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# Virtual Leadership: Concept, Expectation and Future

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Abstract: This article discusses the concept, expectation and the future of virtual leadership. The discussion starts with the approach and the concept of virtual leadership with any underlying theory. Virtual Leadership is a contextual leadership as an adaptation and response to technological developments within the organization. Various issues, strategy, implementation of leadership are reviewed in the discussion of this article to provide a range of perspectives in the development of virtual leadership competencies. Ultimately the change how the leaders will certainly have consequences for the changing characteristics of the ideal leader to the procedure, support, objectives and clear communication with an emphasis on knowledge for members of the organization.

Keyword: virtual leadership, leadership concept, competency.

### **INTRODUCTION**

Globalisation, technology, work-life balance and outsourcing cause the change in paradigm in performing a job. Cascio and Shurygailo (2003) explains that a vast development of technology enables a job to be performed any time, any where and with any media: face to face or through a medium of technology.

The change also causes organization problems to be more dynamics and complex that rises new competitive challenges with many organizational environment alternatives, both traditional (face to face) and virtual. Aside from the challenges, the changes also create opportunities for organization to change, adapt new technological expertise and skills. Organization utilizes many opportunities to achieve their goals and objectives, acquisition of resources and maintaining its survival as well as expansion.

Various of these opportunities will create a new context in organizational leadership such as the pattern of leader-member relationships that moves from face to face to the era of virtual / digital, then the adaptation of leadership is needed to create a transformative leader that has a comparative advantage, competitive, adaptive and digitalization.

New context of leadership is understood as an e-leadership or virtualleadership which is defined as a process of social influence mediated by sophisticated information technology to produce changes in attitudes, feelings, thoughts, behavior, and / or performance of individuals, groups and / or organizations (Avolio, Kahai, & Dodge, 2001: 617).

Virtual leadership can occur in any hierarchy that involves one-to-one and one-to-many interactions within an organization and basically there are differences between the roles of virtual leadership and traditional leadership, the only difference lies in the pattern of limited communication in face to face. Leadership continues to be one of the factors in determining the success of the organization in achieving its goals and objectives. Leadership is a complex phenomenon involving the leaders, followers and situations; have an influence on the productivity and cohesiveness of the group; the process of influencing subordinates to behave according to what they want as well as directing and coordinating the work of the group members (Hughes, 2006; Bass, 1985; Bennis, 1989; Fiedler, 1967).

Furthrmore, the leaders must continue to evolve in order to meet the changing needs and new demands that occur in the organizational environment. This article will discuss the challenges and competencies required by a leader in the context of globalization and technological development. The discussion includes the concept, expectation and the future for virtual leadership in developing a new style of leadership on the environment.

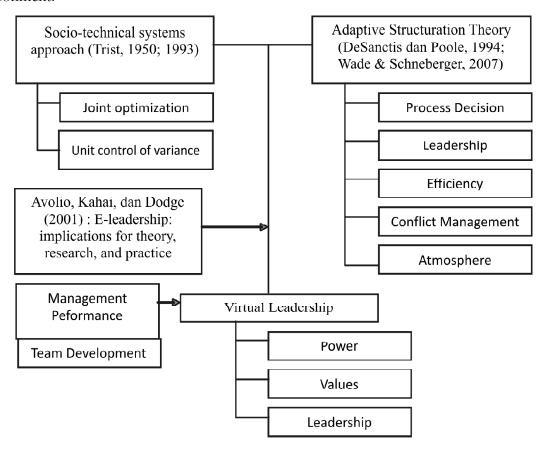


Figure 1: Summary Conception of Virtual Leadership

Source: Processed data, 2016

### THE CONCEPT OF VIRTUAL LEADERSHIP: APPROACH AND CONCEPT

The issue of virtual leadership is one of the topics that is increasingly important for many modern organizations. Virtual teams rely on computer-mediated communication and a member of the team must find a way to understand the leadership using a relatively lean media. The interaction may occur across the boundaries of geography, time, culture, organizational affiliation, and other factors. Various questions arise related to the virtual leadership, including how the team plays across distance and time, and how the role of facilitator in virtual organizations.

In addition to leadership, teamwork has been affected by the virtual environment. Virtual teams become more common type of unit and is expected to play an increasingly important role in the organization (Hertel, Konradt, & Orlikowski, 2004; Lipnack & Stamps, 2000). Some approaches and concepts in the virtual leadership are described in Figure 1 above.

# Socio-Technical Systems Approach

Socio-technical systems (STS) in organizational development is an approach to job design complex organization which recognizes the interaction between humans and technology in the workplace. So in the context of virtual leadership, this approach becomes a core approach that is able to explain it. Long (1973) states that the concept is put forward by Trist, Bamfort, and Emery based on the results of their work with workers at a coal mine England Tavistock Institute, London which revealed that there are at least two principles associated with this approach: (1) joint optimization: system social and technology should be designed to complement each other and fit (fit), as optimal as possible; (2) The control unit of variance: the problems that arise should be addressed directly by the employee (and not call a supervisor or unit specific specialist).

Individuals adapt the system to the needs of their specific job, or they refuse to use it at all with the use of different variations so that ultimately affect the decisions and other results. Avolio, Kahai & Dodge (2001) states that many of the researchers believe that advances in information technology and social system influence each other as described by Klein & Hirschheim, (1983), Orlikowski (1992), Orlikowski, Yates, Okamura, and Fujimoto (1995), Weick (1990), Yates, Orlikowski & Okamura (1999).

Technology brings a change for the organization, in the form of changes to the structure, operation and management of the organization. In addition, the support of appropriate technology gives effect to increase productivity, reduce operating costs, accuracy and speed in decision making, develop new strategies and even then improve relations with various stakeholder organizations. Such changes would require an adaptive and responsive leadership so that the various steps and strategies can be fit (in accordance) with the situation and the prevailing conditions.

Various changes are in addition to having links with the leader, also affect members of the organization, the relationship between them should be able to direct current and in accordance with the directives leaders and goals to be achieved by the organization. The pattern of this relationship refers to the quality of the relationship between leaders and members of the organization, known by the term leader-member exchange (LMX).

Eisenberger, et al. (2010) in his article describes the LMX theory of constraints of time and resources for a leader to limit the number of trade associations are of high quality. Bosses then identified a core

group of subordinates with socio-emotional resources which leads to increased mutual trust, liking and respect. Therefore, with the tools of technology, it is able to mediate the relationship between leader-member so as to contribute more productive in accordance with the vision and mission of the organization.

The use of technology also functions as a regulator or logic structures that make up the interaction of organizations, as expressed by Weick (1990) that the technology causes and consequences of the structure within the organization. The technology used in an organization, closely related to various organizational characteristics such as qualification of employees, organizational structure and organizational patterns. Technology relationships with various characteristics can be seen by: (1) Organization and mechanistic organic; (2) the qualifications of employees (3) the formal structure; and (4) control range. Figure 2 provides an explanation of this kind of relationship, so as to understand the context of the changes that might occur.

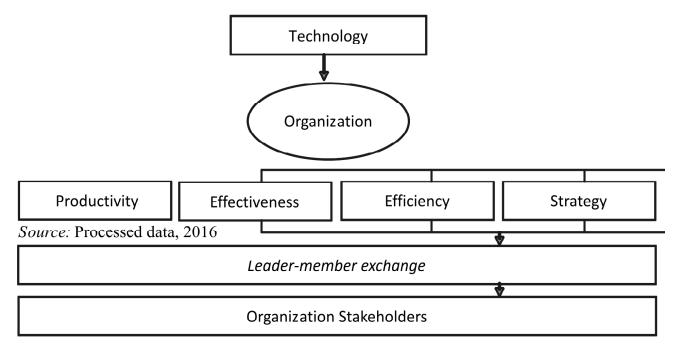


Figure 2: The relationship pattern of technology and organization

## **Adaptive Structuration Theory**

Adaptive Structuration Theory comes from Structuration theory proposed by Gidden (1984), this theory explains the "production and reproduction of the social system through the use of rules for members and resources in interaction, in this context the use of technology." The structure and agency into a tool of analysis in theory this, so that both objectivist and subjectivist only looked at one side only.

The development of this theory made by DeSanctis & Poole (1994) that seeks theories and models appropriate to describe how the organization can survive and be able to keep abreast of the times, further take into account the various influences that can alter structures within the organization, such as information technology, assignments, jobs, social interaction, and so forth.

This theory tends to resemble the structural functionalist in four paradigm proposed by Burrell and Morgan (1979), because if one structure is changed, then the structures of others will too affected and in general the organization will change, adapting to the changes that occur in any structure

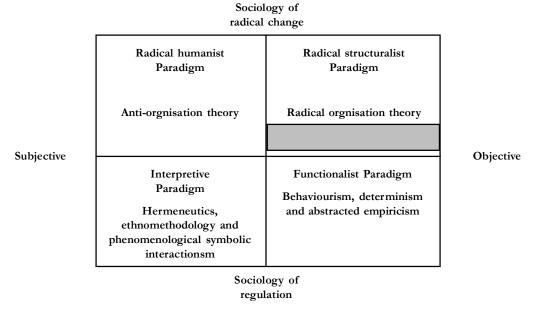


Figure 3: The posisition of adaptive structuration theoryin four paradigms

Source: Adopted from Burrell and Morgan (1979)

This theory is used by DeSanctis and Poole (1994) to explain the relationship between technology and structure within the organization. The article stated that" there is no structure in technology on the one hand, and the structure of the action on the other side. Both continue intertwined; there is a recursive relationship between technology and action, each iteration forming other information" (DeSanctis and Poole, 1994: 125). Due to this allocation would lead to any changes in the social structure and then from time to time instituted.

DeSanctis & Poole (1994) specifically explains that advances in information technology to bring social structures that allow and limit interaction in the workplace, further explained that the social structure provided by advances in information technology can be described in two ways: the structural features of the particular technology and spirit of this feature set. The structural features of a particular type of rules and resources, or the ability, offered by the system, while the spirit is a general intent with regard to the values and goals that underlie a set of structural features which include: (1) the decision process, (2) leadership , (3) efficiency, (4) the conflict management, and (5) atmosphere. Table 1 below will explain the examples of dimensions that describe the "spirit" of the social structure of the advance of information technology.

Wade & Schneberger (2007) explains further that the groups and organizations that use information technology to their work dynamically create the perception of the role and use of technology, and how it can be applied to their activities.

### E-leadership; virtual leadership pattern

Avolio, Kahai, and Dodge (2001) are the scientists who are first to introduced the concept of e-leadership, which is defined as a leadership process that is mediated by technology, such as e-mail and knowledge

Tabel 1

Dimensions that describe the "spirit" of the social structure for the advancement of information technology

Dimension	Description
(1)	(2)
Decision Process	type of decision process that is being promoted; for example, consensus, empirical, rational, political, or individualistic (Rohrbaugh, 1989).
Leadership	leadership possibilities arise when the technology is used; whether a leader is more likely or less likely to appear, or whether there will be equal participation against domination by a few members (Huber, 1984)
Efficiency	emphasis on the compression of time, whether the interaction period will be shorter or longer than interaction in which the technology is not used (DeSanctis and Gallupe 1987).
(1)	(2)
Conflict Management	whether the interaction would be orderly or disorderly, causing a shift in viewpoint or not, or emphasize awareness of the conflict or the atmosphere of conflict resolution (Dennis <i>et al.</i> 1988).
Atmosphere	relative formality or informal nature of the interaction, whether structured or unstructured interaction (Dennis et al., 1988, Mantei 1988).

Source: DeSanctis & Poole (1994: 127)

management systems that enable new ways of working and the lead in the organization. The concept is basically the same as the concept of leadership in general, which is intended to give effect to the members of the organization, as Yukl (1994) which states that "leadership is a process of social influence in which case the effect is intentionally run by a person against another person to structure activities and relationships within a group or organization".

E-leadership in the discussion of this article is interpreted as a virtual leadership, which describes a concept of leadership that can be done anytime and anywhere by collaboratively utilizing advances in information technology without limits on time and space. Furthermore Avolio, Sosik, Kahai & Baker (2014) defines it as a process of social influence are embedded in both the proximal and distal context and mediated by advances in information technology that can produce changes in attitudes, feelings, thoughts, behavior, and performance.

Consideration of theories on the concept of e-leadership explained that the leadership and technological influence of mutual reciprocity. Thus, a leader in this context should have the capability and commitment to shuck the advancement of information technology in solving the problem, formulate a vision and mission oriented utilization of technology to achieve the goals and objectives of the organization as well as building the active participation of member organizations in the utilization of information technology in the context of the activities of the organization, Some examples of information technology that can be used, among others: (1) video conference; (2) e-learning; (3) the digitization of the report; (4) intranet; (5) various applications of e-office support, and more.

The leader must play a more proactive role in creating social structures that encourage the implementation of information technology-based organizations, in particular, one of the leaders of the major challenges is how to optimally integrate technology systems, human and information within their organizations to fully understand the context of the new organization. That requires competence virtual leader in understanding how different virtual leader role of traditional leaders.

Burke (2008) state that virtual leadership competencies include the ability to integrate a variety of roles and implement them by utilizing information and communication technology in various roles that should be implemented include:

- 1. **Visionary:** have the ability to see the big picture and translate it to the members of his organization;
- 2. Convener: have the ability to manage the diversity of members and bring the organization toward clear goals and problem-solving;
- **3. Team sponsor:** have the ability to shape and direct the working group and the Group of virtual / cyber;
- **4. Manager:** have the ability to seek and allocate organizational resources with full responsibility, and the ability to manage real and virtual organizations;
- 5. Innovator: have the ability to find new ways for jobs outside their duties and functions;
- **Mentor:** have the ability to guide and direct the prospective new leaders in the environmental organization.



Figure 4: Virtual leadership competency

Source: Burke (2008)

Some may question whether there is a difference between the role of virtual leadership with the leadership in general, studies show that the virtual role can be tricky. Zigurs (2003) states that in the early 1990s, experiments were performed in which computer-supported teams developed and studied to determine what role it will appear in this new environment. The researchers found that more than half of the participants feel the software has fulfilled many leadership roles including recorders, gate-keeper, the driver process and, perhaps most interesting, a motivator. So we see how the leadership role may be changed or shifted when technology and group dynamics change.

When the newly created virtual teams, usually begins as nothing more than a collection of individuals. The role of a leader from the beginning is to develop individuals into a coherent unit and well integrated which provides the ability for teams to self-manage themselves. To achieve this, leaders must create a team orientation, which includes motivational factors such as promoting a common goal, creating a positive impact on the value and shape perception. The orientation of the ties that bind the team members and the team's mission. Once the environment is created, there are two functions of leadership, performance management and development team (Hunsaker & Hunsaker, 2008).

# Various virtual leadership strategies; effectiveness perspective

Research on the leadership of the virtual still limited, of course, the understanding of this concept needs to be done empirical research although some of the information according Kaywort & Leidner (2002) can be obtained through the explanation of literature relating to leadership generally applied to small groups, further explained despite various No framework that describes the effectiveness of leadership, most theories can be classified into one of three traditions: the nature, behavior and contingency theories.

Proponents of the theory of the nature found effective leader will have certain innate qualities or characteristics (such as intelligence, social maturity, motivation and attitude of human relations). In this view, the leaders are "born, not made" and most of the research has focused on identifying leadership attributes to predict the success or failure of leaders. In contrast, the view of leadership behavior is a tradition that focuses on the actual leadership behavior compared with an innate quality. In this view, effective leadership can be characterized in terms of specific activities observed set can then be used as a basis of comparison in leadership effectiveness. Some of the classical approach described in the article Kaywort & Leidner (2002) among other managerial roles, managerial grid (versus initiating structure consideration), the theory of x versus y theory, managers versus leaders, transactional and transformational leadership, and democratic versus autocratic.

In the context of virtual teams, the complexity of the various theories of behavior above would suggest that an effective virtual team leaders must show a set of activities that are much more varied, thus subordinates will see the virtual leader who showed a dual role more effectively. Effective virtual leader will have a team that is satisfied with the communication, understanding of their roles, and feel the effectiveness of communication.

Some of the benefits of virtual leadership being able to present a virtual team with minimization of time, cost, ease of sharing information, innovate and make decisions together. Of course, creating an effective virtual team is not an easy job, managers can not only design the optimal performance by setting members and then "let them run" without careful structuring, support and attention to the process. Here are some strategies that can be implemented in a virtual leadership:

# 1. The election of members of the virtual team;

Leaders must carefully select team members, for example the convenience of electronic communication to others, open to ideas and capable of understanding and communication between individuals of diverse values. Furthermore, when a team has been formed, then the next activity related to empowerment.

## 2. Team Empowerment;

Empowerment of virtual teams is an important factor that must be done by a leader. empowerment is a process to increase feelings of self-efficacy among member organizations through the identification of the conditions that helped develop the helplessness and through changes in both formal organizational practices and informal techniques in providing information about self-efficacy itself. Bandura (1982) states that self-efficacy related to a judgment about how well a person is able to carry out a variety of actions required and the actions related to the situation in the future. Teams that lack of empowerment and seldom meet face to face to be more passive and less performing. To implement empowerment in virtual teams, leaders have to spend enough time with individual team members (eg, telephone), train them, help them see the bigger picture of the organization and how the team is aligned with the organization's strategy.

## 3. Building relationship and conflict management;

Quality relationships characterized by trust and respect, cooperation and commitment. Destructive conflict can be minimized by increasing the team's ability to manage and gain value from conflict-related tasks performed. Trust is a prerequisite for effective conflict resolution. Diverse backgrounds of the team members, the issues leading to the different conflicts between cultures, what is perceived or interpreted as different conflicts, and ultimately different modes to resolve the conflict. It is clear that developing a better understanding of the conflict in a virtual team is very important.

# 4. Leadership;

Every team needs a workspace organized, roles are defined, strategy clear tasks and norms explicit interaction. In traditional teams, this process can be implicitly negotiated by team members as they observe and react to individual facial expressions and non-verbal behavior of others. However, the virtual team no chance as it was, and virtual teams that do not manage these processes often fail to understand untu directly. It is the leader's job to provide feedback in a timely and reflective and actively build the team strength as they arise.

## 5. Facilitating relationship;

It is important for team members to engage in dialogue and communication to build social and intellectual capital. This communication may occur in the context of a formal meeting, but also should be part of everyday life. Leaders must help keep team members focused on the big picture and a common goal. Make a small task group is often a good way to do this.

## THE EXPECTATION OF VIRTUAL LEADERSHIP

The purpose of leadership in this context has not changed and is still on the same basis in the achievement of the vision, direction, motivation, inspiration, and trust organizations. The fundamental difference that

the virtual leader may be less interaction of the members of his organization. However, it gives hope of interest for the implementation of various strategies of leadership, among others: (1) the ability to directly communicate one-on-one with potentially thousands of employees; (2) the ability to use the talents; (3) the opportunity to improve organizational performance through multi-functional teams; and (4) the ability to target better customer satisfaction; (4) the ability to cut costs; and (5) the scope of knowledge management better.

Virtual Leadership consists of two basic elements of leadership and technology, imperfect situation occurs if one of the elements increases, but on the other elements decreased, then of course the ideal is a balance between these two elements thus creating good leadership. It states that the global virtual leader to some extent face the same challenges as traditional leaders coupled with the challenges generated by the dispersion of the team members and by high dependence or total them on information technology as a communication medium (Kayworth & Leidner, 2002). Various media applications affecting the ability of communication was the sight of the virtual leader in delivering presence.

Variations communication media is seen affecting the leader's ability to deliver social presence that is attached to the face to face environment, and information-nonverbal cues, such as facial expressions, voice inflections and gestures (Kayworth & Leidner 2002). Therefore, the virtual leader is facing diverse challenges, but be adaptive and effective they may be able to convert these challenges into opportunities.

Virtual leadership competency development requires good planning and organizational development support and practice. Various leadership development program must include a segment on how a given leadership skills or practices can be applied virtually. However, given that many organizations do not have a formal program of this kind, the leaders often do not get the training and support needed. Some things that can be done in the success of the virtual leadership, among others: (1) building and maintaining trust through the use of communication technologies; (2) ensure that the diversity of the team understood, valued and leveraged; (3) Virtual handled these work-cycle and meetings; (4) to monitor the team's progress through the use of technology; (5) increasing external visibility and a team member; and (6) ensures that the benefits for individuals who are members of the virtual team.

#### THE FUTURE OF VIRTUAL LEADERSHIP

These various innovations and advances in information technology position plug and play organization that led to the virtual organization. Good management will provide ease in management and strategy management, so the expansion will happen massive organization with subsidiaries and small organizations attached. Sharing resources in meeting the needs into an organization's activities and of course with the flexibility of innovation. Virtual organization is generally described as a network of colleagues (independent) spread, consequently the necessary trust between the parties - related parties are relatively higher than conventional organizations so that the goal can be achieved.

A leader must understand the context of these developments, Heifetz and Laurie (1998) argues, the future leadership is a leader adaptive challenges, regulatory pressing, pay attention to the maintenance of discipline, giving back to the employee, and maintain its leadership. Added, leadership must always prepare various forms solution in solving the challenges of the future.

In relation to adaptation to change, emphasized the utilization of human resources. For it is necessary to develop new regulations, relationships and new cooperation, new values, new behaviors, and new approaches to the job.

The most successful leaders will focus on maintaining superior performance by aligning people around the mission and values and empower leaders at all levels, while concentrating on serving customers and collaborating across the organization. George (2010) describes three essential concepts for the future leadership success and this can be understood in the context of what should be done by leaders in the virtual era:

- 1. Aligning: The most difficult task is to align those leaders around the organization's mission and shared values, which is much more challenging than making short-term number. Getting alignment is very difficult in a broad global organization in which local employees may be more faithful to the original culture of their employer, especially regarding business practices.
- **2. Empowering:** Leaders on the number of hierarchical delegating limited powers to maintain control. Instead, the leader of the 21st century empower leaders at all levels, combined with a sophisticated system of accountability to ensure that commitments are met.
- **3. Collaborating:** The business challenges that are faced today is too complex to be solved by individuals or single organizations. Collaboration within the organization and with customers, suppliers, and even competitors is needed to achieve a lasting solution. Leaders must foster a spirit of collaboration, eliminating internal politics and focus on internal cooperation.

In the context of virtual leadership, the development of the rapid growth of information technology, membungkinkan individuals to change preferences and logic in managing and designing organizations. Referring to the social cognitive theory of Bandura (1986), stated that individuals acquire values, skills, and standards of behavior through social learning basic (eg, a representative of learning, verbal persuasion) that involve interactions with significant others (eg, mentor). Learning and leadership development can occur either formally or informally.

The system appears represented not only in terms of behavior, but also in the way people interpret the meaning of their interaction (Bandura, 1986; Fulk, 1993). Therefore, the technology to be part of the social transformation in the organization and in turn become part of the leadership system. The shift is causing a need to study the social system in which technology is embedded and evolve over time, and of course the center of the social system is leadership. So a must for determining the start of observation of the interaction between technology and human / social systems.

Avolio, Sosik, Kahai and Baker (2015) explains that some of the advances in information technology can be used to accelerate the development of leadership within the organization, for example, the Internet offers a large amount of information can be searched on business trends, financial forecasts, and personal information about leaders, peers, and followers. Further described in an article a framework that describes the interactive effects of advances in information technology and leadership at individual, team and organizational interactions present and future.

Virtual leadership of the future should try to create a "presence" global, which can be achieved with a leadership style that emphasizes the knowledge of a good job, clear goals and objectives, and ensuring

face- to-face meetings during the project's lifetime. Future global virtual environment also requires a leadership style that is flexible and proactive to accommodate a variety of backgrounds member. In addition, leaders must implement clear procedures for virtual support, communicate with clear objectives, and focus on aspects of virtual work, change how leaders will certainly have consequences for the changing characteristics of the ideal leader.

#### **CONCLUSIONS**

Technological developments provide change for the organization to give the new format in managing and designing organizations including the type of leadership. Various concepts and approaches discussed in this article with various theoretical approaches such as socio-technical system and Adaptive Structuration theory. Virtual Leadership consists of values and objectives that underlie a set of structural features which include: (1) the decision process, (2) leadership, (3) efficiency, (4) the conflict management, and (5) atmosphere.

The success of the organization must be a hope of any leadership context, the various competencies and leadership strategies must be owned. Leadership competencies virtual include the ability to integrate a variety of roles and implement them by utilizing information and communication technology in various roles that should be implemented, while the strategies associated with a focus leader in maintaining superior performance by aligning people around the mission and values and empowering the leaders in all levels, while concentrating on serving customers and collaborating across the organization.

Ultimately the context of virtual leadership requires a leadership style that is flexible and proactive with a variety of clear procedures in communications, operations, and how the leaders as a consequence of changes in the characteristics of an ideal leader.

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