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Challenging Hierarchical Structure to Boost Technical Outcomes*

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Abstract. As digital technologies are transforming businesses, the trend of digitalisation has also changed the ways we create value. Maximising value creation necessitates influencing decision-makers, especially in complex knowledge structures and network-based environments. This paper suggests the best practices of informal leadership deployed by technical experts aiming to influence others, especially formal leaders. Insights were gathered through interviews with Finnish technical experts and enhanced through consultations with international partners. The findings provide practices to manage work-related issues through human relations, and by doing this also challenge the hierarchical organisational structures. Crucially, informal leadership empowers employees to use their knowledge and competencies for the benefit of their organisations.

Keywords: Informal · Collective · Leadership · Expertise · Practice.

1 Introduction to Collective and Informal Leading

Transformation of work and digitalisation are challenging organisational leadership by shifting its paradigm from hierarchical toward collectivistic [1, 2] and processual [3] forms. There is also adoption of processual approach [4] and leadership through expertise [5]. This leads to novel ways of exploiting the knowledge, experience and competencies of employees to benefit organisations.

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The collectivistic leadership evolves through formal and informal relations [6] and selective use of expertise in a network [7]. Collective engagement is vital in complex situations that are not manageable by a single individual or in cooperative projects [8]. The leading is dispersed to the organisational and network collective. Personal networks are based on an individual's social skills, knowledge and expertise. Knowledge is created and shared through these networks.

Informal leadership is the influence exerted with no designated position of power. It is determined by a complex process among people acting and perceiving actions [9] giving rise to leaders spontaneously [10] in an emergent network of relations [11]. This complex social process of acting and perceiving can lead to informal leadership influence within the group, which is formed from respect and esteem someone receives from others [12]. The status is gained through person's knowledge [13], motivation to lead [14], strong organisational identity [15], ability to prioritise and achieve goals [13], amount of friendship ties [16], ability to build social networks [17], and trust [13]. As the leader's work benefits the group, the creation of status and influence is based on how others perceive that work.

As like-minded people are more likely to reach consensus, the diversity of expertise in a collaborative group can hinder knowledge creation [18]. The group diversity and task uncertainty expose the lack of common ground and understanding of the subject matter. The importance is placed upon issue-selling [19], making claims about what matters, and information brokering [20], distributing and channelling information and knowledge. Through issue-selling, changes are initiated, issues packaged and processed, and involvement created [19]. Information brokering [20] also interweaves two needed entities: organisational and administrative context to technical knowledge. This entity knowledge is needed in the processual approach to the work - how to match resources to the desired outcomes? Informal leadership can be utilised in performing these initiatives.

Also, leadership and stakeholder engagement are key institutional drivers of innovation management [21]. This paper deals with the impact of informal leadership in organizations and how this can lead to competitive advantages.

2 Method

Nineteen semi-structured expert interviews were conducted in Finland from September to December 2021. Interviewees were either handpicked by their superiors and the interviewer, or snowballed i.e., recommendation by other interviewees. All interviewees are industry-based: energy 3 persons, IT 3, metal 11, and paper 2. Eight respondents are female and 11 are male. They had 11 years of experience in knowledge work on average, ranging from 4 years to 20 years.

The data is handled using content analysis [22] to identify patterns in the anonymized transcripts. NVivo was used to manage and code the data [23]; each transcript was analyzed and coded, after which all data, including research memos, were combined. During the analysis, the data was approached from different angles to provide a basis to create a cohesive analysis and interpretation.

3 Findings

Figure 1 depicts five formed methods of influencing people through informal leadership practices: 1. Taking responsibility; 2. Helping and engaging; 3. Communicating; 4. Initiating change; and 5. Influencing management. In method 5, the other four methods apply also herein.



Fig. 1. Practical Methods to Increasing Influence of Informal Leadership

Aside from knowledge, informal leadership also benefits from domain experience and know-how, and related influence grows gradually, if allowed by the acting and perceiving process. The influence of an established expert with vast experience can even grow to a level of a manager. Knowledge means deep expert knowledge of the respective area, contemporary knowledge of the field, and relevant up to date knowledge about the organisation, its personnel, their situation and possibilities. Through this, the ability to see and sense possibilities, restrictions, and solutions, is created and exercised. This also builds the ability to exclude the wrong solutions and create backup plans. The process enfolds communication and cooperation on all levels treasuring informal relationships from the shop floor to networks of experts and management. Personal involvement in the process creates trust among peers, networks, and formal management.

3.1 Taking Responsibility

Taking responsibility for the joint work involves: a) leading by doing, b) coordinating joint work, c) taking the initiative to resolve issues, d) taking actions, if wrong directions are chosen, e) courage to challenge, f) ability to make decisions.

Taking responsibility relies on leading by example and coordinating joint work for the group’s growth. The action can be a response to fill existing leadership voids and to support formal management in resolving issues as a prerequisite for the success of innovation [24]. The role-taking can result from an intentional

setting of the group's best path. Thus, corrective actions either resolve ambiguous issues or redirect the group. Solutions are suggested and decided at the group level leveraging knowledge and experience. The actions are enhanced through distinctive courage to challenge active issues and make decisions in own responsibility area and for the group. This requires initiating and being open to change and engaging in discussions with opposing mindsets and opinions.

3.2 Helping and Engaging

Influence grows with connections to others. The practices used in helping and engaging are: a) being a person of whom others ask, b) helping others in work-related matters, c) enjoying helping others, d) being accessible to others.

A person's knowledge and experience are the basis for being a person whom others seek, which demonstrates influence. The work-related help is offered to others with joy. This sharing atmosphere and being accessible are the prerequisite for nurturing cooperation within the group. Eventually, constant engagement with others is done through helping, listening, asking and answering.

3.3 Communicating

Communication is crucial for the creation of the informal leadership influence, which is built in every aspect of the phenomenon. The key activities include: a) seeking everyone's opinion, b) utilising informal communication, c) engaging in dialogue, d) being open to influence, e) creating cooperation and trust.

Informal leadership relies on contacts with others at all levels of organisations or networks. Aside from the formal forums, informal relationships and discussions are momentous. Communication is based on dialogue that helps build a picture of the entity, creates shared meaning, and maintains social relations. One must know 'whom to ask'. These individuals must also be open to being influenced themselves i.e., actively seeking to exchange opinions. This two-way approach to communication aims to strengthen cooperation, which results in trust [25].

3.4 Initiating Change

As a change-oriented phenomenon, informal leadership advances and develops issues through: a) sharing the big picture, b) filtering issues based on knowledge, c) justifying, d) utilising all forums, e) creating collective understanding, f) active approach to engaging people to change, g) varying communication styles.

The change initialisation is built around a created and shared big picture, including future visions and possible consequences. This picture is utilised as the foundation for communicating the need for change. It includes strategic approaches as well as an understanding of resources and periods. The data is also filtered based on the receivers' level of knowledge and interests. Eventually, the change initiatives are presented in formal and informal forums of like-minded and opposing general stances, to justify the need for an initiative or change and create

collective understanding. The means to conduct this active clarification can be speaking to people in their 'own language', speaking of 'our' problem now and in the future, filtering and translating the information to the appropriate context, and creating explanatory presentations, sketches, figures, or calculations.

3.5 Influencing Management

Formal and informal leadership relations vary among peers, groups, and networks. Informal influence may also need to be aligned with formal power, which should back change initiatives. Thus, aside from the four approaches, special influencing practices are applied to formal leaders: a) painting the big picture, b) detailed justification, c) taking full responsibility, d) sourcing the right people.

Differences in expertise and low understanding between experts and formal leaders call for the big picture to be shared and painted. That includes the creation of a common language so that proposed initiatives are clarified and justified in terms of budget, strategy and functions. As an expert with a significant informal leadership influence might claim full issue ownership, they must convey the bigger picture aiming for an optimal technical and resource resolution. The expertise and experience are a good source of suggestions for formal management decisions. Proposals are shared with formal leaders, with whom the informal leader has an informal connection and joint understanding.

4 Discussion

As informal leadership is part of collectivistic leadership that aids renewal of organising work and reducing hierarchical systems [1,2], it enhances organisational functioning and innovation. As informal influence conciliates the stakeholder views, it initiates resolutions and improves cooperation. We analyse technical expert responses and identify the key practices that maximise the informal influence and deliver benefits for all. Our findings are grouped into 5 methods. The discussion considers the impact, benefits, drawbacks and key suggestions for implementation of each method.

'Taking responsibility' assumes a will to take part. The involvement leans on expert knowledge and the ability to implement decisions, or else they are unlikely to be made. The impact occurs when those who drive the process are willing to change and to make a change. Not all the decisions are group-based, but the power of the group shines through and the impact affects all. The relations are improved through cooperation based on group knowledge, which also creates a competitive advantage. The risk is that a party withdraws from a group and weakens its potential. The drawback is that individuals are exposed to criticism of the proposed ideas and decisions. Hence, the key criterion is an open and trusting environment that allows a constructive critique. The method benefits from a formation of a cooperative coalition by drawing in volunteers early.

The 'helping and engaging' assumes that there are common goals and working for a common good. The key internal impact is felt by the establishment of a

collaborative atmosphere that also motivates others to perform. The sense of empowerment opens paths for new ideas and new opportunities. Each success feeds confidence, which secures staff retention through an increased sense of belonging. This method drives individual and organisational growth. The key risk is a possible poor involvement due to a lack of obvious direct short-term personal benefits. If there is a lack of active participation, the organisation could find itself stuck in the middle between the formal and informal worlds. To enhance the impact, growth opportunities should be identified and provided to highly engaged and motivated employees. At a group level, the organisation should secure safe (mental and physical) spaces to create collaborative work.

The ‘communicating’ method is primarily focused on building a reliable and sustainable network that influences a wide stakeholder set and improves trust. Dialogue is what creates shared meaning. This method expands the group knowledge, improves personal and business relationships, and develops a shared understanding by integrating different perspectives. The associated risk is that not all involved parties are willing to share knowledge, as some might practice the ‘information is power’ approach, which inflicts difficulties in terms of reaching a shared understanding. The key to the success of this method is the creation of an open and trusting environment that nurtures cooperation.

The ‘initiating change’ method relies on apt expertise, as experts see the advances in the science and create an impact by wishing to deliver the best quality. The positive outcome of this method is seen in improvements in quality through the creation and delivery of the best results. The interviewees nurture their ambitions about topics and their knowledge contributes to organisational benefits. The key associated risk is that the desired changes are not propped with adequate resources. This method can be enhanced by transparently sharing the big picture, hence enhancing the mutual understanding across disciplines.

Management can be influenced by four complemented methods. As the supervisors are aware of informal leaders, they empower those if the interests are aligned. The alignment is ensured through justification. If there is no room for improvement, the results have a higher potential for value creation, as those who excel in their work have the potential to create impactful results in terms of unknown unknowns. The key risk is the lack of backing and trust for the experts, thus muting their ideas. Such a recurring cycle drives experts away. It is their inner motivation that makes them try and keeps them in the organisation. The innovative environment offers them room to grow. The key to this process is to nurture the workforce, to offer them opportunities to be heard and their ideas to develop. Hence, collective leadership must be implemented.

5 Conclusions

As the expanding literature on informal leadership is far from complete, we add to the pool of knowledge by analysing practices informal leaders use to gain and utilise influence in groups, networks and organisations. Our key finding is that informal leadership can be enhanced when motivated individuals are trusted and

empowered to make and implement decisions. The trust expressed in an open environment enhances individuals' identification with the organisation, which reduces staff turnover. The openness eases alignment between personal motivations and the organisation's strategy. The process relies on the expertise to proactively implement changes and resolve the unknown unknowns in a structured manner. We find that informal and collective leadership contribute to organisational growth through utilising available expertise i.e., people hired for their skills should be allowed and encouraged to use their skills.

This work contributes to the SPI manifesto's principles and values [26] by enhancing the involvement of people and cultures and focusing on these needs. Our objective is to enhance learning organisations and their adaptation to changes.

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