Are Leaders in Thailand Prepared for Thailand 4.0?

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Abstract: Industry 4.0 is celebrated in Thailand as the next level of economic success for their country. The concept is also called Thailand 4.0 to emphasize that for the adapted Thai version of Industry 4.0, Creativity and Innovation are defined as the main targets. This study aimed to investigate whether leaders in Thailand are prepared for Industry 4.0. Data were gathered using qualitative methods. For this research paper, a sample of 15 leaders was interviewed in Bangkok who are all successful leaders of small, medium-sized and big companies. The findings depict that these leaders are ready for creativity and innovation, hence ready for Thailand 4.0. Empowerment, support, and self-efficacy are the main sources of innovation. All leaders in this study show that they have created work cultures where these values are active. The results provide evidence indicating that all leaders are very open-minded in trying different creative approaches to develop creative ideas. All are willing to integrate their subordinates into finding creative solutions. The current study is novel in that it is one of only a few studies that cover this topic. Furthermore, the findings highlight the factors that can influence change management and that leaders must focus on in order to effect change.

Keywords: Change management, creativity, culture, industry 4.0, innovation, Thailand, transformational leadership, trust

INTRODUCTION

The course is set. Thailand, like many other nations, is moving towards Industry 4.0, which entails organizations preparing their members for improving existing processes, systems, and technologies on the one hand, and getting leaders and their followers more creative and innovative on the other (Baxter, 2017; Maierbrugger, 2016; Mercer, 2019). As leaders are in charge of such complex change, the success of this transformation depends pretty much on their capabilities. Many change projects fail due to weaknesses in leadership. As a result, strong leaders are important to drive changes in the desired direction (Armenakis & Bedeian, 1999; Banks, Dionne, Sayama, & Mast, 2019; Newstead, Dawkins, Macklin, & Martin, 2019).

As part of new technology and high-level services, Creativity and Innovation play a key role in Thailand 4.0. Both are necessary to improve existing solutions and to generate innovations so that long-lasting economic growth can be achieved. This target requires an increase in the value of human resources, as the quality of human capital will mainly determine the success of Thailand 4.0 (Baxter, 2017). Leaders in business have to be ready to initiate creativity and innovation within their workforce in Thailand. Many studies have suggested that transformational leaders (TFL) enhance individual employee's creativity (Cummings & Oldham, 1997; Newstead et al., 2019; Scott & Bruce, 1994; Tierney, Farmer, & Graen, 1999). They create better relationships with their followers and by doing so, establish a climate that is supportive of promoting employee creativity and innovation. It seems that in order to reach Thailand

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4.0, transformational leadership is the most effective leadership style. Leaders are supposed to be the initiators who encourage followers to challenge the status quo, challenge the way of thinking and imagination. They provoke critical and creative thinking. Furthermore, they empower followers to be experimental and give them support whenever needed (Abbey & Dickson, 1983; T. M. Amabile, Conti, Coon, Lazenby, & Herron, 1996; Anderson & West, 1998; Banks et al., 2019; Cummings & Oldham, 1997; Scott & Bruce, 1994; Shalley, 1995; Woodman, Sawyer, & Griffin, 1993). Cummings and Oldham (1997) come to similar conclusions that high job complexity, supportive supervision, informational feedback, freedom and low oversight control stimulate the creative and innovative behavior of employees.

As organizations worldwide are facing a dynamic environment with shortening product life cycles, globalization, rapid technological disruptions, the ability to create and innovate is most likely the best and most critical weapon to survive. Innovation, through creativity, is an important factor for the success of organizations. Strong economies can reach competitive advantages based on their ability to innovate (Altantsetseg, Chen, & Chang, 2017; Drucker, 2014; Woodman et al., 1993; Mercer, 2019).

Given the current state of leadership in Thailand, how realistic is it to become a creative and innovative workforce with leaders who are having a real impact on people and the future of their organizations? What is the opinion of leaders on creativity and innovation? What people do they consider as creative? What creative products are meaningful to them? What innovative decision have they ever made? These are questions this paper tries to examine critically.

LITERATURE REVIEW

Good Leadership: The Key for Creativity and Innovation

The digital transformation labeled Industry 4.0 is profoundly re-shaping current business models. It stands for the fourth industrial revolution, where automation and process integration are the focus. Researchers, governments, manufacturers, and application developers worldwide are paying more and more attention to Industry 4.0 programs as it offers increased economic benefits, enables smart production, a wide array of interdisciplinary technologies, and a reduction in energy consumption. U.S., EU, China, India and other Asian countries have widely adopted the conceptual idea of Industry 4.0. Thailand 4.0 is about reforming Thailand's existing industries, such as automotive, electronics, agriculture, medical and biotechnology, and increasing the development of new technologies, such as robotics, aviation, digitalization and logistics (Baxter, 2017; Maierbrugger, 2016). In short, the economic model of Thailand 4.0 focuses on creativity and innovation. Research shows that leaders with creative ability are more effective at promoting positive change and inspiring their followers than leaders who lack creative ability (House & Howell, 1992; Hairudinor, Hidayati, Muspiron., Tampubolon, & Humaidi., 2017; Mumford & Connelly, 1991; Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2000; Newstead et al., 2019; Shin & Zhou, 2003, 2007; Sternberg, 2007; Tierney et al., 1999; Yukl, 1989). Somech (2006) claims that leaders are the key drivers, who either promote or inhibit innovation management in the organization. According to Bel (2010), different leadership styles are likely to have different impacts on employee involvement and commitment which, in turn, influence the climate for innovation management. Deschamps (2005) goes even further, saying that the failure of innovation projects is most likely due to ineffective leadership skills. Within the growing literature on change leadership, there are assertions that the root cause of many change problems is leadership behavior (Mercer, 2019). Especially, trust and the lack of trust are considered the main factors in failed change projects. Trust in leadership is, in general, identified as an important role in innovation and change research (Armenakis & Bedeian, 1999; Banks et al., 2019; Newstead et al., 2019). Leadership obviously plays a decisive role in enhancing organizational creativity, launching, driving and implementing innovation projects and overcoming resistance (T. M. Amabile, Schatzel, Moneta, & Kramer, 2004; Banks et al., 2019; Bossink, 2007; Gilley, Dixon, & Gilley, 2008; Mumford, Scott, Gaddis, & Strange, 2002; Pimonratanakan, Intawee, Krajangsaeng, & Pooripakdee, 2017; Stoker, Looise, Fisscher, & Jong, 2001).

Transformational leaders encourage followers to challenge the status quo and experiment with new and different approaches to their work. They pay attention to stimulating their followers intellectually (B. M. Bass & J., 2000). For example, they challenge followers' thoughts and imagination, recognize their creative values, beliefs, and mindset and develop individual employee's and work teams' capabilities. Furthermore, they provide resources and support and give them permission to act, and energize followers to work harder toward achieving higher targets (B. Bass, 1990). Studies show that the perception of support and empowerment are important sources of creativity (Mercer, 2019; Scott & Bruce, 1994). All of this helps to develop an identity of being creative in the followers' mind. Consequently, this means that the success of Thailand 4.0 depends significantly on the quality of leaders in Thailand. This type of leader

will be a catalyst, a facilitator, a coach and a trainer in organizational learning. As business conditions regularly keep changing, the ability to manage change becomes an essential skill for leaders. To survive in today's business world is directly related to the ability to manage change successfully. Without strong leadership capabilities, an effective organizational change towards creativity and innovation is most likely not possible. As Thailand wants to change into a country where creativity and innovation are key elements in their society, it is important to understand how leaders in Thailand perceive creativity and innovation themselves and, based on that, to understand what kind of climate and culture they are installing in their organizations.

Point of Departure: Thailand Now!

Geert Hofstede's cultural dimension theory is probably the most famous framework that helps to understand cultures and their values regarding factors such as individualism-collectivism, uncertainty avoidance, power distance and masculinity-femininity (Dellner, 2014). Hofstede studied many countries worldwide to analyze their organizational culture. The results do not necessarily apply on an individual level but show a trend for whole societies. For Thailand Hofstede found that Thais are used to organizations with high power distance (Hofsteede, 2001). That means Thais accept easily that power is distributed unequally, which includes the following characteristics:

- Being dependent on hierarchy,
- Unequal rights between power holders and non-power holders,
- Superiors inaccessible,
- Leaders are directive,
- Management controls and delegates,
- Power is centralized, and managers count on the obedience of their team members,
- Employees expect to be told what to do and when,
- Control is expected, and managers are respected for their position,
- Communication is indirect and negative feedback hidden,
- Co-workers would expect to be clearly directed by the boss or manager

Privileges come with different ranks and are respected accordingly. For protection and guidance, employees show loyalty, respect, and obeisance. Each rank has its privileges and employees show loyalty, respect and deference to their superiors. The relationship between leaders and followers may lead to paternalistic management (Hofsteede, 2001; Persons, 2016). Thus, the attitude towards managers is more formal. The information flow is hierarchical and controlled.

Furthermore, Thailand is a very collectivist country where relationships are very important and committed. To be liked and accepted is more important and appreciated than to stand out from the crowd, and this includes the fact that assertive and competitive behavior is not really supported or deemed desirable. Thai society is not considered as easily accepting of any kind of change and acts very risk-averse, which leads to the need to control everything becoming visible by high levels of strict rules, laws, policies and regulations (Hofsteede, 2001; Persons, 2016). As has been demonstrated leadership can and should activate creative behavior through its influence on the followers' perceptions of a climate supportive of creative work processes and innovation (T. M. Amabile et al., 1996, 2004; Scott & Bruce, 1994). All of the previous findings combined seem not to be ideal requirements for a successful change towards Thailand 4.0, where a creative and innovative workforce is considered a key target. Leaders in Thailand seem to be far from a supportive leadership style and understanding in the context of Thailand 4.0. However, Thailand because of its collectivist culture, seems to be a good setting for the success of a transformational leadership style (Hofsteede, 2001; Persons, 2016). M. and J (1995) argues that transformational leadership is more likely to emerge in collectivist cultures than in the individualistic cultures of the West. In collectivist societies, followers expect their leaders to take care of them, while followers are ready to identify with their leaders' vision and demonstrate their loyalty (B. Bass, 1990). This goes hand in hand with a number of studies that report a stronger positive effect of transformational leadership on the creative performance of collectivists as compared to individualists (Avolio, Bass, & Jung, 1999; D. I. Jung & Yammarino, 2001; Mercer, 2019). Also, D. I. Jung and Yammarino (2001) report that the effects of transformational leadership are stronger among collectivists than among individualists. Organizational climate plays an important role in creativity (Scott & Bruce, 1994). Employees' perceptions of the extent to which creativity is encouraged at the workplace, and the extent to which organizational resources are allocated to supporting creativity influence their creative performance. An employee's perception of an innovative climate encourages risk-taking, and the challenge to

use creative approaches at work. In short, that means if Thailand comes up with the right leaders, enhancing creativity and innovation, the right examples for followers, including leaders with lots of characteristics considered to be present in transformational leaders, there is a good and realistic chance to transform organizations here in Thailand into creative and innovative giants.

Leaders Should Manage For Creativity

For a strong economy and strong companies, innovation through creativity is a crucial factor for successful and long-lasting business performance (Banks et al., 2019; Drucker, 2014; Mercer, 2019; Newstead et al., 2019; Woodman et al., 1993). Leaders and managers decide mainly on the capacity an organization can deploy in terms of creativity and innovation (Newstead et al., 2019). The success rate of implemented innovative projects depends on their capabilities in terms of leadership style, team ability, motivation, etc. (Kamaruddeen, Yusof, & Said, 2009). Management support and management involvement are, according to Ireland and Hitt (1999), key requirements for promoting creativity and innovation in an organization. So far, only a handful of studies have examined the requirements of actual leadership conditions in Thailand for stimulating followers to be creative and innovative. As striving for success, creativity and emotional intelligence are considered crucial factors for leadership characteristics in general, and creativity and innovation are considered specific targets for Thailand 4.0 (Bruton, 2018). The main question for this paper is what leaders in Thailand think about creativity and innovation. According to the Global Leadership Forecast Report from 2011, only a minority of 35% of Thai leaders consider themselves being effective in terms of being creative (Boatman, Wellins, Liu, & Phang, 2011). It comes with no surprise that the majority of Thai leaders in the same report state that creativity, organizational strategy and change management are critical for effective leadership in Thailand (see also (Bruton, 2018)). These circumstances prompt the present research, which primarily aims to understand the initial situation of the current leadership in Thailand and its impact on followers' potential for working creatively and innovatively in real work settings. The idea is to get an estimation of how leaders will influence their followers in light of Industry 4.0. Are they good role models for their people? Do they understand the meaning of creativity and innovation? What do innovation and creativity mean to them? In view of Industry 4.0 and its implications on the creative and innovative workforce in Thailand, it is worth examining current leadership considerations on creativity and leadership.

METHODOLOGY

Data was gathered using qualitative methods. For this research paper, a sample of 15 leaders was interviewed in Bangkok who are all successful leaders of small, medium-sized and big companies. The number of led employees by these leaders ranged from 12 persons to several thousand people. As CEOs, Vice Presidents, Global directors are ultimately responsible for plotting the organization's direction and plans, as well as for guiding the actions carried out to achieve them, the sample of the participants in this research focuses on their decision level (Porac & Thomas, 1990; Westphal & Fredrickson, 2001). Out of the total of 15 interviews conducted in Bangkok, 9 were foreigners (Germans, Australian, Americans, Lebanese) and 6 were Thais. From this sample, there were 4 female and 11 male interviewees. The industries that they are working for are very diverse: automotive, education, retail, finance, hospitality, aviation and cosmetics. All of the foreign participants spent significant time living and working here in Bangkok, Thailand. All Thai participants were living abroad either for their studies or due to work assignments. The interviews were semi-structured to allow open-ended responses. All were done face-to-face and took about 90 minutes. All interviews took place at their company sites so that it was possible to get an impression of the work atmosphere and environment as well.

Creative Leaders: Some Do's and Don'ts

Following the mainstream of organizational behavior literature, a leader is a meaningful and crucial factor regarding the followers' attitudes and behaviors. A change cannot be done alone and power is always shared between leaders and followers. Nevertheless, leaders and their attitude and behavior mainly decide the climate, the official and unofficial rules, and the "way we do it here" mentality and conditions (Persons, 2016).

Returning to the theme of creativity and innovation: leaders also decide how creative and innovative their employees can be, meaning how much support they can expect from leadership. Hickman and Silva (1984) have developed a list of six criteria that disable leaders from being creative and innovative. They are:
- Resistance to change,

- Reliance on rules and conformance,
- Fear and self-doubt,
- Over-reliance on logic and precision,
- Black-and-white thinking, and
- Over-reliance on practicality and efficiency.

Leaders caught up in these behavior traits are most likely not creative themselves and not able to set up a creative environment where their followers can be creative and innovative. However, becoming a creative organization doesn't necessarily mean that leaders need to be creative themselves. Instead, leaders need to understand the key elements of the creative process to enhance creativity in their organization and their followers. Key elements are:

- Freedom/autonomy,
- Ownership,
- Acceptance,
- Creativity principles (critical, logical analysis, etc.)

Trust and openness, challenge and involvement, debate, risk-taking, and a tolerance for diversity among organizational members are critical for support creativity (Kanter, 1983; Siegel & Kaemmerer, 1978; Tidd & Bessant, 2009). New ideas and creative solutions to problems come from followers who have an environment where they can challenge their own traditions, beliefs and express themselves openly without fear of negative interpersonal consequences (D. D. Jung, Wu, & Chow, 2008; Kahn, 1990). Transformational leaders are considered the ones supporting collaboration and organizational learning, trust and favorable attitudes towards proactivity, risk-taking, creativity and innovation (Lefebvre & Lefebvre, 1992; Manz, Keating, & Donnellon, 1990; Scott & Bruce, 1994). Such leaders also promote intellectual stimulation by promoting employees' intelligence, knowledge and learning so that employees can be innovative in their approach to problem solving and solutions.

Chance Favors the Prepared Mind

Results of a survey of 1,500 chief executives conducted by IBM's Institute for Business Value show that CEOs identify "creativity", the ability to generate exceptional and useful solutions, as the most important leadership capability for the future success of any organization (Kern, 2010). This is also one result of the global leadership forecast where Thai leaders identified creativity as critical for effective leadership in Thailand (Boatman et al., 2011). Leaders in Thailand are aware that creativity and innovation are important for creating an innovative environment (Bruton, 2018). One interviewee in this study said: "Innovation is key for a successful company no matter what size a company has." Another participant said: "I believe that innovation doesn't happen without creativity." In the report of the Global Leadership Forecast, Thais in leadership roles considered themselves less creative than other global leaders (Boatman et al., 2011). This can't be confirmed by the major results of this study. Only one participant said that "I'm not a person who creates a new product or service. My talent is pretty much problem-solving." As problem-solving often needs the ability to think creatively, this participant might well be creative too. Hence no answer from the interviewed leaders, especially the Thai leaders, points in the direction that Thai leaders think they are less creative than foreign leaders in Thailand. All Thai leaders in this study have spent some time overseas in the UK, Australia and the US. Nevertheless, this study does not focus on differences regarding nationalities amongst the interviewed leaders. What all leaders have in common is that due to their rank, they have a huge impact on establishing a creative and innovative work environment, where employees can develop and nurture their creative and innovative capabilities. According to Dunegan, Tierney, and Duchon (1992), the quality of the relationships between leaders and subordinates, the quality of teamwork and the collaboration between departments are all aspects that significantly predict the perception of employees of climate factors believed to encourage creative activities in their company (Rickards & Moger, 2006). Also, Scott and Bruce (1994) have suggested that innovative behavior is related to the supervisor-subordinate relationship. To be effective, good leaders know how to use power to the advantage of both sides - leaders and followers. These leaders understand that they are mainly responsible for how creative and innovative their people, in the majority Thai followers, can be and how innovative and successful their organization can become. Hence the aim of this research is to investigate what leaders in Thailand think about creativity and innovation and based on that to get an impression of how they might influence their followers regarding innovation and creativity and what impact this might have on the implementation of Industry 4.0 here in Thailand.

The majority of participants in this study defines creativity more as a mental process while they see innovation more

like a business process where a real end product or service is introduced to the market. This actually is in agreement with the academic definition and differentiation between the two terms: creativity and innovation. A widely accepted differentiation between those two terms is that creativity is the mental process of producing ideas and novelty while innovation refers to the concrete outcome of creative ideas within an organization, which can be a product or a service (T. M. Amabile et al., 1996; T. A. Amabile & Khaire, 2008). One interviewee from an aviation company pointed out that creativity and innovation are important in general but that he in fact gets mainly paid for security as in his business and position, he has to make sure that customers reach their destination safely. In his role, he points out the main concerns are safety and security and not creativity and innovation. Another Thai CEO said that many Thais still think that creativity is only for artists and other weird people. This was the predominant thinking in the Western world not a long time ago. Overall all interviewees think that creativity is about creating something new while innovation is related to products or services that are already introduced to the market. One leader pointed out that "creativity and innovation are change because they mean looking at things differently and pushing the boundaries like an artist. Many people might not like it, as change is very uncomfortable."

All of the interviewed leaders have in common that they agree to the necessity of growing creativity and innovation in their workplace. Obviously they understand that the future of Thailand's economy is decided and driven by the ability to create and innovate. Creativity is the driving force behind innovation, and innovation increases the productivity of any organization. According to Klemm (1990), creative leaders are prepared to be creative, meaning creative leaders have a way of thinking that enables creativity to happen coincidentally. This is confirmed by some responses saying that best ideas hit them unexpectedly when they are alone, jogging or feel relaxed on an airplane or during conversations. "Normally, it comes unexpectedly. I can think of two times. When I'm jogging so, I have to stop suddenly and write myself an email so that I can't forget about it. Another time when I'm driving in my car."

Klemm (1990) defines abilities for leaders to act creatively in the following way: they must identify a problem, must be motivated to solve it, and must know at least some information about the problem. One interviewee said on problem-solving, "My talent is pretty much problem-solving. When I'm confronted with a problem, I will be the expert in solving it." Another participant commented, "I have seen many problems which in their fundamental nature are about disagreement about different topics and issues. When people try to find commonalities, then they can create a solution together." In any organization, the biggest challenge for any new idea to succeed is the employee's immediate supervisor. Leaders set the benchmark for their department either to encourage creativity in their followers or to actively discourage it. Young professionals are easily discouraged in attempts to sell their ideas. Pelz and Andrews (1976) found out in their research that scientists were most effective in implementing new ideas when their superiors gave them a lot of space and freedom to do their research. Also, in this case, it shows that the proper role of leaders is to encourage their people and make resources available for them (Bruton, 2018; Pelz & Andrews, 1976; Sternberg, 2007). According to Klemm (1990), "leaders should stimulate creativity in their organization for two very important reasons: to prevent obsolescence and to increase productivity." In a global dynamic environment, obsolescence means actually the slow death of any organization. A work environment where leaders allow the sharing of ideas and listen to what employees suggest is beneficial for setting up a creative culture where innovation can happen and ensure in that way a long life for the organization. As one interviewee put it: "I can show you so many examples in our production floor where we provided the right culture and provide the right processes to give people the freedom to innovate. Any employee has the chance to come forward and make an improvement to their area. My response would be great. Come on! Do it!" Followers feel appreciated by sharing ideas and leaders have access to more useful ideas and potential innovations that can give credit in terms of satisfaction, productivity and profit to the whole organization (Bruton, 2018; Gumusluoglu & Ilsev, 2009). All participants in this study emphasize the meaning of collaboration with other colleagues to gain new ideas. All point out that diversity, freedom and the possibility of failing are necessary conditions to establish a creative environment where innovative results can occur. They all understand that outside the box thinking is only possible when people from a different discipline, culture and even level of hierarchies take part in finding new solutions.

All participants in this study confirm that they share their best practices with their teams and that they encourage open conversations and sharing of ideas. One leader said that he "inspires creativity by giving the same respect they give to him and by enhancing their self-esteem so that all employees feel more confident and can live their creativity." Another leader said that she "tries to get her employees to see the big picture and the outcome in the future." Another leader points out that "we do not want here to work like robots what happens when the boss is the only one who gives orders, and all have to follow." This participant gives his people a lot of space to be experimental and encourage

them to try different ways without being afraid of punishment in case outcomes turn out negative. The most ordinary discouragement for creativity and innovation arise in an atmosphere of fear: fear of being penalized for failure, fear of not getting adequate administrative support, or fear of not having enough time (Bruton, 2018; Klemm, 1990). Freedom is pointed out as essential for engendering a creative environment, said another participant. This person said, "all of our engineers here are highly skilled. I think to be creative and innovative, we need a lot of freedom. Here at our office, we have no fixed work time. We can talk and bring in ideas anytime. My people get the confidence to work on their own ideas. Of course, some decisions are also going in the wrong direction. This is ok for me as well. As researchers, we must take risks. Mistakes are part of every innovative process. Nobody gets punished for making a mistake. People appreciate our working culture." There is now a global consensus that despite a few famous innovations in the past that most innovations draw on many contributions and not on a single genius (D. D. Jung et al., 2008). Johansson (2017) writes in his book that innovation is more likely when people of different disciplines, backgrounds, and areas of expertise share their thinking. All interviewees in this study share the same point of view on collaboration and appreciate and support all kinds of collaboration. When leaders provide support, followers are more likely to innovate (Basu & Green, 1997; Bruton, 2018).

Good, transparent, and direct communication channels with superiors are necessary for employees and leaders and this is also what Thai workers are longing for according to an Adecco survey from 2018 (Bruton, 2018). One interviewee said the following in this context: "I'm more a team player. For every team setting, it is useful if you have different characters in a team; so when you are overoptimistic like me, it is good to talk to someone who is more cautious and a little bit more pessimistic. It balances the whole process of ideation." In this kind of open culture driven by accessible hierarchies employees can develop trust that their ideas are heard and have a realistic chance to be implemented as their supervisors have the authority and the will to make the decision to move things forward. Trust is the main factor for successful change projects (Armenakis & Bedeian, 1999; Bruton, 2018). One leader said: "I'm not afraid that somebody will steal my ideas. I enjoy brainstorming and I like to share my thoughts." It seems that employees in this organization do not need to fear that somebody else will claim to be the founder of the idea and get false credit for it. Leaders, in general, have the opportunity to openly value ideas and provide positive reinforcement to those who advance new ideas, even ideas that are not feasible. It is evidential that innovation correlates strongly with a person's view to be expected to be innovative or not. Leaders who enact this only within their own circumscribed sphere of responsibility block the chance of creating a creative and innovative work environment. Such an environment may actually discourage or penalize workers for innovation (Armenakis & Bedeian, 1999; Bruton, 2018; Klemm, 1990). Followers cannot see it as their responsibility and chance to participate in a creative process in the interest of the whole company. One leader said in the interview, "People who inspire are creators". Charisma, inspiration and intellectual stimulation are considered the three best criteria for a transformational leader. Transformational leadership is considered the best leadership type for becoming a creative and innovative organization (B. M. Bass & J., 2000; M. & J, 1995; Conger, 1999).

In terms of inspiration, the interviewees were asked to name any creative person they would like to interview and explain their choice. The participants came back with the following famous people: Jack Ma, David Bowie, Khun Duangrit, Elon Musk, Steve Jobs, King Rama 9, God, Bill Gates, Sakichi Toyoda, Leonardo da Vinci, Dr. Richard Feynman. They were all choosing extraordinary personalities as an inspiring model for creativity and innovation. One participant felt motivated to choose David Bowie because he combined visual appearance and effects with his music, which was extraordinary at that time. Another interviewee chose Jonathan Ive, the Chief Design Officer of Apple. He thinks that a lot of the success of Apple comes from the design and according to him, Jonathan Ive has a unique sense of how to design a product, both functionally and emotionally. Jack Ma was chosen by one participant because he is a very motivating and inspiring leader. Another interviewee would like to learn from the failure experience of Steve Jobs at the beginning of his career. A further person feels inspired by Steve Jobs because he created change in a way that other people would think impossible.

Bill Gates was chosen because he is not only about PCs and IT but also about investing in social activities. According to this participant, "this is another way of innovation and to show leadership." Transformational leaders are considered open-minded and receptive to ideas from very different disciplines. By choosing products or services that participants really like and don't want to miss, it was obvious that these leaders have a very creative and open-minded character. One participant came back saying that "he doesn't want to miss Elon Musks SpaceX Mission to Mars. This would be one of the greatest achievements in human history and might be during this lifetime." Many interviewees have

chosen products or services related to their profession. One interviewee said that he doesn't want to miss his Fitbit as he is an analyst and enjoys all kinds of data. The other one replied that flying is the basis of his job so he adores the ability to fly. Another one said that she as a business manager who would be lost without her smartphone. All kinds of communication products were summarized by one participant reasoning that family and friends are living abroad but he still can keep in touch with them on a regular basis even though he is living in Bangkok. In summary, the participants mentioned the following: My Fitbit, electric vehicle, iPhone, inverted umbrella, iPod, university, google maps, a car navigation system, smartphone.

RESULTS, CONCLUSION, AND LIMITATIONS

The aim of this study was to investigate whether leaders in Thailand are prepared for Industry 4.0. Consequent upon this research is the conclusion that these leaders are ready for creativity and innovation, hence ready for Thailand 4.0. Empowerment, support, and self- efficacy are the main sources of innovation. All leaders in this study show that they have created work cultures where these values are active. The results provide evidence indicating that all leaders are very open-minded in trying different creative approaches to come up with creative ideas. All are willing to integrate their subordinates into finding creative solutions.

The results of this study do not confirm that these leaders prefer a pure top-down decision process and certainly no authoritarian leadership style. Can they be considered transformational leaders? Based on certain interview results, it is possible to say that they fulfill and serve certain criteria related to transformational leadership style, such as sharing knowledge with their followers, giving space for ideas, and inspiring them. They all appreciate creativity and innovation as a team approach. All understand that each employee can contribute to creativity and innovation. Some mention that they set up processes and space for their employees where they can work creatively and share ideas. It seems that those leaders set up an environment where followers are motivated to share their ideas with supervisors. Some participants directly point out that they motivate their people to try new ways and risk failure.

The present study has certain limitations, however, like all studies. First, the sample size with 15 interviews is very low to allow general and strong conclusions. Second, all 4 Thais in this sample have stayed for a relatively long time in Western countries and have adopted Western leadership style elements, in opposition to classic Thai leadership traits. This may mean that many Thai leaders without Western influence might still follow an authoritarian and autocratic leadership style that is undermining any kind of creative and innovative work environment. As employees were not interviewed in this research, there is no data that can confirm a seemingly positive attitude towards creativity and innovation that includes empowerment of people, organizational cultural aspects of supporting idea-sharing given by the interviewed leaders. There are many other important variables that can lead to a successful Thailand 4.0 (not only the right leadership mindset and behavior towards creativity and innovation), such as, for example, policies, rules, regulations, bureaucracy, and taxes.

ACKNOWLEDGMENT

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