TECHNOLOGY LEADERSHIP TO MEASURE WATER MANAGEMENT PERFORMANCE

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Abstract. *Explaining about this, Technology Leadership involves using technology to achieve goals and lead teams, encompassing both technical expertise and management skills. It includes understanding technology, its evolution, and how to apply it effectively. Technology leaders are responsible for fostering innovation, driving team engagement, and ensuring the organization's technology infrastructure functions properly. Research objective to gain relatedness between Technology Knowledge and Leadership Style as a Cognitive Thinking. Research method with qualitative method and also secondary data to explain about fluid mechanics as basic theory so that have got capability to understand water phenomena from water environments and water from process technology with 3 phase liquid, ice and vapor. Knowing the kind of water transportation facilities such as pipeline, elbow, flange. and also, heat pump to change pressure from one surface to more surface. Knowledge about viscosity, laminar, turbulence, heat transfer and thermodynamics more important to provide about cognitive thinking about procedure from loading until diplomacy for decision making. Suitable Technology Leadership at Human Resources concepts relevant with Transformational Leadership. Research finding, need decision from all research procedure so that review form research problem until conclusion.*

Keywords: *Cognitive; Fluid Mechanics; Measurement; Technology Leadership; Water Management.*

1. INTRODUCTION

Gimmick about some terms in research activities, think about new ideas with other people so that make sure professional atmosphere more guaranteed. Explain Capability in Leadership. In leadership, capability refers to the specific skills, knowledge, and behaviors that enable a leader to effectively guide their organization towards success. It encompasses both hard skills like project management or technical expertise and soft skills like emotional intelligence. Leadership capability is crucial for achieving organizational goals, motivating, and fostering a positive work environment.

Technology Leadership involves guiding the strategic planning, implementation, and management of technology resources to achieve organizational goals, foster innovation, and maintain a competitive edge. It's about aligning technology initiatives with business objectives and leveraging technology to drive innovation and success. During result not yet implementation, Technology Leadership encompasses how a leader uses technology during their daily duties and tasks, while leading others to complete their assigned tasks and duties. This may include ensuring their subordinates are trained to use the technologies needed to complete their assignment, and to ensure they drive engagement, motivation, and focus throughout their team.

This research with qualitative method, using secondary data from journal and have got statistics data based on leadership style. The objective to be achieved from this research:

1. Aims to get secondary data about the kind of leadership style.
2. Aims to gain data so that some knowledge regarding the kind of technology.
3. Aims to gain data about human resources capability to understand water as a fluid.
4. Aims to understand water phenomena from Environment.
5. Aims to explain so that understand decision making to increase financial performance.

Aggregate solutions as a purpose to find Suitable Leadership. Some supporting theories regarding knowledge focus on fluid mechanics technology. Fluid mechanics with water attitude, such as pipeline, elbow, flange for transportation facilities. Liquid Speed more highspeed if with small diameter and cool water with heat transfer applied and thermodynamics phenomena.

2. LITERATURE REVIEW

Technology Leadership is a style of leadership that focuses on leaders' characters in uplifting the spirit of the workforce into applying the technology within the organization. Current issues related to technology integration and provides a contextual framework with which school principals can undertake new leadership responsibilities in this area. Selected examples of successful technology integration are provided to inform current technology leadership practices. The leadership goals, competencies, and responsibilities needed in order to achieve this preferred future are described in the final section. The authors draw on professional experiences as researchers and leaders to build and expand on a five-part leadership model currently in use by a large urban school district to interpret multiple dimensions of technology leadership for principals. Ways in which this framework can serve as a guide for school leaders as they develop technology competencies, implement professional growth plans, work with their community, and provide daily technology leadership, mentorship, and advocacy for teachers in an elementary school are discussed.

During the past decades, both business managers and academic researchers have shown considerable interest in understanding how information technologies (IT) help to create competitive advantage for a firm. While recently, the idea of a competitive differentiation through IT has been challenged, this study contrasts the traditional thinking about competitive advantage with the resource-based view. Specifically, it is argued that by demarcating specific types of capabilities, we can contribute to better understanding of the resources of IT-based competitive advantage. Conceptually, we distinguish here between value, competitive, and dynamic capabilities as three distinct types of capabilities. Within each type, we identify specific capabilities, such as quality of the IT infrastructure, IT business experience, relationship infrastructure, and intensity of organizational learning, and present a model that describes relationships between these capabilities and competitive advantage. We in the next time have got empirically test the model using data collected via a national mail survey from chief IT executives around 204 manufacturing firms. While the quality of the IT infrastructure is hypothesized as a value capability and expectedly did not have any significant effect on competitive advantage, the quality of IT business expertise and the relationship infrastructure relevant with competitive capabilities did. The results of the study also indicate that the intensity of organizational learning, the mention as same as dynamic capability, was significantly related to all the type capabilities. These results point to the importance of delineating capabilities such as relationship infrastructure that can facilitate differentiation in the marketplace and dynamic capabilities such as organizational learning as an important antecedent to IT capability building.

The famous photograph of the three seated on a veranda embodies a prototype of leadership in action: powerful persons making decisions that affect the lives of millions. At the time of the summit, the physicist Albert Einstein was at his desk at the Institute of Advanced Study in Princeton, pondering the nature of matter. Working alone, shunning publicity for the most part, Einstein was apparently far removed from the concerns and activities of political figures such as Churchill or Franklin Delano Roosevelt. Yet Einstein's insights into the relations between matter and energy provided the intellectual capital upon which the atomic bomb was.

The increasing urbanization and growing urban population present significant challenges for urban water resources. Inadequate management has led to a decline in water quality and a mismatch between the availability and usage of city water resources.

In this period of significant growth, improving urban water efficiency and reinforcing water resource protection are especially important. Leadership is essential in developing and carrying out urban water resource policies. This research investigates how leadership influences the operational efficiency of water resources protection policies. The study seeks to fill the gap in understanding the relationship between leadership, member trust, and policy effectiveness in water resource management by constructing a theoretical model and conducting empirical analysis through questionnaire surveys. The findings of this study are expected to provide valuable insights into the significance of leadership in driving improvements in water conservation policies. By establishing a link between leadership, member trust, and operational efficiency, the research contributes to both theoretical knowledge and practical implications for enhancing water resource management strategies.

3. RESEARCH METHODS

Properly, method sometimes needs confirmation regarding the essential matters of research. Research with interpretation to analysis regarding capabilities explains some criterium of kinds of technology as a cognitive mindset. Some technology, with combination applied, includes global criterium such as Fluid Mechanics Technology and Modern Information Systems with Digitalization Technology. This matter does not explain about engineering, but about Quality Human Resources, with analysis up to decision making that should include understanding of fluid mechanics processes up to measurement, using a human resources cognitive mindset.

This is about Cognitive Development regarding the ability to understand Fluid Technology. The research method in this matter is based on some quantification observations that have been done, so that implementation becomes an effort to understand water direction, including supervision ability to detect some liquid with viscosity based on liquid shape. It also includes human resources' ability to understand, try to do, direct, and explain all aspects that are being done in relation to the benefits gained. Decision-making analysis and the capability to think based on cognitive understanding of technology are essential, especially when directed toward sustainability through sophisticated technology.

3.1 Statement of Research Purpose

The Purpose of this study was to gain relatedness between Technology Knowledge and Suitable Leadership Style as a Cognitive Thinking. Qualitative Data had been explained by information from this problem solving. Secondary data about this, as a Argument Data:

Table 1.

Score's in Leadership	Mean	Standard Deviation
[1] Transformational Leadership	3.16	0.54
Charisma	3.40	0.51
Intellectual Stimulation and Individualized	2.91	0.63
[2] Transactional Leadership	3.40	0.47
Contingent Reward	3.28	0.51
Management by Exception	3.52	0.51

(Source: Leadership Style, 2016)

Description of method as an instrument of Data Collection from reference with statistics data to gain Leaderships Style. Some problems about technology knowledge, all statement about cognitive thinking, relatedness to gain suitable leadership so that have got capability to measure water performance. This is fluid mechanics knowledge as basic intellectual to discuss, to explain, and to determine for decision making analysis. Although some information from electronic media provides some data, the majority about

digitalization media for secondary peripheral.

3.2 Determination between Technology Leadership and Ability to understand.

Technology Leadership usually speaking, about technical condition phenomena, more briefly and more clearly to understand about working mechanism, technology properties and kind of technology such as digitalization for all transport mass (Laminer, Turbulance).

3.3 Scheme to design working mechanism for Qualitative Research.

This is problems after receiving data 3.16 regarding as an argument so that research mediate between Technology matters and Suitable Leadership Style. We explain about flow chart. In Figure 3 Leadership Research Flow Chart.

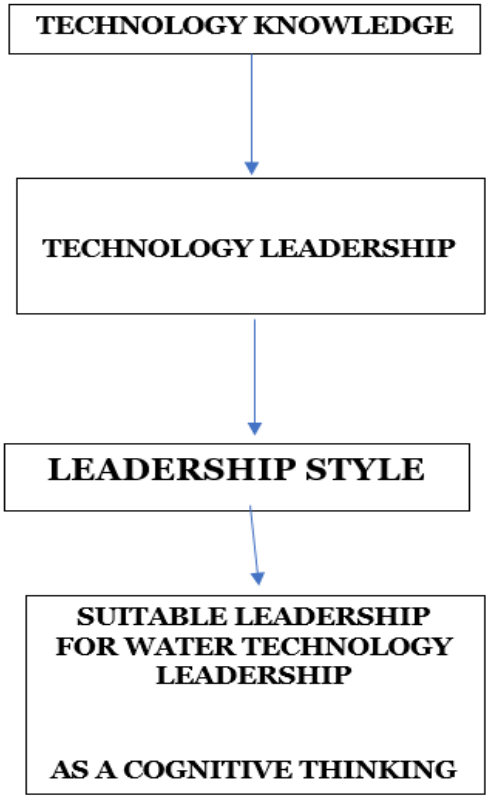

Figure 3. Leadership Research Flow Chart.

Technology Knowledge adjustment by tittle in this research in Water in Nature, Waste Water Technology, Water Treatment, and all aspects of Fluid Mechanics. Capabilities in society smarter if understood about this, but in area manufacturing employee, Technology must be had been learned and studied as a knowledge and skills, involve mechanical electronics, Chemical, and Nuclear, but especially water technology with fluidization principles. In context, Human Resources Recruitment, and Career Planning, Technology Leadership should be as a receive condition to accept Human Resources for position Managing Director who master technology concepts. Water Technology in implementation rarely include digitalization for water technology to instrumentation for measurement. Analysis about this involve Cognitive aspects, and sometimes open to affective aspects as an emotional, an attitude to encourage.

Every Human Resources, with Cognitive mindset to capable measure water management performance should understand fluid mechanics, clarifying process technology, filtering, heat transfer, thermodynamics and Reynold Number.

4. RESULTS AND DISCUSSION

Result of Research with Qualitative Method after providing analysis about suitable leadership criterium and cognitive aspects for clear capabilities to inform, and also decision-making analysis.

We begin with a solution, identifying Transformational Leadership as a result, and then discussing Water Technology Leadership. Water technology is relevant to fluid mechanics concepts.

The results show an understanding that in every leadership criterium, technology leadership has the purpose of shaping attitude, behavior, and thinking methods that are supposed to be capable of supporting decision-making. Technology leadership is more suitable with Transformational Leadership, which includes charisma, so that it is capable of explanation and preferable in decision-making to understand all problems in context.

We should understand that Transformational Leadership is a leadership style focused on inspiring and motivating followers to achieve extraordinary outcomes and personal growth. It goes beyond traditional management by fostering a shared vision, encouraging innovation, and promoting individual development. Transformational leaders inspire a collective commitment to shared goals, creating a dynamic and engaging environment.

Charismatic Leadership is a leadership style where individuals inspire and motivate followers through their charm, vision, and personal appeal. It involves strong interpersonal connections, persuasive communication, and the capability to tap into followers' emotions to create a sense of purpose and trust. While charismatic leaders can be powerful agents of change and innovation, their leadership style can also present potential downsides, such as overconfidence or manipulative behavior.

Cognitive thinking, through an in-depth study of leadership style, after finding medium-sized data such as Transformational Leadership, is very logical around the suitable mindset. Although the score is only 3.14 when we discuss water opinion, including natural water cycles, ecology of water resources, and phases of gas, vapor, and ice, the way of thinking to understand all procedures and choose problem solvers is suitable with qualitative analysis and transformational leadership.

CONCLUSION

It would be emphasized that the conclusion is not a summary but the results of research that describe the opinion or analysis of the researcher. Generally, the conclusion is written in a paragraph, without using serial numbers or citations, especially APA system. However, each journal or proceeding has its own writing rules, so the researcher must comply with the writing guidelines. Transformational Leadership had been determined because focuses on Human Resources Quality to understand, preference, and in-depth object analysis ad Cognitive aspects. Suitable Leadership Style for Water Technology Leadership in existing area conclusion.

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