

Promoting Young Managers' Entrepreneurial Creativity with Design Thinking in a Social Learning System

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Abstract

Entrepreneurship education has been subject to enormous interest ever since entrepreneurs have become the key drivers of business growth across the globe. Entrepreneurial creativity is identified as a core competency of large multinational corporations within Thailand, this is because of a unique combination of a sense of ownership and innovative thinking. The Thailand 4.0 policy was launched in 2016 by the Thai government in order to enhance creativity and technological competitiveness in an effort to move towards a creative, innovation-driven economy. However, the 2019 Global Innovation Index stated that Thailand is ranked No. 43 of 129 countries in the world, the reason for this being that Thai entrepreneurs and corporate entrepreneurs still have a lower level of entrepreneurial creativity, judging from the fact that 90% of products developed are not differentiated enough from one another. An in-depth focus group of 8 respondents was created using young managers working in a multinational company to understand the triggers and barriers which affect the development of entrepreneurial creativity. Additionally, it was found that their entrepreneurial creativity is at a moderate level as they are not confident in their own skills driven by current development activities, and that any learning experiences are mostly theoretical, one way and passive. They do not feel engaged, motivated and confident enough to transfer the knowledge into practice. Design thinking is well recognized as a creative, problem-solving process which uses human needs to simulate the journey of entrepreneurship, and has been used when developing business education. Social media provides some of the most commonly used platforms in daily life, which can incorporate features to allow learning and deliver open, collaborative environments. Therefore, learning design derived from a design thinking process is recommended to be used in conjunction with social media technology to deliver engaging, experiential, and motivating learning experiences among young managers.

Introduction

Entrepreneurship and entrepreneurship education have received an enormous amount of interest among governments, academic institutions and business industries worldwide. This is due to the fact that entrepreneurs are key drivers of business growth, alleviating the slowdown of global economy. Entrepreneurs come into the business world harboring unique mindsets and competencies which can include recognizing emerging business opportunities, initiating innovative ideas, creating business plans, gathering required resources. They are able to do this while maintaining motivation, passion and commitment to achieve goals that come with calculated risks. The results have can be seen in developed nations like the United States, United Kingdom, Singapore and Japan where entrepreneurs in small and medium sized corporations have contributed at least 50% of gross domestic products and have generated more than 65-70% of the whole country's employment (Yildirim, Trout, & Hartzell, 2019).

In the corporate world, entrepreneurial competency is identified as a core competency in large multinational corporations, such as Coca Cola, P&G, Unilever, S.C. Johnson and Sons. It is comprised of the ability of executives, managers or employees to take on strong ownership skills, as well as continued innovation in their areas of responsibility. This is done by weighing up opportunities and taking calculated risks to achieve impressive business results. This is called "Corporate Entrepreneurship" and is used to change the employees' mindsets from a traditional "wait and see", to a more "proactive and aggressive" method of working (Barringer & Ireland, 2012). Skills that should be expected when it comes to entrepreneurship are creativity and business ownership. While ownership is more the aspect of engagement and passion across roles and companies, creativity is one of the skills that makes up entrepreneurship that can be cultivated within an organization itself. Creativity is part of the 4Cs' learning skill categories of 21st Century skills.

Creativity is considered to be one of the most important competencies for success among entrepreneurs if they are to become successful in their ventures. Burns and Burns (2014) mentioned the 5 qualities of entrepreneurs which are as follows: (1) Creative thinking and innovation (2) Drive for achievement (3)

Independency (4) Self-directed/control (5) Awareness of calculated risks. Creativity encompasses multiple processes, from recognizing opportunities to creating innovative business models used to start new ventures. This is consistent with what was stated by Barringer and Ireland (2012); Bolton and Thompson (2013) and Kuratko and Hodgetts (2004), who have included creativity as a key component of entrepreneurs, and can be said for creative problem solving, creative thinking, as well as creative design.

The Thailand 4.0 policy was launched by the Thai government in 2016 in an effort to increase creativity and develop a technological advantage that could deliver innovation in the workplace. The reason for this being the intention to shift the country from a middle-income and efficiency-driven economy to an innovation-driven or creative economy (Murnpho & Unaromlert, 2018). However, the 2019 Global Innovation Index (developed by Cornell University, INSEAD and WIPO) indicates that Thailand ranked No. 43 of 129 countries in the world. Singapore (8th), Korea (11th), Hong Kong (13th), China (14th) and Japan (15th) were shown to be the best-in-class in Asia. Furthermore, it was found in another study, carried out in 2018 by the Organization for Economic Cooperation and Development (OECD), that Thailand ranked No. 3 out of 10 countries in Southeast Asia, following Singapore and Malaysia in the aspect of innovation and technology outputs (The Secretary-General of the OECD, 2018). The opportunity to improve the capability of creativity has been outlined here and can be accomplished by tackling the issue of entrepreneurial creativity development.

Design thinking is well recognized as a creative problem-solving process that takes place through a human-centered approach. In itself, the process is not linear, with a strong focus on gaining a deeper understanding of users, or customers, who provide a clear problem statement. Potential ideas emerge from being able to take on a different point of view, which is then brainstormed and transformed into prototypes to be used for testing and retesting, until they fully meet or exceed the customers' expectations. This process simulates the life cycle of entrepreneurs and can foster creative thinking amongst learners (Linton & Klinton, 2019).

Social media has been used to promote entrepreneurial education via a variety of platforms (Line, WeChat, Facebook Messenger), and this has occurred all around the world due to unique features provided to drive learners' engagement, experiences and collaborations, and to ultimately improve learning outcomes (Wu & Song, 2019). However, there is a limited amount of knowledge and studies on the ways social media can be used for learning to improve entrepreneurship or entrepreneurial creativity. It was found by Teepapai and Karawek (2018) that a company's culture and learning environment has a strong impact on creative ideas and the innovative output of the employees. Therefore, it is recommended to invest in the development of creativity by leveraging newly connected technology to promote learning among employees.

Consequently, this article will explore the literature of entrepreneurial creativity, design thinking and social media learning, as well as look at an in-depth focus group study of young managers working in a multinational company. Recommendations for a learning design to promote young managers' entrepreneurial creativity are provided at the end of the article. This will take place using design thinking on a social learning platform.

Corporate Entrepreneurship (Intrapreneurship)

Successful innovation is one of the key success factors for companies looking to achieve business goals by growing their revenue, profit margins, market share and corporate image (Miller & Bauer, 2017). Pinchot and Pellman (1985) were the first to create "Intrapreneurship" (corporate entrepreneurship) by defining it as an individual who has vision above their level of responsibility when it comes to creative ideas. Corporate entrepreneurship, or intrapreneurship, is another kind of entrepreneurship which occurs when employees drive the business using strong sense of ownership, and will go the extra mile to provide new creative ideas or innovations, thus delivering success to the business (Trifan, Guica, & Micu, 2012). Corporate entrepreneurs are ones who do not have any intention of creating a venture of their own but are willing to work within an organization with a strong sense of ownership. For an entrepreneur to become successful, he or she needs to have managers with the corporate entrepreneurship quality if he or she is to deliver innovation (De Lourdes Prado, MacHado, Mafra, & Maria Campos, 2012). Corporate entrepreneurship consists of three components; proactiveness, creativeness and risk bearing (de Jong et al., 2011) cited in (Miller & Bauer, 2017). Additionally, Christensen (2011) cited in (Miller & Bauer, 2017) categorized 4 different types of creative entrepreneurs; (1) creative entrepreneurs are the ones that introduce a new venture with differentiated products to capture unmet needs (2) creative intrapreneurs are the ones to introduce a new business within a corporation (3) product creators are the one who creates new product or services (4) process creators are the ones to continue to improve efficiency or create new processes. This makes it evident that there are 3 types of corporate entrepreneurship, these include business that takes place within an organization, product innovation and process improvement. They are all centered around creating or innovating to increase the organization's competitive advantage. This is why corporate entrepreneurship is identified as a core competency used to generate innovation in the corporate world, especially within international firms e.g. Unilever, P&G, Nestle', and S.C. Johnsons & Sons. It was said by Teltumbde (2006) that a corporate entrepreneur or intrapreneur can be more important than an entrepreneur as an entrepreneur creates new ventures, while an intrapreneur continues work on an existing business to gain

success and achievement. Most often, this is accomplished by adapting and reinventing the wheel based on changes in the business environment.

Menzel (2007) cited in (Hanns C. Menzel, Aaltio, & Ulijn, 2007) explains that the process of corporate entrepreneurship has 2 levels; the organizational and individual levels, meaning a corporate entrepreneur can occur either as an individual employee or as a group of employees. This procedure commences with opportunity recognition and exploitation, then ends with creative solutions or innovations in products, services, technology and processes, as shown the figure below.

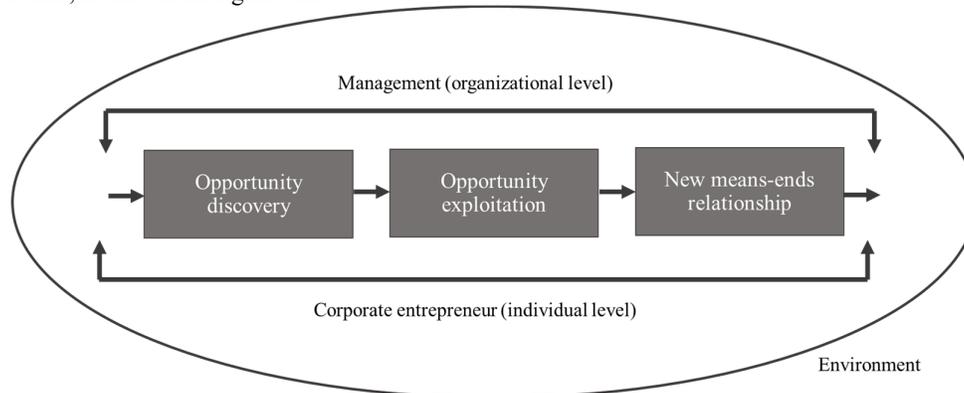


Fig. 1. Corporate entrepreneur process(H.C. Menzel, 2007)

Entrepreneurial Creativity

Creativity encompasses two dimensions; innovativeness and functional (Runco and Jaeger 2012) cited in (Liang et al., 2019). Innovativeness is defined as being new, differentiated, and unexpected, while functional includes being useful, handy and practical. Entrepreneurship requires creativity if new business ventures are to be made innovative and functional for the market (Sternberg and Lubart, 1999) cited in (Liang et al., 2019). Entrepreneurship and creativity are interrelated since creativity complements entrepreneurship at every stage, from analyzing an opportunity gap in the market, to thinking creatively of potential solutions to address customers' unmet needs, to developing business plans and action plans to deliver an actual product to market. Creativity is regarded as a critical factor of entrepreneurship, and is used to identify potential markets, create new ideas, and then commercialize them (Saptono et al., 2019). During each stage, uncertainties are sure to occur along the way. As such, entrepreneurs or corporate entrepreneurs must employ creative problem-solving and innovative thinking to be able to overcome those situations. Entrepreneurial creativity was previously defined by Amabile (1997) cited in (Jing & Anja Svetina, 2014) as the creation and implementation of innovative business solutions or campaigns, used to launch new products or services. Entrepreneurial creativity consists of two key components; creative problem-solving and creative innovation, which are required skills in every process of entrepreneurship. Furthermore, entrepreneurial creativity is not regarded as an innate ability, but has the potential to be developed from actual, real-life situations. Researchers in the field of industrial psychology suggest that nurturing an employee's creativity is one of the critical success factors which allows organizations to gain an advantage over their competition (Ahlin, Drnovšek, & Hisrich, 2014). This is because a creative employee is proactive and looks for opportunities to improve their methods of working. In addition, they tend to anticipate the consequences of each step they take. Price, Stoica, and Boncella (2013) investigate the relationship between innovation, knowledge and performance in family and nonfamily firms, and it was found that innovation and creativity drive superior firm performance; therefore, the continuation of developing new products, services, processes to achieve business targets is recommended.

Jing and Anja Svetina (2014) investigated entrepreneurial creativity, and developed the resource-based view that entrepreneurial creativity happens during the gathering and allocation of resources, under the context of resource constraints. There are 4 types of corporate innovations. (Trifan et al., 2012)

1. **Product or service innovation** refers to the launch of new, superior and differentiated products or services, when compared to existing products in the market
2. **Process innovation** refers to the application of a novel process, used to improve efficiency and effectiveness through the introduction of new technology and ways of working
3. **Marketing innovation** refers to the launch of a novel mix of marketing components, products or services
4. **Organization innovation** refers to the application of organization arrangement, re-organization, and new-organization structures

In a corporation, each department or division can be managed like a venture which requires innovation as fuel for success. Therefore, organizations require employees with a strong sense of entrepreneurial creativity. Trifan et al. (2012) mentions the 5 senses of corporate creator, explaining the behavior and attitude of employees who possess creativity:

1. **Internal Sense** describes behavior in which the individual is aware of the firm's business performance, key issues and opportunities. The individual has a strong overall organizational network awareness and can accomplish a lot through collaborating with another functional team.
2. **External Sense** refers to behavior in which individual has market insight and understands competitors so well that they're able to analyze opportunities and threats which could potentially occur in the future.
3. **Positional Sense** describes behavior in which the individual can leverage strong a competitive advantage for the company, to generate new product ideas to achieve goals.
4. **Strategic Sense** refers to behavior in which the individual has a strategic thinking capability to evaluate various business decision choices, and to be able to recommend the most appropriate one for the company with strong justification.
5. **Value Creation Sense** describes behavior in which the individual has a strong sense of ownership, and are dedicated to creating value for customers and the company by calculating any risks before making recommendations or decisions.

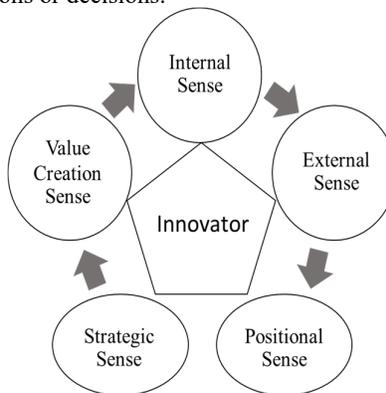


Fig. 2. 5 Senses of Corporate Innovators (Trifan et al., 2012)

Design Thinking Process

Design thinking has been used widely in the fields of business, engineering and architecture to deeply understand define, redefine and find the root causes of problems. The purpose of this is to enable the user to find the best fitting solutions to said problems through the process of prototyping and testing. In recent years, design thinking has come to play a more important role in educational settings. (Koh, Chai, Wong, & Hong, 2015). Design thinking refers to a creative problem-solving method that's systematic and collaborative, and works by focusing on a human-centered approach, namely empathizing (understanding), identifying problems, ideating possible solutions, prototyping to move from ideas to tangible solutions and testing with target customers (Luchs, Swan, & Griffin, 2015). The process itself is iterative and nonlinear, and helps improve the quality of solutions provided. This allows for the best match with the expectations of the customer. Design thinking is most appropriate for a problem or opportunity that's not well-recognized, or ill-defined, and this process has been used with proven success in the creation of new businesses, the development of new products and the improvement of internal processes (Luchs et al., 2015).

Jaitip promotes design thinking with research-based design, specifically: Digital Learning Design, Define Gap, Root cause analysis, Conceptualization, Learning Design, Rapid prototypes, Evaluation and Revision (Na-Songkla, 2018). Design thinking originated from the research study of The Hasso Platter Institute of Design, or D.school at Stamford University, and refers to the thinking process which allows for varied perspective and a deeper understanding of target groups. Via this process, new ideas can be created, prototypes and processes can be continuously refined. Additionally, it has been used in conjunction with technology to support instructional design to deliver learning outcomes among diverse learners. The design thinking process consists of 5 key parts;

1. **Empathize** is the first step in understanding a target group in-depth through interviewing, observing and collecting evidence of the past successes and failures. This could include participation in the target groups' activities.
2. **Define** is the step where data and facts are collected and synthesized actual to identify the root cause of a problem.

3. **Ideate** is when people come together in groups to brainstorm different ideas with tools so that they can find as many solutions as possible to address the root cause of a problem, which was analyzed in a prior step.
4. **Prototype** is the step where ideas are transferred so they can become a tangible product or service prototype. This, then triggers discussion and criticism from the team and it is essential that this step happens quickly if flaws are to be seen and ideas for further improvement are to be developed.
5. **Testing** is when the prototype is tested on real customers to observe and evaluate the efficiency of a product. The result of these tests is used to continue improving the prototype until it meets customers' expectations.

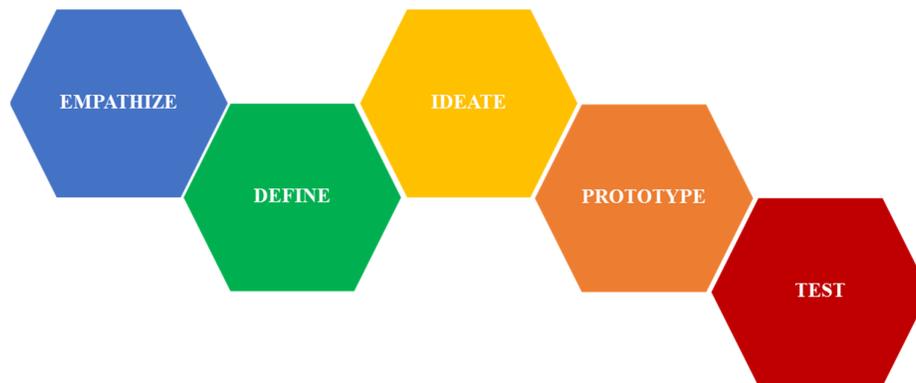


Fig. 3. Design Thinking Process (Stanford d.school)

Entrepreneurs or corporate entrepreneurs are faced with uncertainties daily, having to cope with many ill-defined problems if they are to survive in a competitive market environment; therefore, their lifestyles are often very complex and nonlinear. In the past, education for entrepreneurship focused on “about” which means teaching mainly in a theoretical manner. This meant that the “through” was neglected, which relates more to a direct experience through the journey of entrepreneurship (Linton & Klinton, 2019). The design thinking process mirrors the key processes of entrepreneurship and corporate entrepreneurship. For the design thinking process, the ultimate goal is to solve problems through the development of creative ideas, products or services. Due to this, it is appropriate to encourage the nurturing of entrepreneurial creativity. Linton and Klinton (2019) investigated and found that the use of new teaching methods, which incorporated the design thinking process, can be an effective approach to entrepreneurial education. The reason for this being that the learners are able to undergo more practical experiences as they can experiment in real life situations, and this can help to develop both skills and mindsets needed for entrepreneurial creativity. Schiele and Chen (2018) studied design thinking and digital marketing skills used in marketing education, and found that learners key skills improved in the following areas; understanding, creativity, communication skills, technology skills, critical thinking, and collaboration (Glen, Suci, Baughn, & Anson, 2015).

Social Media Learning Platform

It was said by Jaitip Na-Songkla (2018) that the connectivism paradigm emphasizes learning from the connection between information technology and groups of people. Social connection is an integral part of knowledge creation and the bigger the social connection, the more knowledge is being generated. This paradigm has a strong impact on our way of living, communicating and learning. There are 4 facets of connection; social media, social networks, cloud-based learning and open education.

Social media is digital media as a means of communication within social networks using a connection to the internet. The users interact with each other by creating their own content as well as consuming content created by others on the network, and there are different types of social media that can be used in learning; (Na-Songkla, 2018)

1. Blogs
2. Collaborative Writing
3. Video blog
4. Photo Sharing
5. Podcast
6. Virtual Reality
7. Crowd Sourcing

The benefits of social media learning were outlined by Wu and Song (2019), and are as follows; (1) enhance learner engagement, participation and experience (2) integrate outside resources as part of a learning environment (3) create a group to allow application practice among learners. Social media enables learners to interact with each other, and teachers, in an open and collaborative environment; hence, the rate of participation among learners increases. By nature, social media is ubiquitous in all aspects of our lives, in personal, family, work and educational areas. Social media is proven to be a key facilitator and driver of creativity (Bhimani, Mention, & Barlatier, 2018). It is also used extensively by entrepreneurs for marketing, business networking, searching for information, and crowd funding (Olanrewaju, Hossain, & Whiteside, 2019).

Thailand has the highest rate of social media penetration in Southeast Asia, at 74%, vs. the rest of Southeast Asia, at 61%. This translates as 51 million people who are actively using social media, mostly through mobile devices. The average time spent on social media per day currently sits at 3 hours 11 minutes. In Thailand, the top 5 social media platforms are Facebook, Youtube, Line, Facebook Messenger and Instagram, accordingly. The majority 34% of social media users are 25-34 years old. (source : we are social <https://wearesocial.com>) It is evident that social media is an integral part of the professional and personal lives of young working adults. Therefore, social media proves to be an appropriate platform where entrepreneurial creativity can be promoted among young managers in Thailand.

Social media as a method for adult and higher education is receiving higher attention in terms of both content dissemination and evaluation. It is evident in research results that there are favorable consequences of using social media when driving in-depth learning experience and uplifting certain skills, for example: collaboration and organization (Stathopoulou, Siamagka, & Christodoulides, 2019). Al-Rahmi, Alias, Othman, Marin, and Tur (2018) investigated a model of factors which affect learning performance when using social media in throughout higher education in Malaysia. It was found that social media enhances collaborative learning and engagement through group assignments. Furthermore, O'Boyle (2014) studied the mobilization of social media in sports management education, focusing on Facebook and Twitter as part of blended learning. A conclusion was reached that social media delivered a strong learning platform which has the potential to increase student and staff engagement.

Young managers' Insights on Development Opportunities

Focus Group Discussion

One focus group of 8 young managers in a multinational company were investigated to understand the need gaps of existing entrepreneurial creativity development, so that recommendations could be developed in the future. The respondents were between 28 to 35-year-old, with 5-10 years of working experience in multinational companies. The discussion guideline covered perceived entrepreneurial creativity skill, past development activities and needs for future entrepreneurial creativity development.

Perceived Entrepreneurial Creativity

In terms of **perceived entrepreneurial creativity**, most young managers rated themselves at the moderate level and struggled to improve their skill set. The reason for this being that they had become used to working under the close supervision and guidance of their superiors and regional teams. In the context of a multinational firm, there are always standard operating procedures (SOP) as guidelines for the ways of completing tasks and even templates to be followed for each piece of work. This is because global and regional teams will need to consolidate and compare different countries and regions, meaning that it is not allowed for workers to deviate from the template or structure. If young managers are asked to conduct a piece of work without the use of a template, they would find it difficult as they would not know how to start. This is called "Template Syndrome". Most of the staff members came from sales and marketing teams and so they need to create a marketing plan on a yearly basis. However, they receive templates from their global and regional teams to follow rather than beginning from scratch. In the end, they would fill in forms rather than thinking creatively and analytically about the strategy that should be proposed.

Past Entrepreneurial Creativity Development

Entrepreneurial creativity has been integrated as part of the managers' functional competency for sales and marketing. They are all evaluated on this in their performance reviews; however, they are not clear on exactly what it means to their role and haven't had a chance to practice in real-life scenarios. Most of the **past development** focused on theoretical framework in an e-learning module, rather than real-life experiential learning. This means that there's a limited amount of collaborative working sessions with other learners. They are required to complete a session by a deadline. Yet, they do not feel engaged in the materials because they mostly spend time alone on e-learning modules, being tracked by their human resources or training teams. Training feels more mandatory to them, and does not inspire them to develop themselves.

Needs for Future Development

In terms of wish lists for **future entrepreneurial creativity development**, the managers are asking for higher quality development sessions by focusing on real-life case studies. This would allow them to work with peers and learn how to transfer knowledge to practice. Nevertheless, they are not against e-learning, though they do think there should be mixture of e-learning and in-classroom activities where they have the opportunity ask questions and engage in discussion with trainers and peers. They are expecting a workshop session where they can use personal experience from their own work in discussion with other learners and trainers in the workshop session. The e-learning platform shouldn't be restricted to one-way learning and should be accessible anywhere, any time as currently it can only be accessed via laptops using a VPN, and is not mobile friendly.

In conclusion, there is a lot of potential to revamp entrepreneurial creativity development through the enhancement of experiential learning, as well as boosting engagement among learners. Learning design should stimulate deep and collaborative learning in real working situations; thus, providing opportunities to reflect on current work and ways to improve upon the completion of daily tasks. Engagement, experiential activities, collaboration and inspiration are the keys to success in this regard.

In conclusion

Promoting young managers' entrepreneurial creativity using social learning platforms

From the literature and results of focus group discussions, I'd like to propose a learning design for entrepreneurial creativity by utilizing the design thinking process in order to mimic the experiences of corporate entrepreneurship. Empathizing, defining, ideating, creating prototypes and testing would all be incorporated into new product development. Following is the proposed learning design in combination with design thinking processes and cognitive tools. Technology is another tool to be used in this proposal, and allows for support of experiential, collaborative, real-life based learning design. The content of the case study should be based around the category of the product that the company developing, or an expansion plan for future development. This will allow the team have a basic understanding of the field of work, and have target customers' insights available to them.

Table 1. depicts the proposed learning design for entrepreneurial creativity

| Design Thinking Process – Learning Design | Cognitive Tools | Enabling Technology |
|---|---|--|
| 1. Empathize: - Interview and observe target groups to understand the customer journey and pain points for assigned product category | - Interview & Observe guide - Customer Persona - User profile canvas | Purpose: Interact with target customers - Line Video Call - Facebook Messenger |
| 2. Define: - Define the key unmet needs of target customers and root causes of these needs | - Fishbone - WH questions (What, When, Where, Why How?) | Purpose: Collectively define customers pain points - Line Notes - Line Albums |
| 3. Ideate: - Brainstorm with team on as many solutions or product ideas as possible | - Brainstorming sessions - Idea communication sheet - Creativity techniques | Purpose: Collaborative platform to gather ideas and discuss - Line Album and Notes |
| 4. Prototype: - Create product concepts and initial prototypes | - Product Concept board - Boxing and shelving | Purpose: Platform to display ideas and prototypes - Line Album and Notes |
| 5. Test: - Conduct a focus group interview to test on target customers and gain feedback which then allows for improvement | - Conduct A/B testing - Focus group discussion - Use feedback-capture grid | Purpose: Interactive forum to test ideas on target customers - Line Album - Line Messaging with groups of potential customers - Line Voting - Line Survey & Feedback |

This is the initial outline of a potential learning design and will need to be rigorously evaluated to validate what will work for young managers, and to enhance the effectiveness of entrepreneurial creativity development. For future research, it is recommended to:

1. Conduct a survey on a larger scale of needs assessments of entrepreneurial creativity among young managers.

2. Research and design the learning design, components, and technology which are to be used when developing entrepreneurial creativity.
3. Test and validate learning design components and technology among young managers to propose the most appropriate model and platform to be used in learning design.

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