chinese context. While the Western use of “no” in either business or cultural situations usually pertains to a separate transaction or demand, the Chinese have difficulty translating the Western nuance of the word’s meaning into their own way of communicating because they do not readily split business or cultural exchanges into fine parts or disconnected concerns. The Chinese are much more interested in communication that supports the ongoing formation and refinement of a relationship. This means the Chinese are reluctant to use the word “no” at all because it signals that the overall relationship, rather than simply one request or dealing, may be in jeopardy.

The Chinese communicate “no” through a range of phrases and supporting facial expressions, gestures, silence, and deferral of the issue at hand. Essentially, the goal of a Chinese speaker is to remain polite and save face for everyone involved in the discussion. This means that, rather than saying “no” outright, a person may hesitate when responding to a specific request, may couch a reply using vague terms such as “perhaps,” or change the subject altogether. The Chinese speaker expects his or her counterpart to pick up on these subtleties and react accordingly by neither engaging in confrontation nor pursuing the issue further. From the Western point of view, this indirectness can be interpreted, at worst, as indicative of secrecy or dishonesty, and, at best, as showing disinterest or incompetence. The simple word “no” carries the potential, therefore, for long, complicated misunderstandings between Chinese and Western business associates.

To understand the verbal and nonverbal exchanges between a Western researcher and a Chinese company, one must first develop an awareness of the setting and social norms. The Chinese culture is based in a large part on maintaining hierarchies while demonstrating mutual

respect and avoiding conflict. This is especially true in business interactions, so it is best to be patient, and polite at all times. Manners-based values provide the foundation for basic business etiquette in the following areas:

Introductions: Beginning with the most senior person and working down the hierarchy, introductions tend to be formal and include handshakes as well as business card exchanges. As a sign of respect, cards are presented and received using both hands. The recipient should take a few seconds to examine the card. In general, the Chinese refrain from outward displays of emotion and do not embrace or kiss when greeting or saying goodbye. At the end of a visit, the Chinese often choose to demonstrate respect for a visitor by accompanying him or her to the outer door of the office.

Entertainment: The Chinese typically entertain visitors with banquets consisting of several courses. Seating arrangements are expected to adhere to and reflect the social hierarchy. Numerous toasts are made throughout the meal, and everyone is expected to participate; it is acceptable to request a non-alcoholic drink for toasting. Smoking is common, and guests are usually offered cigarettes. Tipping is not customary, but both parties are expected to vie to pay the bill.

Gifts: Gifts are important symbols used to cultivate relationships and demonstrate respect. Small gifts like company mementos are seen as signifying respect and consideration for the host. As with business cards, one should present and accept gifts with both hands as a show of respect. Also, it is not expected that gift recipients will open presents in front of the giver unless they are encouraged to do so.

Due to the differing philosophies of relationship and communication, the possibility for misunderstanding between Chinese and Western businesspeople is immense. Nonetheless, these

differences can be bridged successfully if both parties make an effort to be attentive to the context of communication and — particularly in the case of Western businesspeople — to be aware of the subtle nonverbal signals that may be used to indicate disagreement. All parties should be especially conscious of allowing speakers a way out of uncomfortable or potentially compromising situations. Above all, both parties should first cultivate self-awareness. Only after looking at our own culture with fresh eyes, can we begin to see how others see us.

Following are some suggestions from researcher's own experience after working in China for more than 20 years:

- Use wording that is less directive and more suggestive. For example, “could be” instead of “should be” and “perhaps it could be seen in this way” rather than “I think.”
- Structure exchanges so that they occur in a group context. Employees may be more willing to speak for the group than for themselves.
- Devote the time and energy to build and maintain personal, face-to-face communication. Frequent visits and communication are important as an investment in the relationship.
- Refrain from showing anger.
- Give credit to others. The group will realize the context and see you as invested in the group.
- Handle criticism carefully so that individuals do not lose face in front of the group.
- Be aware that often there are other parties to whom you have not been introduced who may be involved in decisions.
- Make efforts to alleviate miscommunications as quickly and as earnestly as possible.
- Another way of looking at the reasons of asking first the opinion from the respondents is the way how to extract information out of Chinese people.

Knowing and applying all this, the researcher came to an acceptable questionnaire for the company.

The initial idea of the researcher was to only conduct semi-structured interviews, but the company preferred a questionnaire due to time issues. A survey in both English and Chinese can be found in the Appendix and has already been approved by the company. The structure of the questions in the survey is directly linked to the sequential topics in the literature review.

A big advantage of an online survey is that it makes the most of the ability of the Internet to provide access to groups and individuals who would be difficult, if not impossible, to reach through other channels (Wright, 2005). A second Advantage of online survey is that a wide geographical area can be covered in the survey. A link to the survey sent to the respondents, who can complete it at their convenience, in their homes, and at their own pace.

There are also disadvantages of online surveys. When conducting online research researchers often encounter sampling problems. The return rates of such surveys are typically very low. Another drawback of online surveys is that many people consider this kind of survey a kind of 'spam'. Another disadvantage of electronic surveys is that any doubts the respondents might have cannot be clarified (Wright, 2005).

In the survey the researcher uses the Likert scale. The Likert scale is designed to examine how strongly respondents agree or disagree with statements on a five-point scale. The responses over several items tapping a particular concept or variable can be analyzed item by item, but it is also possible to calculate a total of summated score for each respondent by summing across items. The summated approach is widely used, and therefore the Likert scale is also referred to as a summated scale (Likert, 1932).

4.5 Data collection through secondary data

Secondary data is already existing information which was gathered from someone else's research other than the current research, having relevance and utility to the current study as well as helping with finding facts and trends. In this research, the secondary data are collected from previous research studies, online articles, journals, and books.

Advantages:

- Fast acquirement
- Inexpensive
- Saving time
- Comparison with the actual research

Disadvantages:

- Inaccurate data
- Out-dated
- Uncertain validity (Lopez, 2013)

4.6 Data Analysis

Since the main method of collecting data for this research is qualitative research strategy, it is of importance to perform a thematic analysis of the data collected. This is to confirm the trustworthiness of the data and to ensure a consistent and viable result when analysing the data collected from the semi structured interviews and the survey (Nowell et. Al., 2017).

The thematic analysis consists of six steps which are the familiarisation, which is mainly listening and reading the recordings of the interview and the results of the survey and transcribe the interviews. This is to get a clear understanding of the data given. The second set is coding the data, the purpose is to find and assign phrases and answers from all interviews and survey with different codes to discover similarities between them. The third step is identifying broader

themes found within the coding. The fourth step is a thorough review of the identified theme, to understand if the coded phrases and answers are supported and correctly placed within the generated themes. Step five is describing and naming the themes. The sixth step is to start the data analysis based on the thematic analysis done and start writing up the analysis of the data. Through this a proper and detailed analysis can be formed, while avoiding interfering assumptions from the researcher. So that proper themes and patterns can be found. (Mortensen, 2020).

CHAPTER 5

RESEARCH FINDINGS

The intention of the researcher was to do semi-structured interviews with key people of the company to explore issues related to intrapreneurship at the company. After having approached several companies, it became clear that this was not a good strategy to follow as companies were rather reserved and did not want to waste too much time on those interviews. Another method was chosen. The first step was to have a focus group meeting via Zhumu with three employees of the company to prepare an acceptable questionnaire, since cultural dimensions in communications between China and the West are very different, as demonstrated in chapter 4.4.2 of this dissertation. This focus group meeting was done, and an acceptable questionnaire was created in good consultation with the three employees. At the beginning the researcher underestimated the difficulties to get employees of SOEs opening about their working environment and more specifically about the intrapreneurship issues in their SOEs. Questionnaire will be sent in Chinese to the SOE after the acceptance of this proposal. The data from the questionnaire will be analyzed and based on the analyses, the researcher will identify specific issues at the SOE related to intrapreneurship. Based on the specific issues a suitable educational intrapreneurship program will be developed for the SOE. This specific program will be introduced to the SOE after finishing the research. Later this program will serve as a basis for further improvement in the intrapreneurship education in China in general.

The chances that the researcher will reach the goals of this research are good as the company already showed willingness to participate in the research. Risk could be that not enough employees will answer the questionnaire so that a good valid data analysis cannot be

made. Another limitation of this research is that it is only focusing on one company so that it might not be representative for other SOEs in China.

5.1 Introduction of the research findings

In this chapter all the findings of the research will be mentioned and categorized in a systematic way. A discussion of the findings will be made in the next chapter. The findings are divided in two parts the first part is the findings of the questionnaire done in the period May to June 2021. This questionnaire was filled in by 32 persons working at CRRC. The findings of this questionnaire will be visualized in graphs. As there are also open questions in the questionnaire the answers on these open questions will be written down in a systematic way. The second part will be the findings of the semi-structured interviews with 8 persons from CRRC. These semi-structured interviews were conducted in the period 21 to June 25, 2021, after the questionnaire. Both the questionnaire and the semi-structured questions can be found in both Chinese and English in the appendices.

The questions were prepared related and in sequence to the various parts in the Literature Review and could be divided in following parts:

- Introduction
- Background interviewees
- Level of Intrapreneurship existing at State Owned Enterprise
- Ownership issues at State Owned Enterprise
- Bureaucracy at State Owned Enterprise
- Incentives and Intrapreneurship at State owned Enterprise
- Personality characteristics and their impact on Intrapreneurship at State Owned Enterprise

After each part an open question was added.

5.2 Findings of the questionnaire

In this part the findings of the closed questions of the questionnaire will be visualized.

5.2.1 Demographics

Figure 2

Your age in years?

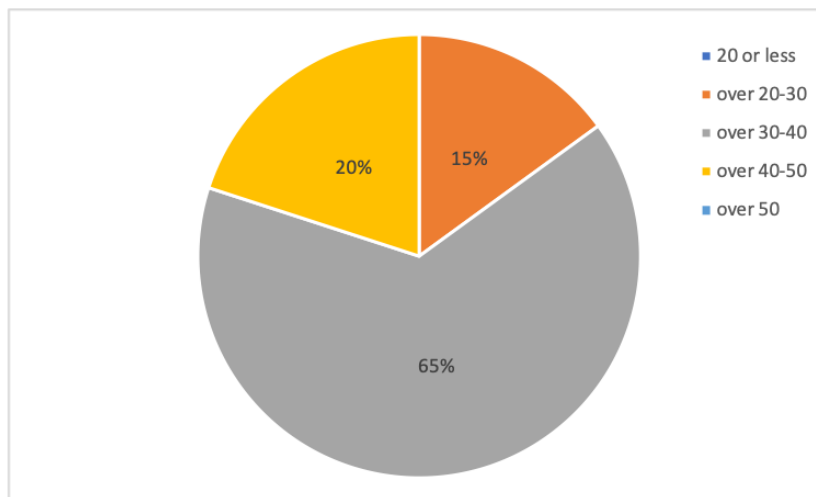
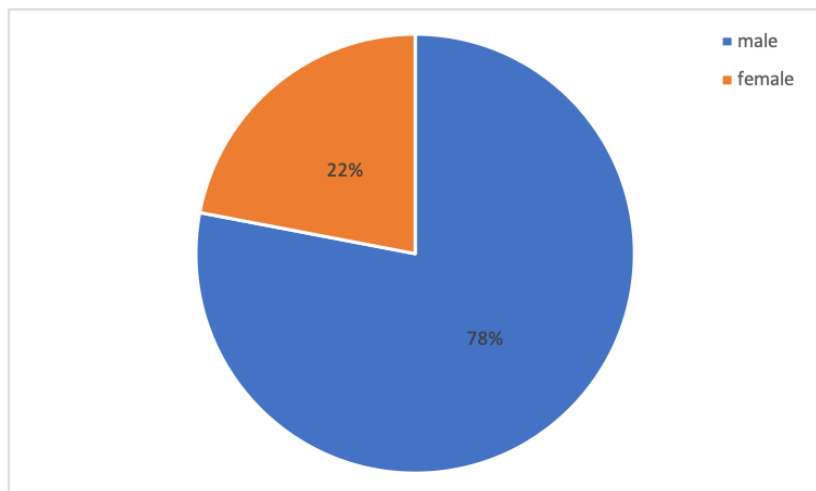


Figure 3

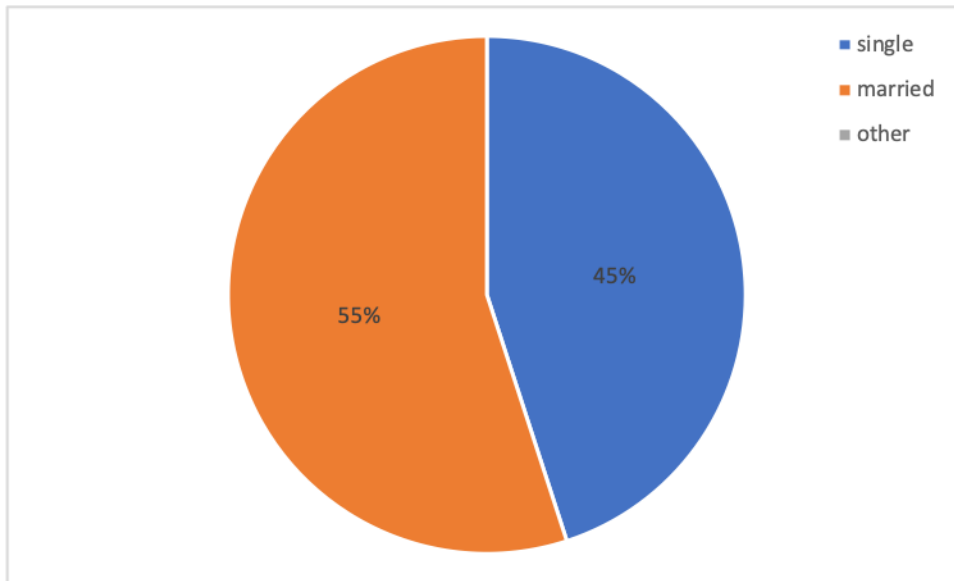
Gender



Note. This figure shows that there are more male respondents, the number of which is 3 times more than the number of female ones.

Figure 4

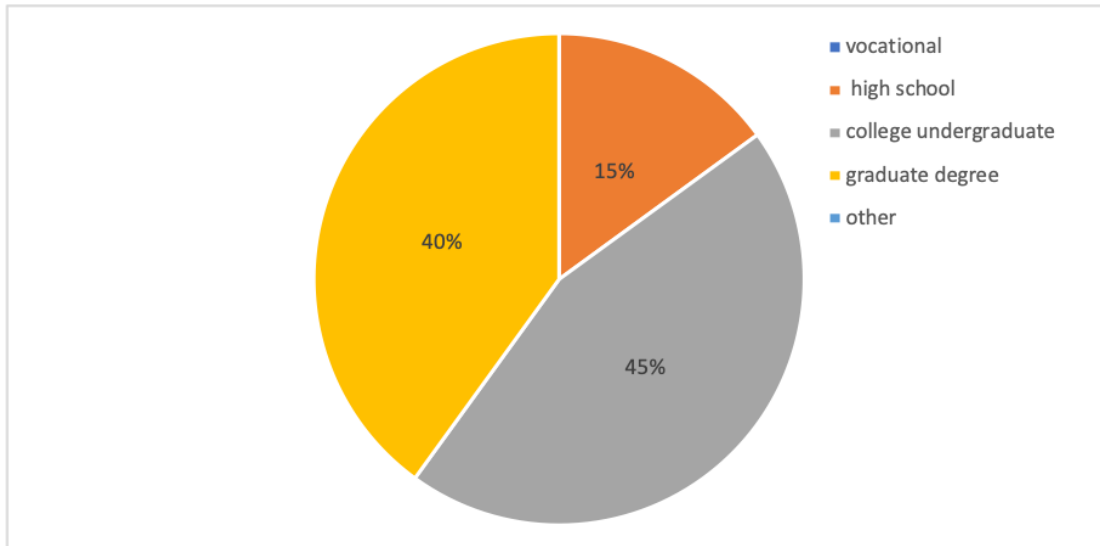
Marital status: single, married, other



Note. This figure states that 55% are married, and 45% single.

Figure 5

Educational Level



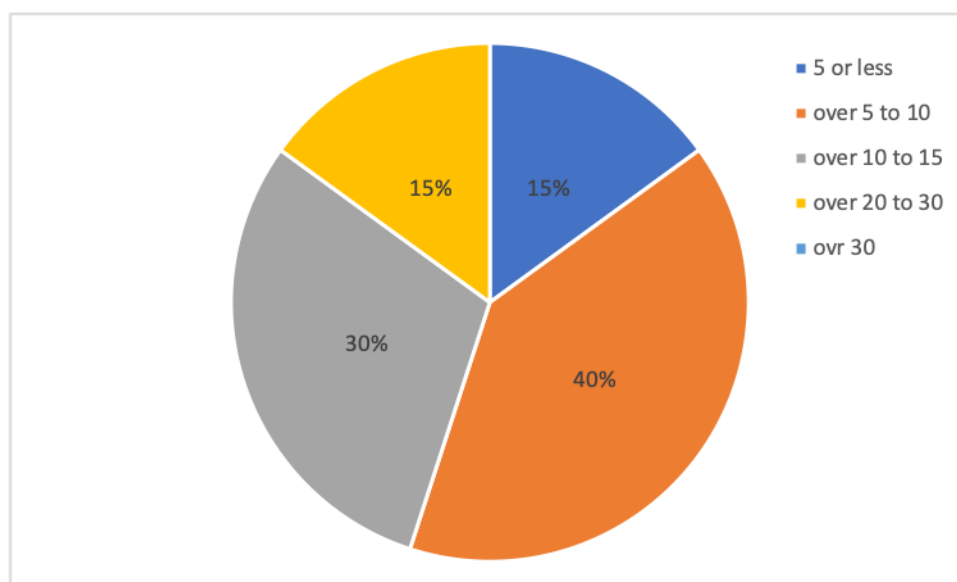
Note. This figure shows that most of the respondents are college undergraduates or have a graduate degree, while the remaining 15% completed high school.

5. Profession

Answers are given later at the in open questions section.

Figure 6

Number of years working at the SOE



Note. This figure demonstrates that most of the respondents have already worked at SOE for 5 to 10 years, while those who have been working there for less than 5 years and over 15 years account for 15% for each.

7. Position at SOE

Answers, later in open questions.

By observing these five pie charts the demographics of the respondents can be identified. The age of the respondents can be divided into 3 groups: 65% of the respondents are aged from 31-40, 20% from 41-50 and 15% from 21-30. The gender of the respondents is 22% female and 78% male. The researcher has no way of finding out the entire population of the

target company. An assumption can be made that there are more men than women in the target company. The marital status of the respondents is 55% married and 45% unmarried. The researcher understands the sensitivity of this question in China and admits it was a mistake to add it in the survey.

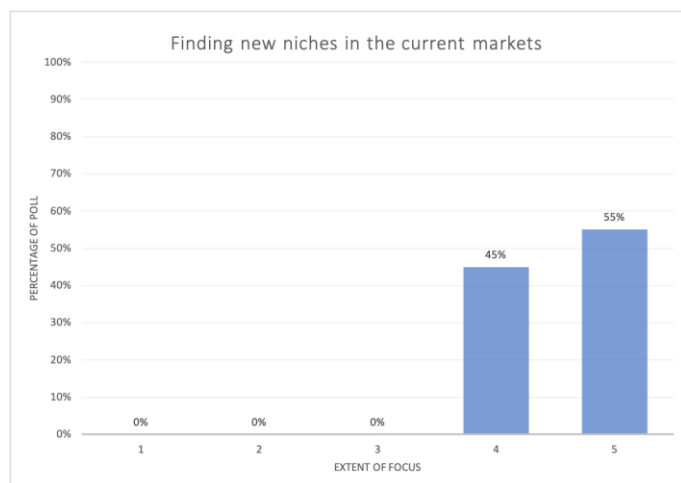
The educational level of the respondents is 45% college undergraduates, 40% graduates and 15% high school graduates. The educational level of the respondents is relatively high. The number of years the respondents have been working at the SOE can be divided into four main groups: 40% has been working there between 6-10 years, 30% between 11-20 years, 15% between 21-30 years and 15% between 0-5 years. From this we can infer that the respondents have a high level of experience.

5.2.2 Q1 Level of corporate entrepreneurship currently at SOE

Respondents were asked to indicate the extent to which SOE has focused each of the following items in the past 5 years. Answer options range from Minor focus (1), to Major focus (5).

Figure 7

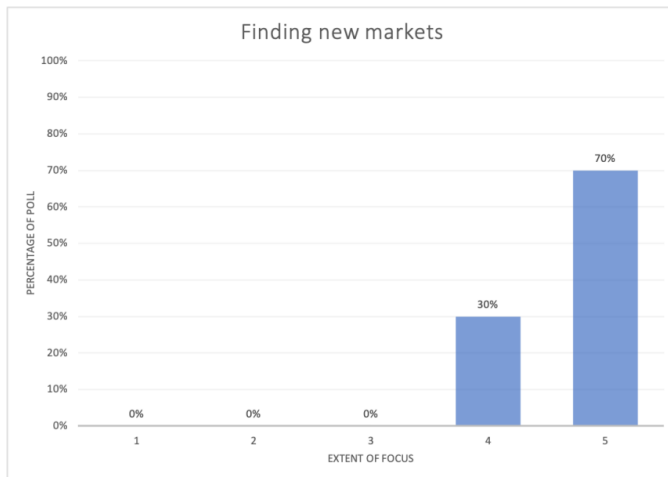
Q1.1 Finding new niches in the current markets.



Note. This demonstrates that the respondents think finding new niches is a relatively major focus for SOE, with 55% scoring 5 and the rest scoring 4.

Figures 8

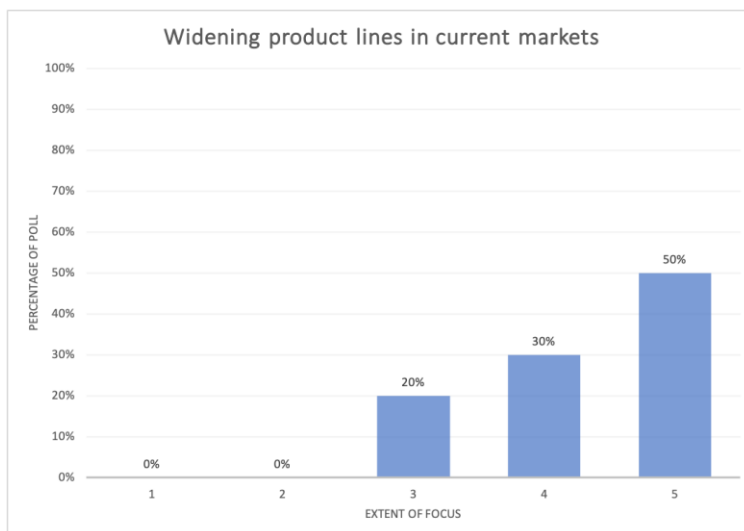
Q1.2 Finding new markets.



Note. This indicates that most of the respondents thinks finding new markets is a main focus for SOE, with 70% scoring 5 and the rest 30% scoring 4.

Figure 9

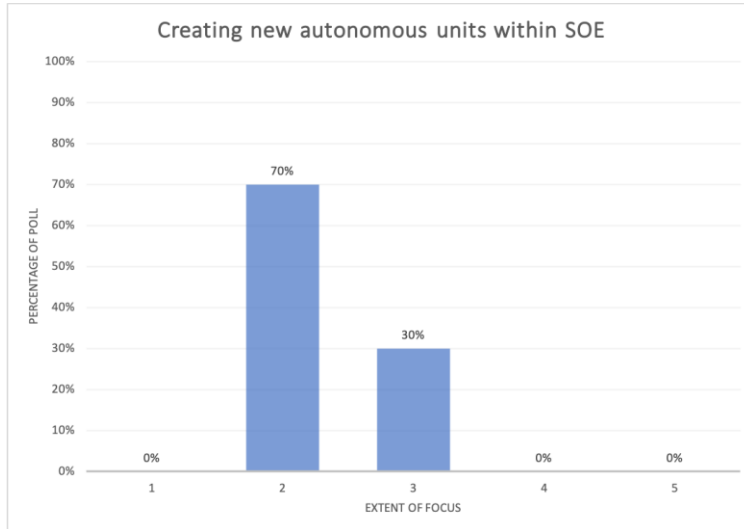
Q1.3 Widening product lines in current markets.



Note. This reveals that most of the respondents agree that widening product lines in the current market is a main focus, while 20% consider it a medium focus.

Figure 10

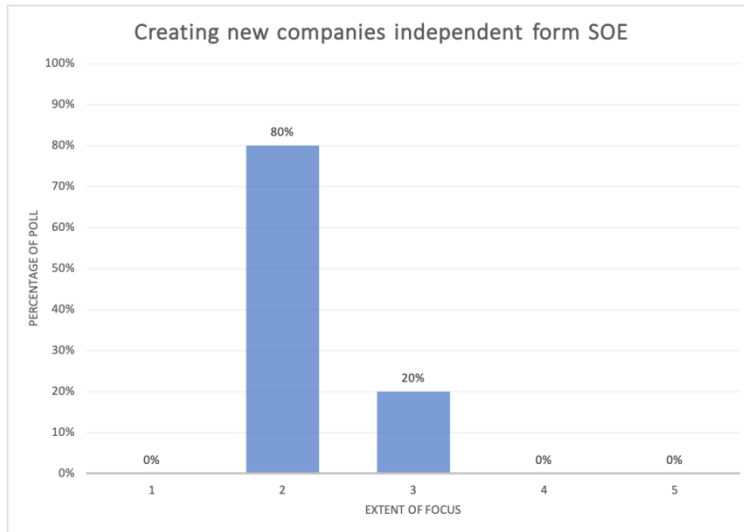
Q1.4 Creating new autonomous units within SOE.



Note. This demonstrates the majority considers a lesser focus of the SOE on creating new autonomous units within the SOE while the remaining 30% consider it a medium focus.

Figure 11

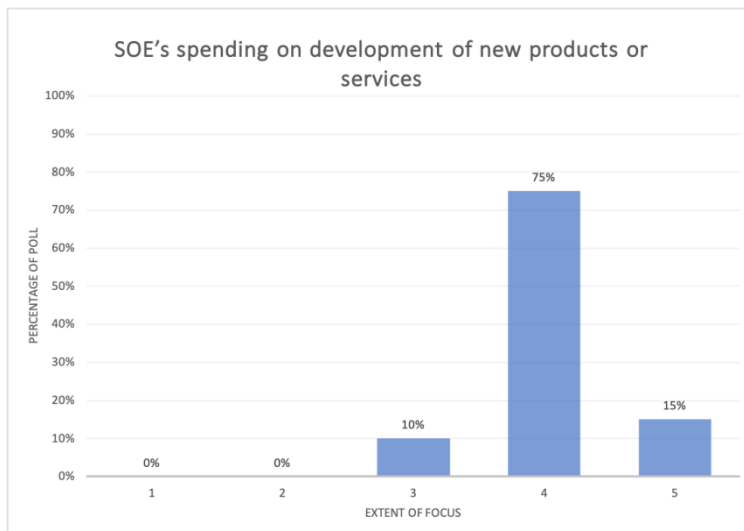
Q1.5 Creating new companies independent from SOE.



Note. This indicates that only 20% consider creating new companies independent from the SOE is a medium focus while most of the respondents consider it a lesser focus.

Figure 12

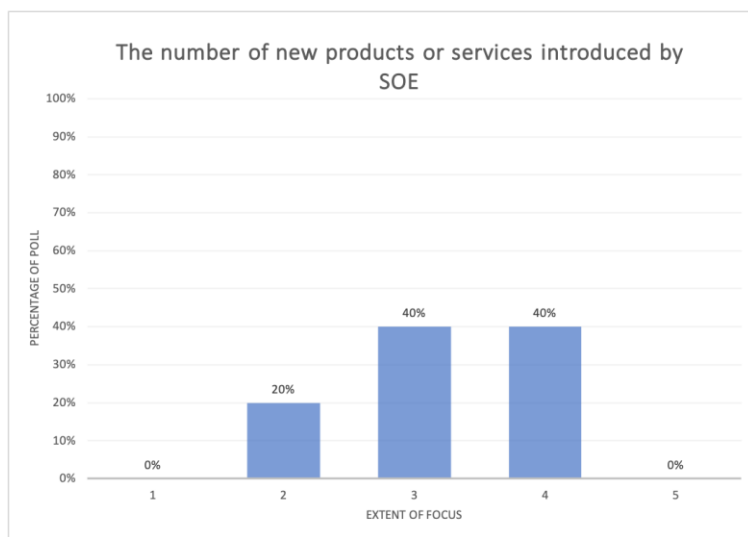
Q1.6 SOE's spending on development of new products or services.



Note. This shows that most respondents consider the SOE's spending on the development of new products and services a relatively high focus, with 15% even considering it a major focus. Only 10% considers it a medium focus.

Figure 13

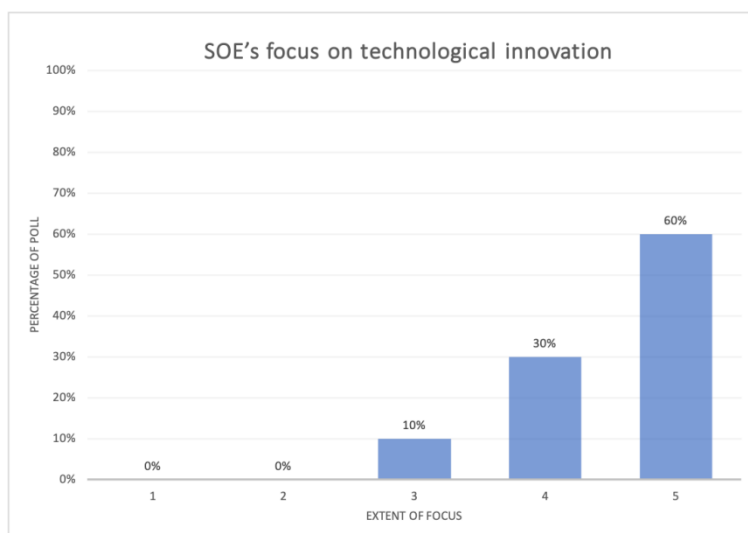
Q1.7 The number of new products or services introduced by SOE.



Note. This demonstrates that 40% of the respondents considers the number of new products or services introduced by the SOE a relatively high focus, whereas another 40% considers it a medium focus. 20% of the respondents consider it only some focus.

Figure 14

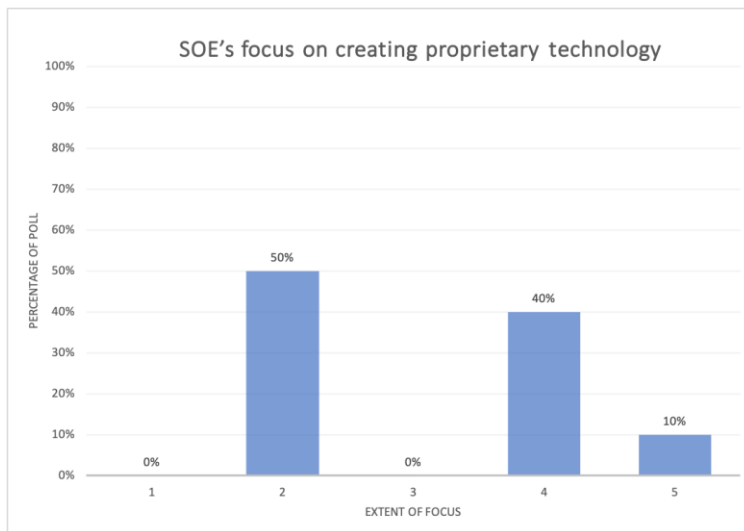
Q1.8 SOE's focus on technological innovation.



Note. This shows that 90% of the respondents consider the SOE's focus on technological innovation a high to major focus whereas only 10% considers it a medium focus.

Figure 15

Q1.9 SOE's focus on creating proprietary technology.



Note. This reveals a split in the views of respondents, with 50 % answering that the SOE's focus on creating proprietary technology is not very large, whereas 50 % considers it to have a high to major focus within the SOE.

Open questions:

Do you think SOE is emphasizing enough on the importance of corporate entrepreneurship?
Why? Later in transcript.

By observing the above nine bar charts the level of corporate entrepreneurship at the SOE can be identified.

Finding new niches in current markets are considered the major focus by 55% of the respondents, while 45% give a score of four. This indicates that respondents agree that the SOE is finding new niches in the current markets.

Finding new markets is considered the major focus by 70% of the respondents, while 30% give a score of 4. This indicates that respondents agree that the SOE is finding new markets.

Widening product lines in current markets is considered the major focus by 50% of the respondents, while 30% give a score of four and 20% is neutral. This indicates that most respondents agree the SOE is widening product lines in current markets, but not as much as finding new markets.

Creating new autonomous units within the SOE is not considered a major focus by the respondents; 70% mostly disagree and 30% is neutral. This indicates that most respondents agree that creating autonomous units within the SOE is not a priority.

Creating new companies independent from SOE is also not considered a major focus by the respondents; 80% mostly disagree and 20% is neutral. This indicates that most respondents agree that creating new companies independent from SOE is also not a priority.

SOE's spending on development of new products or services is considered a high focus by 75% of the respondents, while 15% consider it a major focus while 10% is neutral. This indicates that most respondents agree the SOE is investing in development of new products and services.

The number of new products and services introduced by SOE is not considered a major focus by the respondents, as only 40% giving mostly agree, but 40% is neutral and 20% mostly disagrees. This indicates that although the respondents agree that investments are being made to develop new products and services the output of these is not showing evidence.

Focus on technological innovation is considered a high to major focus by 90% of the respondents, while 10% is neutral. This indicates that most respondents agree that the SOE is focusing on technological innovation.

SOE's focusing on proprietary technology is considered very differently by the respondents, not showing a clear answer with only 10% considering it a major focus, 40% a high focus, whereas 50% mostly disagree. This indicates that there might be a misunderstanding of the question.

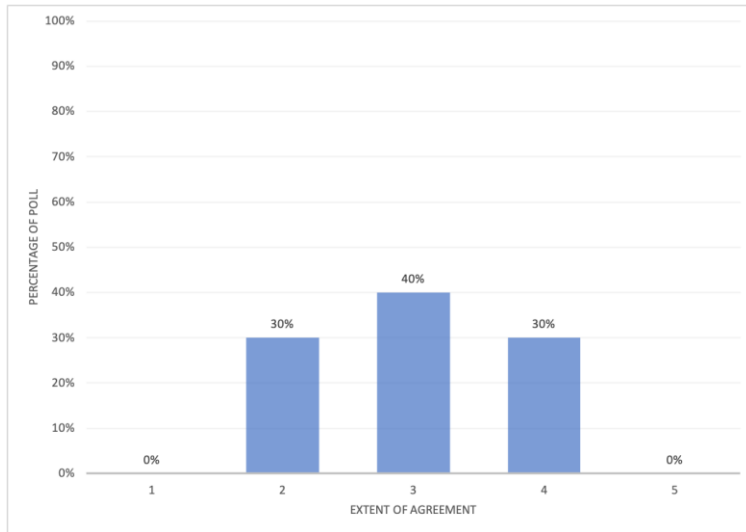
In general, respondents agree that there is intrapreneurial intensity at the company but that certain aspects need more attention.

5.2.3 Q2 Ownership issues at SOE

Respondents were asked to indicate the extent to which they agree or disagree with following statements: fully disagree (1), to fully agree (5).

Figure 16

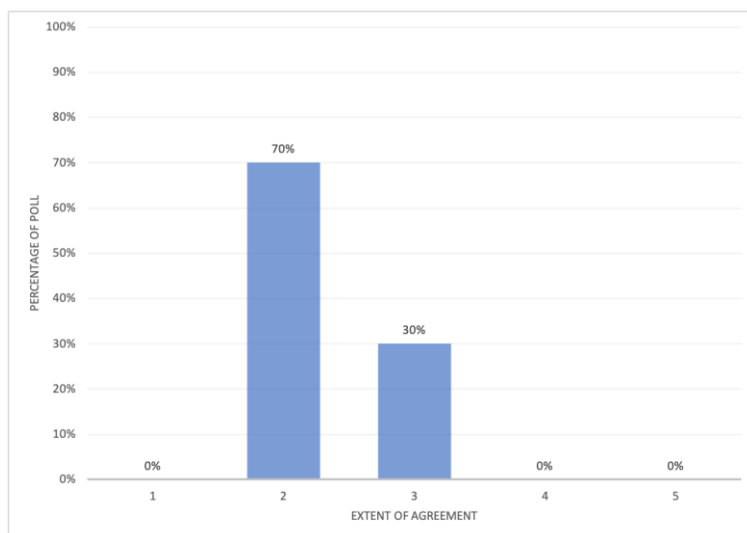
Q2.1 Do you agree that mixed ownership will stimulate corporate entrepreneurship at SOE?



Note. This shows the opinion of respondents towards the impact of mixed ownership at SOE is quite average. Score 2 and score 4 take up 30% for each while the rest 40% scores neutral 3.

Figure 17

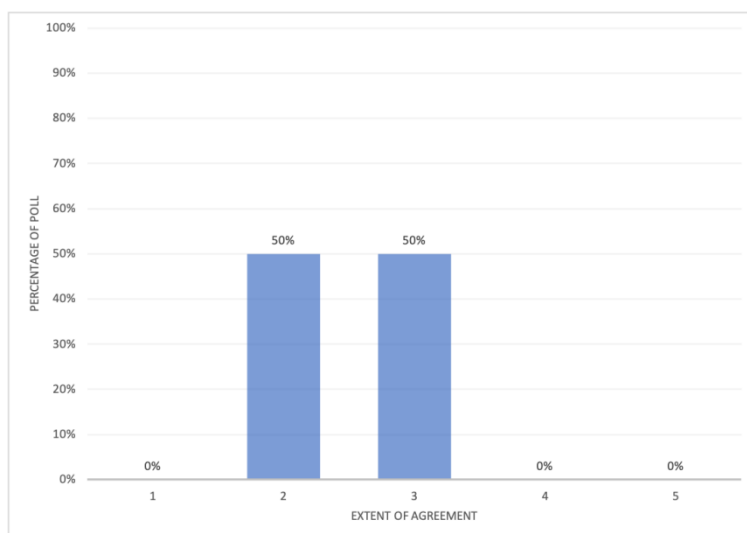
Q2.2 Do you agree that foreign ownership will stimulate corporate entrepreneurship at SOE?



Note. This reveals that the majority of respondents do not agree that foreign ownership would have a stimulating effect on an SOE, with 70% partly disagreeing and 30% taking a neutral position.

Figure 18

Q2.3 Do you agree that control systems are different in companies with mixed ownership at SOE?



Note. This demonstrates that 50% of the respondents partly disagree that control systems in companies with mixed ownership at an SOE are different and 50% take a neutral position.

Open question: Anything you would like to say regarding the relation between mixed ownership and corporate entrepreneurship? Later in transcript.

By observing the above three bar charts the importance of mixed ownership at the SOE can be identified.

To the question whether mixed ownership would stimulate corporate entrepreneurship at the SOE, 30% of the respondents mostly agree, 40% is neutral and 20% mostly disagree. This indicates that the respondents do not fully consider that mixed ownership stimulates corporate entrepreneurship at the SOE. This might indicate that respondents are not yet aware of the impact mixed ownership can have on corporate entrepreneurship.

To the question whether foreign ownership would stimulate corporate entrepreneurship at the SOE, 70% of the respondents mostly disagree and 30% is neutral. This might indicate that respondents are not yet aware of the different approach to corporate entrepreneurship foreign owners have, or foreign ownership does not appeal to them.

To the question whether control systems are different in companies with mixed ownership at SOE, 50% mostly disagree and 50% is neutral. This indicates that respondents are not aware that control systems differ depending on ownership issues.

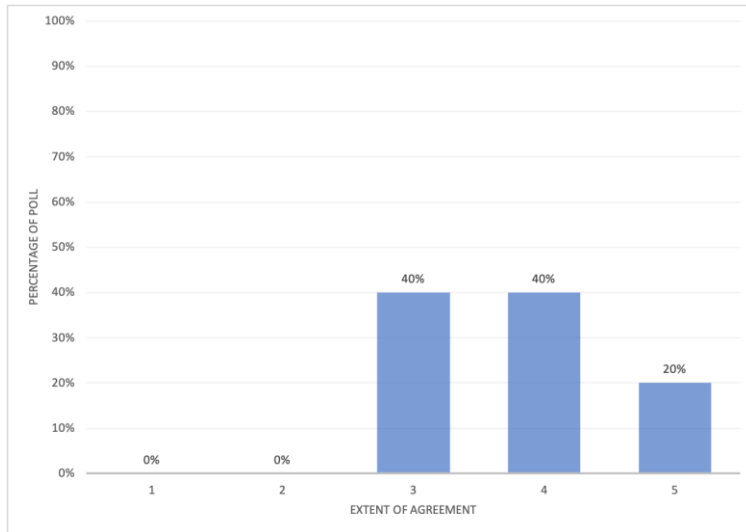
In general, respondents do not consider ownership issues a major aspect in relation to intrapreneurship within the SOE.

5.2.4 Q3 Bureaucracy at SOE and its role in intrapreneurship

Respondents were asked to indicate the extent to which they agree or disagree with following statements: fully disagree (1) to fully agree (5).

Figure 19

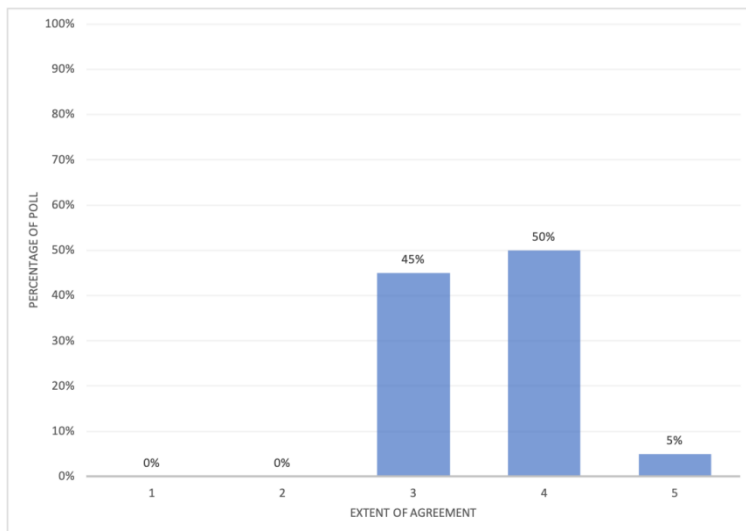
Q3.1 Do you agree there is high level of bureaucracy at SOE?



Note. This demonstrates that the majority of the respondents (60%) mostly or fully agree that there is a high level of bureaucracy. 40% hold a neutral position.

Figure 20

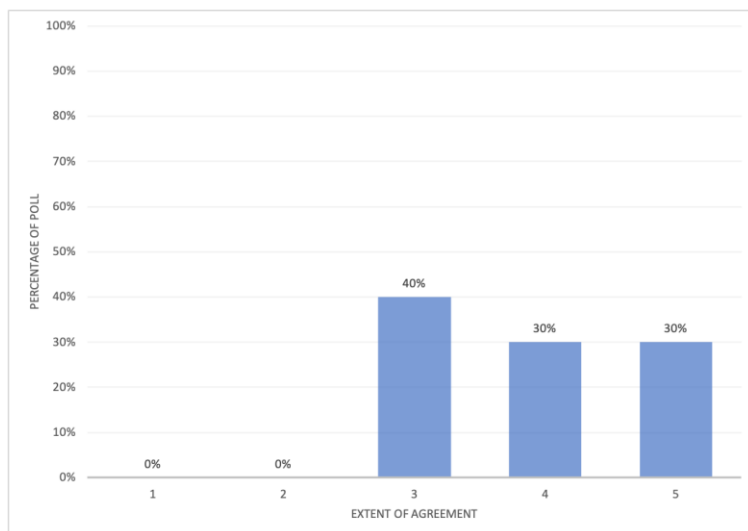
Q3.2 Do you agree that there are too many meetings taking place at SOE?



Note. This demonstrates that 45% has a neutral position about the number of meetings held at the SOE, 55% mostly to fully agree that there are too many meetings.

Figure 21

Q3.3 Do you agree that a lengthy decision-making process is a constraint for corporate entrepreneurship?



Note. This demonstrates that most of the respondents give a neutral answer, and 60% vote for relatively agreement with 30% 4-point and another 30% fully agreeing that a lengthy decision-making process is a constraint for corporate entrepreneurship.

Open question: Anything you would like to say regarding the relation between bureaucracy and corporate entrepreneurship at SOE? Later in transcript.

By observing the above three bar charts the extent of bureaucracy at the SOE can be identified.

To the question whether there is a high level of bureaucracy at the SOE, 20% fully agreed, 40% mostly agree and 40% is neutral. This indicates that the respondents think there is clearly a level of bureaucracy within the SOE.

To the question whether there are too many meetings taking place at the SOE, 50% of the respondents mostly agree, 45% is neutral and 5% fully agree. This indicates that the respondents agree there are a lot of meetings.

To the question whether a lengthy decision-making process is a constraint for corporate entrepreneurship, 40% is neutral, 30% mostly agree and 30% fully agree. This indicates that the respondents have a mixed view on the decision-making process at the SOE.

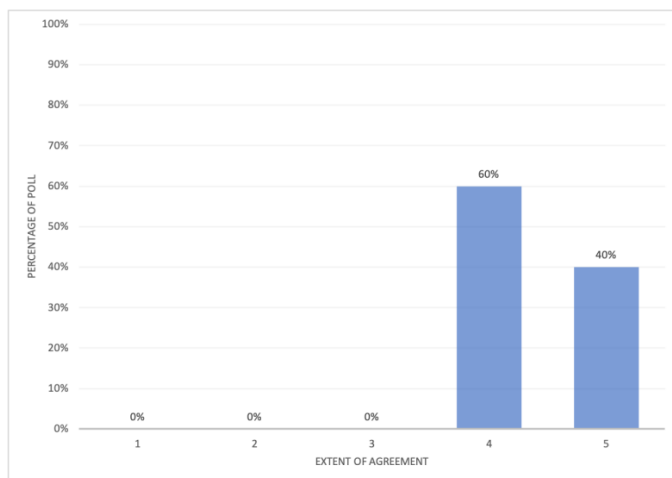
In general, questions about bureaucracy at SOEs are relatively sensitive and therefore the answers may be not as reliable as one would wish.

5.2.5 Q4 Incentives and corporate entrepreneurship at SOE

Respondents were asked to indicate the extent to which they agree or disagree with following statements: fully disagree (1) to, fully agree (5).

Figure 22

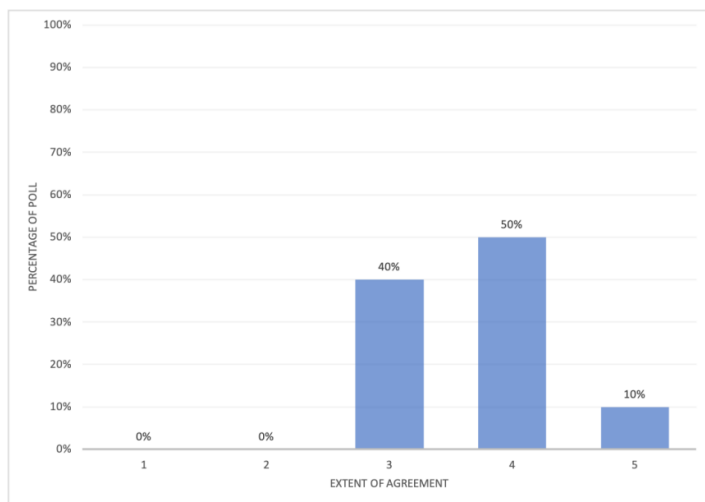
Q4.1 The management encourages employees to believe that corporate entrepreneurship is a part of all members of SOE.



Note. This reveals that 40% of the respondents fully agrees that the SOE encourages all employees to believe that corporate entrepreneurship is a part of all the members of the SOE, whereas 60 % partly agrees.

Figure 23

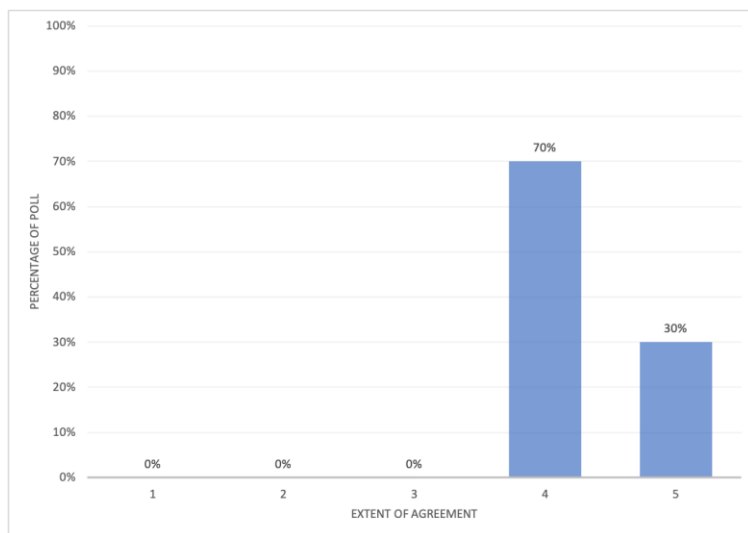
Q4.2 Employees of SOE have discretion to make decisions about their own work.



Note. This demonstrates that 40% of the respondents take a neutral position about employees being able to make their own decisions about their own work, whereas 50% partly agree, and 10% fully agree.

Figure 24

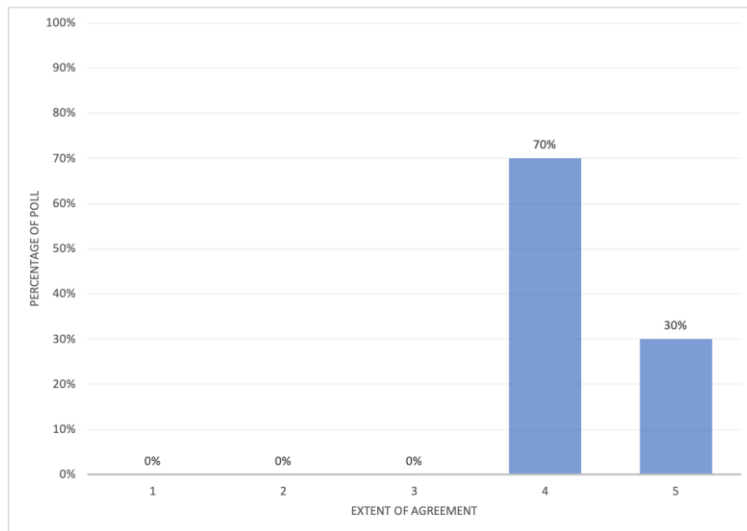
Q4.3 Rewards enhance the motivation of individuals to engage in corporate entrepreneurship.



Note. This shows that all the respondents tend to agree that rewards motivate individuals to engage in corporate entrepreneurship, with 30% fully agreeing.

Figure 25

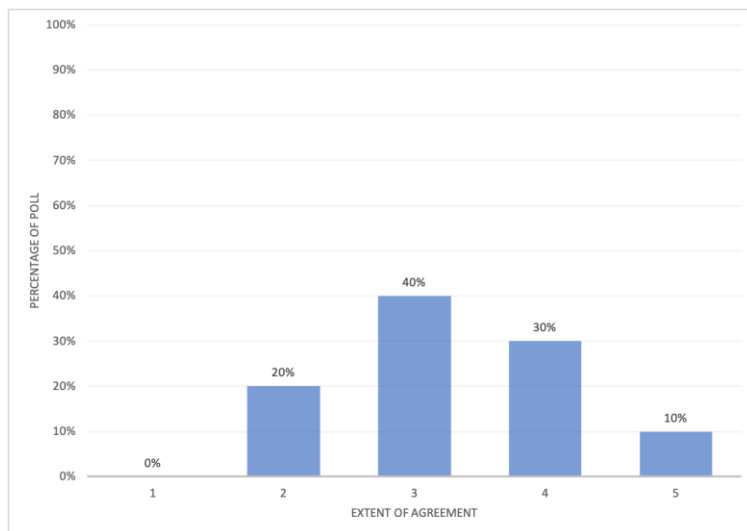
Q4.4 Financial resources are available at SOE for intrapreneurial projects.



Note. This demonstrates that all the respondents agree that financial resources are available at the SOE for intrapreneurial projects, with 30% fully agreeing.

Figure 26

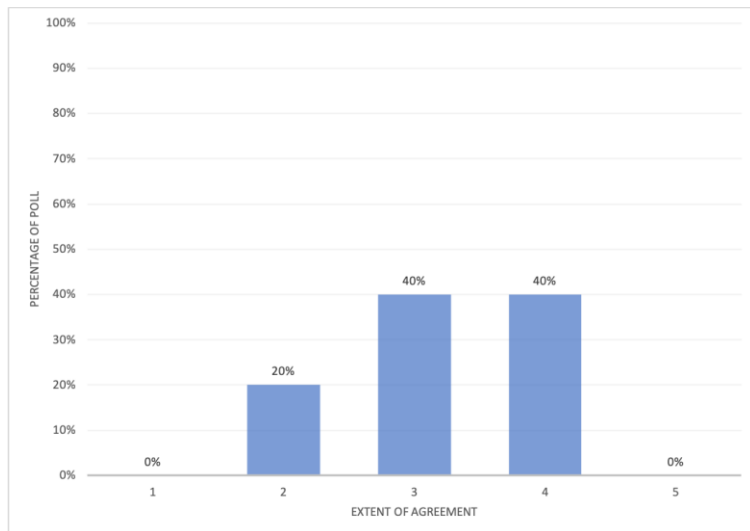
Q4.5 Employees have time to incubate their new ideas.



Note. This shows the respondents are divided about whether they are given enough time to incubate their new ideas, with 20% partly disagreeing, 40% taking a neutral position, 30% partly agreeing and 10% fully agreeing.

Figure 27

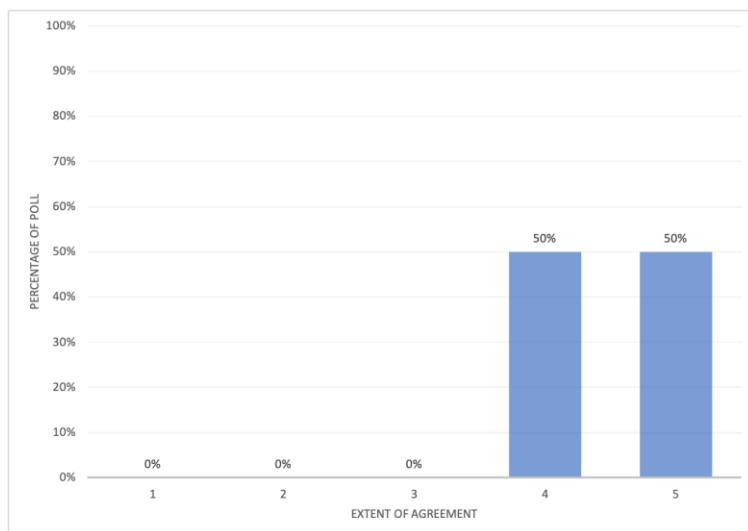
Q4.6 Employees are satisfied with the pay they receive for their job.



Note. This shows that only 20% of the respondents are not really satisfied with their salaries, while 40% remain neutral and 40% partly agrees. No one agrees or disagrees fully.

Figure 28

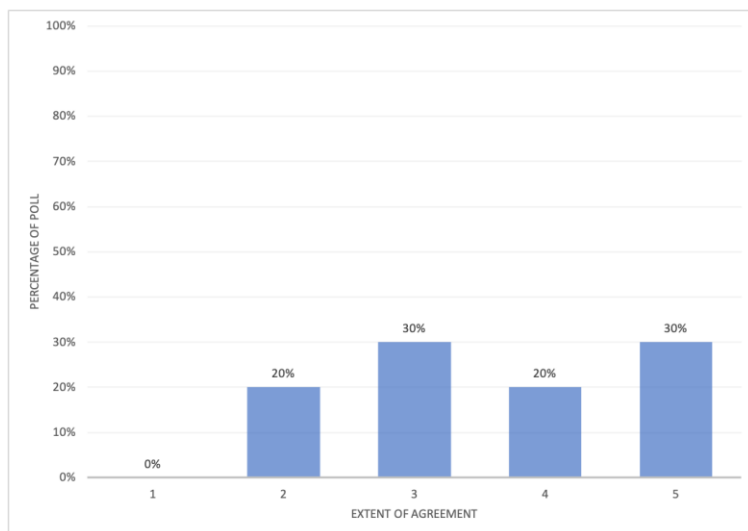
Q4.7 A basic value of SOE includes learning as key to improvement.



Note. This shows that respondents agree the SOE values learning as key to improvement, with 50% partially agreeing and 50% fully agreeing.

Figure 29

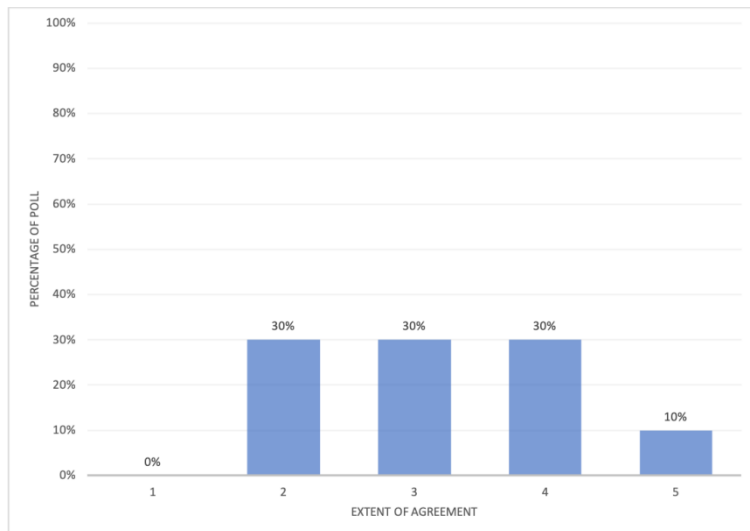
Q4.8 Employees find their work challenging and exciting.



Note. This reveals that respondents are quite divided on whether their work is challenging and exciting, with 20% partly disagreeing, 30% taking a neutral position. The other 50% partly to fully agree that their work is challenging and exciting.

Figure 30

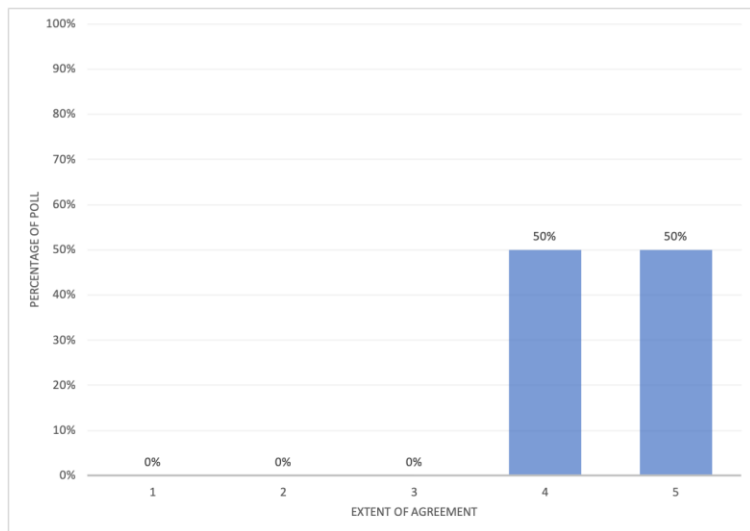
Q4.9 Employees feel that their fellow workers are stimulating.



Note. This shows that only 10% fully agrees their colleagues are exciting, whereas the remaining 90% are equally divided over partly disagreeing, neutral and partly agreeing.

Figure 31

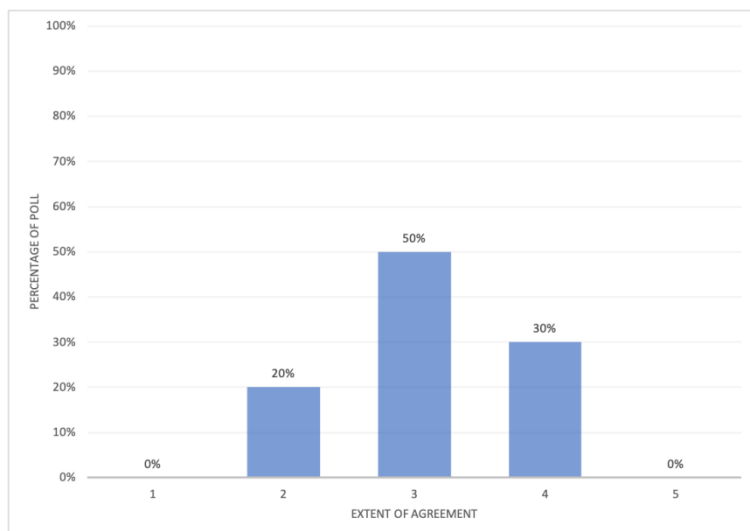
Q4.10 Employees are committed to the organization.



Note. This demonstrates that all respondents are partly to fully committed to the SOE.

Figure 32

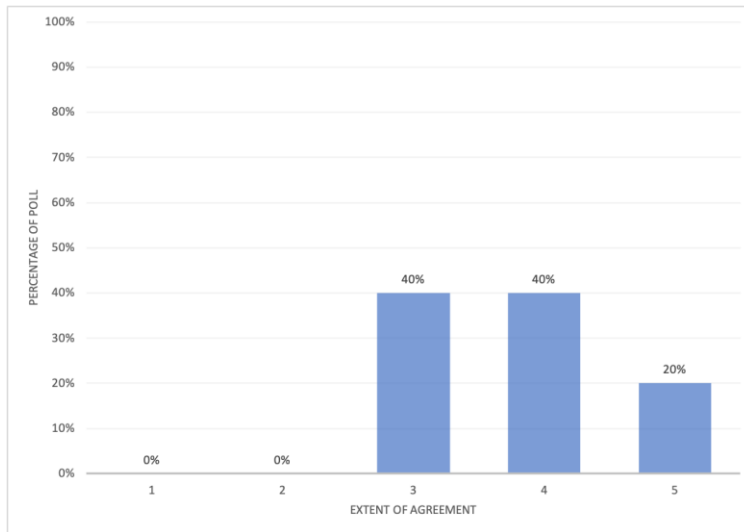
Q4.11 Managers at SOE share relevant information with workers.



Note. This shows that 50% of the respondents respond neutrally, while 30% partly agree that managers at the SOE share relevant information. However, 20% partly disagrees.

Figure 33

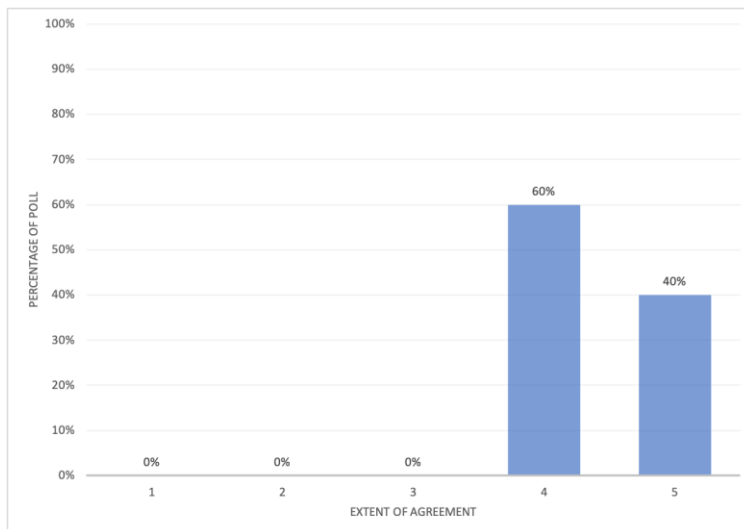
Q4.12 Flow of information at SOE is top down.



Note. This reveals that most respondents agree that the flow of information is top-down in the SOE, with 20% totally agreeing. The remaining 40% hold a neutral position.

Figure 34

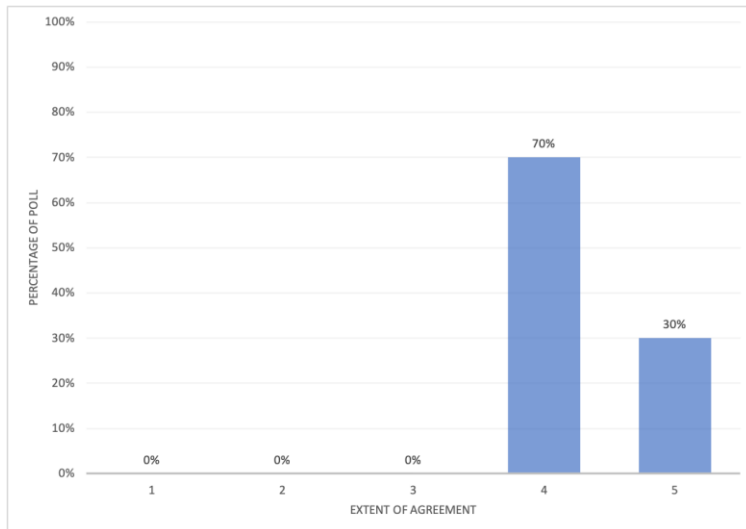
Q4.13 The opportunity for personal growth and development exists at SOE.



Note. This shows that all the respondents agree that there is opportunity for personal growth and development at the SOE, with 60% partly agreeing and 40% fully agreeing.

Figure 35

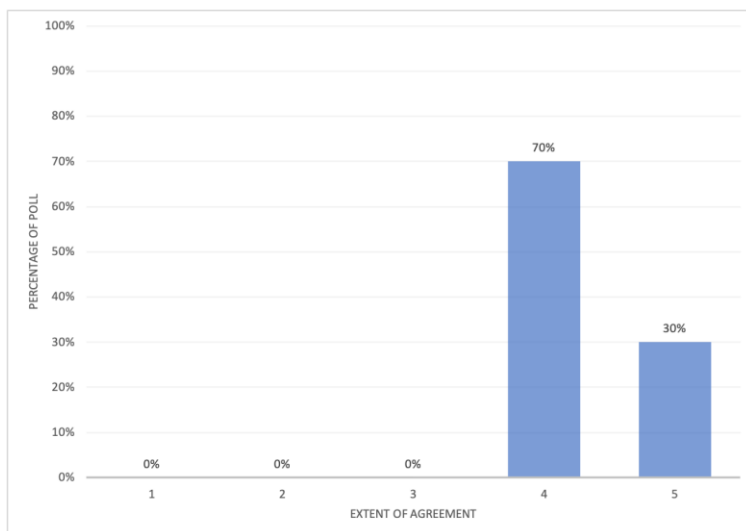
Q4.14 Working in teams will stimulate corporate entrepreneurship at SOE.



Note. This demonstrates that all respondents agree that working in teams will stimulate corporate entrepreneurship at the SOE, with 70% partly agreeing and 30% fully agreeing.

Figure 36

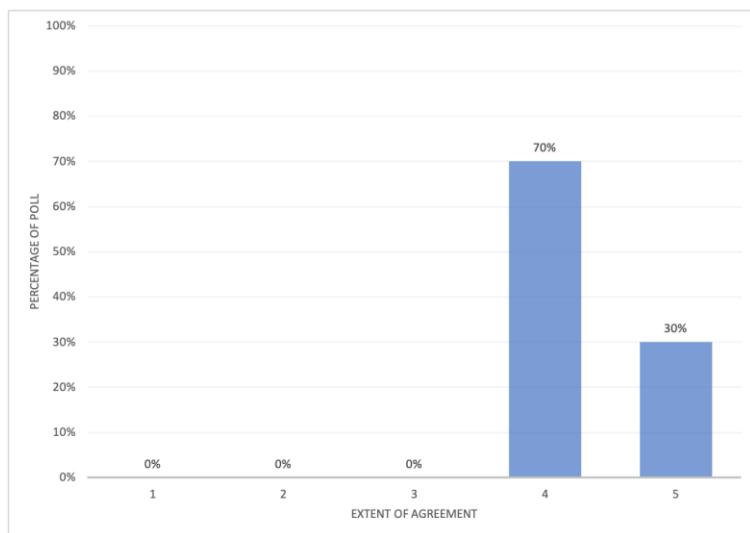
Q4.15 An educational program to stimulate corporate entrepreneurship is useful.



Note. This reveals that 70% partly agrees that an educational program would stimulate corporate entrepreneurship at the SOE, whereas 30% fully agrees.

Figure 37

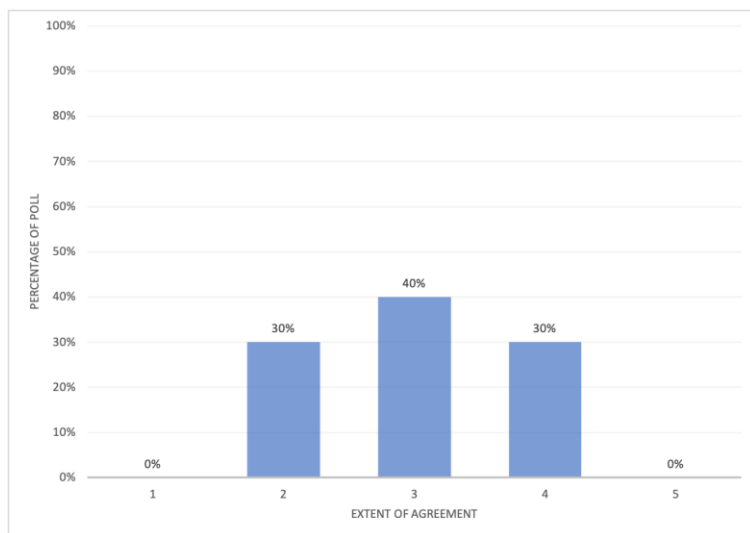
Q4.16 'Thinking outside the box' must be stimulated at SOE.



Note. This shows that all the respondents agree that 'thinking outside the box must be stimulated at the SOE', with 30% in full agreement.

Figure 38

Q4.17 Corporate entrepreneurship cases about other companies should be studied.



Note. This shows that the respondents are not unanimous in their opinion that cases of corporate entrepreneurship should be studied, though no one fully agrees nor disagrees.

Open question: Anything you would like to say regarding the relation between incentives and corporate entrepreneurship? Later in transcript.

By observing the above 17 bar charts the influence of incentives for corporate entrepreneurship at the SOE can be identified.

To the question whether the management encourages employees to believe that corporate entrepreneurship is a part of all members at the SOE, 60% mostly agree and 40% fully agree.

This indicates that the respondents agree that management encourages all employees to take part in corporate entrepreneurship at the SOE.

To the question whether the employees of the SOE have the discretion to make decisions about their own work, 50% of the respondents mostly agree, 40% is neutral and 10% fully agree.

This indicates that the employees have some autonomy to make their own decisions within the SOE.

To the question whether rewards enhance the motivation of individuals to engage in corporate entrepreneurship, 70% of the respondents mostly agree and 30% fully agree. This indicates that rewards are motivating.

To the question whether financial resources are available at the SOE for intrapreneurial projects, 70% of the respondents mostly agree, and 30% fully agree. This indicates that the SOE is making funds available for intrapreneurial projects.

To the question whether employees have time to incubate their new ideas, 40% of the respondents is neutral, 30% mostly agree and 10% fully agree whereas 20% mostly disagree. This indicates that most respondents do not get enough time to further develop their ideas within their working week.

To the question whether employees are satisfied with the pay they receive for their job, 40% of the respondents mostly agree, 40% is neutral and 20% mostly disagree. This indicates there is a level of dissatisfaction with the salaries they earn.

To the question whether the SOE considers learning (professional development) as key to improvement, 50% of the respondents fully agree and 50% mostly agree. This indicates that most respondents agree that professional development is necessary for improvement.

To the question whether employees find their work challenging and exciting the answers are quite diverse, although none of the respondents fully disagree. This indicates that more variation within jobs would be preferable.

To the question whether employees feel that their fellow workers are stimulating, again the answers are quite diverse, although again none of the respondents fully disagree. This indicates that teambuilding could be encouraged.

To the question whether employees are committed to the organization, 50% fully agreed and 50% mostly agreed. This indicates that most of the respondents have a strong loyalty towards their employer.

To the question whether managers at the SOE share relevant information with workers, 50% is neutral and 30% mostly agree whereas 20% mostly disagree. This indicates that improvement is needed in the communication and sharing of information between management and the workers.

To the question whether the flow of information at the SOE is top down, 40% of the respondents is neutral, 40% mostly agree and 20% fully agree. This indicates that management could do more to encourage workers to engage.

To the question whether opportunity for personal growth and development exists at the SOE, 60% of the respondents mostly agree and 40% fully agree. This indicates that the SOE takes good care of its staff's well-being.

To the question whether working in teams would stimulate corporate entrepreneurship at the SOE, 70% of the respondents mostly agrees and 30% fully agrees. This indicates that respondents think teamwork must be encouraged.

To the question whether an educational program to stimulate corporate entrepreneurship would be useful, 70% of the respondents mostly agree and 30% fully agree. This indicates that such a program would be beneficial.

To the question whether 'thinking outside the box' should be stimulated at the SOE, 70% of the respondents mostly agreed and 30% fully agreed. This indicates that creativity is highly valued.

To the question whether corporate entrepreneurship cases about other companies should be studied, the respondents' replies were mixed in the middle. This indicates that comparing companies is not considered to be useful.

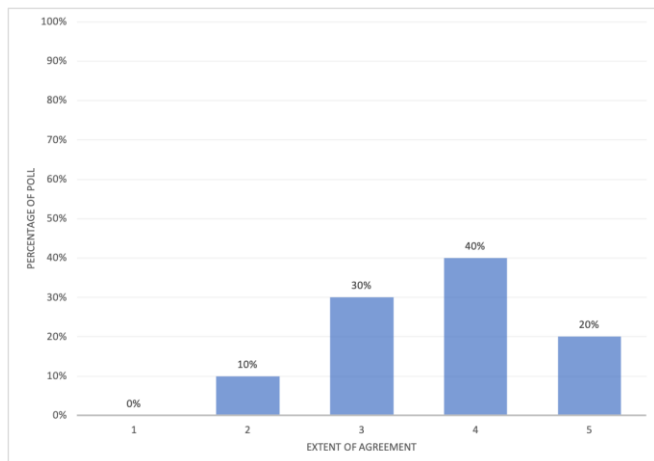
In general, one might discover some contradictions in answers, this might be caused by the relative sensitivity of certain questions, where respondents try to stay on the 'safe' side of the argument.

5.2.6 Q5 Personality characteristics and their impact on corporate entrepreneurship

Respondents were asked to indicate the extent to which they agree or disagree with following statements: fully disagree (1) to fully agree (5).

Figure 39

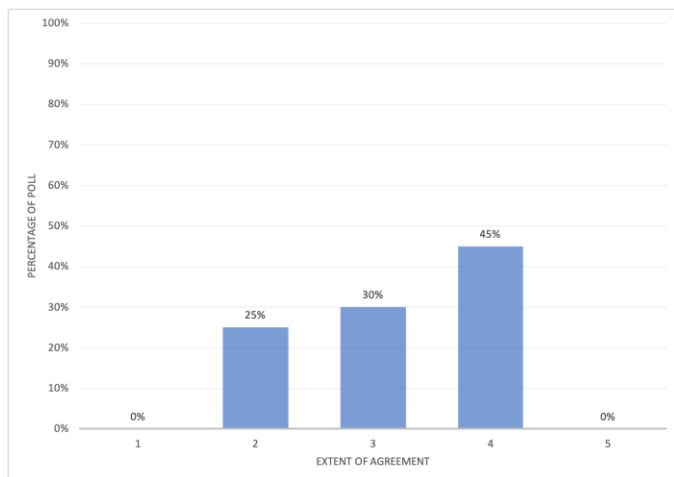
Q5.1 Self-confidence is an important personal characteristic to improve corporate entrepreneurship at SOE.



Note. This shows that self-confidence is mostly considered an important personal characteristic to improve corporate entrepreneurship, with 20% fully agreeing and 40% partly agreeing. 30% is neutral towards the idea and 10% partly disagrees.

Figure 40

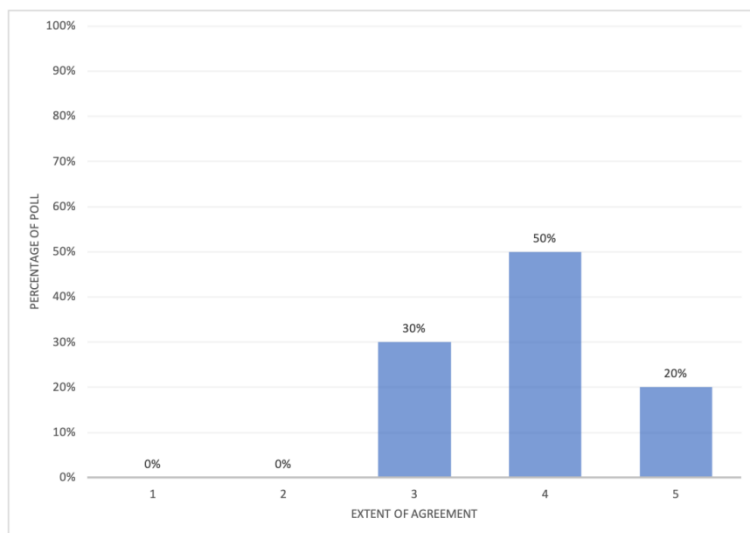
Q5.2 Being a risk taker is an important personal characteristic to improve corporate entrepreneurship at SOE.



Note. This demonstrates that no respondents are in full agreement nor opposition, whereas 45% partly agree that it is important to be a risk-taker to improve intrapreneurship, and 30% holds a neutral view.

Figure 41

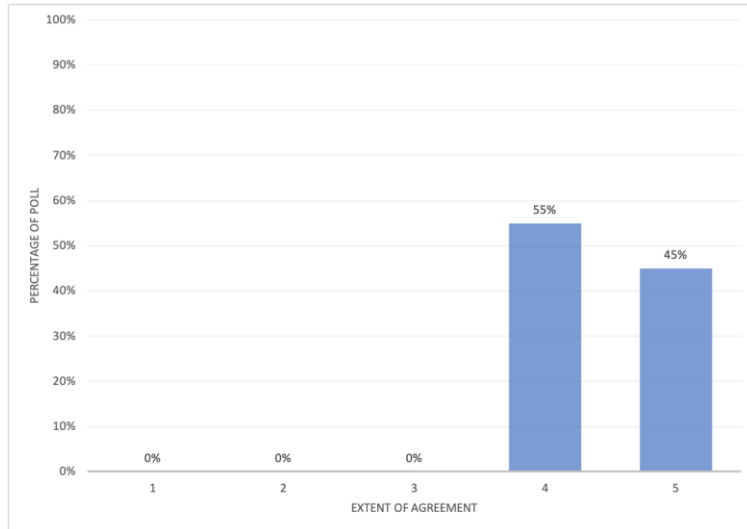
Q5.3 Being a networker is an important personal characteristic to improve corporate entrepreneurship at SOE.



Note. This shows that most of the respondents partly to fully agree that being a networker is an important characteristic to improve intrapreneurship at the SOE, whereas 30% holds a neutral view.

Figure 42

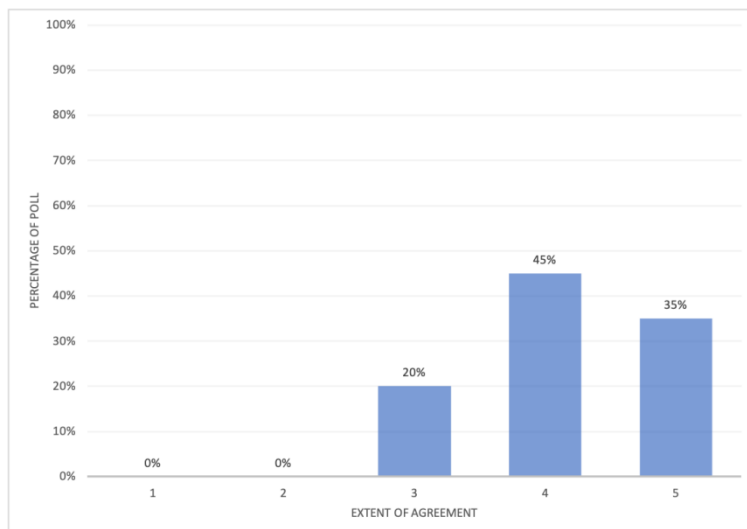
Q5.4 Creativity is an important personal characteristic to improve corporate entrepreneurship at SOE.



Note. This reveals that all respondents partly or fully agree that creativity is an important characteristic in improving entrepreneurship at SOE.

Figure 43

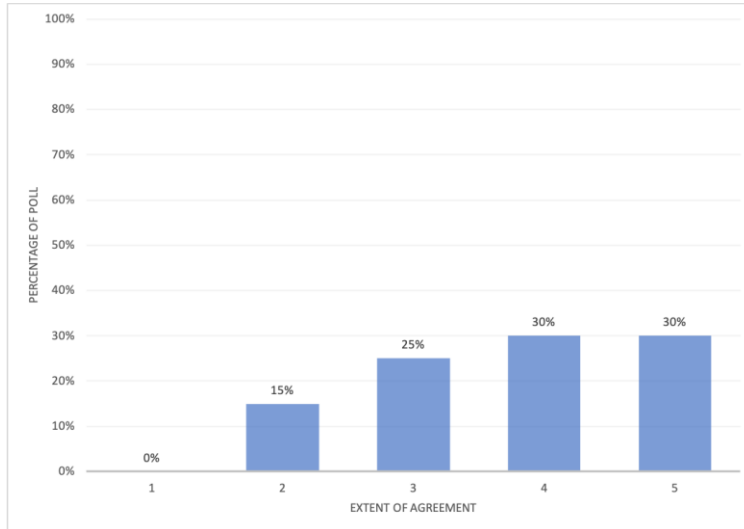
Q5.5 Being energetic is an important personal characteristic to improve corporate entrepreneurship at SOE.



Note. This demonstrates that most of the respondents partly to fully agree that being energetic is an important characteristic in improving intrapreneurship, whereas 20 % holds a neutral view.

Figure 44

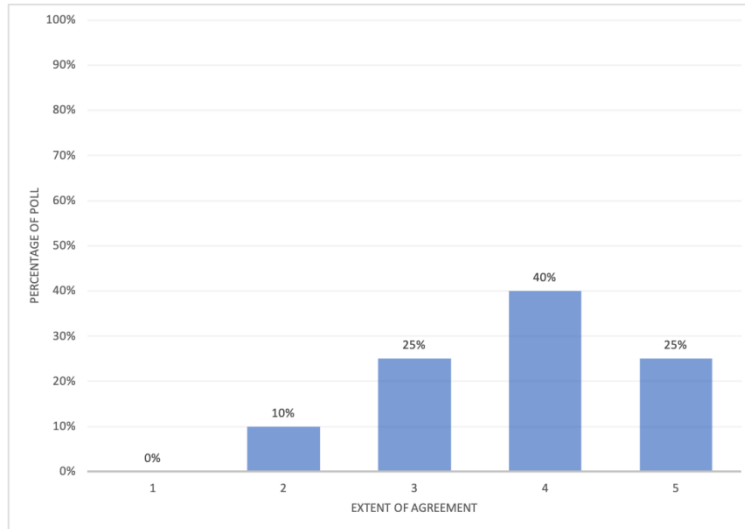
Q5.6 Tenacity is an important personal characteristic to improve corporate entrepreneurship at SOE.



Note. This demonstrates that a small majority of the respondents agrees that tenacity is an important characteristic in improving intrapreneurship at an SOE, whereas 15% partly disagrees and 25 % is neutral.

Figure 45

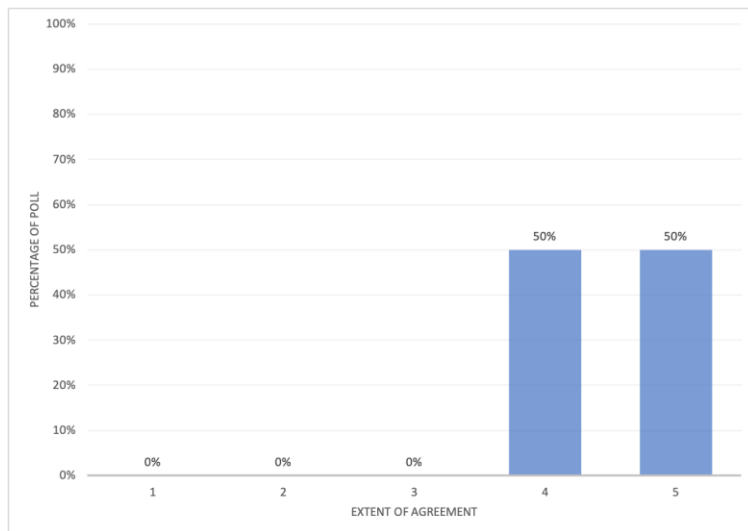
Q5.7 Tolerance to ambiguity is an important characteristic to improve corporate entrepreneurship at SOE.



Note. This shows that only 10% respondents do not quite agree with the importance of tolerance to ambiguity to improve intrapreneurship, and 25% are neutral. The majority of respondents are inclined to agree with the clause, with 25% fully agreeing and 40% partly agreeing.

Figure 46

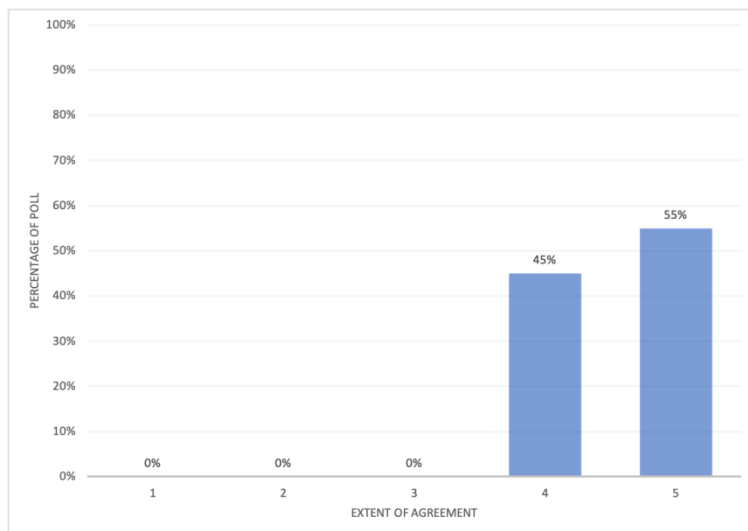
Q5.8 Being an optimistic person is an important characteristic to improve corporate entrepreneurship at SOE.



Note. This reveals that all the respondents agree that being an optimistic person is important in improving intrapreneurship in the SOE, with 50% partly agreeing and 50% fully agreeing.

Figure 47

Q5.9 Having a strong work ethic is an important personal characteristic to improve corporate entrepreneurship at SOE.



Note. This shows that all the respondents agree that having a strong work ethic is important in improving intrapreneurship at the SOE, with 55% fully agreeing and 45% partly agreeing.

Open question: Is there anything you would like to say regarding personality characteristics and corporate entrepreneurship? Later in transcript.

By observing the above nine bar charts the influence of personality characteristics on corporate entrepreneurship at the SOE can be identified.

To the question whether self-confidence is an important characteristic to improve corporate entrepreneurship at the SOE, the respondents' replies were quite mixed, though none fully disagree. This indicates that not too much focus should be given to this characteristic.

To the question whether being a risk-taker is an important personal characteristic to improve corporate entrepreneurship, the respondents' replies were again quite mixed, the majority mostly disagree or is neutral and only 45 % mostly agree, indicating that the respondents do not attribute the success of corporate entrepreneurship fully to risk-taking.

To the question whether being a networker is an important personal characteristic to improve corporate entrepreneurship at the SOE, 50% of the respondents mostly agree and 20% fully agree whereas 30% is neutral. This indicates that social skills are considered essential to corporate entrepreneurship.

To the question whether creativity is an important personal characteristic to improve corporate entrepreneurship at the SOE, 55% of the respondents mostly agree and 45% fully agree. This indicates that creativity should be stimulated.

To the question whether being energetic is an important personal characteristic to improve corporate entrepreneurship at the SOE, 45% of the respondents mostly agree, 35% fully

agree and 20% is neutral. This indicates that active participation of employees in the SOE is beneficial to corporate entrepreneurship.

To the question whether tenacity is an important personal characteristic to improve corporate entrepreneurship at the SOE, the respondents show diverse replies with the majority of 60% fully and mostly agree, 25% is neutral and 15% somewhat disagree. This indicates that failure in the initial stages could lead to loss of face and therefore discontinuation of a new project.

To the question whether tolerance to ambiguity is an important characteristic to improve corporate entrepreneurship at the SOE, the respondents again show diverse replies with the majority agreeing, and none of them fully disagreeing. This indicates that tolerance to ambiguity is not a very clear concept and needs further explanation.

To the question whether being an optimistic person is an important characteristic to improve corporate entrepreneurship at the SOE, 50% of the respondents mostly agree and 50% fully agree. This indicates that an optimistic disposition is much appreciated on the work floor.

To the question whether having a strong work ethic is an important personal characteristic to improve corporate entrepreneurship at the SOE, 55% of the respondents fully agree and 45% mostly agree. This indicates that the culture in the SOE is one of discipline and strong work ethic.

The conclusion is that some personality characteristics need to be developed more than others to effectively stimulate intrapreneurial activities within the SOE.

5.2.7 General open questions:

Do you think it is useful to start an educational program at CRRC to stimulate corporate entrepreneurship?

Later in transcript

Do you have any suggestions for such a program?

Later in transcript.

5.3 Findings of Open Questions in the Survey

In this part the findings of the open questions of the survey will be summarized in a systematic way. 32 Persons working at CRRC filled in the survey, not all of them gave an answer on the open questions. The survey was done in the period May to June 2021.

The following questions were asked:

1. Do you think that the company you work in is emphasizing enough on the importance of intrapreneurship?

Intrapreneurship at the company, 10 respondents answered this open question in the survey. Intrapreneurship isn't commonly established, only four of the 10 respondents who answered the question are positive on emphasizing importance of intrapreneurship in their working experiences. We can see a difference on acknowledging this concept based on work position and work experience.

Three respondents say that intrapreneurship isn't encouraged in the company because the authority is highly concentrated within top management teams.

Two respondents define the company culture as "Hierarchy" culture.

Two respondents say that company does not have enough emphasis on intrapreneurship. The company could do more to stimulate entrepreneurship and innovation at the company. In general respondents feel a sense of the importance of intrapreneurship at the company but also feel that it might be not enough to be completely 'ready for the future'.

These replies show that there are mixed opinions about the emphasis on intrapreneurship. It could be that this depends on the positions held by the respondents. Another reason could be that intrapreneurship is a relatively unknown concept in China.

2. Is there anything you would like to say regarding the relation between mixed ownership and intrapreneurship at your company?

About the mixed ownership: 10 respondents answered this question in the survey. Respondents defined mixed ownership as to offer shares to people or companies outside the government, including employees. They think mix-ownership must be planned carefully with strict regulations. One respondent believes the behavior of “I am accountable” promotes mixed ownership. Three respondents express that ‘the difference of adding an outsider as a shareholder influences the conducts in risk-taking and being innovative’.

Two respondents express that intrapreneurship is easier to implement in the company than mixed ownership, because of conservative thinking within the management and rules and regulation of the country.

One Respondent expresses that mixed ownership at the company makes embedding of an innovative environment easier.

Here too the replies are varied, as by nature ownership at an SOE is sensitive, it might be that some respondents are somewhat reluctant to give their true opinion. From these replies, it can be inferred that employees of SOEs carefully consider their answers.

3. Is there anything you would like to say regarding the relation between bureaucracy and intrapreneurship at your company?

Bureaucracy in company, eight respondents answered this open question in the survey. Two Respondents express that bureaucracy begins when an enterprise develops, and the organizational structure becomes more bloated.

Three respondents express that bureaucracy is triggered by internal processes, structure, policy, and culture. Most respondents express that bureaucracy in general does not encourage employees to take risks and be enthusiastic about their work. One respondent expressed that bureaucracy drags down the decision-making efficiency and formation of intrapreneurship.

Two respondents think bureaucracy is popular in stated-owned companies, because of its management rules favoring some employees until retiring. Also, for Chinese private owned companies, bureaucracy exists but won't affect their process of intrapreneurship.

Two Respondents express that Intrapreneurship, exists in a more open environment, and intrapreneurship is more welcomed among young generations and in private SMEs.

Bureaucracy is generally perceived as a barrier to intrapreneurship. However, young people might feel a bit more negative about bureaucracy than older generations. One could also conclude that bureaucracy in certain circumstances can be positive for the company.

4. Is there anything you would like to say regarding the relation between incentives and intrapreneurship at your company?

Incentives, nine respondents answered this open question in the survey. Most respondents think proper levels of incentives encourage formation of intrapreneurship in a company. The incentives include annual salary rise, promotion policy, and stock share rewarding.

One respondent believes that even though incentives encourage employees' working enthusiasm, it doesn't encourage intrapreneurship because of Chinese culture.

One can conclude that incentives are also important at an SOE and therefore must be considered when stimulating intrapreneurship at the SOE.

5. Is there anything you would like to say regarding personality characteristics and intrapreneurship at your company?

Personality characteristics, nine respondents answered this open question in the questionnaire. Two respondents express that a mindset of growth decides upon the level of ambition in relation to intrapreneurship. Most respondents express that people who are open minded are easier to accept changes and intrapreneurship.

Not much can be concluded from this open question other than that being open-minded is a rather meaningless characteristic.

6. Do you think it is useful to start an educational program at your company in order to stimulate intrapreneurship at your company?

Educational program at the company, 15 respondents answered this question in the questionnaire. Most respondents express the answer is yes. One respondent expresses that because of the tremendous changes happening from technical, technological, and psychological in this 'VUCA' world, an educational program could fulfil self-driven aspects to achieve greater goals. Five respondents express this educational program is also beneficial for company expansion in the future.

One respondent agrees with the importance of educational program, but he/she thinks it's not necessary to every industry.

This rather rhetorical question gives an expected outcome, in general one can say that in China the word 'education' has a very positive connotation.

7. Do you have any suggestions for such a program?

Suggestions, eight respondents answered this question in the questionnaire. Three respondents express that possible intrapreneurship program needs resources from different parts of the company like marketing, finance, and supply chain management. One respondent suggests intrapreneurship over entrepreneurship if these above resources could be provided by company. One respondent expresses that a possible program could start from little and run this program as a pilot.

Three respondents express that more feedback from company insiders is needed to determine whether this program is suitable or not.

One respondent expresses that it is important to set a mechanism to track the process.

One can conclude that decisions like these come from higher up in the hierarchy, and that some employees have difficulty with sharing their suggestions.

In conclusion, the part of the questionnaire with the open questions did not have many respondents. It could be that time was a constraint. Moreover, open questions, by nature, require reflection and opinion. However, it can be concluded from the replies to the open questions that overall employees are positive towards improvement, education, and the concept of intrapreneurship.

5.4 Transcript of Open Interviews

(Done with eight employees of CRRC, names of interviewees and time of interviews known.)

The major interview question asked to the employees:

How can CRRC improve, stimulate Intrapreneurship?

Based on the interviews the researcher identified the following categories, as many ideas were mentioned by the interviewees.

1. Government and society.
2. Working environment and culture.
3. Management.
4. Market and product.
5. Recruitment, Education and Human Resource Management.

These five categories presented themselves during the interviews. As the interviews were individual and not structured, answers and opinions were coming from all directions. The major interview question, ‘How can CRRC improve and stimulate intrapreneurship?’ was answered by very different employees, from various departments, from various cities. In appendix 4 this rationalization of these categories can be found.

5.4.1 Government and Society

The Chinese government can help establish a positive environment for State Owned Enterprises to improve intrapreneurship. With appropriate macro-control policy to stimulate the social economy, such as monetary and fiscal policy, the SOE can be provided with a befitting macroeconomic environment in the market. The government can also advocate the transparent and neutral competition under the market economic system which involves both state-owned and private sector. The shareholding system in SOEs that has been gradually initiated by the government, in particular SOEs, allows SOEs to prioritize the private sector and privatize partly while the government gives up more controls. It can also sell stock to the public, thus reducing the voting power of the state. Instead of the equity reformation, opening-up the market to overseas business can also stimulate SOEs to improve internally under the market economy rules. Besides, other policies which would encourage and support entrepreneurs, such as

preventing expropriation, protecting private property, sharing big data, and strengthening infrastructure construction, are probably effective from authority side.

In conclusion, the government in China can play a very positive role in relation to intrapreneurship. The sentiment towards government policies is rather positive and employees are proud to work for a government organization.

5.4.2 Working Environment and Culture

The enterprise culture of SOEs is always considered conservative and stereotypical because of their internal hierarchy and bureaucracy inherited from the background of state ownership. A free and flexible working environment can lead to more innovation and creative ideas which are important for intrapreneurship. Firstly, employees should feel free to express ideas and have risk-taking behavior. This could encourage the innovation in the SOEs. But this kind of culture of free expression requires a no blame culture where there are less or no punishments for failure, and even celebration for mistakes. With a working environment as mentioned above, a vicious circle could be formed to continuously promote the innovation of the whole company. What is more, encouraging collaboration among the employees is important. By organizing brainstorming or just communication across the departments or across functions can provide the participants with new ideas, more comprehensive view of the whole enterprise, deeper knowledge of the accessible resources and functions and critical thinking. The most arguable part of the culture at SOEs is the bureaucracy which sets unnecessary barriers for the internal communication and potential innovation. The enterprise should reduce wasteful bureaucracy that consumes energy and time from workers. Many bureaucratic processes are overdrawn and add on employees' monotonous work.

In conclusion, bureaucracy is considered a barrier for intrapreneurship and innovation. Creative thinking could be encouraged by a more open culture, which encourages collaboration between different departments.

5.4.3 Management

The reformation of the working culture requires a change in management style. A micro-managing at the minimum level and a designated physical space for employees to collaborate in can eliminate the barriers of communication and make the working more efficient. The power of decision should be decentralized as well, to increase the employee engagement. The employees at SOEs should also be familiar with the corporate missions and strategies. The management team should be open-minded and consist of talents with both industry experience, innovative sense, and market insight ability. It should be guaranteed that there are practical methods of upward communication for every employee to express his or her ideas and complaints, by weekly idea-sharing session or others. For the leaders, their task/goal setting can be adjusted to lower the workload pressure and try to inspire the innovation of fellows. For external development, the management team should try to find appropriate opportunities to cooperate with private companies, both at home and abroad. For the equity structure, the SOEs management should also try to find the possibility of outward investment in new and growing business.

In conclusion, management style is generally perceived as rather old-fashioned. One can say that management should encourage teams to be more open-minded to embed intrapreneurship in the company. Another interesting conclusion is that goal setting by management should be adjusted to lower the workload pressure, this to inspire intrapreneurship.

5.4.4 Product and Market

With the innovation culture to be improved inside the SOEs, the target market of the company should be clarified. First, the traditional SOEs should re-evaluate the consumer market and their target customers. Then the product improvement should be customer oriented. The brand strategies of transforming from an old-style product to an up to date one, retaining the trustful impression brought by its state-owned history. Secondly, product innovation is important in the company. The SOEs should involve new technology to reduce pricing and adjust it to the market. Thirdly, the SOEs can also be involved new fields. The approaches can be investing in start-ups and expanding business. The budget for innovation should be increased to stimulate the production renewal. There could be a new department to focus on intrapreneurship which could receive employees' innovative ideas. This department can be set free from the control of supervisors or managers so that there can be less pressure for workers to propose new ideas.

In conclusion, employees agree that continuous product innovation and opening new markets is a prerequisite for improvement.

5.4.5 Human resource management, recruitment, and education

Last, but not least, there is a major task for the Human Resources department when it comes to improving intrapreneurship. When recruiting staff, the enterprise should involve more young blood who are trying to change the established rules of the business world and own the ability to innovate, which is a key factor in a company's success. The talent recruiters should also concentrate on expertise with both experience and innovation. To attract premium expertise, the company can offer competitive salaries and attractive benefits. An effective reward system is necessary to encourage the creative and critical thinking of the employees. The rewards for intrapreneurship can be various. Such as oral praise, promotion, and even stock incentives. The

compensation would be adjusted to differ from the traditional standardized government type wage, it will involve incentivizing workers with capital rewards. These rewards can promote the recognition and confidence of the staff which will also stimulate the risk-taking, free expression and lessen the hierarchical culture. To attract more talents, the brand marketing of the whole company should be given attention. As the improvements we mentioned above, they can gradually become attractive features, such as free working culture, innovation-oriented, enviable welfare, and wholesome reward mechanism. Continuing professional development is also important to cultivate an innovative organizational culture. An open platform to share the latest information and advanced knowledge can also be a part of life-long learning for employees.

In conclusion, human resource management is becoming more and more important in China.

Another interesting conclusion is that continuing education is also considered to be important to cultivate and intrapreneurial culture. Lifelong learning is mentioned by employees.

CHAPTER 6

DISCUSSION

In this chapter the theories and or theoretical concepts as introduced in Chapter 2 will be used to analyze the findings.

6.1 Level of intrapreneurship currently at SOE

Questions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9.

The research seeks to evaluate perceptions of the existing levels of innovation and intrapreneurship among the respondents in key areas undertaken by the SOE. The questions concentrated on participants' views on the current state of innovation and intrapreneurship in SOEs.

When it comes to finding new niches in current markets, most respondents tended to agree that this was an activity that the SOE had concentrated on in the last 5 years. Similarly, an overwhelming majority of respondents were also of the view that their SOE had concentrated on finding new markets in the last 5 years.

However, when it comes to widening product lines in existing markets, a key aspect of innovation, respondents were not so emphatic, with some positing that their organization had not devoted as much effort to doing so in the past. Opinions were even more neutral when it came to the subject of creating autonomous units within the SOE, indicating that in the absence of foreign investment, SOEs did not tend to encourage intrapreneurship, initiative, and autonomy within the group. The view was similar when it came the topic of spinning off new companies to carry on independent innovation, with most saying it was not an important part of the SOE's strategy.

Innovation figured highly in respondents' view of their SOE, with the majority stating that the organization had been spending heavily on new product development, but results were

more mixed when it came to the effectiveness of the expenditure, as to the number of new products developed, with most respondents of the opinion that there was no significant improvement in this regard.

Most respondents agreed that the SOE had placed a lot of focus on technological innovation but again, opinions were mixed as to their emphasis on creating proprietary technologies that could be leveraged for IP-based revenues from licensing and similar arrangements.

In theory the intensity of intrapreneurship at a company is a variable related to the need for intrapreneurial education at that company. A high intensity requires a different educational approach than a company with a low intrapreneurial intensity.

Knowing this, we can conclude that the SOE is geared to innovation, both on the technology and the market side, but does not place much emphasis on proprietary technology and intellectual property as a competitive strategy or a revenue generation model.

6.2 Ownership issues at SOE

Questions 2.1, 2.2, 2.3.

This section explores the perceived role of mixed public-private ownership of traditional SOEs and the possible impact on corporate intrapreneurship within the organization. The influence of private capital has been seen to increase the emphasis on competitive advantage in the market, making firms more efficient at what they do, as well as stimulating the spirit of entrepreneurship by changing the risk-reward equation within the firm itself. However, this represents a drastic departure from established organizational culture, impacting both the firm and its employees in very fundamental ways. Mixed ownership, therefore, is neither easy to implement within traditional firms nor are the benefits assured upon adoption of the model. The

openness of the employees to the prospect of mixed ownership of SOEs therefore can be seen to be rather lukewarm, and distinctly disapproving of the prospect of that mixed ownership being of foreign origin.

However, broad agreement, exists when it comes to the question of whether control mechanisms will be different under a mixed ownership model as opposed to a those in a SOE. It is conceivable that this view comes from the effects of a bureaucratic control system are largely seen to be tempered by the effects of private investment, which has been shown to increase the agility and flexibility of a firm.

In theory, both mixed ownership and FDI are other variables related to the need of intrapreneurial education at that company. In this SOE mixed ownership, is a positive driver for intrapreneurial activity. Foreign ownership is disapproved of. In the educational program a clear distinction should be demonstrated with advantages and disadvantages of both.

6.3 Bureaucracy at SOE and its role in intrapreneurship

Questions 3.1, 3.2, 3.3.

A functioning, healthy system of intrapreneurship requires agility, the capability to adapt quickly to changing market realities, and must have an efficient system of information dissemination and decision making to do so. Bureaucracies, with their inherent tendencies towards entrenched hierarchies, red tape, and procedural exactness, are detrimental to rapid information sharing and decision making, therefore a restructuring of the control and administration system into one more suited to a market-based enterprise is essential to the success of intrapreneurship.

When it comes to the question of the current perception of bureaucracy within SOEs, respondents were tending to the opinion that there is a high level of bureaucracy in their SOE,

with no disagreements, relative or absolute. None of them disagreed either, that there were too many meetings (too many meetings usually mean that a large portion of them is unproductive and unnecessary and can be said to be a symptom of bureaucratic excess).

In general, it is safe to say that a lengthy decision-making process is detrimental to an enterprise expected to react rapidly to changing market circumstances. While many respondents chose to stay neutral on this question, most believed making quick decisions was important to staying competitive.

In theory, bureaucracy is a barrier for intrapreneurship. Decreasing the level of bureaucracy will improve innovation and other intrapreneurial activities. In the educational program it must be explained that each company should have a healthy level of bureaucracy. Making this clear with case studies.

6.4 Role of incentive systems at SOE

Questions 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.12, 4.13, 4.14, 4.15, 4.16, 4.17.

Discussions on incentive systems are inevitably bound to discussions on the role of what could logically be called corporate entrepreneurship within state-owned enterprises. The restructuring of SOEs to accommodate individual initiative and innovation is a necessary adjunct to transforming it into an enterprise which can respond to market realities and becoming a true market player.

A big part of how this transformation into market responsiveness is the development of a new incentive system, which rewards individual effort in innovation and efficiency enhancement and not just collective efforts. This will encourage internal competition and motivate individuals and teams within the SOE to “think outside the box”. To accomplish this, it is necessary to understand what current motivation levels and incentive models exist within SOEs.

By and large, respondents believed corporate entrepreneurship is largely already part of the organization. However, they did not equate that corporate entrepreneurship with increased freedom of decision making about their work. In that respect, most respondents acknowledged that their decision-making powers as regards their own work were only a little above average.

This was accompanied by affirmation that there was a strong link between the motivation of employees to undertake corporate entrepreneurship and the rewards for such initiative. Additionally, all respondents tended to agree to a greater or relative level that the organization has provided sufficient financial support to intrapreneurship efforts inside the firm.

Although financial resources may be seen as sufficient, responses were far more divided about the time provided to individual employees to incubate and foster their ideas of intrapreneurship. It may be significant to point out here, that real intrapreneurship within a corporation can only take place with the application of both time and funding.

One of the main questions of motivation to go into is the one regarding fair compensation for work. There were no examples of either extreme satisfaction or extreme dissatisfaction with the salaries earned by respondents. Most respondents were either neutral or relatively satisfied with their wages, and a small minority were relatively unhappy. Salaries are closely tied in with the perceptions of rewards and determine the difference between those who do just enough not to get fired, and those who do more than is asked for them. They are also closely related to job security.

One of the important aspects of intrapreneurship is the question of whether the enterprise has a focus on learning, both for individuals as well as in its capacity as an organization. Typically, organizations encourage a learning environment by programs that incentivize employees to take up training that is not directly related to their present work to expand their

horizons. This was almost universally agreed upon, with half the respondents strongly agreeing and the other half of them agreeing somewhat that a learning environment is important to cultivate intrapreneurship.

Finding one's work challenging and exciting is an important part of motivation to do more than just enough. In general, no respondent found their work completely boring, but responses were evenly distributed among the remaining viewpoints. In the matter of whether they found their co-workers stimulating, they were also divided.

The promotion of intrapreneurship in an organization relies heavily on the level of commitment of individual employees to the enterprise. Respondents were clear that they were either relatively or completely convinced of their commitment to the organization they work for.

The transparency and communication espoused within an organization is a key aspect of the intrapreneurship instincts of the employee base. For the most part, respondents believed their managers were open to share relevant information with them with a small part preferring to reserve their opinions, but also mostly agreeing that the flow of information in SOEs was top down, with a small proportion again neither agreeing nor disagreeing.

Intrapreneurship in organizations has been shown to improve if employees are able to visualize personal growth and development within the enterprise, and benefit from team-oriented approaches as well as guidance on the implementation of intrapreneurship in the company. Here, all three questions met with relative or high acceptance by all the respondents, with no disagreements or lack of an opinion in the matter.

Similarly, all respondents either agreed wholly or relatively that it is important to stimulate out-of-the-box thinking in SOEs but were divided on the usefulness of studying cases of intrapreneurship in other companies (though there was no disagreement on the subject).

In theory, individual incentives are necessary in transforming a company into a more intrapreneurial one. These incentives vary from financial incentives to creating a feeling of ownership within the company by giving employees more responsibilities and freedom to innovate. In the educational program a clear distinction between the various incentives and their advantages and disadvantages must be addressed.

6.5 Impact of personality characteristics on intrapreneurship

Questions 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9.

If one looks at corporate entrepreneurship/intrapreneurship from an individual lens (as it does involve individual drive and motivation) it is evident that unlike in a collective environment, individual personality characteristics make a considerable difference to the likelihood of success of any intrapreneurship initiative. Theories have shown that there are both individual personality characteristics and important organizational culture elements that are necessary to this success. Some of these personal characteristics include creativity, imagination, a philosophical bent, openness, intellectualism, complexity, and depth of thought. These characteristics must be backed up by an organizational culture that encourages open communication, formal controls, organizational support to the principles of corporate entrepreneurship and an analytical focus on market environments.

Within the SOE in question, respondents displayed a variety of viewpoints on their feelings about which of these questions were important to the fostering of intrapreneurship in the SOE. For example, a few respondents disagreed with the premise that self-confidence is an important personal characteristic for successful intrapreneurship within SOEs, but most respondents agreed with the premise to varying degrees. It's difficult to say whether the lack of

exposure to intrapreneurship within the enterprise played a part in the answers to the research questionnaire.

An ambiguous attitude to the value of risk-taking is also evident from the responses of most respondents, with several in relative disagreement and no one in actual emphatic agreement. Risk-taking tends to be viewed differently in certain cultures, both societal and organizational. Whereas free-market enterprises tend to view risk-taking as a wholly positive trait in entrepreneurs, frequently opting for high-risk high-reward strategies, more traditional and collective-driven enterprises tend to view high-risk projects as reckless and ill-advised.

Another valuable characteristic in an entrepreneur is networking, that is, the development of a personal network of people who may be able to lend support, encouragement, knowledge of connections to the entrepreneur over a period. Building relationships is the fundamental talent in an intrapreneurship effort. But interpersonal relationships translate to very different concept in different cultures. Nowhere is this more manifested than in the difference between Eastern and Western cultures. It has been shown that the existing conceptions of interpersonal relationships is more formal, more defined, and differently enabled in Eastern, more specifically Chinese culture. The social and personal networks that lubricate Chinese business transactions (known as “guangxi”) are less transactional than business networking as perceived by Westerners. It is possible that responses to this question are therefore better viewed through the respondents’ interpretation of what exactly constitutes networking as a concept. Respondents tended to believe relatively that networking is an important talent of an entrepreneur, but several were neutral in their views.

One of the more unambiguously desirable traits of an entrepreneur, possibly the least disputable is that of creativity. The ability to think outside the box is considered and has been

shown to be an extremely valuable characteristic. The attitude of the respondents also reflects this unambiguity, with all respondents either relatively or absolutely agreeing that creativity was an essential personality trait for the success of any corporate entrepreneur.

It is generally known that the ephemeral quality of “energy” is invaluable to the development and progress of an enterprise. Entrepreneurs are expected to fill several roles in their new entities as they grow, working with a small multifaceted team that can wear several hats, to not invest into a talent pool which would effectively break the bank during the early stages of the enterprise. Although this is not necessarily applicable to intrapreneurs, with the support of the parent SOE behind them, being energetic is still considered an important trait of a successful entrepreneur. By and large, most respondents tended to agree in one way or other that energy is important, with a few respondents being ambivalent about this.

Entrepreneurs are supposed to be tenacious. A “can-do” attitude as popularly projected, is deemed essential to success of the entrepreneurial mindset. The reason this is such a prized trait, is that entrepreneurs are constantly faced with setbacks of a procedural and financial nature, which is proportionate to the level of innovation in their product or service. Tenacity is relevant whether in the free market of ideas or in the confines of a possibly bureaucratic environment of an SOE, albeit in different ways. Respondents had mixed responses to the question as to their perceived value of tenacity in an intrapreneur, with a few in relative disagreement or taking a neutral view, but a slight majority in either relative or absolute agreement. It is possible that the responses were also influenced due to lack of exposure to the challenges of being in the market by oneself.

When it comes to free market economies, there is far more ambiguity in the environment than in traditional planned economies. This means that an effective entrepreneur is probably

more tolerant to ambiguity than the average employee of a state-owned or private enterprise. Here too, respondents were only marginally more in agreement that tolerance to ambiguity is important to every entrepreneur, with an almost equal number preferring to stay neutral or in mild disagreement with the premise.

Optimism is widely seen as a necessary quality for an entrepreneur to possess, as far as keeping motivation alive despite setbacks that may be encountered during the early stages of a start-up enterprise. There was broad agreement by all respondents to the premise that optimism is a necessary if not essential trait in an intrapreneur.

It is well-known that a sense of discipline or a strong work ethic is invaluable in an entrepreneur, enabling him or her to evaluate situations, manage personal and professional time, and carefully husband resources for maximum effect. In a Chinese context, this effect may be multiplied by the fact that self-discipline is already a prized, or even essential characteristic in Chinese culture. Therefore, it should not be surprising that all respondents rated this quality highly in intrapreneurs and might even have done so in the case of all employees. Most were in full agreement, and some relatively agreed.

In theory, certain personality characteristics of individual employees have an important impact on intrapreneurial activity within a company. However, cultural dimensions should not be ignored. In the educational program advantages and disadvantages of specific personality characteristics must be addressed in a cultural context.

From these studies it can be made out that to a great extent, respondents have both an explicit and implicit understanding of what intrapreneurship entails, and the advantages and disadvantages of working in the SOE system, when it comes to implementing a program of intrapreneurship, either with foreign/private investment and state ownership. Viewpoints may

vary on the details, but a broad consensus on what is lacking and what is available begins to arise.

6.6 Answers to thesis' research questions

Question 1: How to improve intrapreneurship at a state-owned enterprise in China?

The first research question of this thesis can be answered as follows. SOEs in China must start to realise more that unlimited availability of critical resources is not necessarily a driver for efficiency, and effectiveness. A way of making SOEs more aware of this would be to introduce a form a mixed ownership in which another party than the state also has a say in the decision-making process. This would enhance and improve intrapreneurial activity at an SOE a lot. Another way to improve intrapreneurship at a state-owned enterprise in China is to decrease the level of bureaucracy and come to a more effective management environment. This will result in less frustration for employees and more agility and speed in the decision-making process. As the level of bureaucracy is a rather sensitive issue in China and at SOEs it should be handled in a rather delicate, customised way. The next way to improve intrapreneurship at an SOE is to incentivize employees. At private-owned companies it is a rather natural reaction to reward employees who come up with good, creative, and profitable ideas. At an SOE this incentivation is not part of the natural way of doing things. This incentivizing of employees needs to be done in a rather personalised way, as employees may differ in their need for getting rewards. Other issues to be addressed related to incentivizing employees is related to corruption. Corruption is a particularly sensitive topic in China. Employees really do not want to show to their colleagues that they are treated differently than others and therefore a kind of common and/or group incentivation should be considered. Another way of increasing intrapreneurship at an SOE in China is to improve/enhance certain personality characteristics present in individual employees.

It might be that these characteristics are latently present, but sometimes are not correctly used to benefit both the company and the employees. Another issue related to this is that some characteristics could be further developed so that individuals will get more involved in the intrapreneurial process. Other ways to improve at an SOE in China are not researched specifically in this dissertation, e.g., the role of forming teams. It could be beneficial to create a team of employees from different departments with the right skills and motivation to join the intrapreneurial process. The teams could get separate funding from the SOE and could also be relieved of the normal activities while working on the intrapreneurial process. Another way to improve intrapreneurship at an SOE in China is more strategic. Intrapreneurial behaviour should be evaluated continuously. This evaluation could be done by management but also by third parties like a consulting firm or an educational company. After having answered the first question the second question can be answered.

Question2: What is a suitable education program to promote and improve intrapreneurship at a state-owned enterprise in China?

The educational program to promote intrapreneurship at the SOE should contain the following details. It should be a program which is fully supported by the top of the management and clearly communicated throughout the whole company. The acceptance of incentivization of individual employees should be communicated as a positive way to improve intrapreneurship and therefore the performance of the company. The program must create awareness that bureaucracy also has negative effects related to agility and creativity. In the program specific personality characteristics should be introduced and skills should be developed so individual employees improve their intrapreneurial ability. The program should also address the advantages and disadvantages of mixed ownership structures, so that employees become aware that state

ownership is not always a driver for intrapreneurship and effectiveness. Furthermore, the program should create awareness among employees that there are cultural dimensions related to intrapreneurship as well and that embedding of a certain intrapreneurial mindset at the SOE is essential to improve and adapt in a continuously changing environment. A detailed educational program has been developed and is shown in Appendix 5 of this dissertation.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATION

In this chapter the researcher will answer the research question and will give recommendations of how to build an educational program for the SOE in China.

The structure of this chapter will follow the sequence of the parts in the survey namely: The level of Entrepreneurship currently at SOE. Ownership issues at SOE. Bureaucracy at SOE and its impact on intrapreneurship. The role of Incentive systems at SOE. And the impact of personality characteristics on intrapreneurship.

This chapter will end with a summary and a concrete program developed for the SOE.

7.1 Level of intrapreneurship currently existing at SOE

The level of intrapreneurship at the SOE is there but not optimal. This level must increase with the help of the educational program.

In an intrapreneurial organization, when innovation is fostered actively, it tends to demand progressively higher levels of autonomy as a project gains trust and support within the leadership framework of the organization. The autonomy is defined in two ways. The first is the control that the intrapreneur has over time (his/her own and that of other personnel) and funds allocated to the project, and the second is the progressive increase in decision-making independence. This should be done in a calibrated way, according to the trust in the innovation's ability to increase revenues or decrease costs, that is, its overall benefit to the SOE.

New product development costs can be high, especially when the product is "out-of-the-box" and a powerful motivation in private firms is to leverage the intellectual property thereby gained to produce continuous revenue without having to linearly increase production capacity and make large technology investments. However, the role of IP in revenue generation is not conventional

to organizational and societal culture in China as opposed to the overall global economy. Although finding new markets and new niches in existing markets is an important and productive part of any organization's strategy, these are functions of the strategic planning of the organization itself. This would be normal functions of any organization, whether private or state-owned.

However, the function of new product development and the research and development of new IP is not "normal" activity. It is fundamentally disruptive and therefore does not fit quite as well into a stable organizational structure. This is where corporate entrepreneurship with a different incentive system needs to make an appearance. Although employees may be satisfied that the company is active in finding new niches in existing markets and in finding new markets, IP and new product development is something that needs education in conventional SOEs in order to spread awareness of their value. This is accurately reflected in the views of employees on the effort given to creating new products (high) *vis-à-vis* the success of the company in doing so (medium).

The creation of a system that actively encourages SOEs to develop IP which can then be actively leveraged in foreign markets and viewed as a revenue stream for the state, to be shared with innovators and private investors may be a powerful motivator to create such IP. As a knock-on effect, the creation of such a system would encourage the SOE to consolidate and formalize its innovation expenditure into a visible and structured system which would include intrapreneur participation in profitability and attract more private participation as a result of increased transparency and predictability. A virtuous cycle can then be created, with private investment helping distribute risk and reduce the cost of new product development to the SOE, while still having potential for exponential returns from global markets, and the ability to use the

considerable reach of an SOE (relative to the marketing ability of smaller private sector players) into international markets.

To achieve this, it is necessary to make the system of intrapreneurship within the SOE into a program that is:

- a. Distinctly visible to the outside ecosystem
- b. A highly desirable program to be part of, for existing employees (using incentives of different kinds, both monetary and non-monetary (autonomy of action and decision-making, increased exposure, etc.). This will also have the effect of employees with intrapreneurial tendencies and ideas being more drawn to participation than others who would prefer normal work, and work as a self-selection mechanism to identify potential innovators
- c. Systematically encourage *autonomy* (control of budgets and decision-making) that encourages the creation of new enterprises within the SOE umbrella, which can be progressively spun off with the SOE slowly graduating to the status of “sleeping partner”.
- d. Boost the ability of smaller private sector players to invest into innovation which they may have the will but not the resources to do
- e. Function as a public relations exercise that will also result in a better quality of recruits to the company.

Over time, it can result in the SOE holding a portfolio of investments into small, agile companies much in the nature of an internal incubation center, which has access to the resources and networks of the SOE in a much more comprehensive and easily accessible mode than a conventional incubator, due to the existing networks that the intrapreneur has within the SOE’s ecosystem.

7.2 Ownership issues at SOE

Ownership issues at the SOE are not having an important role at the SOE. In the educational program a part should be dedicated to the advantages of having mixed ownerships in relation to intrapreneurship and innovation.

The acceptability (or otherwise) to mixed ownership is usually a reaction to its perceived effects on several aspects of the organization. Employees react differently to the prospect of the changes in organizational culture that results from the inclusion of a private sector company in the ownership structure. Employees are likely to see the increase in agility and flexibility conferred by this transformation as a double-edged sword, that has impact on their personal lives and careers. Being long-time residents of a state-owned bureaucratic culture, they may tend to equate private investment to increase in factors such as job insecurity, a tendency to cut corners, the increased competitiveness within the firm, and other perceived and real negative factors of the private sector in general. This is not a uniquely Chinese characteristic. Most ownership change, anywhere in the world, is met with a certain level of resistance from the employees of the firm.

When the prospective owners are foreign, understandably this apprehension is magnified, simply because of the perceived differences between foreign and home-grown private players in terms of culture and adaptation. The SOE itself can make a difference in this case, firstly by introducing controls over the partnerships (which may or may not be acceptable to the foreign company) which lessen the impact of a possible cultural divide, and secondly by playing a part in the selection of personnel for the enterprise which comprises the corporate entrepreneurial entity. Localization is an important part of making foreign ownership more palatable for employees.

However, on the positive side, the attitude to mixed ownership is another “selection mechanism” as it can serve to identify hidden talent. It can expose those employees who wish to “spread their wings”, who chafe the most due to the existing control measures. The program should serve to increase private participation in innovation in small doses, thereby giving employees an option to experiment with a different culture but also recognizing those differences between individual employees’ concerns.

7.3 Bureaucracy at SOE and its role in intrapreneurship

There is a consensus within the SOE that there is a certain level of bureaucracy, the educational program should not only address the negative sides of bureaucracy but also the positive sides of it.

Stimulating entrepreneurship at a relatively conservative company is for obvious reasons not a natural choice of the conservative company. The ability to move quickly and become more entrepreneurial also includes the ability to move in wrong directions. Organizations over a period, desire stability. The desire for stability usually results in the formation of structures which attract people who are good at keeping things on an even keel, and the management of size. Bureaucracies are inevitable in a large system where trust is not dependent on interpersonal relationships. In small teams, members know each other well and repose trust in each other based on this knowledge. However, as more strangers enter the team, the trust stemming from personal knowledge must be replaced by the trust resulting from adherence to procedure.

The lengthy decision-making process is also a result of the same lack of trust within the chain. Each decision maker in the chain must independently evaluate the facts and apply his or her own judgment before deciding, rather than a decision being taken simply because one person has done the analysis and the others in the team trust his or her judgment.

As size increases, more and more strangers join the company, and a complex system of processes gets built, which then becomes increasingly change resistant. Bureaucracies, despite general perceptions, are not the sole preserve of SOEs. Large private organizations, whatever their pretensions, are also bureaucratic, and their efficiency is only relative.

The key to become less conservative and more entrepreneurial is therefore, to bypass either a large part of the bureaucracy or the whole of it. Intrapreneurial programs, when they receive funding, should have direct lines of communication, and receive direction from the top levels of the organization. Even within the top levels the person or group in charge of the intrapreneurial efforts of the company should have responsibility over funding and how it is used, and their objectives defined as program performance, with some possible parameters being, new IP created, new markets addressed, new products brought to market, cost efficiencies innovated and new sources of revenue.

7.4 Role of incentive systems at SOE

There is consensus in the company that there are incentive systems available but that these systems are not necessarily linked to more entrepreneurial activity at the company. The educational program must address that some incentive systems work better than others in relation to the improvement of intrapreneurial activity at the SOE. It is possible that incentives are seen in a conventional sense of the word, as present in any organization. The nature of incentives in such companies follow a certain set of one-time monetary or non-monetary compensation as reward for good ideas or other commendable actions. It is necessary to highlight the differences between incentive systems for generally autonomous and independent thinking as opposed to increased efficiencies or effectiveness in a regular corporate environment.

Innovation in individuals is not a magic talent that some are born with, and others are not. It results in a person's own relationship with their environment and is a product of environmental awareness. Most innovators are driven by their critical thinking ability, their higher developed observational powers, and most of all their ability to "connect the dots" between problems and solutions. It's also natural that the ability to understand a broad spectrum of fields of study or work enhances their chances of learning from one field to solve problems in another. We can divide the requirements for intrapreneurship in two ways:

1. The ability to innovate
2. The motivation to innovate

The ability to innovate is partially inherent because it is defined not just by a person's life inside the firm itself. However, it is important that this ability is encouraged, and not accidentally stifled by organizational culture. Rigidity, the refusal to have free-flowing discussions, discouraging asking questions, not sharing the reasons for decisions are characteristics that can be found in strict hierarchies with steep authority gradients. These are, however, entrepreneurship killers. Entrepreneurs, enterprise because they are seekers of new knowledge. They try to understand the world around them in a more comprehensive way than others.

Therefore, entrepreneurial organizations arise from learning organizations. Companies that create a free atmosphere of shared knowledge and experience and encourage their people to explore both outside and within the company are those that foster the most entrepreneurial activity.

Although employees may feel satisfied with their pay and feel that communication is open and conducive to learning, this only constitutes a starting point to intrapreneurship. The context here is relative, in that whether they feel valued as employees, or whether they feel a

sense of ownership. Ownership involves risk-taking. Risk-taking is dependent on awareness of external and internal circumstances, which expands confidence, as well as encouragement from seniors.

For an entrepreneurial mindset, a learning environment with open communication is a powerful incentive as well. This is logical, since innovators are driven by a desire for personal growth and development, and a learning environment is a key to that sort of growth.

The motivation to innovate is better described as the motivation to innovate within the corporate structure. If we take human motivation in business as the balance point between desiring the reward from an investment and assuming the risk of losing it, we can see a fundamental difference between entrepreneurship and intrapreneurship. An entrepreneur assumes the entire risk of bringing an innovation to market, while reaping all the rewards from its success. A typical corporate employee may neither have the time nor the funds to even start to assume this risk. This means that, in an organization of thousands of employees, the chances are that many innovations that are being identified by employees, some of which may alter the company's fortunes in a significant way, are simply being ignored, or not even being discussed, depending on how learning-oriented the company is. When employees find their work exciting and challenging, it is a positive starting point, but whether they wish to translate this excitement and challenge into a venture is much further up the line.

This is where incentives come in. Firstly, the obvious incentives – monetary. In a conventional company, small innovations are rewarded with bonuses and recognition in the form of awards and gifts. These are usually one-time rewards that do not confer the ownership of that innovation on the employee. In a way, it could be stated that the company is “buying” the innovation from the employee. These are innovations that the company does not need to invest

significant resources to, or are already planned by the company, and the innovator's role is very specific.

However, the innovations that involve the process of discovery, such as developing new markets or products, or the creation of IP which the company can benefit from, even though it was not trying to develop it in the first place, is a different type of creature altogether. These are the kinds of ideas that, had the innovators had the time or the access to funds, they would have left the company to strike out on their own and assumed the risk of developing that idea in exchange for the anticipated rewards. The corporation in this case, has all the requisites to take advantage of the innovation. It has the initial capital, it has the expertise in house, it has the physical infrastructure and the external partnerships which would be extremely difficult for the innovators to access on their own. And it could well benefit from the innovation to a significant extent in the long run. All it needs to do is motivate the innovator to get on with the job of developing the innovation and bringing it to market. This involves a mechanism wherein the innovator becomes an intrapreneur, an employee who now has a financial stake in the success of his or her innovation. By taking on the risk of losing the money spent on development but offering a part of the reward to the employee, one prime motivation will be satisfied.

Innovators are also driven by other factors. As discussed before, personal growth and development and recognition from a professional or other community are also strong motivators for them. Companies need to recognize these needs and make efforts to satisfy them. One of the common examples that repeats around the world every day is that of the "technopreneur", an innovator who comes up with a technical innovation that has good potential and finds a team and investors and starts development, only for the project to fall apart due to poor leadership skills on the part of the innovator. Often, the skills of the innovator do not extend to

managing a business. But, being keen on personal growth and development, the promise of leadership coaching and mentoring, and increased exposure to external leadership can be important incentives for an innovator to contribute. The opportunity to lead an effort, having control of a budget, access to the upper levels of the hierarchy and external exposure working with partner firms, are all very powerful incentives to intrapreneurship.

To summarize, a system of incentives which rewards intrapreneurs in the following ways must be put in place to encourage intrapreneurship:

1. Continuous rewards (for the uniqueness and sustainability of the innovation)
2. Non-monetary rewards (contributing to the intrapreneur's needs for personal growth and recognition from the community)
3. Leadership rewards (promotions and leadership opportunities)
4. Feel-good rewards (recognition that the intrapreneur is contributing to the overall society)

7.5 Impact of personality characteristics on intrapreneurship

Based on the research certain personality characteristics are considered more important than others. The educational program should address those characteristics which are most relevant for the employees of the SOE to stimulate intrapreneurial activity at the SOE.

It would be difficult to assign a particular personality trait or set of traits which favor intrapreneurship. Broad indicators exist, but there is no way to predict success or failure of an entrepreneurial/intrapreneurial project based on the existence or lack thereof of a set of pre-defined traits. Even more importantly, there exists no reliable way to confirm or deny the existence of particular traits in a person among thousands of employees who may be working in the SOE.

This means that in addition to the formal intrapreneurship program, the more difficult task of making cultural adjustments according to the ability of the current organizational culture to support intrapreneurship is important.

The existence of self-confidence in any company is inversely related to the rigidity of the hierarchy within the organization. A steeper authority gradient, also known as power distance, which has a negative effect on the self-confidence and initiative that is the starting point of intrapreneurship anywhere. The reason is that the more employees look to their seniors for advice and direction, the less they tend to apply critical thinking skills to any problem that confronts them. The knowledge that their solutions and ideas are not welcome upstairs has a chilling effect on their critical thinking processes, and it slows down creative people, preventing them from contributing any more than the minimum needed to keep their jobs. Strict hierarchies are a feature of most East Asian organizational cultures.

The authority gradient is also inversely related to the appetite for risks, that individual employees have. The implicit relationship between employees and their superiors in strict hierarchies is usually very dependent on what kind of superior is in a particular relationship. Superiors who adopt a paternalistic attitude towards their subordinates, supporting them and communicating with them, could have a negative effect, creating a “learned helplessness”, where the employees look to them for advice and direction for almost any decision they need to take. When the superior is more authoritarian, employees also fear censure and job loss, should they take wrong decisions in the course of their work. Therefore, whatever the leadership style, in a strict hierarchical organization the appetite for risk is much reduced. Culturally too, high-risk, high-reward ventures are seen negatively due to the social differences between Western and Eastern cultures. Individuality is prized in the Western context, and a strong sense of

collectivism is important in the East. Therefore, taking the risk of failure involves the career of a single person who may have a high appetite for risk, as often seen by the vast amounts of money lost in high-risk trades by Western traders. However, when the prospect of failure is seen through a shared lens, when the consequences of failure reflect on several people, the risk appetite of the collective always goes down. This is not a particularly problematic issue in the inculcating of intrapreneurship in an SOE. By building in a risk assessment mechanism into the intrapreneurship program, one can train innovators to assess risks more objectively and reduce the emotional aspect of risk-aversion.

One aspect of Western business culture is that it is known and expected that efforts to get to know people and cultivate business relationships with them are very transactional on a surface level. Deeper relationships may form over time, but they are usually incidental. Eastern cultures invest more emotion into their interpersonal relationships. Simply put, business is incidental to the relationship, and preserving the relationship takes priority over doing business. This can work both for and against efforts to bring in an entrepreneurial mindset, such as reducing the intrapreneur's perseverance in bringing an innovation to market. Negative feedback from a prized relationship would demotivate an innovator more comprehensively than the same coming from an arm's length, transactional associate. Of course, on the positive side, once buy-in has been established, the level of support and encouragement would also be proportionally higher, accelerating the innovating project. The ability to network effectively is not really a teachable trait, and therefore the company has very little influence over this aspect of personality.

Although creativity is unanimously considered a positive trait in an intrapreneur, it also is the hardest to influence through systemic means. The reason for this is that individual creativity is either suppressed or encouraged by family circumstances at a very young age. The level of

extreme competitiveness and pressure induced by the education system, particularly in China, inhibits creativity considerably. When people have no time to pursue creativity and explore their environment (creativity does not occur in a vacuum) due to the rigors of their work or education, and their range of interests are confined to a limited range of topics relevant to their life stage, it is harder to develop a creative instinct. Fortunately, a learning environment can and has been proven to re-ignite those instincts in people. A learning environment must necessarily enable the exploration of ideas and topics not necessarily related to company work but done in company time. This is applicable to the whole organization, and not just the formal intrapreneurship program. It must be noted that such efforts are long-term and cannot produce results for months or even years, and that the results would be ephemeral if considered over a short measurement period. Since long-term thinking is also prized in the Chinese culture, however, there is excellent scope for long-term cultural change.

The nature of intrapreneurship is such that, whereas it lifts several burdens of entrepreneurship off the innovator, the equation is not that simple. The organization may indeed have several resources available that are not accessible to independent entrepreneurs, but the very fact that the organization is large, is not inherently entrepreneurial and is possessed of a big company culture also puts obstacles in the way of the innovator. The resources allocated to the innovator may have their own primary interests within the organization which reduce the time available that the resource can commit to the project. This inevitably slows things down and needs the innovator to learn additional skills which, even though theoretically available, will take far more time to assemble in a coherent manner. People who need to meet to solve a problem, may not be able to meet because they are temporally or geographically displaced. To solve such

structureless problems, the innovator must dedicate considerably more energy than if he were to simply focus on bringing the innovation to market.

Having a mentorship program which can distribute that need for energy would alleviate this burden to a large extent. That means, having a structure in which one or more senior mentors will be invested into the outcome of the project. The senior mentors can then use their existing networks of relationships in the large organization to smoothen the path of and reduce the burden of time and energy placed on the innovator. These networks will be inevitable stronger and the increase in power and influence of the senior will go a long way to speed up the process.

Tenacity is important to any entrepreneur. If innovations were obvious, then they wouldn't be innovations. Therefore, there are usually many sceptics who will dismiss or otherwise denigrate innovations, especially because they may not want to change the status quo. In a culture which relies on relationships that are not necessarily transaction-oriented, scepticism on the part of people in the network will be more discouraging to the innovator than under normal circumstances. Innovators with good relationships would rather preserve those than risk losing them because he or she takes on a project that meets with disfavor.

Tolerance to ambiguity is a necessary trait in any entrepreneur. There are two factors that determine how much tolerance is needed are, what is the level of disruption in the system, and who is determining the actions to be taken. In a centrally planned organization, flexibility tends to go down simply because of the size of the organization itself. Therefore, they normally have much less tolerance for ambiguity than decentralized structures. This would result in lower tolerance to ambiguity on the part of its employees too.

A proper integrated intrapreneurship program should account for the increased agility required from entrepreneurs until market viability and a probability of success is assured. One of the ways this can be implemented is by building up a market monitoring capacity within the organization as part of the intrapreneurship program itself. The ability to monitor the market in real time is ultimately beneficial for the whole ecosystem that the enterprise operates in.

Optimism is not just an enabler of innovation. It is a necessary pre-requisite. A general environment of learning and fulfilment is the best enabler of an optimistic mindset. Combined with self-discipline, already a valued quality in Chinese culture, this is a powerful mixture of traits in any budding intrapreneur.

If, as shown by the study, employees of the typical SOE understand what intrapreneurship entails and means, it is obvious that the idea of corporate entrepreneurship fostered by the SOE is a very welcome one. What remains to be done is to identify the essentials of putting in place both a formal structure for intrapreneurship to take off and flourish within the SOE, and subtle organization-wide changes that, even if difficult, modify the culture to encourage more employees to innovate and migrate to the innovation ecosystem within the company.

7.6 Final remarks

It seems evident that a formal structure specifically geared to encouraging, fostering, and finally reaping the rewards of intrapreneurship would be a necessary step towards making the SOE more innovative over the long term.

The qualities of the said program in broad terms should be on the following lines.

- a. The program should be FORMAL and VISIBLE externally and internally.

- b. It should be incentivized with specific kinds of incentives to bring out the entrepreneur in the employee, such as stake in the venture, monetary incentives, exposure, opportunities for personal growth, control over budgets, close connections with upper levels of the hierarchy, and personal recognition.
- c. It should interact with the rest of the company to foster and participate in building a learning environment and open communication in the rest of the company as well.
- d. It should bypass most of the bureaucratic structures within the organization to improve its responsiveness and cut down the general red tape which can stifle any intrapreneurship initiative.
- e. It should be managed, but not controlled, by a panel of persons at a senior level, (board or senior management) who are identified as having the following qualities:
 - Known to have visionary attitudes,
 - At least some of them should have long experience in the company (to build up networks),
 - Have a mentoring/coaching attitude to management.
- f. A systematic mentoring program.
- g. Communication within the company that emphasize on the desirability of selection to be an innovator under the wing of the program
- h. Programs for exposure of selected intrapreneurs to external professional organizations, competitions and familiarization with international cultures and systems.
- i. Training courses in varied soft skills such as communication, leadership, management etc.
- j. An investment pool to budget for development costs.

k. A program to invite private players into the ecosystem – in the long run, the innovator, the SOE, and the private player form a triangle of synergistic strength, where the private player brings agility of implementation, the innovator brings the project, and the SOE brings in size, resources, and early funding, along with the credibility in government and international markets.

l. The establishment of a market monitoring body, to quickly analyze market trends globally. This department would be invaluable to the whole company.

Apart from this program, some long-term cultural adjustments should be considered as essential in the SOE organization itself. The main one is to encourage a learning culture within the company. This is also one of the most difficult transformations in a large SOE with normally strict hierarchies. Various internal programs and communication efforts, along with policies of increased transparency are necessary to break down the power-distance within the organization. This is a necessary pre-requisite to more open communication, an indisputable enabler of intrapreneurial thinking.

With the long term in view, it would be important to strike up partnerships with small, agile private players who can bring agility to an operational firm. The SOE can use its resources to move an innovation to project and thence to start up. However, smaller private players can take it from start-up to stable model.

As far as consultancy is concerned a role can be played by private consultants in areas like leadership, communication, teambuilding, and incentivization of employees.

Regarding future research, to get a more comprehensive view of the intensity of entrepreneurship at SOEs in general, more SOEs should be researched. Furthermore, other issues

like management and leadership styles, the role of government and other institutions, tax incentives, financial strength of company and cultural dimensions can be considered as well.

A comprehensive and customised educational program to improve intrapreneurship at CRRC can be found in Appendix 5.

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APPENDIX 1: SUMMARY OF CHINA'S 14TH FIVE-YEAR PLAN

Economic themes in China's 14th Five-Year Plan Proposal

Innovation

- Uphold the central role of innovation in China's modernization
- Promote scientific and technological self-reliance as a strategic pillar for China's development
- Promote new industries, new energy, modern services, new infrastructure, and a digital China
- Encourage R&D spending and introduce related tax incentives
- Enhance intellectual property protection
- By 2035: become a global innovation leader

Digital

- Promote deep integration of the digital economy and the real economy
- Promote digital industrialisation and industrial digitisation
- Strengthen digital society and digital government
- Promote research and development of a digital RMB
- Establish systems and standards for data's properly rights
- Build a unified, national data open sharing platform
- Ensure national data security and strengthen personal data Protection

Economy

- 'Dual Circulation' strategy — encourage large domestic market circulation as complemented by dual circulation of the domestic and international markets
- Stimulate demand and consumption and expand investments

- Promote coordinated development of domestic and foreign demand, imports and exports, inbound and outbound investments
- Achieve fuller and higher quality employment
- By 2035: increase China's GDP per capita to the level of a moderately developed nation
- By 2035: significantly expand the size of China's middle-income population

Reforms

- Promote greater trade and investment liberalisation, convenience, and innovation
- Allow market forces to play a decisive role in resource allocation
- Promote better integration of efficient markets and efficient government functions
- Establish modern fiscal, tax and financial systems
- Give China's free trade zones greater autonomy to implement
- Actively participate in reforming the global economic governance system
- Improve the modern financial supervisory framework, including in the areas of financial risk prevention, early warning systems, compliance, and accountability
- By 2035: modernise China's economy, governance systems, legal system, and rule of law

Opening-up

- Improve the "pre-establishment national treatment plus negative list" management system for foreign investments
- Further open up the services sector (including financial services) in an orderly manner
- Protect legitimate rights and interests of foreign companies
- Promote steady establishment of the Hainan Free Trade Port
- Steadily promote RMB internationalisation and relationships based on the free use of RMB
create mutually beneficial cooperative
- Promote high-quality development of Belt and Road projects

Development

- Promote high-quality, coordinated development across different regions in China
- Achieve basic synchronisation of income growth and economic growth
- Promote green, sustainable, and low-carbon development that protects the environment and ecosystems
- Implement strategies to address China's aging population
- By 2035: significantly increase China's economic, scientific, technological, and overall strengths
- By 2035: narrow the development gap between urban and rural residents

Industry

- Improve manufacturing power, quality, and core competitiveness
- Modernise, optimise, and upgrade industrial chains and supply chains to make them more innovative, more value-added, safer, and more reliable.
- Establish emerging industrial chains and make traditional industries more high-end, intelligent, and green
- Develop a new generation of IT, biotechnology, new energy new materials, high-end equipment, new energy vehicle, aerospace, marine equipment and other industries
- Promote in-depth integration of industries such as the Internet, Big Data and AI

Services sector

- Accelerate development of modern services relating to R&D, design, modern logistics and law
- Promote integration of modern services sectors with advanced manufacturing and modern agriculture
- Accelerate digitisation of the services sector
- Promote diversification and upgrading of consumer service sectors such as health, aged care, childcare, culture, tourism, and sports

APPENDIX 2: QUESTIONNAIRE IN ENGLISH

From: Anselm Vermeulen

To: State Owned Enterprise (SOE) in China, employees

Shanghai, April 2021

Questionnaire about corporate entrepreneurship, intrapreneurship at SOE in China.

Definitions:

Corporate Entrepreneurship is Intrapreneurship is: a process used to develop new businesses, products, services or processes inside of an existing organization to create value and generate new revenue growth through entrepreneurial thought and action.

Bureaucracy is a system of administration marked by red tape, proliferation and lack of flexibility and initiative.

Demographics:

1. Your age in years, 20 or less, Over 20-30, over 30-40, over 40-50, over 50
2. Gender: male female
3. Marital status: single, married, other
4. Education: vocational, high school, college undergraduate, graduate degree, other
5. Profession
6. Number of years working at the SOE, 5 or less, over 5-10, over 10-15, over 20-30, over 30
7. Position at SOE

Actual Questionnaire:

1. Level of corporate entrepreneurship currently existing at SOE.

Please indicate the extent to which SOE has focused each of the following items in the past 5 years.

Finding new niches in the current markets.

Finding new markets.

Widening product lines in current markets.

Creating new autonomous units within SOE.

Creating new companies independent form SOE.

SOE's spending on development of new products or services.

The number of new products or services introduced by SOE.

SOE's focus on technological innovation.

SOE's focus on creating proprietary technology.

Open questions:

Do you think SOE is emphasizing enough on the importance of corporate entrepreneurship?

Why?

2. Ownership issues at SOE.

Indicate the extent to which you agree or disagree with following statements:

Do you agree that mixed ownership will stimulate corporate entrepreneurship at SOE?

Do you agree that foreign ownership will stimulate corporate entrepreneurship at SOE?

Do you agree that control systems are different in companies with mixed ownership at SOE?

Open question:

Anything you would like to say regarding the relation between mixed ownership and corporate entrepreneurship?

3. Bureaucracy at SOE.

Indicate the extent to which you agree or disagree with following statements:

Do you agree there is high level of bureaucracy at SOE?

Do you agree that there are too many meetings taking place at SOE?

Do you agree that a lengthy decision-making process is a constraint for corporate entrepreneurship?

Open question:

Anything you would like to say regarding the relation between bureaucracy and corporate entrepreneurship at SOE?

4. Incentives and corporate entrepreneurship at SOE.

Indicate the extent to which you agree or disagree with following statements:

The management encourages employees to believe that corporate entrepreneurship is a part of all members of SOE.

Employees of SOE have discretion to make decisions about their own work.

Rewards enhance the motivation of individuals to engage in corporate entrepreneurship.

Financial resources are available at SOE for intrapreneurial projects.

Employees have time to incubate their new ideas.

Employees are satisfied with the pay they receive for their job.

A basic value of SOE includes learning as key to improvement.

Employees find their work challenging and exciting.

Employees feel that their fellow workers are stimulating.

Employees are committed to the organization.

Managers at OG share relevant information with workers.

Flow of information at SOE is top down.

The opportunity for personal growth and development exists at SOE.

Working in teams will stimulate corporate entrepreneurship at SOE.

An educational program to stimulate corporate intrapreneurship is useful.

‘Thinking outside the box’ must be stimulated at SOE.

Corporate entrepreneurship cases about other companies should be studied.

Open question:

Anything you would like to say regarding the relation between incentives and corporate entrepreneurship?

5. Personality characteristics and their impact on corporate entrepreneurship.

Indicate the extent to which you agree or disagree with following statements:

Self-confidence is an important personal characteristic to improve corporate entrepreneurship at SOE.

Being a risk taker is an important personal characteristic to improve corporate entrepreneurship at SOE.

Being a networker is an important personal characteristic to improve corporate entrepreneurship at SOE.

Creativity is an important personal characteristic to improve corporate entrepreneurship at SOE.

Being energetic is an important personal characteristic to improve corporate entrepreneurship at SOE.

Tenacity is an important personal characteristic to improve corporate entrepreneurship at SOE.

Tolerance to ambiguity is an important characteristic to improve corporate entrepreneurship at SOE.

Being an optimistic person is an important characteristic to improve corporate entrepreneurship at SOE.

Having a strong work ethic is an important personal characteristic to improve corporate entrepreneurship at SOE.

Open question:

Is there anything you would like to say regarding personality characteristics and corporate entrepreneurship?

General open questions:

Do you think it is useful to start an educational program at OG in order to stimulate corporate entrepreneurship?

Do you have any suggestions for such a program?

Thank you,

Anselm Vermeulen

End of questionnaire

APPENDIX 3: QUESTIONNAIRE IN CHINESE (MANDARIN)
有关国企企业内部创新相关问题的问卷调查

个人信息:

年龄: [单选题] *

- 20 岁以下及 20 岁
- 21 岁-30 岁
- 31 岁-40 岁
- 41 岁-50 岁
- 50 岁以上

性别: [单选题] *

- 男
- 女

婚姻状况: [单选题] *

- 单身
- 已婚
- 其他

受教育程度: [单选题] *

- 职业学校
- 高中
- 大学本科
- 研究生
- 其他

专业： [填空题] *

在国企工作的时间： [单选题] *

5年及以下

5-10年

10-15年

20-30年

超过 30年

您在国企的职位是： [填空题] *

有关企业内部创新：

国有企业目前存在的企业创新水平：

请说明国有企业在过去 5 年中对以下每个项目的关注程度。[矩阵文本题] [输入 0 到 10 的数字] *

在当前市场中找到新的利基市场	_____
寻找新市场	_____
扩大当前市场中的产品线	_____

在国有企业中创建新的自治单位	_____
建立独立于国有企业的新公司	_____
国有企业在开发新产品或服务上的支出	_____
国有企业推出的新产品或服务的数量	_____
国有企业专注于技术创新	_____
国有企业专注于开发专利	_____

您认为国有企业是否足够强调企业中企业家精神的重要性？

为什么？

[填空题] *

国有企业的所有权问题

表示您同意或不同意以下陈述的程度[矩阵单选题] *

	很不同意	不同意	一般	同意	很同意
您是否同意混合所有制将刺激国有企业的企业创新精神？	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
您是否同意外国所有权将刺激国有企业的企业创新精神？	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
您是否同意国有企业的控制管理与混合所有制	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

的企业有所不同?					
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关于混合所有权和企业家精神之间的关系，您想说什么？ [填空题] *

国有企业的官僚主义

表示您同意或不同意以下陈述的程度：

[矩阵单选题] *

	很不同意	不同意	一般	同意	很同意
您是否同意国有企业具有很高的官僚主义水平？	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
您是否同意在国有企业中召开太多的会议？	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
您是否同意冗长的决策过程是企业创业的制约因素？	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

关于国有企业的官僚主义与企业家精神之间的关系，您有什么要说的吗？ [填空题] *

国有企业的激励机制和企业创新精神

表示您同意或不同意以下陈述的程度： [矩阵单选题] *

	很不同意	不同意	一般	同意	很同意
管理层鼓励员工相信企业家精神是国有企业所有雇员的一部分	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
国有企业的雇员可以自行决定自己的工作	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
奖励会增强个人从事公司创新的动力	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
国有企业可为企业内项目提	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

供财务资源					
雇员有时间来培养他们的新想法	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
雇员对自己的工作报酬感到满意	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
雇员认为他们的工作充满挑战并兴奋	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
雇员认为他们的同事们正在受到激励	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
雇员致力于企业组织	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
经理与员工共享相关信息	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

国有企业的信息流是自上而下的	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
国有企业存在着个人成长和发展的机会	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
团队合作将激发国有企业的企业创新精神	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
刺激公司内部创新的教育计划是有用的	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
国有企业必须激发“跳出思维”	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
应该研究有关其他公司的公	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

司创业案 例					
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关于激励与企业家精神之间的关系，您有什么要说的吗？ [填空题] *

人格特征及其对企业创新精神的影响

表示您同意或不同意以下陈述的程度： [矩阵单选题] *

	很不同意	不同意	一般	同意	很同意
自信是提高国有企业企业家精神的重要个人特征	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
风险承担者是提高国有企业企业家精神的重要个人特征	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
成为人脉网络是提高国有企业企业家精神的重	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

要个人特征					
创造力是提高国有企业企业家精神的重要个人特征	○	○	○	○	○
充满活力是提高国有企业企业家精神的重要个人特征	○	○	○	○	○
坚韧是提高国有企业企业家精神的重要个人特征	○	○	○	○	○
容忍歧义是改善国有企业中企业家精神的重要特征	○	○	○	○	○

成为一个乐观的人是改善国有企业中企业家精神的重要特征	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
具有良好的职业道德是提高国有企业企业家精神的重要个人特征	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

关于个性特征和企业家精神，您想说些什么？ [填空题] *

您认为启动教育计划以激发企业企业家精神有用吗？ [填空题] *

您对这样的计划有什么建议吗？ [填空题] *

APPENDIX 4:

TRANSCRIPT OF OPEN INTERVIEWS DONE WITH EIGHT EMPLOYEES OF CRRC

1. Government and Society

- appropriate macroeconomic condition – government
- prioritize the private sector – government / SOE / Structure reformation
- encourage and support entrepreneurs – government?
- invest start-ups and expanding business – SOE
- implement inclusive policy - government
- change work culture/ environment – SOE / society
- balance proactivity and innovation -SOE
- improve customer experience – SOE
- shift management style free – SOE / society
- reduce wasteful bureaucracy – SOE / society
- creative culture – SOE / Society
- competitive Salary - financial compensation for talent – innovation & management -
SOE
- private sector – SOE / structure reformation
- policy prevent expropriation and protect private property
- give big data better evaluate the market
- neutral market competition
- stimulating economy- transparent competition

2. Working Environment / Enterprise Culture

- free flexible

- free to express – incentive risk taking behavior
- reduce wasteful bureaucracy
- encourage innovation – new trying
- no blame culture – risk taking – less / no punishment for fa
- emphasize talents – competitive salary / compensation / promotion / incentives – recognition / reward system
- micro-management, barrier free
- open-minded – upward communication
- encourage collaboration and critical thinking
- collaborative
- proactive action – hierarchy
- communication across the departments / cross-functional
- provide more benefits
- more budget
- macroeconomic
- monetary policy
- Infrastructure investment
- product improvement – SOE
- invest in new and growing business

3. Management

- mixed ownership
- power decentralizing
- set open platform for company to share information

- less hierarchical structure
- increase employee engagement
- increase internal and external mobility
- adapt advanced system
- clear cooperate mission everyone knows
- stock incentive
- recruit more younger employees

4. Market and Product

- revaluating
- target customer
- customer-oriented
- brand strategies
- cooperate with private companies / foreign companies
- involve new tech to reduce price
- adjust by market

5. Recruitment, Education and Human Resource Management

- innovation culture
- competitive salary
- brand strategies
- expertise in certain industry
- include more, young pp
- smaller team.
- right employee for employer to arrange – talent arrangement

- Intrapreneurship – competition / set goal / training
- require collective efforts
- hiring foreign consultant
- comprehensive training / orientation of the whole group
- more training to catch up the social changes
- advertising
- special team for entrepreneurship

APPENDIX 5:**CONCRETE PROGRAM FOR CRRC TO IMPROVE INTRAPRENEURSHIP.**

Intrapreneurship at CRRC.

Instructor Anselm Vermeulen

E: anselm.vermeulen@yahoo.com

Mob: 13501710772

Participants: selected employees from various departments from CRRC.

Classes: 3 days of each 7 hours, total 21 hours, for practical reasons best would be Friday, Saturday and Sunday.

Assessment: attendance 10%, class behaviour 30%, group project 60%.

Course description:

The program has the goal to motivate participants to engage more in intrapreneurial activities at the company. Participants will be exposed to intrapreneurship as a way of thinking and behaving to improve the organisation and create meaningful results.

One of the main concerns for each organisation is how to continuously generate and commercialise new ideas, coming from within the organisation. This program will address the main issues concerning this process.

The focus is to develop the understanding of how intrapreneurship leads to new knowledge which could be the basis of new products and services that can be commercialised on the market.

The program also considers the skills and personality characteristics needed to succeed in today's competitive and global environment. The program also identifies ways for the organisation to embed intrapreneurship in the fabric of the company and will help participants to understand that certain levels of bureaucracy can either be a barrier or a driver for intrapreneurship.

Ultimately the program will convince participants that the company will be better prepared for the future when it embraces intrapreneurship within their organisation.

Learning outcomes:

Participants completing the program should be able to:

Understand the processes of intrapreneurship.

Recognise the challenges of intrapreneurship.

Know how intrapreneurship can be stimulated and managed.

Analyse and apply personality characteristics needed for intrapreneurship.

Identify barriers for intrapreneurship.

Identify drivers for intrapreneurship.

Be a strong ambassador for the company to embed intrapreneurship at all levels of the company.

Teaching methods: live classes, PowerPoints and other teaching materials will be provided by instructor.

Recommended readings: cases and relevant information will be shared with participants before delivery.

Content in sequential order:*1. Introduction: what is entrepreneurship/ intrapreneurship?*

Why is it relevant?

Some myths about entrepreneurship.

What are results from survey?

2. Recognising opportunities within your organisation.

How to recognise opportunities?

Qualities of opportunities.

Sources of opportunities.

How to incentivise employees to engage with recognising opportunities?

Personality characteristics of successful people strong in recognising opportunities.

3. Feasibility analysis, validation of opportunity.

Research on the feasibility of the opportunity.

4. Business model preparation.

What is important to think of when there is a change in the business model?

5. Getting the support.

How to form teams to facilitate the change?

How to get support from management?

Finance issues.

6. Managing the project during the process.

Implementation, turning the ideas into valuable products and or services for the customer.

How to overcome barriers during the project.

Barriers like bureaucracy.

7. How to keep momentum within the organisation?

Analysis of how mixed ownership can enhance level of intrapreneurship at organisation.

Analysis of how foreign direct investment can enhance level of intrapreneurship at organisation.

Group project.

Consulting project.

You will work in groups of maximum 3 people, preferably from different departments of the company. The main goal of this project is that you identify a new business opportunity within the company.

You will make a description of the opportunity in the form of a business model.

In this business model you cover all aspects of a business model like:

Key partners.

Key activities.

Key resources.

A value proposition.

Customer relations.

Channels.

Customer segments.

Cost structure.

Revenue streams.

Eco social benefits.

Moreover, you identify ways to persuade your management to allocate resources to this project.

A written report of minimum 5000 words will be sent to instructor 6 weeks after the delivery of the program.

A presentation of about 20 minutes of each project will be done to both the instructor and the management of the company after the written report is finalised.

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