With a Special focus on the Fourth Industrial Revolution (4IR)

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Abstract

This paper investigates the including of creative thinking skills into Leadership Development Programs (LDPs) to Enhance Organizational Innovation. It discusses the changes that happen to the global market due to the Fourth Industrial Revolution (4IR) and its technology. These changes can cause policy and procedures to change which can create new and unexpected challenges for companies. To overcome these new challenges companies and leaders need to develop their creativity and innovation capabilities. Although creativity and innovation can help leaders and companies to overcome challenges and create new opportunities, most of the research on LDPs focus mainly on leadership skills and communication skills. To fill the gap in the literature, this paper examines the incorporating of creative thinking skills into LDPs to Enhance Organizational Innovation. According to the results of this paper, I found that developing creative thinking skills for future leaders can help to enhance organizational innovation. Future research has also been discussed and the need for more focus on the relationship between creativity, innovation and LDPs has been shown.

Key words : Leadership, Leadership Development Programs (LDPs), Creativity, Innovation, Fourth Industrial Revolution (4IR)

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1. Background/ Objectives and Goals

The companies of all sizes and sectors are living in an unstable and ever-changing world. One of the reasons behind this continuous change is the new technology that has changed the way companies conduct businesses. The different and rapid changes that happen in the market forces companies to face new and unexpected challenges. This requires them to have strong and effective leadership to overcome the challenges that come their way.

In order to overcome the challenges that usually come with rapid changes, companies invest a huge amount of money and time on preparing future leaders. Billions of dollars are paid every year by companies and organizations on Leadership Development Programs (LDP). A rough estimate has been done by some researchers where they found that organizations spend around \$366 billion annually on LDP (Vogel, B., et al., 2021: 3). This makes the research on LDP very important due to the huge amount of money and time that is being invested in LDP by organizations around the world.

However, investing in developing leadership skills alone might not be effective for organizations. In addition to investing in LDP, organizations and companies need to improve creativity and innovation capabilities. The reason behind the need for creativity is the continuous change that is happening to the global market that is affecting procedures and policies. When procedures and policies change it forces companies and organizations to deal with new challenges. Novel problems and challenges require new and novel solutions. That is why creativity and innovation are vital components in any organization (Ancona, D., and Caldwell, D. 1987: 1; Amabile, T. M. 1988: 124). Unfortunately, many LDP do not address creativity and focus only on soft skills that are related to leadership such as creating a vision and a mission for the company. To fill the gap in the literature I will try to answer the following question: Does including creativity skills into leadership development programs can make organizations more effective in The Fourth Industrial Revolution Era?

To understand the vital role that creativity plays in organizations, I will provide some of the definitions of creativity that are in the literature and after that I will provide the definition of creativity of this paper based on other definitions from other studies. The first definition comes from Amabile where she defines creativity as a process that consists of domain relevant skills, creativity relevant process and task motivation (Reiter, R., and Illies, J. 2004: 4). Another point of view can be found on the research of Runco and Jaeger where they suggest that originality and effectiveness are seemed to be standard factors of any creative product (Runco, A., and Jaeger, J. 2012: 92). Another perspective suggests that creativity is an imaginative process that results in original and valuable results (Trisnayanti, Y., et al., 2019: 1). A more holistic definition is that creativity is a complicated process that includes aptitude, process, environment where they interact with each other to provide an original and appropriate or useful products and services (Snyder, H. et al., 2019: 134). As one can see that there are different views on the definition of creativity among scholars. I will provide more definition of creativity on the literature review section below. For now, I would like to state that the definition of creativity of this paper which has been taken after reviewing other definitions of the literature is as follows: creativity is the ability to come up with original and useful ideas. It is a mental ability that allows creative individuals to think differently from others and to make connections between elements that seem to have no connections between them. The original and useful ideas can be turned into innovative products or services by organizations.

In this article I will discuss Leadership Development Programs and creativity with a special focus on The Fourth Industrial Revolution (4IR). First, in the literature review section I will discuss leadership, LDP, creativity and 4IR. All these components will

be analyzed, and I will mention the history and the changes that happened to each factor separately. Second, I will review the past studies and I will talk about the main points, the focus of each study and the conclusion. Third, I will analyze the gap in the literature and review the models and theories of LDP and discuss the solutions that can be implemented. Finally, in the discussion and result section, the research problem and the findings will be summarized. In addition to that, I will mention the theoretical and practical contribution of this research.

2. Literature Review

2.1 Leadership

In the past few decades, the research on leadership has gained a lot of attention from researchers around the world.¹ The reason is because leadership plays an important role in the success of any organization (Kumar, C. R. 2007: 27). Leadership is the most important element in any organization, company, household, school or even a country. Leaders could motivate and influence their members to achieve the desired outcomes. They also possess the power to motivate, mobilize and encourage them to be a productive member in their societies. Leaders can motivate people and achieve great things and lead followers to make the world a better place. Even in our homes, the lack of an effective leadership that guides family members to the right path might cause a lot of misery. Leadership is not only performed and practiced in organization and companies. It is something those normal individuals also practice every day without recognizing it. Teachers and university professors also need leadership to be effective in their vocations. In organizations, without an effective leadership, employees might find it difficult to be productive, meantime competitive advantage and be innovative and creative (Yahaya, R, and Ebrahim, F. 2016: 190). The purpose of leadership is to lead

¹ The importance of leadership in organizations has led many researchers to classify leadership into different types. Traditional leadership is characterized with giving clear directions to subordinates on how the work should be done, provides resources that are necessary for accomplishing the task, rewarding good behavior, and acting only when something goes wrong. On the other hand, new leadership is characterized with charisma where subordinates perceive their leader as an exceptional and motivating person. Moreover, encouraging subordinates to think about their work and provides them with new ideas, be a good role model, creates a safe and trustful environment, and encourages innovation (Bryman, A., et al., 1996: 358).

followers and assist them to achieve the goals of the organizations. If the heart of the organization, which is leadership in this situation is not performing well, then the whole organization will be affected. That is why the study of leadership should be inclusive and analyze all the factors that might affect the quality of leadership. Because as we said before that leadership can be one of the most influential factors in the success of any organization.

However, leadership can be practiced by different styles and methods. There are many factors that can affect the style of leadership. Every leader is operating and functioning in a different and unique environment. Factors like culture, organizational climate, and the laws of the country that the leader is living in, and the social and cultural customs and traditions. All these factors make leadership comes in different shapes and forms (Nawaz, and Khan 2016: 1). That is leadership in the West is different than the leadership style practiced in the East. Culture and environment impact how we think, feel, and behave. It is difficult to take leadership out of its context, because when we do that the leadership loses its meaning. The purpose of leadership is to influence others and mobilize them to achieve the desired goals of the organization, company, or any other human cluster. When leadership is taken out of its context it becomes like an empty spirit, where respecting the culture and the social rules is not of importance.

Leadership is vital for any organization and leaders can be the source of encouragement and hope for subordinates. However, when human connections are not valued leadership becomes about giving orders and lead with a dictatorship. That is why in this research, I will focus on human factor when leading, because I believe that when leaders take into consideration all the cultural and social elements and appreciate and respect them, their relationship with their members improve and their leadership enhanced.

In the literature of leadership, many different definitions and styles for leadership is discussed. For instance, in 1847, Thomas Carlyle came up with the The Great Man Theory. His theory stated that leaders are born, and one cannot learn the skills of leadership. He believed that people were born either as leaders or as members. However,

in this research I argue that leadership is a learnable skill, and everyone can learn it. After that came leadership theories that focused on traits that distinguish leaders from other people. There were two main traits that researchers focused on. One, emergent traits or the traits that depends on heredity. For example, physical characteristics like height and weight, intellectual abilities like intelligence and psychological characteristics like self-confidence. Two, effectiveness traits or the traits that can develop and learned like self-discipline, and other learnable skills. After that came another trend in leadership studies where some researchers tried to shift the focus from leaders themselves to the situations, they are operating in. This is called contingency theories and it claims that leaders don't have fixed characteristics. Instead, they function and behave according to the situation of their environment.

Leaders need to respond to the changes and deal with the unexpected events that occur from time to time. This theory claims that there is no right way of leading other people. Situations, economy, societies, individuals, and organizations are continually changing all the time. If leaders had only one style of leadership, it would be difficult for them to be flexible and adopt to the changes around them (Nawaz, and Khan, 2016: 2).

It is important to remember that, regardless of the leadership style that the leader is using with his members, the effect of his or her actions on the followers are fundamental and strong. Leaders could control resources and planning of task, time, and money. This give them the power to be very influential and have the capacity to increase the innovation performance (García-Morales, et al., 2008: 3). One of the leadership styles that encourages creativity is transformational leadership style. In this style leaders take the role of creating a vision and inspire their followers to realize the vision and make a reality. They work in continues fashion to refine their vision and make appealing to others. They support their members and always make sure that they have what they need to accomplish the tasks. They do not only create a common goal for members, but they also create the same mentality for members so that they act as one team and assist each other when needed (Sethibe, T., and Steyn, R., 2015: 330).

In their book Effective Leadership Achua and Lussier define leadership as the

ability to influence others. They divide leadership into five key elements. The first key element is leaders-followers' relationship. According to their definition leadership is not only about leaders influencing followers, but followers also sometimes influence leaders and followers sometimes can be leaders in certain situations. The second key element is influence, which is the essence of leadership. It is the process where leaders communicate their ideas and inspire followers to implement them. The third key element is about setting organizational goals and creating visions. Effective leaders always have a clear plan and inspiring vision that aims to improve their organizations and communities. Change is the fourth key element in leadership definition, and if we look at the elements mentioned above, we can see that the purpose of these elements is simply change. Finally, people are the fifth element, and perhaps it is the most important one. Effective leaders treat people with respect and look at them as the most important asset that they have. Without good people skills and without good followers' leaders may find it very difficult to success (Achua and Lussier 2010: 6–8).

However, some researchers have different definitions of leadership. For example, Sethuraman and his colleagues define the leadership as the person who can create a vision, build an effective team, motivate his flowers, have good people skills, and help employees to develop and improve to minimize attrition (Sethuraman, K., and Suresh, J. 2014: 165). In addition to that, Leadership can be divided into four main groups. One, the style that is concerned with the task at hand and it also can be referred to as result oriented. Two, the style that prefers to focus on people more, rather than focusing on the task and it can be referred to as person centered. Three, the directive style known also as authoritarian leadership style. Four, the democratic way of leading known as participative leadership or democratic leadership. Five, the style based on transaction that some researchers referred to as transactional leadership. Six, the transformational leadership style (Samad, S. 2012: 488). Researchers have found that there are eight traits that effective leaders usually exhibit when lead their followers. One, dominance which means that leaders usually tend to be dominant but not in a bad way. Two, high energy to achieve goals and overcome challenges. Three, self-confidence and this is one of the most important traits, and leaders also foster confidence among followers. Four, locus of control which means that leaders believe that they could control their fate and that makes them look stronger and more confident. Five, stability and good control of emotions. Effective leaders are stable emotionally and they do not let their emotions override their thinking. Six, integrity and honesty and that is crucial if one wants to be an effective leader. Seven, intelligence that helps leaders to be more creative and come up with innovative solutions. Eight, flexibility and the ability to be more flexible when faced with difficult challenges (Achua and Lussier, 2010: 33).

2.2 A historical View of Leadership Research

Leadership research has developed to a great extent during the last century. During the 19th century the theory of the Great Man and the Trait Theory was very popular among leadership scholars. These theories suggested that leaders are born with certain physical and personality traits that allow them to be more able than others to lead. Physical traits that include strength, height and agility; and personality traits such as self-confidence and emotional stability were believed to be signs of great leadership.

After that came the Behavioral Theories were scholars focused on the behavior of the leaders rather than their physical and physiological traits. This transition allows researchers to study the effect of the behavior of leaders on followers. It led to the expansion of leadership research, and it allowed researchers to investigate different elements regarding the interaction between leaders and followers. Both the Great Man Theory and the Behavioral Theories failed to give a clear understanding of the nature of leadership. That is what led researchers in the field to shift their attention to other factors such as contingency. The research on the Contingency Theories suggested that there is no single way of leadership. Instead of that, leaders should tailor their behavior according to the situations and environments in which they operate. Contingency theorists believe that elements such as organizational environment and the attributes of followers should be taken into account.

Another line of research on leadership is on Transactional Theories. Transactional Leadership Style focuses on the transaction that happens between leaders and followers. One of the most famous transactional theories in leadership is Leader-Member Exchange Theory (LMX). Transactional Theories measure the relationship between leaders and

followers and consider high quality relationships as very effective for leadership.

After that came Transformational Leadership which analyzes the connection between leaders and followers and the roles that govern the connection. The four characteristics that distinguish Transformational Leadership are idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The charismatic Leadership Theories claim that charismatic leaders possess certain traits that enable them to lead others successfully. Traits such as good role modeling, competence and the ability to motivate others allow charismatic leaders to be effective. Another famous theory in leadership is Servant Leadership Theory. Servant Leaders focus mainly on the needs of others rather than focusing on themselves. Creating an environment where followers can feel safe, are taken care of, trusting each other, and enhancing their wellbeing is a priority for servant leaders. They affect followers through their service and honesty towards building a relationship that is based on putting the needs of others first. Finally, Relational Leadership is based on social effect and leadership. The main purpose is to shift attention from leaders and followers to leadership and organizing (Sacavém, A., et al., 2019: 1743–1745).

As there are many theories of leadership, the same concept can be applied to the definition of leadership. The reason behind this is because leadership is a complex phenomenon that is practiced in different social, cultural and economic settings. According to some researchers, leadership can be defined as the influencing process that happens between leaders and followers to achieve organizational objectives through change. From this definition there are five key elements that will help us understand leadership better. The first key element is Leaders-Followers that indicates that leadership is about teamwork. The leader alone will not be able to achieve the goals of the organization by himself without the help of his followers. The second key element is Influence which is the essence of leadership. Leaders need to be influential and to motivate others to achieve the organizational objectives. Without influence leaders will not be able to communicate their ideas and mobilize followers to achieve the desired outcome. The third key element is Organizational Objectives that need to be communicated clearly by leaders to followers. Achieving the organizational objectives

can give leaders the power and confidence they need to achieve bigger goals. The fourth key element is Change which can be the result of the planning and hard work of leaders and followers. The fifth key element is People which refers to emotional and social skills that leaders must have to be able to inspire and motivate followers towards achieving organizational goals (Lussier, R., and Achua. C. 2013: 5–7).

Because the contexts and environments in which leaders grow up are different, the styles and behavior that leaders exhibit are also different. The most famous leadership styles that got the most attention from researchers is autocratic, bureaucratic, Democratic and laissez-faire Leadership Style. I will talk about each leadership style and the positive and negative points of each one of them. First, the Autocratic Style of Leadership in which leaders have most of the power and rarely listen to employees. Leaders set clear rules for employees and depend on strict reward and punishments systems to motivate followers. Autocratic Style of Leadership has many advantages such as providing discipline among employees, effective leadership style to be used if there is no time to consult followers, and it provides good control and management. Disadvantages of Autocratic style of leadership include little or no tolerance at all for freedom of thought and expression, truss issues, fear, and anger among employees. Second, the Authoritarian Style of Leadership which is like the Autocratic Style of Leadership. As the name suggests, Authoritarian Style of Leadership uses authority to influence others and it creates clear boundaries between leaders and followers. This leadership style does not consider the opinions of followers to be important and usually leaders make decisions without consulting followers. Advantages of this leadership style include the speed in making decisions and it works well if the leader is the most experienced and knowledgeable person in the group. Disadvantages can be shown as too much control, dictatorship and bossiness.

The third leadership style is Democratic Style of leadership. Democratic leaders share information with employees and include them in the decision making process. Employees respond well with the trust they receive from democratic leaders and this leads to more enthusiasm and productivity. Advantages of democratic leadership style include different ideas and points of view that lead to more innovative solutions, trust between leaders and followers and motivated employees. Disadvantages include longer time to make decisions, exhausting for leaders and not effective with less experienced leaders. Lastly, Laissez-Faire style of Leadership that is characterized with giving little or no guidance to followers at all. It works well with experienced and motivated employees. Advantages of the Laissez-Faire style of Leadership include freedom, less pressure on employees and independence. Disadvantages of this leadership are misuse of rules, less participation from weaker members and less unity (Khan, M. et al., 2015: 87–90).

2.3 Leadership Development Programs (LDPs)

In this section I will talk about Leadership Development Programs (LDPs), its history and theories. Adult Learning Theories will be used to explain the history, trends and most important theories of LDP. The Adult Learning Theories that will be used to explain the history of LDP are behaviorism, cognitivism, constructivism and connectivism. After discussing Adult Learning Theories, I will connect them to the topic of this paper and explain the relationship between them.

The first theory that will be discussed is behaviorism which was very popular among scholars in the 1940s. Behaviorists believe that people acquire knowledge and skills through experience especially those related to sensory perceptions such as seeing, touching, hearing and feeling. Before behaviorism became popular, researchers used to believe that leaders have innate physical and psychological traits that enable them to be effective leaders. Hence, the Great Man Theory of Leadership that was popular among scholars before the emergence of behaviorism theory. Researchers of leadership believed that leaders were born with some physical and psychological traits of leadership rather than made or trained to be leaders. However, behaviorism theory changed that, and it assumed that leaders can be made through learning and experience. Behaviorism paved the way for LDP to emerge and grow and organizations recognize that they have the ability to prepare future leaders of their organizations (Kelly, R. 2018; 5).

In the late 1950s and the start of 1960s, a new learning theory called cognitivism appeared and replaced behaviorism. Mental processes such as thinking, remembering, perceiving, interpreting, reasoning and problem solving are emphasized in the

cognitivism theory. Behaviorism theory assumes that people should be taught and trained to respond properly and effectively to the stimulus and citations in the environment around them. However, researchers of cognitivism believe that learners are capable of learning through rational thought and active participation (Clark, K. R. 2018: 176).

Unlike behaviorism, where researchers believed that adult learners should be trained and programmed to respond to environmental stimuli, cognitivism gives more freedom to the learner to think about the problem and try to solve it by using mental activities such as reasoning and problem solving. Some scholars believe that cognitivism is a mental process that happens internally and is accompanied with positive psychological activities. Cognitivists believe that learning should be a dynamic process and learners must be involved in it by constructing their own actions and targets. One can see that unlike behaviorism where learners are at the receiving end of the learning process and their involvement in it is limited, cognitivism takes the opposite approach and involves learners in the learning activity. It assumes that adult learners are capable of using their mental processes such as remembering, problem solving and analyzing to construct their own targets and objectives. In short, behaviorism can be described as an external way of learning where learners receive the information and are being trained and programmed to respond to stimuli and situation in the environment. On the other hand, cognitivism can be described as an internal learning method, where the learning process happens internally inside the head of the learners. Through mental activities such as short-and long-term memory, critical thinking and rationalizing, learners are able to be involved and participate in the learning process where they can identify their own targets and objectives (Basit, I., et al., 2021: 1153).

Constructivism theory is a learning theory that has been popularized in the 1980s by Piaget and other scholars. As the name suggests, constructivism assumes that knowledge is built and constructed rather than passively absorbed. There are several claims that explain the theory of constructivism. The claims are learning is an active process, knowledge is constructed rather than passively absorbed, knowledge is invented not discovered, all knowledge is personal and idiosyncratic, all knowledge is socially

constructed, learning is a process that help us to make sense of the world around us and effective learning require meaningful, open-ended, challenging problems for the learner to solve (Fox, R. 2001: 23–24). As one can see that there are many differences between the learning theories of adults and every theory has many positive and negative points.

There relationship between LDPs and creativity is a strong one. This is because LDPs are rooted in educational background as I mentioned above. When employees enroll in LDPs they turn from normal workers into learners. This means that they actively seeking to learn how to be better as leaders and individuals. When employees go through LDPs they learn how to sharpen their leadership skills in order to be able to overcome the challenges that will face them in their leadership positions. Fasko, D. (2001) done research on creativity. In his study he says that when learners engage in a problem-solving problem that is meaningful to them it leads to the enhancement of motivation. As a result, the creative thinking skills also enhanced, and learners become more motivated and creative when they face challenges that require their attention and require new ways to solve them (Fasko, D. 2001: 317). Therefore, I believe that LDPs can enhance creative abilities of employees because as the research above shown that engaging in learning tasks that are meaningful to learners can lead to the improving of motivation which in turn leads to the increasing of creativity thinking skills.

2.4 Creativity

Creativity is a great tool that can be used to overcome problems that individuals, societies and organizations are facing. Creative individuals and companies always had the upper hand when it came to solving problems and inventing new products and services. In today's world, creativity is important because individuals and organizations are dealing with continuous change that is accompanied by new technology and globalization. The changes in the market are usually followed by changes in policy and procedures that govern how companies do business in the market. When policy and procedures change, new and unexpected challenges emerge and can cause problems for many organizations. That is why creativity is important, because when new and unexpected challenges emerge, organizations need to have creative and new solutions to overcome them. Having a creative leadership ensures that organizations are well

equipped and well prepared for any new challenges that may face them in the future. In addition to that, creativity can also help individuals and organizations to seize opportunities and find new ways to do marketing, improve the quality of products and services and create new value in the market by inventing novel products and services for customers.

Although creativity is an important factor for individuals and organizations to solve problems and seize new opportunities to be successful, defining it can be very challenging. Creativity is a complex phenomenon that has many angles to consider, and because of that researchers have not been able to agree on one definition for creativity (Said-Metwaly, S., et al., 2017: 240). Researchers of creativity define it on the basis of four main perspectives that are called The 4Ps Creativity Model. The first P is the cognitive and mental process that governs and accompanies creative thinking, and it is referred to as the "Process". The second P is the personal characteristics of creative individuals such as spontaneity and risk taking, and it is called "Person". The third P is the environment in which creative individuals operate and researchers called it "Press". Most researchers use one or more of the 4Ps Creativity Model when defining and explaining creativity.

I will explain the 4Ps Creativity Model in detail by explaining the meaning and importance of each element. First, the creative product which seems to have more importance than the other Ps. The reason behind this is because for any creative activity to be successful, it must produce a product or service that is novel and useful. The creative activity loses its value if it does not produce a novel and useful product, service or process (Gruszka, A., and Tang, M. 2017: 55). Second, the creative person and it can refer to different elements that govern the human personality. For example, it can refer to personality characteristics, intellectual abilities, physical features, temperament and mood, habits and attitude of creative persons (Liu, H. Y., and Chang, C. C. 2017: 2). Third, the creative process that involves cognitive operations in the human brain. One of the most famous cognitive abilities that are related to creativity is the divergent and convergent thinking styles. In the divergent phase, the goal is to come up with as many

ideas as you can that are related to the problem at hand. Next in the convergent phase the selection process is applied where only the most relevant and applicable ideas are selected (Said-Metwaly, S., et al., 2017: 241). Fourth, the Press that is simply referred to the place or environment where creative people operate, and creative products are made. Many scholars of creativity think that the palace is an important factor in the creative process, and it can support or hinder creativity (Das, S. 2019: 55).

In the above section I provided a definition of creativity and its importance for individuals and organizations. Now, I would like to provide different definitions of creative thinking from the literature. After that I will provide the detention of creative thinking that I will use in this paper. The reviewing of the different definitions and perspectives about creative thinking will give a broader look and a deeper understanding of its nature.

The first definition of creative thinking comes from Baker, M. et al., (2001), where a study was done to analyze the difference between creative thinking and critical thinking. In their study they describe creative thinking as divergent and critical thinking as convergent. In other words, the ability to produce new ideas would constitute as creative thinking, whereas the filtration process and the ability to assess the value of these ideas would be consider as critical thinking (Baker, M. et al., 2001: 173). Another study done by Webster, P. (1990), where the results showed that creative thinking had unique characteristics that makes different from other types of thinking. These characteristics or features include extensiveness, flexibility, and originality (Webster, P. (1990: 23). Also, Kim, K. H. (2006), has done a study on Torrance Tests of Creative Thinking (TTCT). In his paper, creative thinking was defined as a process that include the sensitivity to problems, gaps in knowledge and deficiencies. In addition, creative thinking is characterized with the ability to provide solutions for the discovered problems and deficiencies. The final process of creative thinking is communication and sharing the results (Kim, K. H. 2006: 3). As one can see that creative thinking has many characteristics and features that makes it unique and important for organizations and societies.

After providing different definitions of creative thinking from the literature, now I would like to provide the definition of this paper. After reviewing the literature of creativity and the definition of creative thinking, the definition of creative thinking of this paper is as follows. Creative thinking is the ability to produce new and novel concepts, theories, and ideas. The produced concepts, theories, and ideas are used to solve a problem or create new opportunities for individuals and organizations. Also, creative thinking is characterized with flexibility and novelty.

2.5 Innovation and Creativity

The speech of Guilford at APA Presidential Address in 1950, pointed out that the topic of creativity was a neglected subject. He encouraged scientists to research topic of creativity because of its importance for both individuals and societies. Creativity is defined as the ability to produce work that is both novel and appropriate (Sternberg, 1999: 3). Being novel means original or unexpected and being appropriate means useful and relative to work tasks. Since change is the only thing that does not change, creativity is a vital weapon and indispensable asset that organizations can use to thrive, succeed, and survive. What distinguishes innovation from creativity is that innovation requires an actual application of the new ideas. Also, creative process is defined by many scholars as the process of coming up with new and useful ideas, but not necessarily applying them in the real world (Kathrin et al, 2011: 956). Innovation comes when creativity has been established, and that is why it is important to develop creativity skills and establish a proper environment for it before working on innovation (Almaloy, Y. 2021: 69).²

Kantar defines innovation as a process of bringing any new idea or problem-solving idea into use. Ideas for reorganizing, cutting cost, putting new budgetary systems, improving communication, or assembling products in teams are also innovations. Innovation is the generation, acceptance and implementation of new ideas, processes, products, or services. Acceptance and implementation are central to this definition;

² This paper describes and reflects some of the points that has been published in Chapters 2.4, and 5 of Almaloy, Y. (2021), under the title: The Effectiveness of Functioning as a Robust Systems and Using Relational Leadership to Enhance Disruptive Innovation in Small and Medium Enterprises (SMEs). Additions and corrections have been added to the selected parts.

it involves the capacity to change and adapt (Hall and Williams, 2008: 5). Another definition comes from Schumpeter where he describes innovation as the inventing of new knowledge or technology or the combination of new knowledge with existing knowledge to create something new out of them. His main interest or focus was on big and radical innovation rather than incremental innovation. Looking through Schumpeter's description of innovation, innovation can be divided into the following types. First, the creation of new products or services (product and service innovation). Second, new production processes (process innovation). Third, new markets, which can also be referred to as (market innovation). Fourth, new suppliers, which involves new logistics and assistances (input innovation). Fifth, changed organization or management systems (organizational innovation). From the description above, products, process, organizational/managerial and market innovations constitute the main body of innovation categories (Weiermair K. 2006: 60).

In addition to that, we can also find many theories and models of innovation by different researchers. For example, Porter says that innovation can be used with and for competitive capabilities to leverage strength and build a more stable and stronger environment that will help to achieve the best results (Porter, 2011: 6). Tushman also says that to be a successful, organizations need to focus on producing incrementally and revolutionary innovative products and services (Tushman et al., 1996: 24). Clayton Christensen who coined the term (Disruptive innovation) in 1955 define it as "a process whereby a smaller company with fewer resources is able to successfully challenge established incumbent businesses". Research has shown that Disruptive Innovation methods are effective in helping leaders and organizations to achieve their goals (Christensen et al., 2015: 3). For example, Airbnb, which is one of the biggest names in the tourism industry, and the company used disruptive innovation methods to succussed. Disruptive innovation focus on products and services that are not popular and do not attract the attention of the mainstream customers but provide an alternative benefit for other customers can overtime turn the table and become the dominant player in the market (Guttentag D. 2015: 4). In the case of Airbnb, a new market is created through connecting consumers and customers with each other using electronic platform.

The terminology of creativity and innovation are usually used interchangeably in the research articles of creativity and innovation (Scott, S. and Bruce, R. 1994: 581). Creativity is essential for innovation and without creativity, innovation cannot be produced. It is because creativity is the act of producing novel and useful ideas (Sternberg, 1999: 3; Mumford, M. and Gustafson, S. 1988: 28). Innovation is the application of creative ideas into reality (Van de Ven, A. H. 1986: 5; Kanter, R. M. 1988: 94; Amabile, T. M. 1988: 126). Other researchers define creativity as doing something for the first time anywhere or creating new knowledge (Woodman, R. et al., 1993: 293). Individual creativity and organizational innovation are connected to each other, and without Individual creativity innovation can be hard to realize. Although individual creativity plays an important role in organizational innovation, it is not enough by itself (Amabile, T. M. 1988; 125). Creativity can be defined from different angles, but most researchers adopt the definition of creativity that focuses on the product or service which is characterized by novelty and usefulness (Stein, M. 2014: 6). The definition of creativity that is going to be used in this research is that of Amabile in which she says: creativity is the production of novel and useful ideas by an individual or small group of individuals working together (Amabile, T. M. 1988: 126). As one can see that creativity is essential for organizational performance, due to its efficiency in assisting organizations to overcome challenges and create opportunities (Almaloy, Y. 2021: 69).

Kanter describes innovation is a complex phenomenon and it can be characterized with uncertainty, fragility, political and imperialism (extending to other areas and territories). Therefore, for innovation to flourish the environment must be fixable, react quickly, and has a thorough and intensive care, a coalition formation and connectivity. He divides the innovation process into four stages. First, idea generation which is mainly led by creative individuals. Second, the gathering of resources and materials that are necessary to work on the innovative ideas that have been produced in the first stage. Third, the idea realization stage where ideas are turned into real products or services. Fourth, is the commercialization and the adoption of the idea and the product and/or services (Kanter, R. M. 1988: 95–96). Innovation can also include the utilization or the adaptation of different products or services that come from outside the organization (Scott, S. and Bruce, R., 1994; 581). Innovation also can be defined as the intentional

introduction and application within a role, group or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit role performance, the group, the organization or the wider society (West and Farr, 1989: 16). Another definition of innovation is the embodiment, combination, or synthesis of knowledge in original, relevant, valued new products, processes, or services (Luecke, R., 2003: 2). Innovative work behavior can be divided into three stages: idea generation, coalition building, and implementation (Scott, S., and Bruce, R. 1994: 582). Climate plays an important element in the organizational innovation process. It can support and enhance organizational innovation level, or it can cripple innovation and hinder it. Flexible environment and performance-reward dependency are factors that increase innovative climate level. Another factor that supports innovation in organization is the aiming and focusing on creativity and innovation (Siegel, S. and Kaemmerer, W., 1978: 554).

The focus of the classical innovation literature was on manufacturing industries and patent numbers. However, with the software boom that happened in the 1980s, immaterial products and service industries were included too. The research on LDP and innovation is scarce, and the relationship between the two components have not been explored thoroughly. Innovation has not been investigated properly and many studies have been using the innovation on anything new, without a deeper understanding of the nature of innovation and its characteristics. To solve this problem, some researchers divide innovation divided it into five categories. First, product or service innovation which refers to the changes that the maker of the product or the provider of the service make and recognized by the customers as new. Second, process innovation which refers to the steps that organizations take to improve their overall performance, efficiency, and productivity. Third, managerial innovation which is related to the initiatives that organizations take to improve and organize their internal processes. It aims to empower the staff by encouraging them to excel at their job and that by providing them with pay and benefits. Fourth, management innovation which can refer to innovations that are concerned with the relationship between the customer, provider, and the product. Fifth, institutional innovations which refers to the innovation activities that are related to the structure or the legal framework of the organization. It aims to improve and enhance

the efficiency and productivity of organizations (Hjalager, A. M., 2010: 1-3).

Organizational learning is one of the main components in any innovative adventure. It drives innovation and strengthen creative abilities for organizations. And since there is a relationship between organizational learning and Entrepreneurial Orientation (EO) some research suggests that organizational learning improves innovation skills when combined with EO (Wang et al., 2015: 72). Organizational learning includes some activities such as knowledge acquisition and information sharing. In some firms, innovation relies on organizational learning that is fuels by EO. The reason why organizational learning and innovation has a strong relationship is because innovation starts with organizational learning. In other words, organizational learning is the starting point of innovation, and it also advances EO activities.

Here is what Teresa M. Amabile says about the relationship between creativity and innovation, and how creativity is the first step towards innovation:

"At its heart, creativity is simply the production of novel, appropriate ideas in any realm of human activity, from science, to the arts, to education, to business, to everyday life. The ideas must be novel—different from what's been done before—but they can't be simply bizarre; they must be appropriate to the problem or opportunity presented. Creativity is the first step in innovation, which is the successful implementation of those novel, appropriate ideas. And innovation is vital for long-term corporate success. Because the business world is seldom static, and because the pace of change appears to be rapidly accelerating, no firm that continues to deliver the same products and services in the same way can long survive. By contrast, firms that prepare for the future by implementing new ideas oriented toward this changing world are likely to thrive (Amabile, T. M. 1997: 40)."

Finally, creativity is essential for innovation, and it is considered the first step toward innovation. Organizational support and emotional security are vital to produce novel and creative ideas. Any innovation that leads to diminish and weaken this factor is considered a bad innovation and it will lead to a weaker innovation performance. The role of leadership is vital in fighting the negative side effects of some of the new

technologies of the Fourth Industrial Revolution and to prioritize human relations.

2.5.1 Types of Innovation: Incremental and Radical Innovation

Innovation can be divided into two main categories: incremental innovation and radical innovation. Incremental innovation activities that aim to make small improvements on products and services. On the other hand, radical innovation activities are big and aiming to create something completely new or create a new service or a new experience for customers.³ Terms like radical innovation, breakthrough innovation, and paradigmshifting innovation are all words that describe innovation process that is different from incremental innovation or sustaining innovation. Organizations need to engage in some form of disruptive innovation for the long-term survival. Many organizations have disappeared from the market because they ignore radical innovation and focus on incremental innovation.⁴ We will analyze the similarities and differences between the two types in the next section.

Innovation is an important weapon that organizations can use in their competition with other organizations. Innovation is great because it makes the organization or company unique and different from others and that what attracts customers to the company (Thomond, P., and Lettice, F. 2002: 17). Disruptive innovation explains the phenomenon of the technologies or services that disrupt the market and change the way both suppliers and customers view and interact with each other. For example, a great example of disruptive innovation in the tourism industry is the rise of Airbnb Company. Before that, customers would go to their destinations and would book a hotel

³ Big companies need to use radical innovation and include it into their corporate strategies. Some studies found that most big companies engage in more market research on the value propositions of existing customer segments and ignore radical innovation. Traditional management that focuses on improving existing products to keep their regular customers may want to apply new innovation management strategies if they are to be successful in today's global markets (Stringer, R. 2000: 87). This can be extended to SMEs as well and the reason is because both big and small organizations are experiencing the same environmental circumstances of global markets.

⁴ Companies can face the threat of bankruptcy if they do not react efficiently to disruptive innovation products from other competitors in the market. One study done on HassIblad Company found that lacking the resources to pursue extensive internal development projects can be one of the reasons that restrain organizations from reacting in an efficient way towards disruptive innovations in the market (Sandström, C., Magnusson, M., and Jörnmark, J. 2009: 14).

room for their stay. Hotel chains like Hilton and Four Seasons Hotels dominated the market of the hotel industry for decades with almost no competition. Airbnb provided a new innovation and a new paradigm-shift in thinking. Instead of booking a hotel room, customers now can book a room in an ordinary house for local people. This provided a new financial resource for many local people and made booking a room much cheaper and easier to find. Before that it was difficult for some people to find a hotel room if the hotels were fully booked. Now Airbnb services makes easier for customers to find a place to stay. The innovative services that Airbnb provided is that the website of Airbnb is acting as a platform where both suppliers and customers can come in one place to do the transaction. This is different from the traditional way where hotels had to buy a land and then build the hotel and then buy the furniture of the hotel and find employees for the hotel. This is a long process that takes a lot of time, money, and energy. Airbnb platform makes all that unnecessary. You just to find a good room at your house and put it on the website so that customers can see it (Almaloy, Y. 2021: 73)

What makes disruptive innovation different from other types of innovation is that disruptive innovations usually start small and unnoticeable. Over time they grow and become very popular and the new entrants to the market become the big new players in the market. They do that by studying and analyzing the needs of the unserved customers who are usually are not from the main customer group. Companies that use disruptive innovation make smaller, cheaper, and easy to use product or services that over time the main customer group leave the traditional favorable product or service and shift to the disruptive innovative product. Disruptive innovation always causes the market to change, and the big players might lose the battle against the new entrants. The new entrants to the market will introduce newer, cheaper, and easy to use products that will make the loyal customers of the dominant companies think about shifting to the new products. This happens to big hotel chains that we talked about above. A lot of companies lost the battle and could not take the disruption that disruptive innovations

have made in the market.⁵

2.5.2 Similarities and Differences between Incremental Innovation and Disruptive Innovation

Innovation is invaluable tool for organizations of all sizes, and it is important for longterm survival. In this paper, innovation will be divided into two main types. The first type is radical or disruptive innovation. The second type is, incremental or continues innovation or what some researchers refer to as Kaizen.⁶ Although, both kind of innovation is important for companies, most companies ignore radical or disruptive innovation. There are several reasons that make companies ignore disruptive innovation. One, disruptive innovation requires the investment of time and money. Two, radical innovation involves risk and ambiguity, and that makes the involvement in a disruptive innovation activity very uncomfortable for leaders. Disruptive innovation starts when new entrants to the market start to focus to the underserved customers. They develop new products to meet customers' needs, and they keep developing them until it reaches a point where it can compete with the products and services of the big companies in the market. The process of the disruptive innovation that it takes time, money, and effort until one can see the desired results. Whereas incremental innovation is faster, easier and it does not require a lot of time and money. Most companies focus their energy on incremental innovation because they think that making products for regular customers is what will make profits. They believe that engaging in disruptive innovation is risky and cost a lot of time, money, and energy. In addition to that, they believe that disruptive or radical innovation is ambiguous, and the results are not guaranteed. Some researchers found that radical innovation involves and require new skills, analyzing the

⁵ The environment can have a huge impact on Disruptive Innovation dynamics. One study that Disruptive Innovation in China differs than developed countries in three ways. One, Chinese Disruptive Innovations focus on offering a range of differentiated value propositions including delivering high technology at low cost. Two, Disruptive Innovation products performance improves more rapidly compared with developed markets. Three, they achieve large scale sales volumes because they are directly launched into a mass market (Williamson, P. et al., 2020: 21).

⁶ Kaizen is a Japanese word that refer to a process of continuous improvement of the standard way of work. Continuous Improvement is one of the core strategies for excellence in production and is considered vital in today's competitive environment (Singh, J., and Singh, H. 2009: 51). Kaizen is one of methods that led to the success of Japanese companies and has been adopted by many countries around the world.

current markets and the needs of customers, and introducing new systems inside the organization to be able to engage in radical innovation (McDermott, C. M., and O'connor, G. C. 2002; 424).⁷

When one read the characteristics of disruptive innovation, one can understand why in most organizations leaders always try to avoid it. However, disruptive innovation is important and without it organizations of all sizes might face the threat of losing their share in the market place. The reason why disruptive innovation is important is because we live in an era where everything around us changes quickly and without any previous warning. This is due to the changes of the Fourth Industrial Revolution. Companies are competing all the time with each other to invent new products and systems to attract new customers or to keep their regular customers. If leaders of incumbent companies ignore disruptive innovation and focus their energy on incremental innovation, the new entrants will turn the table and it will be very difficult for the losing companies to catch up after they lose. Disruptive innovation technologies at first provide different sources of values. At first these technologies can be unpopular among mainstream customers. However, overtime these technologies improved and become cheaper, smaller, and easy to use. This attracts the attention of the mainstream customers, and they start to shift from their preferred regular products to the newly disruptive technologies. When firms engage successfully in disruptive innovation activities, they can create a new value network and that can challenge the incumbent companies (Adegbile, A., Sarpong, D. 2018: 5).8 When the new entrants succussed in attracting the customers of the incumbent companies, their disruptively innovative technologies and products keep

⁷ Radical innovation is different than incremental innovation also known as (Kaizen). Radical innovation requires more resources, and it is usually surrounded by instability and unpleasant surprises. One study found that has been done on five companies had found that proactiveness, risk-taking, autonomy, and competitive aggressiveness, lead to the development of radical innovation (Lassen, A. et al., 2006: 363).

⁸ One of the main characteristics of Disruptive Innovation is its ability to create new value. This means that companies that use disruptive methods to innovate can create new markets and new line of customers. One can see this in examples like Airbnb where the owners of private homes become the main providers of the service in the hospitality world and chain hotels lose the battle against the platform. This ability cannot be seen in incremental innovation because the main goal is to make small improvements on the current product or service for the main group of customers. The purpose is not to pursue a new line of customers but to keep the regular customers.

improving until the incumbent companies lose the battle and in so many cases exit the market. Engaging in radical and disruptive innovation is not something that organization can ignore. If they choose to avoid it and focus on incremental innovation, they will risk losing the battle to the new entrants to the market.

Disruptive innovation can assists leaders and organizations to be profitable and achieve the desired goals. It might be risky and ambiguous, and the results might not show in the short term. However, this does not mean that organizations should refrain from producing disruptive innovation activities. The reason is because they will lose the benefits of disruptive innovation which include better financial situation, better customer satisfaction and better chances of long survival. Disruptively innovative products and services give organizations the advantage of being the attacker and not the defender. Firms that relay on incremental innovation usually are surprised with the disruptive innovation technologies, and they react late to try to defend their market share. But, because the disruptively innovated technologies and products are cheaper and more convenient, they fail to defend their products and fail to imitate the new technologies. We said that disruptive innovation takes time, and the organizations that choose to disruptively innovate, will have the advantage of being experts in the making of the new products. So, organizations should avoid the strategy that only focus on incremental innovation, and they need to adopt disruptive innovation (Almaloy, Y. 2021: 74).

2.6 The Fourth Industrial Revolution (4IR)

We live in the age of the fourth industrial revolution (4IR), and many tourism companies are already using what is called "e-tourism" services such as paying through applications. In the age of industry 4.0, both travel agencies and their customers are using e-tourism services and technologies, which can be very useful for both parties. However, it can also have some problems like hacking of wallet attacks that only can faced and resolved using the technology of 4IR such as block chain. This can enable trust and respect between different stakeholders including travel agencies and customers and lead to a more robust environment and active economy (Bodkhe et al., 2019). In the 4IR age many travel agencies are already utilizing the technology of the 4IR to serve their clients. Therefore, it makes perfect sense to include it in this research since it has an immediate impact on travel agencies.

Klaus Schwab is the one who coined the term The Fourth Industrial Revolution. Klaus Schwab is the founder and executive chairman of the World Economic Forum (WEF).⁹ The term refers to the new technologies that people use to increase the efficiency of our everyday life. Also, it provides a unique feature where people can move from virtual reality into reality and stay connected with other people from all around the globe. The steam engine was invented in 1760 and it was the beginning of what researchers call the First Industrial Revolution.¹⁰ The steam engine was especially helpful for farming industry because it enabled farmers to move their products from their farms to the local and international markets. Trains were the main tool that people used at that time to move products. Other industries that had flourished at that time was steel industry and textile industry. When oil and electricity were used as the main source of power in 1900 the Second Industrial Revolution started. Mass production and rapid industrialization were the some of the characteristics of the Second Industrial Revolution. In 1960 the Third Industrial Revolution started when the use of electronics and information technology was incorporated within companies all over the world. This has made the sharing of information much easier between organizations and customers and it played a huge role in the development of the products that are used in the IT departments.

In the Fourth Industrial Revolution in which we live now, a lot of revolutionary technologies have been invented.¹¹ For instance, three-dimensional printing (3D), big data analysis, Internet of Things and super computers have all changed our lives and

⁹ The World Economic Forum (WEF) is a global political and economic institution that is based in Davos, Switzerland. The annual meeting of WEF attracts the most powerful political and economic leaders in the world. The organization has a great influence on the global markets and plays a pivotal role in the world trading market (Graz, J. C. 2003: 321).

¹⁰ Industrial Revolution refers to the shift in economy structure or the advancement in manufacturing industry and the shift from agriculturally based economy to mining based economy. The First Industrial Revolution started in the late eighteenth century and ended in the nineteenth century. Major developments took place in the textile, steam power and iron making fields (Agarwal, H., & Agarwal, R. 2017: 1062).

¹¹ The major technological companies in the world such as Deloitte, Gartner, IBM, IDC, IEEE, and Red Hat is leading the technological revolution in The Fourth Industrial Revolution. Technologies such as IoT, Big data, Cloud, 3D Printing, Healthcare, Mobile Devices, Smart Machines, 3rd Platform, Block Chain and Security technologies are considered the core technological means of the future (Chung, M., and Kim, J. 2016: 1312).

the way organizations work (Xu, M., et al., 2018: 90). The Fourth Industrial Revolution has brought with it a lot of amazing technologies that are used in many industries. For example, a lot of industries are using robots instead of humans to make different products including cars, airplanes parts, engines, furniture, and computers. These new technologies have increased both the efficiency and productivity of factories and organizations. In addition to that, the inventions, and technologies of the Fourth Industrial Revolution have also changed the way we work in organizations. Many companies now are either depending on artificial intelligence or robots to do the mundane tasks to reduce cost. Also, a lot of companies are asking their employees to work from home to reduce the cost of renting a building and pay for the electricity bills. These changes are affecting all organizations with almost no exception.

However, there are some advantages that we can get from these new technologies. For instance, the barriers that were causing problems for inventors and markets will be reduced thanks to some of new technologies such as 3D printing. Also, artificial intelligence industry is moving rapidly and the new inventions in this field are more than ever before. Artificial intelligence systems have the power to solve complex problems which will open up a lot of economic opportunities. On the other hand, the Fourth Industrial Revolution technologies are also creating a lot of challenges to organizations and leaders around the world, and they need to overcome these challenges. For example, the replacement of humans with robots will create a lot of employment challenges for many countries. Unfortunately, the replacement of workers with robots is one of the characteristics of the Fourth Industrial Revolution. However, people who can create new and innovative ideas, products and services will be consider a valuable resource. Another big challenge is cybersecurity and the threat that comes with hacking issues that can affect banks and organizations in a bad way. The personal information of customers is stored in the files of the organizations and banks. If these systems get hacked, the threat of the information being stolen is great (Xu, M., et al., 2018: 93). The Fourth Industrial Revolution is bringing with it a lot of challenges and opportunities. Organizations in general and leaders need to encourage employees and provide them with necessary resources to overcome the challenges and take advantage of the positive things that the technology of the fourth industrial revolution can create.

In addition to that, in today's global market that is characterized by continuous change and fierce competition, the need for innovation has never been greater. Due to the technological innovations, new products and services enter the market in a continuous fashion. Organizations of all sizes are experiencing a huge change in the global and local market environments. Some researchers suggest that the reason behind these rapid changes is The Fourth Industrial Revolution also known as "4IR" (Bloem et al., 2014: 11).¹² Organizations of all sizes need to incorporate innovation into their main strategy to stay ahead of the competition. The reason why is because innovation plays a pivotal role in the long-term survival of organizations. Some research studies found that without innovation, organizations cannot survive in the long run. This is due to the tough competition that organizations face nationally and internationally. In addition to that, the rapid changes in regulations and market conditions can lead to the emergence of new and unusual challenges that require creative and innovative solutions (Ancona, D., and Caldwell, D. 1987: 1; Amabile, T. M. 1988: 124).

However, innovation can be extremely difficult without the support of leadership. It plays an important role in making regulations, procedures and providing a supportive and encouraging environment for employees. Creativity and innovation cannot happen without human intervention. Innovation happens when creativity is established. In other words, the innovative process starts after the establishment of creative ideas by humans. However, the conditions that support and prohibit creative and innovative endeavors are critical to be understood before engaging in any innovative activity. The role of human resources and the management of this invaluable resource has been discussed by researchers. In this study, the role of incorporating creativity skills into LDP to boost organizational innovation will be discussed.

¹² There have been four industrial revolutions that caused a lot of economic and social changes. The First Industrial Revolution started with mechanization and steam power. The Second Industrial revolution begun with the mass production and electricity. The Third Industrial Revolution was the result of the invention of computers and automation. The Fourth Industrial Revolution is characterized with Cyber Physical Systems (Stancioiu, A. 2017; 74).

3. The Relationship between Leadership, Creativity, and Innovation

3.1 Previous Literature

In this section, I will present some of the studies that discuss LDP, and I will analyze their components and characteristics. After that I will talk about the importance of this study in comparison to other studies. The relationship between leadership, creativity and innovation will be discussed. In addition to that, the characteristics of Fourth Industrial Revolution (4IR) that require leaders to be creative and organizations to be innovative will be analyzed.

The first study was done by two professors of Business School at Harvard University, Mihnea Moldoveanu and Das Narayandas who wrote an article about LDP in 2019. They claim that companies and organizations of all sizes need to have a new and good leadership skills that are different from old leadership skills to help them deal with the complexity, ambiguity and uncertainty that surround the market environment. That is why senior leaders and companies are spending a great amount of money LDP to prepare future leaders. Unfortunately, although a lot of money is being invested in LDP, many companies are not satisfied with results and many of them think that LDP did not help them to achieve their goals. The authors mentioned in their article that more than 50% of senior leaders believe that their talent development efforts don't adequately build critical skills and organizational capabilities

According to the authors the problem with LDP that makes companies complain about its inefficiency, is that the traditional approaches to leadership development no longer meet the needs of organizations or individuals. The authors believe that there are three reasons that make companies think that traditional leadership development is no longer beneficial. First, organizations pay a huge amount of money on LDP, but they feel individuals are benefiting more from these programs than the companies that are paying. Second, providers of LDP are focusing on hard skills and ignore the soft skills that companies need. Third, the application of the learned lessons in the real world is difficult. The solution according to authors is in online courses, social platforms, and learning tools that are being provided by both traditional providers and upstarts which will help to close the gap and lead to more satisfaction among companies and senior leaders.

The second study is examining A leadership development program (LDP) at Southern Illinois University Carbondale (SIUC) during the COVID-19 pandemic. For the purpose of this study, in this research I will focus only on the components of the LDP, and I will not focus on the COVID-19 pandemic. The program started in 2006 to support talented students to become leaders in their fields. The authors states that the objective of the program is to help STEM students become future leaders in industry by providing leadership training and mentoring with a cohort experience of co-curricular education and community service opportunities.

According to the author of the study The LDP research framework and an instructional approach are based upon Social Interdependence Theory, which suggests that successful achievement of group goals and individual development are accomplished through member interdependence and cooperative learning. The cornerstone of the LPD is Social Interdependence Theory which states that member interdependence and cooperative learning can lead successful achievement and induvial development.

To analyze the effect of the LDP the researchers use the following components: Leadership Self-Efficacy (LSE), Motivation to Lead (MTL), and the Grit-8 Scale. Self-efficacy is the ability of individuals to believe in their ability to succeed and overcome challenges. Motivation to Lead (MTL) examines the motivation participants has to persist through tough times of leadership and training. Finally, active students administered the Grit scale to examine the trait-level perseverance and passion for long-term goals.

The third study was done by Alice M. Black and Garee W. Earnest from Ohio State University. The study was focusing on evaluating and measuring LDP on a post-program level. Social learning theory, adult learning theory, and the EvaluLEAD framework were used to build the theoretical framework of the study. The authors also created an evaluation instrument named the Leadership Program Outcomes Measure. The program is used to understand the achieved results and achievements of the participants in LDP. It is very useful for those who are managing LDP and would like to know the outcomes they achieved after the program.

The Leadership Program Outcomes Measure evaluates the individual, organizational, and community outcomes. The scale was developed to measure leadership program outcomes after participants leave a program. The instrument helps participants and managers to see the effect of LDP and to analyze their strengths and weakness. The instrument also gives a holistic view because it examines LDP on three levels: individual, organizational, and community levels. Finally, the researchers concluded that leadership development programs should work on the personal, professional, policy, and practice levels.

The fourth study was conducted by John F. et al, to examine the impact that participation in a formal LDP has on hospital managers and leaders' competencies, as well as to identify the positive organizational outcomes that can be achieved. A literature review focusing on hospital managers and leaders who participated in formal LDPs was conducted in this study.

According to the authors, some outcomes appeared more frequently than others during the analyzing of the data. For example, the ability to gain knowledge of management and leadership roles and responsibilities which appeared 13 times. An increase in participant's confidence and communication skills appeared 10 times, respectively. The ability to network with others within the organization and an increase in job positivity and satisfaction appeared 7 times each.

The fifth study was done in the medical filed and that shows that all organizations need leadership development regardless of their sector. Jaason M. et al, (2019) done a study on the effectiveness of LDPs provided for professional health care workers. According to the authors the estimated annual cost is \$50 billion (USD) which equals nearly half of all funds allocated annually to cancer treatment. This again shows the need and the importance of LDPs in organizations and companies of all sectors and

sizes. The researchers claim that LDPs in health care can improve the capabilities of individuals and contribute to better organizational and benefit to patient outcomes. However, the effectiveness of these programs has not been investigated properly and the research in this area is scarce.

The results of the research showed that effective LDPs include three main factors. First, individual-level outcomes such as knowledge, motivation, skills, and behavior change. Second, LDPs can make a huge difference in the next enhancement of performance of organizations and individuals. Third, workshops, videotaped simulations, multisource feedback (MSF), coaching, action learning, and mentoring are considered an optimal intervention. Fourth, the outcome of the LDPs should be collected before, during and after each LDP. Finally, an outcomes-based approach appears to be the most effective design of programs.

The sixth study was done by Alysse Merila and Ryan Woo from Cornell University. Their research focused on the best practices that can be used to assess the effectiveness of LDPs. Their research shows that only 41% of executive leaders think that their LDPs are effective. The researchers also found that only 18% of companies are gathering relevant business impact metrics, key determinants for measuring a program's effectiveness and ROI. The reason why is because many organizations focus only on the Kirkpatrick model reaction, learning, behavior, and results to evaluate learning. However, according to the paper organizations should also include return on investment methods in their assessment.

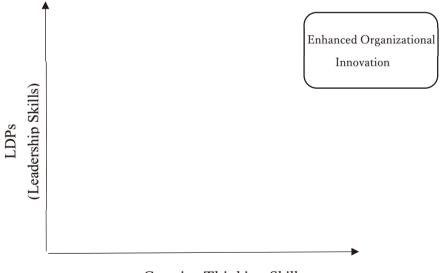
The authors state that there are four characteristics of effective LDPs that leaders and organizations can utilize to ensure getting the desired results. One, the factor of relevance which can be obtained through surveys that are distributed to participants. The surveys will show the information and skills that participants acquired from the LDPs. Two, to assist the knowledge and skills that have been acquired assessments, simulations, and role playing can be utilized. Three, a 360–Degree Feedback distributed to participants after nine months of the program to assess the changes that happened in terms of knowledge and skills for participants. Finally, teamwork, inclusion, and

experience are skills of leadership and should be the focus of any assessment of LDPs.

3.2 The Gap in Literature

This paper is investigating the role of incorporating individual creative thinking skills into LDPs to enhance organizational innovation. I argue that incorporating individual creative thinking skills into LDPs can help to enhance organizational innovation. That is because creativity is the first step toward organizational innovation. Creative persons have the ability to come up with novel and useful ideas that can turned into innovative products and services for customers. The following figure gives a visual explanation for the hypothesis of this paper.

After presenting the hypothesis of this paper, I would like now to discuss the previous literature and present the gap in literature. We live in the Fourth Industrial Revolution (4IR), which means that the new technology and innovations are causing the global market to be in a constant change. This continues change lead governments and institutions to change the laws and policy that govern the market. In addition to that, the way companies deal with customers and competitors change all the time and companies



Creative Thinking Skills



Source: Made by the Author

need to be aware of these changes and try to adapt to them. For these reasons and more, companies and leaders will have to deal with new and unexpected challenges and problems. To overcome these new challenges companies, need to come up with creative and innovative solutions. Also, innovation can be used to create new opportunities, find new markets and attract new customers. That is why in this paper I claim that including creative thinking skills in LDPs is necessary if companies and leaders would like to be able to deal with the challenges and be able to create new opportunities.

In the first study that was done by Mihnea Moldoveanu and Das Narayandas (2019), the authors discuss the problem of the inefficiency of LDPs. According to the authors the solution is in online courses, social platforms, and learning tools that are being provided by both traditional providers and upstarts which will help to close the gap and lead to more satisfaction among companies and senior leaders. One can see that the authors did not focus on creativity and innovation as tools that can increase the quality of LDPs. This shows that here is a gap in the literature and this paper is trying to fill that gap. Since we live in the Fourth Industrial Revolution (4IR) that is characterized with continues change, I believe that creativity can help with innovation if it included in the LDPs.

Another study that was done by DeRuntz, B. et al, (2022), examined the effectiveness of the LDP at Southern Illinois University Carbondale (SIUC) during the COVID-19 pandemic. The researchers used Leadership Self-Efficacy (LSE), Motivation to Lead (MTL), and the Grit-8 Scale to evaluate the efficiency of the LDP at Southern Illinois University Carbondale (SIUC). The authors did not mention creativity and innovation in their paper, and I think that global market needs creative leaders that can come up with novel solutions for the new problems that they face in the market. Also, the study that was done by Alice M. Black and Garee W. Earnest from Ohio State University to evaluate the LDP on a post-program level focused mainly on three factors. The authors say that LDPs should be measured on three set of levels: LDP on three levels: individual, organizational, and community levels. As one can see that this study also did not examine the creativity and innovation role in LDPs.

John F. et al. (2020) to examine the impact that participation in a formal LDP has on hospital managers and leaders' competencies, as well as to identify the positive organizational outcomes that can be achieved. According to the authors of this study, the ability to gain knowledge of management and leadership roles and responsibilities, an increase in participant's confidence and communication skills, the ability to network with others within the organization and an increase in job positivity and satisfaction are the characteristics of an effective LDPs. Jaason M. et al. (2019) done another study on the effectiveness of LDPs provided for professional health care workers. The research showed that individual-level outcomes such as knowledge and motivation, action learning, and mentoring are considered essential for effective LDPs. However, one can notice that the two papers did not analyze the importance of creativity and innovation in LDPs. Moreover, Merila, A., and Woo, R. (2019) examined the factors of the LDPs and showed that the factor of relevance, role playing, and a 360-Degree Feedback are important. Once again one can see that creativity and innovation is unexamined in this research. Finally, the gap in the litreatuer can be seen in the under examination of the role and creativity in LDPs, and in this paper I try to fill the gap in the literature.

As mentioned above, research support the idea that creativity and innovation are important factors in leadership and organizational success (Hughes, D. et al., 2018: 3). They allow organizations to be more flexible and come up with new and useful products for their customers. Also, they allow them to respond swiftly and effectively towards the changes and challenges that come their way. However, in this paper I claim that leadership and LDPs are different components and each should be studied and analyzed separately. The reason why I believe leadership and LDPs are different is because LDPs deal with indivuals who want or will be leaders in the future and also deal with indivulas who are currently leaders in their companies or organizations. On the other hand, research on leadership focus mainly on those who are currently leaders and who are in leadership positions in their organizations and companies. In addition to that, I mentioned above in the literature review section that the research on LDPs focuses mainly on learning theories and knowledge acquiring.

On the other hand, we find the literature on leadership analyze different aspects such as the leader's behavior, communication skills and the effect of leadership on

organizational climate. In conclusion, what separate leadership from LDPs is the sample of the studies is different. In other words, LDPs deal with people who aspire to be leaders. They train and learn how to be effective leaders in their organizations. Although it is true that sometimes leaders undertake LDPs training, but that cannot be generalized for all people who are in leadership positions. Another reason that make leadership and LDPs different is their definition. I mentioned the different definitions of leadership and LDPs that have been stated by previous research. Leadership definitions are characterized with behavior, communication and climate. Whereas LDPs definitions are characterized with learning, knowledge acquiring and application of learned content. In the section below I will review some of the studies that analyzed leadership and creativity and I will point out the gap in the literature in terms of the absence of mentioning the relationship between LDPs and creativity.

The first study done by Shalley, C. E. and Gilson, L. L. (2004) where they analyzed the factors that leaders control that lead to the enhancement of employee's creativity through the climate. They claim that the previous studies focused on the leader's behavior and its effect on employee's creativity. They believe that context in which employees operate is as equally important as the leader's behavior. Therefore, research should investigate this vital element of leadership. They conclude their study with three main points. One, the leaders must understand the factors that affect organizational environment so that they can maximize their effect on employees creativity. Two, support and encouragement is important for creativity. Therefore, leaders need to create supportive and safe environment for employees. Three, leaders should take into consideration the policies of the company and change them so that they can provide more support for creative activities within organizations (Shalley, C. E. and Gilson, L. L. 2004: 15). The study focused on organizational climate and the role of leaders in enhancing it. Although, the study analyzed leadership and creativity, it did not mention LDPs and the role they play in enhancing creativity. As I mentioned above, people who are enrolled in LDPs training are not usually in higher leadership positions. They are usually people who will become leaders or people who aspire to be leaders. Also, the study did not mention the learning theories that are related to LDPs, therefore I believe this to be a gap in the literature where this study is trying to fill.

The second study done by Amabile, T. et al., (2004), investigated the role that the behavior of leaders play in providing instrumental and socioemotional support for employees. The study claims that the support of leaders is essential in individual and organizational creativity. The study mentioned some behaviors that support creativity and other behaviors that hinder creativity. For example, monitoring progress in a timely manner, reacting to problems in the work with understanding and help and absence of an expected negative or alteration of a negative pattern are believed to be behaviors that are not appropriate for the team member, not providing enough clarity about an assignment and changing assignments or objectives too frequently are believed to behaviors that hinder creativity (Amabile, T. et al., 2004: 17–19). In this study also we find the absence of the analyzing of the relationship between LDPs and creativity. The study analyzed the socioemotional support of leaders on employees. Therefore, this study also did not fill the gap related to LDPs and its relation to creativity and innovation.

The third study by Basadur, M. (2004), was investigating the different styles of individuals, teams, and organizations in approaching creative problem solving methods. The author believes that leaders should be able to support teams and organizations in developing appropriate and effective creative problem-solving styles. The paper divide the Creativity activity in an organizations into three main steps. The steps are problem finding activity, problem solving activity and solution implementation activity. The study claims leaders should support employees' creative activities through providing training for creative problem-solving methods, set up structures that have rewards to motivate employees and be a process leader (Basadur, M. 2004: 107–108). Although this study is investigating the relationship between leadership and creativity, but it focuses on leaders who are already in leadership positions and can control the resources of the company.

As I mentioned above, LDPs deal with people who will be leaders in the future as well as people who are already in leadership positions in their perspective companies. This means that this study does not cover the sample of people who will be leaders in the future who are considered an important part of the research of LDPs. Therefore, in this study I try to fill the gap in the literature by analyzing this important sample who will be leaders in their companies and organizations.

Finally, I would like to point out the reason for focusing on leadership and LDPs in this research. It is important that factors such a climate and organizational communication and logistics are important for organizations and companies to be successful. However, in this study I focus on leadership and LDPs for the following reasons. First, based on the research on leadership and organizational climate that has been done by Koene, B. et al., (2002: 210), they found that different leadership styles have different affect on organizational climate. According to this research one can see that that this research is not including the people who are involved in LDPs. In other words, the affect on climate can be done only by established leaders who have the power and who control the resources of their perspective organizations. In this study I would like to analyze LDPs which contain people who might not have any power to affect the organizational climate. For this reason, I tried to focus only on leadership and LDPs and not on organizational climate.

4 Summary and Conclusion

LDPs are very important for companies, and a huge amount of money is being invested in leadership development by companies to ensure that they can have strong and effective leaders. This make research in LDPs very important because it can help companies to spend their money effectively and will allow researchers to understand leadership better.

In this paper I claim that incorporating creative thinking skills into LDPs can help to enhance organizational innovation. This is because creativity is the first step towards innovation. Companies need to have creative ideas first before they can turn them into innovative products and services. The changes that happen in the market caused by the Fourth Industrial Revolution (4IR) forces governments, policy makers, companies and investors to change the rules that govern the market. In addition, companies need to change the way they communicate with customers and investors too. This can create a lot of new and unexpected challenges that companies need to face.

Also, new competitors can enter the market at any time, and they usually bring with

them new services and products. To face these challenges companies, need to have a strong innovation capability so that they can overcome the challenges and create new opportunities and find new customers in the market. Including creative thinking skills into LDPs can help to achieve these results because when leaders become creative, they allow for creative ideas to be turned into innovative products and services. Leaders usually control the resources of the companies and without them innovation can be hard to achieve, the reason why is because in order for creative ideas to be turned into innovative products and services, money, time and effort need to be invested. If leaders do not allow for the resources to be invested, innovation can be hard to achieve.

In conclusion, according to my knowledge there is a few research that discusses creativity and LDPs. Some research focus on improving soft leadership skills such as creating the vision or mission. Another set of research focused on communication skills and emotional intelligence to improve the quality of relationship with followers. However, the research that analyze creativity, innovation and LDPs is still scarce. Future research can examine the including of some creativity thinking skills such as divergent and convergent thinking skills into LDPs as means to enhance organizational innovation.

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