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COMPARING AGILE LEADERSHIP WITH BIOMIMICRY-BASED GRAY WOLF: PROPOSING A NEW MODEL

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ABSTRACT

Biomimicry is a modern interdisciplinary approach that motivates leaders by nature to use its applications. Leadership is not only a subject of study in biology but also in all social sciences. This research focuses on understanding the mechanism behind the coordinated behaviour observed in mobile animal groups in order to assess the impact of leadership models in biology and sociology on group behaviours. In this context, this study aims to reveal the common grounds and to establish bridges between agile leadership and biomimicry by using a new model on grey wolves. The research was done by qualitative analysis method including current literature. The findings reveal that there is a strong relationship between characteristics and qualities agile leadership and of wolves. It is resulted that natural and biological cycles inspire on the leadership models. Understanding this differential impact and the ability of leadership is the key to appreciate the function of group organizations in collective animal systems.

Keywords:

Agile Leadership
Agile Leadership Dimensions
Biomimicry
Grey Wolves

JEL Codes:

M10, M12, O32, Q57

ÇEVİK LİDERLİĞİN BİYOMİMİKRİ TABANLI GRİ KURT İLE KARŞILAŞTIRILMASI: YENİ BİR MODEL ÖNERİSİ

ÖZ

Biyomimikri, liderleri, doğası gereği uygulamalarını kullanmaya motive eden modern bir disiplinlerarası yaklaşımdır. Liderlik sadece biyolojide değil, tüm sosyal bilimlerde de bir çalışma konusudur. Bu araştırma, biyoloji ve sosyolojideki liderlik modellerinin grup davranışları üzerindeki etkisini değerlendirmek için mobil hayvan gruplarında gözlemlenen koordineli davranışın arkasındaki mekanizmayı anlamaya odaklanmaktadır. Bu bağlamda bu çalışmanın amacı, gri kurtlar üzerinde yeni bir model kullanarak ortak temelleri ortaya çıkarmak ve çevik liderlik ile biyomimikri arasında köprüler kurmaktır. Araştırma, güncel literatürü içeren nitel analiz yöntemi ile yapılmıştır. Bulgular, kurtların özellikleri ve nitelikleri ile çevik liderlik arasında güçlü bir ilişki olduğunu ortaya koymaktadır. Doğal ve biyolojik döngülerin liderlik modellerine ilham verdiği sonucuna varılmıştır. Bu farklı etkiyi ve liderlik yeteneğini anlamak, grup organizasyonlarının kolektif hayvan sistemlerindeki işlevini takdir etmenin anahtarıdır.

Anahtar Kelimeler:

Çevik Liderlik
Çevik Liderlik Boyutları
Biyomimikri
Gri Kurtlar

JEL Kodları:

M10, M12, O32, Q57

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1. INTRODUCTION

Man has always been inspired by the designs in nature ever through the course of history. The elements, mechanisms, organisms and structures in nature have recently been studied by a number of scientists (Kim and Park, 2018). Biological systems are the products of 3.8 billion year old process (Volstad and Boks, 2012; Ginsberg et al, 2013; Benyus, 1997; Kennedy, 2015). This notion has transformed into a scientific discipline when biomimetic applications were studied in modern science (Ball, 2011; Benyus, 2002). Recent innovative designs inspired by biomimicry are all products of systematic studies (Luke, 2014). The basic methodology of biomimicry is based on understanding the principles of biological process or biological adaptation and thus integrating these features into the product (Agnarsson et al, 2009; Assous et al, 2008; Bar-Cohen, 2006; Epstein et al, 2010; Holten-Anderson et al, 2011; Gattiker et al, 2005; Schmitz et al, 2012). Although the twentieth century had a reputation of being the age of physics, the twenty first century is the age of biology. Biology is known one of the main facts for the 21 st century. Biology is measured by the size of its project budgets and workforce or the outcome of the great discoveries. And biology will remain as the greatest part of science throughout the twenty first century, biology is considered more important than physics due to its financial and ethical outcomes since it can be measured by human welfare (Aziz and El Sherif, 2015).

In line with this information, it can be said that this research is applicable to a wide range of management and leadership functions and requirements such as strategy, production design, innovation, sustainability, collaboration, motivation, leading etc. and it is rather hypothetical and thus has no direct practical consequences and implications. It is worth describing the fundamental principles of nature with a record of sustainability of 3.8 billion years (Dargent, 2011). The rapid advancements of the physical world eventually led to an advancement in business enterprises and it has been more difficult for the organizational structures to adapt to this change. Some leaders are capable of accomplishing this difficult task whereas others have been trying to determine new strategies for themselves within different system of thinking. All impacts of change- predictable or unpredictable- have been about the whole balance within the system, sustainability, consistency and durability. Therefore, there

has been a process of change observed in the business world as in nature. While change is on the rise within the system, the whole ecosystem has been subject to a self – sustaining transformation. As a result of change, organizations are on the way to differentiating the strategic model style and leadership style while adjusting themselves to this ecosystem (Dinwoodle et al, 2014).

This research puts forward that biomimicry can be an essential framework for a sustainable business environment since it has a capacity to create various strategies for leadership and business management: This has been applied in nature for the last 3.8 billion years.

As mentioned in Ulgen and Mirze (2018), "the organizations need to adjust themselves into the environment like biological species and those who fail to do will cease to exist". When there is a tangible problem in nature, a leader to change the ecosystem will intervene to solve the problem. The ecosystem has an integrated network of players and the leader will simultaneously perform "inside-out" and "outside-in" strategies, which will eventually lead to an observable change in behaviours since it will trigger a gradual and long-term systematic change in the environment. In other words, there is so much to learn from the transitional change samples in nature for the leadership model in enterprises (Battilana and Casciaro, 2013). List and Vermeule (2010) model the decision-making processes observed in honeybee organizations and looked for signs of. O'Malley (2012), on the other hand, stated that a system similar to the Delphi technique based on the honeybees will offer faster and more powerful decision-making mechanism which can be used to reduce the possible risk factor. Nayyar et al. (2019), state that unlike lions and monkeys, self-organizing behavior is not observed in fish. Tofield (2002) observed that while termites perform a job, leaders are well organized and decide how to perform that particular job. In amoeba organizations, the leadership structure includes team leaders and teams of small or organizational units that organize themselves (Schatten and Žugaj, 2011). Zhang et al. (2013) stated that in flock intelligence, no central control structure is observed; however, the interaction between the members leads to a global behavior.

It is noteworthy to underline the fact that there cannot be a single comprehensive business management model since the business environments, leadership thinking models and operating models can vary in an ever-changing world. The business environment is becoming incredibly complex and unpredictable, therefore, agile leadership theory and biomimicry can be modelled by the business organization in order to keep up with this complexity. This research focuses on six qualities of agile leadership as well as agile leadership models observed in nature such as grey wolves.

At the gate of the 4th wave of the industrial revolution; it is necessary to develop a new understanding regarding the future of human labor based on new leadership styles for organizations. As seen, organizations must resist the rising competition more effectively than their competitors. How will the nature of human work be in this rising competition of the forthcoming future? This problem has not been answered yet. Scientific management is trying to transform to answer the emerging requirements of different leadership styles but not to re-organize work in an agile leadership and mimicry in perspective of grey wolves. Based on this light, the authors, firstly, will define agile leadership and its sub-dimensions based on previous literature. Then, the mimicry in perspective of grey wolves will have been analyzed. Next, agile leadership and mimicry will be linked in methodology section. Finally, authors will discuss and suggest for future studies.

2. THEORETICAL BACKGROUND & LITERATURE REVIEW

Leadership is one of the most widely used terms in social science research. Many scientists and researchers have studied on that term through the course of history, especially management science. Because of varied historical and academic backgrounds of those researchers, many different kinds of leadership styles emerged. Stogdill (1950) stated that it dates back to 1300s. It has almost as many definitions as the researchers who attempted to define it (Stogdill, 1974). Since then, it has been stated and defined many times and in many ways. While some of those researchers focus on one aspect of the leader or leadership itself, the others focus on behaviours of leaders.

Malik and Azmat (2019) said that "A leader is supposed to have the ability not just to manage or control the people, but also to inspire them; not only meeting goals and targets, but also able to create new goals and modify the existing ones according to the changing time, needs and challenges" (p.24). Sudden changes, uncertainties and unexpected developments are some of the most important problems in today's competitive environment. In other words, companies are in a complex matrix situation. This situation, which is called VUCA, has four main variables: volatility, uncertainty, complexity, ambiguity (Bennett and Lemoine, 2014). Therefore, it is critical for companies to be proactive and agile instead of reactive and traditional. Companies can achieve it by being agile (Lawrence, 2013). Therefore, leader is the key element in VUCA.

Leader is a person that sets goals for his/her followers or teammates, and then leads or rallies them to achieve those goals. It is about leaders' ability to motivate, encourage and bring hope to his/her followers. Leader plays an important role in helping an organization in meeting its targets and objectives. Hicks and Gullet (1975), Cuban (1988) and Bass (2019) defined leaders as the person inspiring, motivating controlling, managing and instructing followers to achieve their targets. Erickson et al. (2015) added that targets of a leader are not for organizational benefits only, but for the development and growth of his/her followers as well. Hemphill and Coons (1957) and Mitchell (2019) defined leader as the person having behaviour of an individual when she/he is directing the activities of a group towards their targets. Jacob and Jaques (1990) supported them by description of leader as the person having purpose or meaningful direction and causing willing effort to achieve purpose. Prentice (2005) stated that a leader collaborates with his/her followers to achieve particular ends. Success is the most important concept in this collaborating.

Leader can be defined as the person who directs the activities of his/her followers. Leader has some direction through moving a group (Kotter, 1988), organizing groups (Stogdill, 1950) and directives of the organization (Katz and Kahn 1978). Silva (2016) stated that leader is the person that some people accept him/her as their leader to achieve common goals.

In the light of the previously mentioned definitions a leader can be defined as the person who has ability to direct, motivate, inspire and share responsibility with his/her followers to achieve their goals.

Companies must rethink how their teams work together and apply a modern approach to work with new systems and models, enabled by the right tools. As Gobillot (2010) stated that leaders must make them agile to ensure that their organizations are resilient to context change. It shows that leadership and agility are closely related for company to meet their goals and targets even to survive their existence in today's competitive environment. However, the success, survival and achievement of a company are effective if it is managed and implemented by a successful leader. Leaders play a key role in helping an organization in meeting its goals (Malik and Azmat, 2019) and direct impact management process beside organizational structure (Jermsittiparsert and Srihirun, 2019; Kılıç and Günsel, 2019; Tetik et al, 2019). Because it has become clear that even if these are determined, it may not be successful whether it is used in the wrong time or wrong place. Therefore, an agile leader is needed. Agile leader is the person who determines the mission and vision of the company with all the people in contact (colleagues, followers, staff etc.). He or she can make strategic, sudden and proactive changes for the future and provide competitive advantage. The abilities of the agile leader to maintain the existence of organizations and manage them by predicting future uncertainties demonstrate the importance of agile leader.

2.1. Agile Leadership

Agile leadership is a postmodern style of leadership (Akkaya, 2020). Agile leadership is about the process to change or not to change. Agile leadership is more dynamic and evolving. Moreover, different people within the same group can assume leadership role depending on conditions and requirement.

Khan et al. (2015) said, "Successful leader is one who is flexible to adapt to the differences among the groups and the changing situations". Here flexibility is also added as an important quality of an agile leader. Bass (2019) said, "The primary purpose and value of a leader and leadership practice is to inspire others, deemed

followers, to willingly engage together to achieve a goal" (p. 1). Here again, key words seem to be "inspired" and "willingly", clearly suggesting a leader is not a dictator, but motivator. Bass (1990) added that any member of the group could exhibit some amount of leadership.

Agile leader has some qualities, principles values, notions, ideals that enable leader to think specific and creative. These are some qualities that differentiate agile leaders from others. Hereby, people would be willing to follow him/her.

It is not a routine or systematic desk projection plan that feeds an agile leader; the main thing that feeds an agile leader is proactive experimentation and creative efforts to search for the fastest and most appropriate solutions to the needs of the moment arising from the environment and technology. With his/her team away from detailed imitations and arrogant behaviors, his/her continuous brainstorming can develop innovative methodologies and solutions. Agile leaders can develop different transformational processes that they follow, by adapting solutions to the technology era and change with their innovative behaviors and attitudes. These technological needs are strange and unfamiliar to other managers and leaders, so their logic can hardly be understood and accepted. For example, they are aware of the complex situations that come from technological changes in dynamic environments and necessarily apply to new methodologies to solve them.

2.1.1. The Qualities and Dimensions of Agile Leader

In a conceptual framework developed by Coleman (2017), consistency and agility are proposed as pillars for agile leaders to effectively implement the core values of their business and adapt to market changes. In the view of Holbeche (2015), the foundations and resilience of organisational agility hinge on two main values-based leadership and shared leadership theories as key drivers which are closely related to characteristics' of agile leadership. In literature, these studies are fruitful to shed light on the importance of agile leadership and its characteristics. However, the more details about characteristics of agile leadership can be diagnosed in the work of Joiner and Josephs (2007). Agile leaders are creative and can find solutions for the problems encountered in the organization, can adapt quickly to changes and developments,

cooperate with employees, make mistakes, is reliable, trusting employees, and turns crisis into performance (Ferreira et al, 2012; Collyer and Warren, 2009). In the light of these important researches we realized that agile leadership has some original characteristics. And we summarized six characteristics for agile leadership (see Figure 1). Agile leader has quickness, change, flexibility, proficiency, collaboration, consequent and self-awareness abilities. S/he is a group leader. S/he focuses on teaming and cooperation. S/he shares information with all team members. The characteristics of agile leadership is explained below.

Quickness: It is about time agility. The leader responds expectations as soon as possible. The leader decides fast, learns fast, improves fast, applies fast, adapts fast. The leader does not focus on mistake. To do mistake is normal process but not to learn from mistakes is not acceptable. So to make mistake fast and to correct them faster. The leader knows that to respond the needs and expectations of customers in changeable environment is the key for companies to survive.

Change: It is about change and complexity agility, which is unpredictable today. Therefore, the unpredictable projects are not possible to plan through which change is inevitable. The leader responds to the expectations and needs of customers according to this changeable and complexity environment. The leader is overanxious and curious to think, to learn new things and to learn improvement to meet those expectations and needs. The leader not only enjoys new experiences, is eager to know new things, methods, and deals effectively with the uneasiness of change but encourages the followers to do those as well.

Flexibility: It is about resource agility. The leader is aware of how to benefit from resources (human resources, material, products, management principles, plans etc.). Agile leader is quite flexible in using all resources of company. When needed, the leader changes position, team and even the department of the staffs. A great agile leader understands that resources are a source or supply from which benefit is produced (Overeem, 2015). The leader is willing to take risks and tries to get rid of what hinders success.

Proficiency: It is about mental and creative agility of leader. The leader has dissimilar thinking and ability to find innovative ideas and solutions to problems. In other words, the leader thinks critically to solve problems that are even more complex and finds solution by making new connections. Madore and Spayd (2019) stated that the leader's ability is to relate to others in a courageous and high-integrity manner. This dimension is composed of integrity and authentic. The leader has the ability to inspire and motivate others by his/her high-integrity manner and behaviours instead of verbal expressions.

Team Collaboration: It is about team of the staff's and employers' agility. It is all about true collaboration and trusting each other. Some researches refer to the need of collaborative, systematic and strong leadership for better leadership, which may be succeeded by team collaboration (Atkinson et al, 2015). The leader understands and knows how to relate with the other people and tries to overcome with problems by multiply collective performance. Pieterse et al. (2019) propose that teams low in self-managing teams require that team members are aligned in their goal orientations. Samba et al. (2019) also advocate for strategy research that focuses on the notion of team. Team collaboration not only enables a greater potential to appreciate lived experience and different worldviews but it can also stimulate learning across disciplines as well (Bolden et al, 2019). Madore and Spayd (2019) stated that the leader's capability is to relate to others in a way that brings out the best in people, groups, and companies. It is composed of caring connection, team play, collaborator, and mentoring, developing, and interpersonal intelligence. Overeem (2015) states that an agile leader never asks how to manage the team; in contrast, s/he asks what the team needs in order to manage itself. It is quite important because if teams do not know velocity, manager cannot create a product roadmap with release dates. And without it, the company might fail and investors could lose their money (Henrik et al., 2007). The leader is a part of the workplace with the teams in which the real things are created. S/he has a strong communication with staff and employers, focuses on developing them. S/he respects and trusts them that give them confident and real empowerment.

Consequent and Self-Awareness: It is about result agility. The leader inspires teams to deliver results in first situation and exhibits a position that builds confidence among them and with leader, too. The leader reflects and knows them in a good way, and is aware of their capabilities and their impact on others. Madore and Spayd (2019) stated that the leader's orientation is to ongoing professional and personal development, and the degree to which inner self-awareness is expressed through high integrity leadership. This dimension is composed of selfless leader, balance, composure and personal learner. Moreover, the leader's ability is the extent to which the leader offers visionary, and high achievement leadership such as strategic focus, purposeful & visionary, achieves results, and decisiveness. Here agile leader takes personal responsibility for the outcomes that matter most. Agile leader primary focuses on one project. After completing it, the leader starts a new one. The leader does not try to finish many projects at the same time. The leader believes that commitment to making a significant difference by finishing project. The leader has positive attitudes to complete the current project all times. S/he encourages collaborative engagements and putting others needs first to complete it. The leader develops himself/herself by capabilities across these dimensions. S/he can be more active with a strategic agility potential.

2.2. Biomimicry

Biomimicry inspiration from nature (Benyus, 1997; Passiono, 2005). Characteristic features and functions of many living things have been used in designs. Shinkansen 500 Bullet Train modeling Kingfisher's beak design, Inspired by shark skin, Speedo's swimsuit production (Dündar, 2019) self-cleaning lotus leaves (Özdoğan et al, 2006; Primlani, 2013; Altun, 2011), glues inspired by lizard's feet (Autumn et al, 2000, 2006; Volstad and Boks, 2012), these are just a few examples of inspiration from nature.

The term biomimicry derives from the Greek word 'bios' (life) and 'imitation' (imitation). (Çırpı and Sev, 2015; Minsolmaz Yeler and Yeler, 2017; Volstad and Boks, 2012). The term "biomimicry" was used in 1957 by Otto Schmitt. First, cybernetics and bionics are referred to. Therefore, the term bionic is used to refer to the same field as

biomimic. A complete understanding of the functions and principles of organic structures eventually led to the production and design of materials and commercial interests in areas such as engineering, materials science and chemistry. (Zorica et al, 2015)

Biomimicry is a scientific discipline that includes all kinds of "systems inspired by man-made materials, tools, mechanisms and natural systems" (Altun, 2011). The basic principle of biomimicry is to replace the question 'how can we produce better solutions to our problems' with the question 'how can we do better' (Primlani, 2013). With the advancement of technology, new organizational structures are needed to communicate and produce productive results in the new global world. How these societies can organize themselves is not just a question for people. Some social insects such as bees and ants have been involved in social organizations for 200 million years. (Fewell, 2015). These social insect groups follow a set of general organizational principles.

2.3. The Relationship Between Agile Leadership And Biomimicry

Neither the strongest nor the most intelligent, but the species that the most responsive to change can survive (Robinson, 2010, cited in Celep et al, 2017). In today's dynamic and changeable world, companies must be more aware towards environment. Uncertainty and complexity is one of the most remarkable characteristics of competitive environment in the future. Many firms appear cautious and are not relying on growth being sustained so hose firms need to be capable of responding quicly to changes (Atkinson, 1984). Flexibility and quickness become most important strategic decisions for companies that have the power to live (Volberda, 1997; Syrett and Devine, 2012). It can be achieved whether employees can participate in and initiate change and in turn change(Lundin and Lancaster, 1990). This is about agile leadership. Nature's way to provide flexibility and get over from complexity is to have variety by transfer authority from central to local and share ecosystem. That method may apply to business life (Hutchins, 2013-B, cited in Celep et al, 2017). By that way companies can find opportunities and solutions in uncertain and complexity environment.

In this context this paper critically reviews and analyses some of the most commonly characteristics of agile leadership and biomimicry in perspective of grey wolves.

3. METHOD

The primary purpose of this research is to explore whether there is a link between agile leadership and biomimicry. A descriptive research method is taken into account to illustrate nature and dealt with literature review. The study departs from previous studies by using empirical reviews to depict the significance of agile leadership and its dimensions' relationship with grey wolves. Firstly, we reviewed the literature about leadership and biomimicry. We tried to find which kind of leadership and which leader animal behaviours are similar. We found that agile leadership and grey wolves have nearly the same characteristics. Therefore, we researched and reviewed in detail about these characteristics. Specifically, the concept and evolution of agile leadership and its dimensions is explored and the nature of biomimicry is discussed in sampling grey wolves within its characteristics. In other words, we screened agile leadership theory for relevant to the biomimicry themes in the framework of grey wolves. In addition to that, we reviewed biomimicry and agile leadership literature, within the scope of leading and managing change. We compared the characteristics of grey wolves with the characteristic's agile leadership methodologically.

4. RESULTS

Leadership expectations are trending among employees, students and scholars. The first expectation is to understand the concept of sustainability in order to create a mentality well enough to support economic and social change. Although the concept of contemporary leadership has to have strategies to deal with employees within an organization is controversial. A science inspired by nature is capable of providing us with the answers. When the nature is observed, it is possible to create a successful structure within an organization through team work (Celep et al, 2017). A concept of leadership inspired by nature focuses on cooperation and perception. As Katz stated; "A great team work comes out when the individual members of the team do their best

to bethe best not in their team but for their team". When working in a team, it is important to consciously keep the morale and motivation up for the team, which encourages synergy (Katz, 2013). Behavioral patterns in natural world can provide us with possible leadership theories. For instance; the grey wolf pack *does* have similarities to the behavioural patterns observed in agile leadership. The most typical feature of agile leadership is to trust in the common intellect and mutual decisions, instead of following the norms ordered by the superiors.

The social hierarchl order of the wolf pack is important for the internal management and hunting behaviour (Tu et al, 2019). Managers have mastered the level of agility needed to continuously handle the volatile world economy today.

Strategic thinking can be developed since it is consistent process of learning. The power to understand the ecosystem is important for the leaders and superiors to have a true grasp of the strategic environment (Kanwal et al, 2012). The enterprises capable of having superior performance rate in time are also capable of inventing, rediscovering and transforming their business models in accordance with the dynamic nature of their business ecosystem. The leaders in such enterprises define the shareholder groups, which is critical to manage the change and they build tools of critical change within the institution. Living beings leading to change help the organizations adapt themselves into changing environment and furthermore, they can provide a more dominant, more widespread and more self-sufficient change (Dinwoodle et al, 2014). Reddy and Reddy (2019) developed Grey Wolf Optimization method which imitates the superiority ranking and feeding mechanism of grey wolves in nature. This method has been proposed and implemented for finding the economic dispatch with various fuels and valve-point loading. Reddy and Reddy (2019) and Pradhan et al. (2016) stated that wolves have some strategic abilities which are listed below:

- Searching for prey strategy: the initialization search agents segregate based on their fitness values and recombine after they find the prey.
- Encircling prey strategy: seeking a prey, search agents surround that prey and the surrounding behaviour.

- Hunting strategy: Search agents focus on hunting. The hunting is generally guided by types of search agents. Among these, provides the best candidate solution.
- Attacking prey strategy. After completion of hunting, search agents attack the prey. Based on the position of grade search agents, the leader allows the search agents, i.e. search agents to update their positions to attack the prey.

Johnson (2010) stated that wolves are characterized by leadership that every leader in the business world today would admire. These characteristics are similar to characteristics of agile leaders (Table 1 and Figure 1).

Table 1. Common Characteristics of Wolf and Agile Leader

Wolves	**Agile Leaders**
Sense of Urgency	Quickness
Insatiable Curiosity	Change
Patience	Flexibility
Strategy & Planning	Proficiency
Teamwork	Team Collaboration
Wolves Never quit	Consequent and Self-Awareness

Figure 1. Common Characteristics of Wolf and Agile Leader

5. DISCUSSION

The relationship between agile leadership and grey wolf pack model is analyzed in this research.

Within the hierarchy of leadership, the grey wolf algorithm simulates the hunting mechanism of grey wolves as a method of searching and adapting. Thus, it categorizes solution groups into a certain hierarchy (Mirjalili et al, 2014). The hierarchal structure seen in a pack grey wolves is consisted of alpha, beta, delta and omega. The alpha class represents the leader wolf in charge of making decision for the hunt and other acivities; and thus, it is on the top of the pyramid. The beta class represents the group helping the alpha make decisions. They rank the second in hierarchy. The omega class represents the lowest and the delta class represents any wolf that doesn't belong to any of the categories above (Koc et al, 2018). Additionaly, Mallick et al. (2016) summarized and listed grey wolves pack as below:

- Alpha is leader and in the top level of pack.
- After alphas beta are the second level of grey wolf.
- After beta the third level of wolf is omega.
- The last level of wolf is delta.

Joiner and Josephs (2007) state that every new agility level reflects an ability to effectively adapt to a higher level of change and complexity. They stated that an agile leader has five distinct levels:

Expert ("Tactical, problem-solving orientation. Believes that leaders are respected and followed by others because of their authority and expertise"),

Achiever ("Strategic, outcome orientation. Believes that leaders motivate others by making it challenging and satisfying to contribute to larger objectives"),

Catalyst ("Visionary, facilitative orientation. Believes that leaders articulate an innovative, inspiring vision and bring together the right people to transform the vision into reality. Leaders empower others and actively facilitate their development"),

Co-creater ("Oriented toward shared purpose and collaboration. Believes leadership is ultimately a service to others. Leaders collaborate with other leaders to develop a shared vision that each experiences as deeply purposeful"),

Synergist(Holistic orientation. Experiences leadership as participation in a palpable life purpose that benefits others while serving as a vehicle for personal transformation").

Grey wolves are at the head of the food chain and they mostly try to live in a group or pack. The leader may be male or female. The leader is mostly responsible for taking decision about the hunting, time to walk etc. Alphas may not be the strongest member, but they have the quality to manage the pack which shows that discipline and organization has higher importance then their strength. This information inspired Mallick et al. (2016) to optimize the weighty parameters in automatic generation control (AGC) of interconnected three unequal area thermal system.

Pradhan et al. (2016) were inspired by grey wolves pack which drive them to find out that a new evolutionary optimization approach named grey wolf optimization (GWO), which is based on the behaviour of grey wolves, for the optimal operating strategy of economic load dispatch (ELD). They added that ELD has the potential to solve many other optimization problems in the field of power system planning and operation.

Sultana et al. (2016) also researched on grey wolves pack for empowering the performance of the distribution system

6. CONCLUSION

We are still a part of nature and are subject to its rule because we are a different species on Earth. We will be excluded if we do not live and do business in the boundaries of the program in the light of this idea, Dargent 2011) researched on Nature's Principles and our current business practice and concluded that people can learn to play by the rules of nature, which offer a very rich source of inspiration to challenge our current unsustainable business practice and invent new strategies. To succeed in our volatile, complex, ambiguous world, we have no choice but to master our ability to adapt and learn. Agility is a key to unlocking our adaptation proficiency. Learning agility, being agility and agile leadership is the ability to learn, adapt, and apply ourselves in constantly morphing conditions. Muro et al. (2011) concluded that wolves reach their aims in an emergent collective behaviour which does not

necessarily rely on the presence of effective communication between the individuals participating in the hunt, and that no hierarchy is needed in the group to achieve the task properly. Agile leaders have the same behaviours to achieve their objective. They motivate and inspire their followers and no need any hierarchical system. Johnson (2010) and Hoekstra (2018) stated that the wolf is a social animal. Grey wolves are highly mobile (Wisely et al, 2002; Leonard and Wayne, 2005). This mobility let them to be aware whatever happens in environment. Wolves travel, eat, hunt and play together. Because they know that survival depends on a successful hunt. They do not practice panic response management that as leaders sometimes demonstrate in a crisis. To get over the crisis they develop a plan working together as agile leaders who are patients and focus on their aims to survive in changeable environment. As wolves, agile leaders compete to live they do not live to compete. Because agile leaders know that firms use various means at the point of conveying the products and services they produce to their consumers (Kara et al, 2017). Theuerkauf (2009) and Gable (2016) implied that hunting strategies have evolved to maximize kill rates. It can be seen how adults modify their strategy by conditions and by type of hunt. Moreover, it is clear how the hunters deal with each situation. Agile leaders can develop different transformational processes that they follow, by adapting solutions to each new situation and change with their innovative behaviors and attitudes. Leonard (2015) stressed that grey wolves have a particularly high dispersal capability. Wolves live in different habitats and have very different available prey, therefore they have very different diets; they also differ in water or refuge availability, requirements for thermal regulation, human pressure, competitors which force them to keep their survival in competitive environment.

Even when not correlated with smell, sound or any other signal they can also use visual detection (Gable and Gable, 2019). No external factor deflects them from their aims. Zhou and Zhou (2013) stressed that the strongest wolf was selected as the leader of the wolves; the wolves hunted prey under the leadership of the leader, so that they could be more effective to capture prey. Some or all of them may have provided early human with opportunities to exercise intellectual abilities (Peters, 1978).

Finally, it can be stated that grey wolves may inspire managers to demonstrate agile leadership behaviours in order to overcome competitive in environment. Because literature provides that grey wolves inspire many researches in different fields. Such Reddy and Reddy (2019) developed Grey Wolf Optimization method which imitates the superiority ranking and feeding mechanism of grey wolves in nature, Mallick et al. (2016) to optimize the weighty parameters in automatic generation control (AGC) of interconnected three unequal area thermal system, Pradhan et al. (2016) were inspired by grey wolves pack which drive them to find out that a new evolutionary optimization approach for the optimal operating strategy of economic load dispatch (ELD) and Sultana et al. (2016) also researched on grey wolves pack for empowering the performance of the distribution system.

As the new leadership styles are required in the future, nature will always be the right source to look for any solution. Therefore, it is recommended that different leadership may be compared with some other animals for future studies. Team management or organizational behaviours may be related with some other animals in nature to learn their behaviours which may guide managers or employees of organizations.

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