

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

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Abstract

Entrepreneurship education has received enormous interests since entrepreneurs are key drivers of business growth across the world. Entrepreneurial creativity is identified as core competency in large multinational corporations in Thailand because of unique combination of sense of ownership and innovative thinking. Thai government has launched Thailand 4.0 policy since 2016 to enhance creativity and technology competitiveness to towards innovation-driven or creative economy. However, the 2019 Global Innovation Index reported that Thailand ranked No. 43 from 129 countries in the world since Thai entrepreneurs and corporate entrepreneurs still have lower level of entrepreneurial creativity skill, judging from the fact that 90% of the products are not differentiated enough. An in-dept focus group of 8 respondents are conducted among young managers in a multinational company to understand the triggers and barriers of entrepreneurial creativity development and found that their entrepreneurial creativity skill is at moderate level since they are not confident with their skill, driven by current development activities, focusing on theoretical, one-way, passive learning experiences. They do not feel engaged, motivated and confident in transfer the knowledge to practice. Design thinking is well recognized as the creative problem-solving process though human-centered approach, simulating the journey of entrepreneurship and have been used in developing business education. Social media is one of the most used platforms for daily live and learning with a feature, delivering open and collaborative platform. Therefore, a learning design with design thinking process is recommended with social media technology to deliver engaging, experiential, and motivating learning experiences among young managers.

Introduction

Entrepreneurship and entrepreneurship education have received enormous interests among every national governments, academic institutions and business industry since entrepreneurs are key drivers of business growth, alleviating the slowdown of global economy. This is because entrepreneurs came into the business with unique mindsets and competencies from recognizing emerging business opportunities, initiating innovative ideas, creating business planning, gathering required resources and drive with full passion to achieve the goals with strong commitment and calculated risks. The results have proven in the developed nations like the United States, United Kingdom, Singapore and Japan where entrepreneurs in small and medium sized corporation contributed at least more than 50% of gross domestic products and generating more than 65-70% of the whole country's employment (Yıldırım, Trout, & Hartzell, 2019).

In the corporate world, entrepreneurial competency is identified as core competency in large multinational corporations like Coca Cola, P&G, Unilever, S.C. Johnson and Sons since this competency refers to the ability of executives, managers or employees to have strong ownership and continue innovating in their areas of responsibilities by weighing between opportunities and calculated risks to achieve impressive business results. This can be called "Corporate Entrepreneurship" to change the employees' mindset from traditional "wait and see" to more "proactive and aggressive" way of working (Barringer & Ireland, 2012). The expected skill within entrepreneurship is creativity and business ownership. While ownership is more the aspect of engagement and passion with roles and companies, creativity is one of the skills and attitude within the areas of entrepreneurship that can be cultivated within the organization. Creativity is part of the 4Cs' learning skill category in the 21st Century skill.

Creativity is regarded as one of the most important and key success competencies among entrepreneurs to become successful in their ventures. Burns and Burns (2014) mentioned about the 5 qualities of entrepreneurs which are (1) Creative thinking and innovation (2) Drive for achievement (3) Independency (4) Self-directed/control (5) Awareness of calculated risks. Creativity encompasses the process from recognizing the opportunities to creating an innovative business models to start new ventures. This is consistent with what Barringer and Ireland (2012); Bolton and Thompson (2013) and Kuratko and Hodgetts (2004) have included creativity as key essential component of entrepreneurs which includes creative problem solving, creative thinking as well as creative design.

Thai government launched Thailand 4.0 policy in 2016 to increase creativity and technology competitive advantage to deliver innovation with the intention to move the country from middle-income and efficiency-driven economy to become 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 from 129 countries in the world. The best-in-class in Asia is Singapore (8th), Korea (11th), Hong Kong (13th), China (14th) and Japan (15th). Another study done by Organization for Economic Cooperation and Development (OECD) in 2018 found that Thailand ranked No. 3, following Singapore and Malaysia from 10 countries in Southeast Asia on the aspect of innovation and technology outputs (The Secretary-General of the OECD, 2018). This identifies opportunity to improve the capability on creativity and innovation by tackling on the issue of entrepreneurial creativity development.

Design thinking is well recognized as the creative problem-solving process though human-centered approach. The process itself is a not linear with the strong focus on deeper understanding of users or customers to arrive with clear problem statement. The potential ideas emerge from different point of view brainstormed and transformed into prototypes for testing and retesting until they fully meet or exceed the customers' expectations. The process simulates the life cycle of entrepreneurs and can foster creative thinking among learners (Linton & Klinton, 2019).

Social media have been used to promote entrepreneurial education with variety of platforms (Line, WeChat, Facebook Messenger) all around the world due to its unique features to drive learners 'engagement, experiences and collaborations to ultimately improve learning outcomes (Wu & Song, 2019). However, there are limited knowledge and studies on how to use social media learning to improve entrepreneurship or entrepreneurial creativity. Teepapai and Karawek (2018) found that the company's culture and learning environment has a strong impact on creative ideas and innovative outputs of the employee; therefore, it is recommended to invest in the development of creativity by leveraging new connected technology that can promote learning among employees.

Therefore, this article will explore on the literature of entrepreneurial creativity, design thinking and social media learning, as well as an in-depth focus group study with young managers in a multinational company. The article ends with recommending a learning design to promote young managers' entrepreneurial creativity with design thinking in a social learning platform

Corporate Entrepreneurship (Intrapreneurship)

Successful innovation is one of the key success factors for companies to achieve business goals by growing revenue, profit margins, market share and corporate image (Miller & Bauer, 2017). Pinchot and Pellman (1985) are ones of the first inventors for "Intrapreneurship" (corporate entrepreneurship) by defining as the individual who has the vision above their responsibility with some creative ideas. Corporate entrepreneurship or intrapreneurship is another kind of entrepreneurship when employees drive the business with strong sense of ownership and will go extra mile to deliver success to the business with new creative ideas or innovations (Trifan, Guica, & Micu, 2012). Corporate entrepreneurs are the one who doesn't have intention to create their own venture but willing to work within an organization with the strong sense of ownership. For an entrepreneur to become successful, he needs to have managers with corporate entrepreneurship quality to deliver innovation (De Lourdes Prado, MacHado, Mafra, & Maria Campos, 2012). There are 3 components of corporate entrepreneurship; proactiveness, creativeness and risk bearing (de Jong et al., 2011) cited in (Miller & Bauer, 2017). Christensen (2011) cited in (Miller & Bauer, 2017) categorized 4 different type of creative entrepreneurs; (1) creative entrepreneurs are the one that introduce a new venture with differentiated products to capture unmet needs (2) creative intrapreneurs are the one who introduce a new business within a corporation (3) product creator are the one who creates new product or services (4) process creator are the one to continue to improve the efficiency or create new process. This reflects that there are 3 types of corporate entrepreneurship at 3 different aspects from business within organization, product innovation and process improvement. They are all centered around creating or innovating to increase the organization's competitive advantage. That's why corporate entrepreneurship is identified of core competency in the corporate world, especially in international firms e.g. Unilever, P&G, Nestle', and S.C. Johnsons & Sons, to generate innovation. Teltumbde (2006) said that corporate entrepreneur or intrapreneur can be more important than entrepreneur since an entrepreneur creates new venture while an intrapreneur work on it to success and achievement by adapting and reinventing the wheel based on the changes in business environment.

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

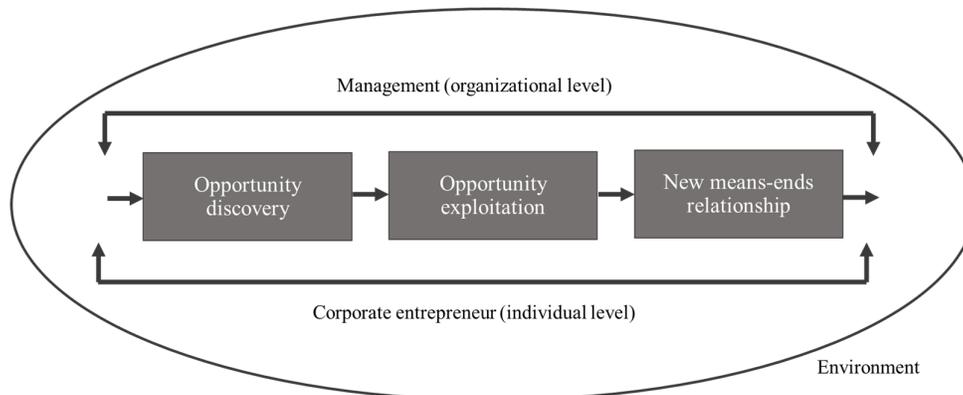


Fig. 1. Corporate entrepreneur process(H.C. Menzel, 2007)

Entrepreneurial Creativity

Creativity covers 2 dimensions; innovativeness and functional (Runco and Jaeger 2012) cited in (Liang et al., 2019). Innovativeness means being new, differentiated, and unexpected while functional means useful, handy and practical. Entrepreneurship requires creativity in making the new business venture 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 in every stage from analyzing the opportunity gap in the market, think creatively on the potential solutions to address customer unmet needs, develop business plan and action plan to deliver the actual product to market. Creativity is considered to be a critical component of entrepreneurship in order to identify potential markets, create new ideas, and commercialize them(Saptono et al., 2019). In every stage, there are always uncertainties along the way which entrepreneurs or corporate entrepreneurs must employ creative problem-solving and innovative thinking to get through those situations. Entrepreneurial creativity was defined by Amabile (1997) cited in (Jing & Anja Svetina, 2014) as the creation and action of innovative business solutions or campaigns to launch new products or services. There are 2 key aspects of entrepreneurial creativity; creative problem-solving and creative innovation which are required skills in every process of entrepreneurship. Entrepreneurial creativity is not an inborn ability but can be developed from actual real life situations. Researchers in the field of industrial psychology suggests nurturing an employee's creativity is one of the critical success factors to enhance to one step ahead of competition as innovative organization(Ahlin, Drnovšek, & Hisrich, 2014). This is because a creative employee is proactive and look for opportunities to improve their way of working and anticipate the consequences for every step of actions. Price, Stoica, and Boncella (2013) investigates the relationship between innovation, knowledge and performance in family and nonfamily firms and found that innovation and creativity drive superior firm performance; therefore, it's recommended to continue to come up with new product, services, processes to achieve business targets.

Jing and Anja Svetina (2014) investigates entrepreneurial creativity with 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, comparing to the existing products in the market
2. **Process innovation** refers to the application of a novel process to improve the efficiency and effectiveness through the introduction of new technology and way of working
3. **Marketing innovation** refers to the launch of a novel marketing mix component of a product or services
4. **Organization innovation** refers to the application of organization arrangement, re-organization, and new organization structure
- 5.

In a corporation, each department or division can be managed like a venture which requires innovation to fuel the success; therefore, the organization required human resources with strong sense of entrepreneurial creativity. Trifan et al. (2012)mentions the 5 senses of corporate creator, explaining the behavior and attitude of employees with creativity

1. **Internal Sense** describes the behavior that 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 get things done through collaborating with another functional team
2. **External Sense** refers to the behavior that the individual knows the market insight and competitors so well that he's able to analyze opportunities and threats that could happen in the future

3. **Positional Sense** describes the behavior that the individual can leverage strong competitive advantage of the company to generate new product ideas to achieve goals
4. **Strategic Sense** refers to the behavior that the individual has strategic thinking capability to evaluate various business decision choices and recommend the most appropriate one for the company with strong justification
5. **Value Creation Sense** describes the behavior that the individual has the strong sense of ownership, dedicated to creating value to the customers and the company by calculating on all risks before making or recommending decisions.

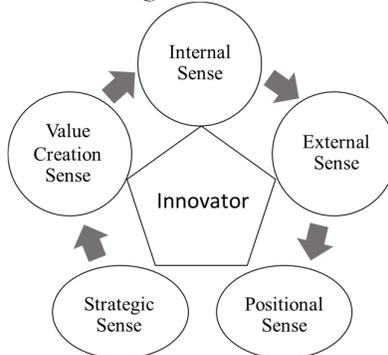


Fig. 2. 5 Senses of Corporate Innovators (Trifan et al., 2012)

Design Thinking Process

Design thinking has been used widely in the field of business, engineering and architecture to deeply understand the roots cause, define, redefine the problems to arrive with best-fit solutions through the process of prototyping and testing and now design thinking plays more role in education settings.(Koh, Chai, Wong, & Hong, 2015). Design thinking refers to a creative problem-solving method that's systematic and collaborative by focusing on human-centered approach from empathizing (understanding), identifying problems, ideating possible solutions, prototyping from ideas to tangible solutions and testing with the target customers(Luchs, Swan, & Griffin, 2015). The process itself is iterative and nonlinear that help improve the quality of solutions to ensure it best fit the customer's expectation. Design thinking will be best worked for the problem or opportunity that's not well-recognized and ill-defined and this process has been used with proven success for new business creation, new product development and internal process improvement(Luchs et al., 2015).

Jaitip promotes design thinking with research-based design namely: Digital Learning Design, Define Gap, Root cause analysis, Conceptualize, Learning Design, Rapid prototype, and 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, refers to the thinking process to deeply understand the target groups from different perspectives to create new ideas, prototype and refine the output or process continuously and this process has been used to support instructional design to deliver learning outcomes among diverse learners fueling by technology. Design thinking process consists of 5 key steps;

1. **Empathize** is the first step to understand in-depth of target group through interviewing, observing as well as collecting the past success and failures including participating with target groups' activities.
2. **Define** is the step to collect and synthesize actual data and facts to identify the root cause of the problem.
3. **Ideate** is when people come in groups to brainstorm different ideas with tools to find solutions as many as possible to address the key root cause being analyzed in the prior step.
4. **Prototype** is the step to transfer idea to become tangible product or service prototype and trigger discussion and criticism from the team and this step needs to happen very fast to see the flaws, weaknesses of the idea for further improvement.
5. **Testing** is when to test the prototype with real customers to observe and evaluate the efficiency of the product and utilize the result to keep improving the prototype until it meets customers 'expectation.

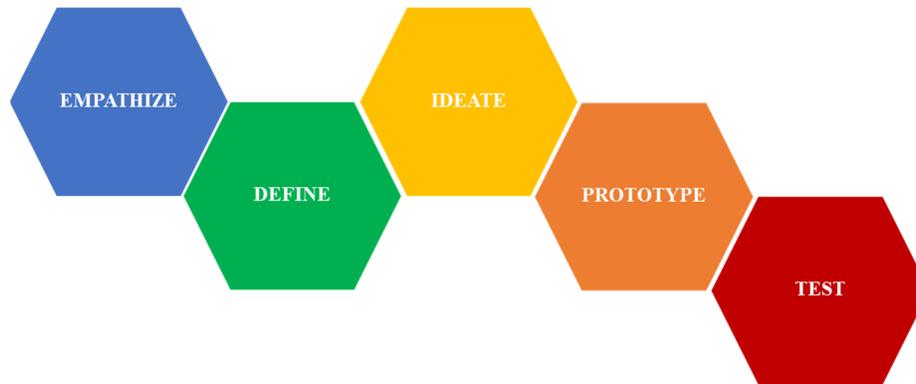


Fig. 3. Design Thinking Process (Stanford d.school)

Entrepreneur or corporate entrepreneur are daily facing with uncertainties with many ill-defined problems to cope with and survive in a competitive market environment; therefore, the life of them is very complex and nonlinear. In the past, the education for entrepreneurship is focusing on “about” which means teaching by focusing only the theoretical part of entrepreneurship while neglecting the “through” which is direct experiencing through the journey of entrepreneurship (Linton & Klinton, 2019). Design thinking process mirrors the key process of entrepreneurship and corporate entrepreneurship and the ultimate goal of design thinking process is to solve problem with creative ideas, products or services which is appropriate to nurture entrepreneurial creativity. Linton and Klinton (2019) investigated and found that a new teaching method with design thinking process can be effective approach to entrepreneurial education since the learners got a more practical experiences through experimenting in real life situation and this can help develop both skill and mindset of entrepreneurial creativity. Schiele and Chen (2018) study design thinking and digital marketing skills in marketing education and found that learners improved on key skills; understanding, creativity, communication skills, technology skills, critical thinking, and collaboration (Glen, Suci, Baughn, & Anson, 2015).

Social Media Learning Platform

Na-Songkla (2018) said that connectivism paradigm emphasizes the learning from the connection with information technology and groups of people. The social connection is the integral part of knowledge creation and the more social connection, the more knowledge being generated. This paradigm has a strong impact on our way of living, communication and learning. There are 4 aspects of connections; social media, social network, cloud-based learning and open education.

Social media is the digital media as means for communication within social network by connection to the internet. The user interacts with each other by creating their own contents as well as consuming contents from others in the network and there are different types of social media for learning; (Na-Songkla, 2018)

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

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

Thailand has the highest social media penetration in Southeast Asia with 74% vs. total Southeast Asia at 61%, translating to more than 51 million people are actively using social media and they use through mobile device. The average time spent at 3 hours 11 minutes per day. The top 5 social media in Thailand 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>) This identified that social media is the integral

part of young working adults for both work and personal life. Therefore, social media can be an appropriate platform to promote entrepreneurial creativity among young managers in Thailand.

Social media for adult and higher education is getting higher attention for both content dissemination and evaluation and the research results demonstrated that there's favorable consequences of social media in driving in-depth learning experience and the uplift of certain skills like collaboration and organization (Stathopoulou, Siamagka, & Christodoulides, 2019). Al-Rahmi, Alias, Othman, Marin, and Tur (2018) investigated a model of factors affecting learning performance using social media in Malaysia higher education and found that social media enhances collaborative learning and engagement through group assignments. Furthermore, O'Boyle (2014) studied mobilizing social media in sport management education by focusing on Facebook and Twitter as part of blended learning and concluded that social media delivered strong learning platform that can increase student and staff engagement.

Young managers' Insights on Development Opportunities

Focus Group Discussion

One focus group of 8 young managers in multinational company were conducted to understand the need gaps of existing entrepreneurial creativity development to propose the future recommendation. The respondents are between 28 to 35-year-old manager, with 5-10 years of working experiences in multinational companies. The discussion guideline covers perceived entrepreneurial creativity skill, past development activities, 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 since they get used to working under the close supervision and guidance from their superiors and regional team. In a multinational firm context, there's always standard operating procedures (SOP) as patterns or ways of doing things and even template for each work to follow. This is because global and regional team will need to consolidate and compare between countries and regions; therefore, not allowed to deviate from the template or structure. If young managers are asked to work on things without template, they would find it difficult on how to start with. This can be called "Template Syndrome". Most of them come from sales and marketing team and what they need to do on a yearly basis is creating the marketing plan. However, they got a template from global and regional team to follow rather than having a blank sheet paper to start with. They ended up filling forms rather than thinking analytically and creatively on what strategy should be proposed.

Past Entrepreneurial Creativity Development

Entrepreneurial creativity has been part of their functional competency for sales and marketing and they are all evaluated in the performance review on this perspective; however, they are not clear what it means to their role and haven't got a chance to practice in the real settings. 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 limited collaborative working session with other learners. They are required to complete the session by deadline; however, they don't feel engaged with the materials since they mostly spend time alone with e-learning module and being tracked by human resources or training team. Training is more like a mandatory but not inspires them to develop themselves.

Need for Future Development

In terms of wish lists for **future entrepreneurial creativity development**, they are asking for a higher quality of development session by focusing on real-life case study where they can work with peers to learn how to transfer of knowledge to practice. They are not against e-learning; however, they think there should be mixed of e-learning and classroom where they can ask questions, discuss with trainers and peers. They are expecting a workshop session where they can even bring their real case at work to discuss with other learners and trainers in the workshop session. The e-learning platform shouldn't be one-way learning and should be able to access anywhere any time since now it can only access via laptops with VPN, not mobile friendly.

In conclusion, there's potential to revamp the entrepreneurial creativity development by enhancing experiential learning as well as engagement among learners. The learning design should stimulate deep and collaborative learning in real working situation; hence, giving the opportunity to think of the current work and apply to improve on the day to day work. Engagement, experiential, collaboration and inspiration are keys to success.

In conclusions

Promoting young managers' entrepreneurial creativity in social learning platform

From the literature and focus group discussion, I'd like to propose the learning design for entrepreneurial creativity by leveraging design thinking process to mimic the experiences of corporate entrepreneurship through empathize, define, ideate, prototype and test by using the case of new product development for market and sales function. Here's the proposed learning design with a combination of design thinking process, cognitive tools and enabling technology to support experiential, collaborative, real case learning design to develop entrepreneurial creativity. The case study content can be based on the product category that the company is competing in or the expansion plan in the future so that the team can have the basic understanding of the category and target customers insights.

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	- Fishbone - WH questions (What, When, Where, Why How?)	Purpose: Collectively define customers paint points - Line Notes - Line Albums
3. Ideate: - Brainstorm with team as many as possible on solutions or product ideas	- Brainstorming sessions - Idea communication sheet - Creatively techniques	Purpose: Collaborative platform to gather ideas and discuss - Line Album and Notes
4. Prototype: - Create product concept and initial prototype	- Product Concept board - Boxing and shelving	Purpose: Platform to display ideas and prototype - Line Album and Notes
5. Test: - Conduct a focus group interview to test with target customers to gain feedback and room for improvement	- Conduct A/B testing - Focus group discussion - Use feedback-capture grid	Purpose: Interactive forum to test ideas with target customers - Line Album - Line Messaging with groups of potential customers - Line Voting - Line Survey & Feedback

This is the initial thought of potential learning design and will need to go through a rigorous study to validate what will work for young managers to enhance the effectiveness of the entrepreneurial creativity development. For the future research study, it's recommended to

1. Conduct a survey in a larger scale on need assessment of entrepreneurial creativity among young managers
2. Research and design the learning design, components, and technology for developing entrepreneurial creativity
3. Test and validate the learning design, components, and technology among young managers to propose the most appropriate learning design and platform

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