



Article Configurational Paths of Leadership Competency Shortages and 4.0 Leadership Effectiveness: An fs/QCA Study

Anna Kwiotkowska¹, Radosław Wolniak^{1,*}, Bożena Gajdzik² and Magdalena Gębczyńska¹

- ¹ Department of Organization and Management, Silesian University of Technology, 41-800 Zabrze, Poland; anna.kwiotkowska@polsl.pl (A.K.); magdalena.gebczynska@polsl.pl (M.G.)
- ² Department of Industrial Informatics, Silesian University of Technology, 40-019 Katowice, Poland; bozena.gajdzik@polsl.pl
- * Correspondence: radoslaw.wolniak@polsl.pl

Abstract: This study examines various leadership competency shortages, such as shortages in strategic perspective; critical analysis and self-vision; managing resources, communication, and achieving results; empowering and developing teams; self-awareness and intuitiveness; and sensitivity-all of which influence problems with 4.0 leadership effectiveness. The effectiveness of 4.0 leadership was assessed in the article in relation to the effectiveness of the leadership style and its relevance to Industry 4.0. The data sample considered 86 small- and medium-sized manufacturing enterprises in Poland. The analysis used a fuzzy-set qualitative comparative analysis (fs/QCA) methodology, which allows for identifying a configuration of causes that lead to the analysed outcome. The innovativeness of the research carried out lies in the fact that the authors examined the relations of deficiencies (gaps) of certain features attributed to leaders which are dependent on each other and which determine the effectiveness of the leader. The results support the argument that different configurations of leadership competency shortages lead to low 4.0 leadership effectiveness. Almost all configurations had a low leadership competence related to strategic perspective. The position we present regarding the configurations of competency shortages and leadership effectiveness is important for considering the development of the profile of leaders in organizations. The research presented complements the characteristics of leaders in the context of building an Industry 4.0 organization.

Keywords: leadership competencies; leadership effectiveness; 4.0 leader; industry 4.0; fs/QCA

1. Introduction

The main part of the international literature about leadership concentrates on the case of positive leadership. The authors try to respond to the question of what the traits of good leadership are, what to do to achieve good leadership, and what leaders should do to be effective. Only a small part of the studies addresses the traits of bad leaders. We think that in this field there is a research gap, especially in the case of Industry 4.0 conditions. Based on the new conception of Industry 4.0 leadership, it would be interesting not only to know about the main competencies of the leaders but also about leadership competency shortages. It would be useful because having knowledge of competency shortages enables us to know which competencies leaders lack in the face of the ongoing changes. We think that the problem is not well known because researchers mainly concentrate their analysis on key positive competencies of leaders. However, we think the problem of competency shortages represents a very interesting and scientifically important research gap, especially in the Industry 4.0 environment. We should know what these competence gaps are in order to enable current and future leaders to be aware of this area and to take appropriate follow-up action. On the basis of the research gap identified, we formulated the main goal of our research, which is: the identification of leadership competency shortages and their configurations in connection with low leadership effectiveness in the area of Industry 4.0. To achieve this goal, we stated the following research questions:



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- 1. What are the requirements for Industry 4.0 leaders in terms of their competencies?
- 2. What are leadership competency shortages for low leadership effectiveness?
- 3. What are configurations of shortages of leadership competencies?

The importance of the causal complexity underpinning the configurational approach was outlined by Ragin (1987) [1], noting that causality is often conjunctive, equal, and asymmetric. Within the last year, however, empirical studies using the configurational approach have used multiple regression methods including additive, symmetric, and univariate effects [2,3]. In response, we employed the method of fuzzy-set qualitative comparative analysis (fs/QCA) to study configurations of complex causality. In this way, we could demonstrate how it might overcome the relations between theory and methods. We used qualitative comparative analysis to investigate the problem and research questions from our survey based on a sample of 86 small- and medium-sized manufacturing enterprises in Poland. The QCA method is based on set theory and Boolean algebra. The method is recognized and structured to identify configurations of conditions that are associated with an outcome of the analysed problem [4]. In the presented paper, we make three contributions to the literature. First, we propose a more comprehensive theoretical framework that can be used to investigate how combinations of leadership competency shortages are associated with leadership effectiveness, especially in the area of Industry 4.0. Second, we discovered four configurations that lead to low 4.0 leadership effectiveness. Third, we extend the scope of leadership research by analysing competency shortages in conjunction with leadership effectiveness.

The paper is structured as follows. We begin with an Introduction, followed by Section 2, which presents a brief literature review on poor leadership and the main sources. Section 3 provides information on the study method, including data collection, measurement, and QCA analysis. Section 4 presents the results of our investigation. The discussion of our findings is in Section 5. Section 6 includes conclusions and limitations as well as directions for future research.

2. Literature Review

Each organization chooses its path to change, including in its quest for Industry 4.0 [5]. Leaders have been and are the driving force behind change. We should know the traits and competencies of bad leaders to know what good leaders should avoid [6]. Every industry also has different requirements and expectations for leaders. The specificity of business activities determines the competencies and skills of leaders [7,8]. Building the ecosystem of Industry 4.0 companies to learn through cooperation includes some significant elements such as face-to-face interaction, positive correlation, interpersonal abilities, and acting in groups. The conception can also provide the chance to meet the needs of participants of the group and can also be useful for strengthening the bonds between them [9–12].

Without appropriate leadership skill organization, managers may have problems with performance. For example, poor communication affects employee performance [13]. Poor leadership can lead to a decline in the performance of the leader because it has a negative impact on the productivity of the organization. Bad leaders also have problems with retaining high-performing people within the organization. One of the most important consequences of bad leadership is connected with the failure to meet the goals of an organization [14]. Lack of vision in a leader can result in a lack of focus in the organization. Without focus, an organization can remain too long without any significant change. A well-shared vision should empower all employees through connecting them to the purpose of the particular organization [15].

If leaders have problems with communicating the vision, the workers do not know the future of the organization [16]. This leads to a low level of motivation; the workers are not well enough mobilized to move the organization forward. The authors' current aim is to find out what competences leaders should have under Industry 4.0 conditions [17]. Industry 4.0 refers to the Fourth Industrial Revolution, including the rapid transformation in the production and service processes of the manufacturing system in today's economy [18–20].

Industry 4.0 integrates and digitizes processes vertically across the entire organization. According to the classical conception of Industry 4.0, in order to implement it within an enterprise the following areas should be considered [21]: managing complex systems, standardization, safety and security, comprehensive communication structure, resource efficiency, regulatory framework, work organization and design, continuous professional development, and training.

A management specialist [22] has written that the new business conditions in Industry 4.0 environment require a new management style. Digitalization leads to the transformation of many processes within an organization such as production, logistics, human resource management, and communication [23]. Organizations need to adapt their capabilities to handle new Industry 4.0 challenges. The frameworks of Industry 4.0 are very broad, from digitalization to cyber-physical systems. The variety of technologies causes companies to realize new investment (new projects) in segments of their business activities [5]. The main necessity for leaders under Industry 4.0 conditions is to integrate knowledge in such a way as to lead their company towards success. This means that a high level of collaboration and extensive creativity is required to achieve outward and inward integration of technology [24]. The main challenge of Industry 4.0 from a human resources point of view is connected not only with the technology itself but with the lack of digital culture and digital skills in the organization [25].

That is why many new conceptions of leadership or the leadership matrix have been found. One of them is a 4.0 leadership matrix which distinguishes four types of leaders under new conditions [22]: the 4.0 social leader, the 4.0 digital leader, the 4.0 freshmen leader, and the 4.0 technological leader. Some researchers in the last four years have tried to find out what the competencies or key skills are for Industry 4.0 leaders. The main skills are as follows [26,27]: contextual intelligence, narratives of the paradox, global intelligence, agility, powerful emotions, pragmatic ethics, emotional intelligence, knowledge management capability, systems thinking, ecosystem intelligence, constructive imagination, and supportive behaviour. All these conceptions of Leadership 4.0 concentrate on good Industry 4.0 leadership [28]. However, we believe that it would be interesting to find out what the leadership competency shortages are, because some scholars suggest that, at present, leaders are not properly prepared for the new Leadership 4.0 conditions. They should be fully prepared for the new condition because knowledge and experience of all the ways of conducting business activities are still not enough to achieve success in the Industry 4.0 environment [29,30]. In this situation, we think that knowledge of the bad traits in 4.0 leaders is very important for achieving an effective transformation of business under the new conditions.

In the literature, researchers have discussed many types of leadership competences depending on typology. Based on in-depth analysis of the literature on the subject, we selected the following competencies: strategic perspective; critical analysis and self-vision; communication; developing and empowering teams; managing resources and achieving results; sensitivity; self-awareness and intuitiveness; and influence, which will be further analysed in the empirical part of the article. Importantly, these competencies have so far been analysed separately in the literature. We attempted to analyse them simultaneously and as a whole in conjunction with leadership effectiveness through a configurational approach. Leadership competences can be defined as the combination of knowledge, traits and attributes, and skills that collectively enable someone to perform a given job [31]. According to the competency framework prepared by OECD, the ability to manage resources is one of the most important leadership competencies. They define managing resources as understanding human, financial, and operational resource issues in order to make proper decisions aimed at building and planning efficient workflow and improving general organizational performance [32]. Sayed and Edgar (2014) have also found that managing resources is a very important leadership competence [33]. Furthermore, achieving results is also a very important leadership competence category.

We can include in this category sub-competencies such as analytical thinking, achievement focus, drafting skills, flexible thinking, and teamwork [32]. The focus on achievement connects with generating results and increasing the performance of an organization within a given deadline. Strategic thinking and vision are useful for leaders because they are frontrunners of change in an organization [34]. Strategic leadership involves dealing with the problem of how to respond to changes in the organization, senvironment [35]. Strategic thinking also lies in the shift from the vision of the organization, which is viewed as a fragmented society that is composed of some separate parts. Those parts compete for resources to exist and deal with other counterparts as a comprehensive system that integrates each part in a relationship with all the others [36].

Another important type of leadership competency is connected with the ability to build teams. Team building refers to those activities which focus on the improvement of the effectiveness of a team by developing various types of working relationships, better alignment among members, and improved communication and trust [37]. Team building should be a managerial goal to improve the communication and interpersonal skills of the leaders [38]. According to Ashley and Reinter-Palmon [39], the self-awareness of a leader is connected with the recognition of internal and external standards, the recognition of one's positive and negative abilities, and one's introspection and self-reflection. The awareness of ourselves was called super-vision by Torbert [40]. This super-vision enables us to reflect at the moment on what goes on inside and around us [41]. Sensitivity is a type of competence that is linked with cultural awareness. People with different backgrounds, ideas, values, beliefs, languages, and religions have different sensitivities [42]. In research by Mirhosseini, sensitivity with influence, intuitiveness, and conscientiousness was found to be integral to the emotional dimension of leadership [43]. Intuitiveness was also a topic of Erenda's research on leadership. He found that the level of intuitiveness increases over years of leadership and with a higher level of education in the leader [44].

With the popularisation of the concept of Industry 4.0, research on the skills of leaders to inspire and persuade employees to change has been growing in importance. Every industrial revolution requires leaders with distinctive characteristics. There were many charismatic leaders during the First Industrial Revolution.

A charismatic leader can influence the attitudes of other participants in events. In the Second Industrial Revolution, leadership needed to be directive, with leaders adopting a top-down style. In the Third Industrial Revolution, leadership was transformational, in which all participants (both the leader and the rest of the group members) influenced each other by appealing to values that were important to both parties. In this model, the leader's leadership style is based on seeking to change values within the organisation and achieve goals by making colleagues follow his vision. In the Third Industrial Revolution, this vision centred around the automation of production and computerisation [45].

In the Fourth Industrial Revolution, the leader has many characteristics that build on the existing classification: cognitive skills, interpersonal skills, business skills, and strategic skills. This distribution of characteristics was the subject of a study by Guzmán et al. [46]. The researchers found that in the first group, speaking, active listening, active teaching, and critical thinking are particularly useful. In the second group, interpersonal skills are important, namely persuasion and social perception. In the third business group, leaders are needed who are oriented towards cooperation, participation, and decentralisation. Leadership should encourage employees to make decisions and to experiment in creating an agile and responsive network culture. In the last group, the emphasis is on the identification of key causes, system evaluation, and solution appraisal [46].

The very interesting problems connected with leadership relate to what has been called sustainable leadership—the leadership concentrated on environmental and social issues. This interesting concept was described by Iqbal et al. [47] based on research in Pakistan and developed by the authors in subsequent publications [48,49]. The sustainable approach to human resource management and leadership refers to a concept that links the idea of sustainability with the soft approach to human resources and leadership [50]. This

type of sustainable leadership is recommended as highly effective leadership for dealing with many environmental challenges [13]. Sustainable leaders can inspire and motivate workers within their organization, and this could lead to continual improvement of the whole organization [51].

According to international research, leaders have a significant influence on their organizations [52]. They also have a visible impact on the level of innovativeness of the organization [48,53–56].

To the cited list of leadership qualities in Industry 4.0, technical and digital skills should be added, as leaders must deal with and use the technologies required by Industry 4.0. A 4.0 leader should have the skills to navigate the digital world and use the latest communication tools. Oberer and Erkollar, describing the characteristics of a leader in Industry 4.0, describe the skills profile of a digital leader [57]. The authors presented a matrix in which the x-axis was concern for innovation/technology and the y-axis was concern for people. The result of the analysis was the conclusion that the 4.0 digital leader forms the highest achievable level in the Leadership 4.0 matrix. The 4.0 leadership style is characterised by a fast, supra-hierarchical, team-oriented, and collaborative approach, with a strong focus on smart innovation. An important aspect of leadership competence that is highly relevant in the Industry 4.0 era is the ability to manage people from different cultures. This aspect of leadership competence is called "cultural intelligence" [58]. The concept of Emotional Quotient (EQ) intelligence fits perfectly into this stream of leadership in Industry 4.0. Leaders who read their feelings correctly lead their team better. They are aware of their feelings when making important professional and business decisions [59]. The concept of cultural intelligence was analysed on the example of China by Charoensukmongkol [60,61]. The concept of cultural intelligence was also analysed by Kim and Dyne [62] and other authors [63]. The concept of cultural intelligence was first introduced in the international literature by Earley. According to him, it is a new set of skills that can act as an explanatory tool for success in the international context [64,65]. Next, van Dye et al. conceptualized this concept as the so-called individual capability to detect, reason, assimilate, and act on cultural cues appropriately in cultural diversity situations [66].

3. Underpinning Theory

Good leaders find paths and strategies to do their business activities right. They manage the organization and encourage, rather than resist, change within it. Because of this, effective leaders have both proficiency and integrity [12,67]. By contrast, bad leaders are corrupt, toxic, or simply misguided, which can damage the welfare and the interests of the stakeholders [68]. They inflict problems on their organization and on the individuals who follow them, such as employees and shareholders. Ineffective leadership can be defined as directly contrasted to successful leadership. Ineffective leadership involves lacking ethics and engaging in dirty tricks that can harm an organization over the long term [69]. Allio (2007) described bad leaders and the influence they have on organizations [70]. Where bad leadership may come from is described in Table 1.

According to Kellerman (2004) [78], ineffective leadership has two dimensions. One is connected with ineffective efforts, and the second with an immoral side. There has been some research about good and bad leadership styles. Kampen (2015) [79], for instance, points out that some types of leadership, such as neglectful or laissez-faire leadership, can be destructive for an organization. Kelloway et al. (2004) distinguish two types of bad leadership: abusive leadership and passive leadership. The first occurs when individuals occupying a formal leadership role engage in aggressive or punitive behaviour towards their employees.

The second type is connected with avoidance and a lack of intervention until problems become very serious [80]. Other types of bad leadership were analysed by Burns (2017) [81]. He distinguished so-called destructive leadership, abusive leadership, and toxic leadership. Destructive leadership is systematic and repeated behaviour by a leader, manager, or supervisor that violates the legitimate interest of the organization by sabotaging or undermining the organization's goals, tasks, motivation, resources and effectiveness, and well-being, or the job satisfaction of employers [82]. Abusive leaders are characterized by injurious actions that include public ridicule, angry tantrums, rudeness, favouritism, non-contingent punishment, and coercion [83,84]. Toxic leadership is a process in which leaders, because of their destructive behaviour and also because of their dysfunctional personal characteristics, can inflict serious problems and enduring harm on followers and non-followers within their organization [85].

Table 1. The main sources of bad leadership.

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Personality disorder	The problem of many leaders is narcissism, a typical, common syndrome in leaders. It leads to a need for admiration and a lack of empathy. It could be also connected with an overdevelopment of expectations. This type of leader takes advantage of others to achieve their own goals. Sometimes the leader thinks that their uniqueness excuses them from the ethical codes that oblige others. Power can also corrupt them.
Akrasia, self-inertia	Akrasia can be defined as a weakness of will. This type of person knows the right course of action but nonetheless chooses the wrong one. People with akrasia can also fall prey to a lapse in judgment. They are often suboptimized because try to avoid risks and think that they have not fully evaluated all the implications and consequences of their actions.
Misguided values	Some leaders choose their own interests above all else. They act in ways that serve their own purposes.
Avoidance of reality	Leaders who emphasise only short-term performance may have problems obtaining good results in the long-term. They can focus too much on imminent crises and ignore future changes until it is too late. Often they are reluctant to accept change, such as technological shifts or changes in consumer preferences.
The complicity of followers	Followers also have a significant influence on leaders. Followers can abdicate responsibility as well as become sycophants or toadies. Too big an influence of followers on leaders can be a problem.
Life leaders	Leaders may remain in their position for too long until no one can believe that there is anyone else who could replace the existing leadership within the organization.
No leadership	Some organizations operate without any leader or director. In this situation the organization is leaderless.
Micro leadership	Ineffective leadership often appears through acting as a partial leader. In this case the leader thinks small and ends up overwhelming workers with unimportant tasks. This could lead to a decrease in their enthusiasm and can become a source of everyday problems for subordinates.
Dismal leadership	This form describes leadership that is gloomy in its outlook. In such a situation negative leaders can create negative days and a negative atmosphere for employees.

Source: own work on base: [70–77].

Another division of poor leaders distinguishes the following traits of poor leaders: incompetence, rigidity, intemperateness, callousness, corruptness, insularity, and evil [86]. Tehreem et al. (2013) try to find out what the perceptions are about the causes of poor leadership. They found that bad leaders do not create a cooperative environment, are not able to identify new and creative ways to solve problems, are not able to create an environment where differences of opinion can be voiced, are not honest, and are not trusted by employers. They think that the main reason for bad leadership is connected with a lack of knowledge about leadership, as well as with selfishness and immoral habits [87].

Burns focused not so much on the skills of poor managers but on their bad behaviour. He found the following commonalities in the behaviour of bad leaders [81]. They degrade, demean, marginalize, incite employees to chastise one another, and exhibit favourites; they engage in ridicule, social exclusion, mocking, ostracizing, disenfranchisement of employees, and harassment; they are emotionally volatile, use physical acts of aggression or coercion, blame others for the leader's mistakes, threaten employees' job security, pit in-group members against out-group members, ignore comments/ideas, force people to endure

hardship, are deceptive/lying, stifle dissent, take credit for others' work, act disengaged, are rigid, and present toxic agendas as noble visions.

4. Data and Method

To explore the relationship between leadership competency deficits and their configurations in influencing low 4.0 leadership effectiveness, fuzzy-set QCA was adopted as the research approach [88,89]. The QCA was initially used in the case of comparative political analysis, and then was developed into a comprehensive research approach that could be increasingly used in management research. The method can be used to identify configurations of conditions associated with an outcome [1,2,4]. As evidenced by researchers dealing with this subject, many theoretical arguments used in management research are best stated in research in terms of sets and their relations. This approach is superior to viewing them as correlations or net effects [2]. Unlike other approaches such as conventional regression-based modelling, in which researchers think about variables as competing in explaining the variability of outcomes, in the case of the QCA method one seeks to show how variables combine to produce outcomes. Analyses using qualitative comparative analysis (QCA) in recent years have been successfully performed in many studies in the social sciences (e.g., [43,44,88]). The configuration approach used in this paper is a method that can be used to understand relationships between different variables which are complicated and interdependent. The central point of the configurational approach is the two of concepts of asymmetry conjunction and equifinality. Conjunction in this method emphasizes that outcomes rarely have a single cause, but rather tend to result from the interdependence of multiple conditions [88,89]. Asymmetry allows for the causal variables leading to an outcome to be different from others leading to the absence of the outcome [89–91]. Equifinality refers to a particular situation where a whole system can reach the same final outcome from different initial conditions, and this outcome can be obtained by a variety of different paths [92]. Moreover, both equifinality and causal asymmetry may be interrelated. This means that equifinality may change depending on the levels of outcome. Going through the different levels of performance allows for seeing that there can be different sets of equally effective configurations [92–95].

The interest when the QCA method is used centres on the set of relations existing between shortages of leadership. The QCA method seeks to identify necessary and sufficient conditions. Those conditions are associated with the outcome of interest, which in this paper is low 4.0 leadership effectiveness [88]. The advantage of using the configurational approach is partly that it facilitates the usage of complex models. Moreover, it should be mentioned that the complex configurational models are not easy to specify a priori. The configurational approach is well adjusted to inductive inquiry, in which the theory is used to identify a set of factors to study; the QCA method can then be used to find the empirical configurations of relevant factors. This approach is adopted in this paper. Accordingly, the output from the configurational modelling was used to achieve new insight into the conditions associated with the outcome of the analysed problem. Using this approach, it can be analysed conditions that may be necessary or sufficient for the outcome, which is 4.0 leadership effectiveness.

4.1. Data Collection

The overall data collection period was from October 2019 to February 2020. Data were collected from 86 small- and medium-sized manufacturing enterprises located in the Silesian voivodeship, affiliated with the Regional Chamber of Commerce in Katowice. The research was realized in the segment of SMEs. The survey was limited to employees and managers of these organizations. A total of 79 responses were received, of which 9 were incomplete questionnaires that were removed (due to missing data or ambiguous responses), resulting in 70 usable questionnaires, representing a response rate of 81.39%. Table 2 summarizes the main characteristics of the sample.

Category		Statistic	
Enterprise level		≤10 (8.9%)	
	Enterprise age	11–20 (35.2%)	
		≥21 (55.9%)	
		<10 (16.2%)	
	Enterprise size (employees)	<50 (38.9%)	
		<250 (44.9%)	
		Production of food products (62.7%)	
	Industry	Production of beverages (23.3%)	
		Others (14%)	
Respondent level		Female (12.6%)	
	Gender	Male (87.4%)	
	Age	Mean: 49.3 years	
		Manager (24.2%)	
	Position	Subordinate manager (33.1%)	
		Specialist (22.3%)	
		Other (10.4%)	
	Working experience of respondents	2–5 years (9.4%)	
		6–10 (65.4%)	
		More than 10 years (25.2%)	

Table 2. Characteristics of the research sample.

Source: own study.

4.2. Measurements

All eight conditions connected with the usage of the QCA method (critical analysis and self-vision; communication, strategic perspective; achieving results; developing a team; managing resources; empowering a team; self-awareness and intuitiveness; sensitivity and influence) were measured using five-point Likert-type scales. The scales ranged from 1 (strongly disagree) to 5 (strongly agree). All measures used in the paper were derived from established scales in the management literature.

The study used 10 interviews in various companies to evaluate the questionnaire according to interpretability and ease of completion. Several items had to be slightly modified based on managers' answers. Regarding 4.0 leadership effectiveness, the questionnaire was based on research conducted by Sarwano and Bernarto (2020) [96] and by Ansari et al. (2004) [97]. Two dimensions were used: managers' performance and workers' satisfaction (Cronbach's alpha = 0.82). Managers' performance in this research was measured with a four-item scale created based on 4.0 leader performance indicators proposed in the literature by several authors (e.g., McManus et al., 2007 [98]; Parkes and Borland, 2012 [99]). Workers' satisfaction in this research was measured with a three-item scale adapted from Mulki et al. (2015) [100]. The leadership competencies questionnaire (LDQ) published by Dulewicz and Higgs (2005) was adopted [101]. The operational definition of dimensions used in this research can be found in the original work by Dulewicz and Higgs (2005) [102]. In the present study, the fifteen variables from the original LDQ were regrouped to seven by exploratory factor analysis using empirical data. The seven consecutive variables included, respectively: (1) critical analysis and vision (Cronbach's alpha = 0.85); (2) strategic perspective (Cronbach's alpha = 0.73); (3) communication, managing resources, and achieving results (Cronbach's alpha = 0.81); (4) developing and empowering teams (Cronbach's alpha = 0.77); (5) self-awareness and intuitiveness (Cronbach's alpha = 0.76); (6) sensitivity (Cronbach's alpha = 0.85); and (7) influence (Cronbach's alpha = 0.86). All items used to assess leadership competencies and Leadership 4.0 effectiveness are presented in Appendix A.

4.3. QCA Analysis

The QCA method in the typical research follows a series of steps (e.g., those in Schneider and Wagemann 2010, 2012 [101–103], which are shown in Figure 1. Due to the relative newness of the QCA method in the field of management research, this paper presents each step of the method more generally before presenting a specific analytical process.



Figure 1. QCA data analysis process. Source: Generally accepted methodology from: [1,4,89,101–104].

Step 1 of the analysis: calibration. The QCA method first requires a comprehensive transformation of raw data into prepared set membership scores. This process is referred to in the literature as "calibration" [89]. This calibration in QCA requires the setting of three important anchor points that can define the case's full membership of the set, the point of maximum ambiguity between membership and non-membership and also full non-membership. These anchor points should be theoretically motivated and based on comprehensive criteria external to the data [89]. Using this convention, the fuzzy set membership scores range from 0 (full non-membership) to 1 (full membership), with 0.5 identifying the threshold between membership and non-membership [89]. Using this approach in the case of medium n studies, raw data are normally transformed into set membership scores. Those scores are called the "direct method". They use a logistic function that is needed to fit the data between three important quality anchors [89,103].

In this research, the calculation of the crossover points is detailed below so as to give information about meaningful thresholds. This threshold has a significant advantage over the conventional use of indices in regression analysis, which tends to be centred only on sample means [67,85]. In this paper, the full details of the means and standard deviations, as well as details on the transformed measures, are given in Table 3.

The transformation function in the fs/QCA 2.5 software package was used in our paper. The log odds of full membership in the process of transforming our original interval scale variables into continuous fuzzy membership scores were used [89,104,105].

Step 2 of the analysis: analysis of individually necessary conditions. In this research, the second step was to analyse whether the individual conditions are logically necessary for the outcome of this problem. This step is necessary to avoid later problems connected with the possibility of wrongly assuming relationships of logical necessity [103]. Moreover,

it should be mentioned that a causal condition is necessary if in the research the instances of an outcome constitute an important subset of instances of the causal condition [89]. This means that necessary conditions are those factors that can be found in all instances of the outcome of the studied problem. In the case of this analysis, the consistency score suggested by Ragin was used [89]. In Ragin's conception, a consistency score of 1 indicates that a causal condition of the problem fulfils the criteria across all the cases. Moreover, the more cases fail to meet the consistency connected with a particular criterion, and the larger the distance from meeting the criterion, the further the consistency score will fall below 1. Typically, a condition, or a combination of conditions, can be called necessary or almost always necessary when the consistency score exceeds the threshold of 0.9. Table 4 shows that none of the analysed causal conditions (capitalized) or their negation (not capitalized) exceed that 0.9 threshold for the outcome—4.0 leadership effectiveness.

Table 3. Means, standard deviations, and calibration of measures into fuzzy sets.

Measures (Coding)	Mean (Standard Deviations)	Calibration into Fuzzy Sets
4.0 leadership effectiveness (L)	3.4 (0.5)	We calibrated fully in (low 4.0 leadership effectiveness) above the 25th percentile; fully out (high 4.0 leadership effectiveness) below the 75th percentile; for the crossover point, we chose the 50th percentile.
Critical analysis and vision (CV)	3.2 (0.5)	We calibrated fully in (high critical analysis and vision) above the 25th percentile; fully out (low critical analysis and vision) below the 75th percentile; for the crossover point, we chose the 50th percentile.
Strategic perspective (SP)	3.0 (0.5)	We calibrated fully in (high strategic perspective) above the 25th percentile; fully out (low strategic perspective) below the 75th percentile; for the crossover point, we chose the 50th percentile.
Communication, managing resources, and achieving results (CMA)	3.1 (0.5)	We calibrated fully in (high communication, managing resources, and achieving results) above the 25th percentile; fully out (low 4.0 communication, managing resources, and achieving results) below the 75th percentile; for the crossover point, we chose the 50th percentile.
Empowering and developing teams (ED)	3.3 (0.5)	We calibrated fully in (high empowering and developing teams) above the 25th percentile; fully out (low empowering and developing teams) below the 75th percentile; for the crossover point, we chose the 50th percentile.
Self-awareness and intuitiveness (SEI)	3.0 (0.4)	We calibrated fully in (high self-awareness and intuitiveness) above the 25th percentile; fully out (low self-awareness and intuitiveness) below the 75th percentile; for the crossover point, we chose the 50th percentile.
Sensitivity (S)	3.2 (0.5)	We calibrated fully in (high sensitivity) above the 25th percentile; fully out (low sensitivity) below the 75th percentile; for the crossover point, we chose the 50th percentile.
Influence (I)	3.1 (0.4)	We calibrated fully in (high influence) above the 25th percentile; fully out (low influence) below the 75th percentile; for the crossover point, we chose the 50th percentile.

Source: own study.

Step 3 of the analysis: the truth tables and logical minimization. To identify combinations of conditions that are logically sufficient to produce a result, so-called truth tables must be constructed in the third step. Those tables consist of two k rows, where k is the number of causal conditions which can be used in the analysis process. Each row of the mentioned matrix is associated with a specific combination of particular attributes, and also with the number of cases. Those cases have a high degree of fulfilment in the case of these conditions (with a fuzzy set membership score greater than 0.5). In the next step, the analysis based on the frequency and consistency criteria was refined [89]. A frequency cut-off should also be used in the analysis to ensure that the evaluation process of fuzzy set relations occurs only for those examples of configurations that can be considered as sufficiently relevant; this means exceeding a certain minimum number of instances, set at three [106]. In the next stage with our cut-off set at three, the set of configurations should be analysed with three or more cases of consistency. This consistency can be estimated using the consistency coefficient for each configuration for a given result. The consistency coefficient can be defined as the proportion of cases which are consistent with the result. This number is calculated by dividing the number of cases that show the same configuration of attributes and the result from the number of cases. Those cases show the same combination but no the same result [89]. The resulting number of cases is analogous to a fuzzy conditional probability. In this case, numbers that are closer to 1 indicate a higher probability that a given configuration leads to an outcome [107]. According to Ragin's conception [89], a value of 0.80 is considered sufficient to indicate that in a particular situation a given configuration of causal conditions is reliably associated with the results of interest. After determining the frequency and consistency thresholds, a value of 1 could be used for those combinations in the truth table which are above the 0.80 consistency level and the frequency point of three. The combinations which are below these values are assigned 0. In this analysis, once the rows of the truth table are sufficient for the result to be identified, a logical minimisation process is used to obtain a more parsimonious general solution term. This process should be conducted using Boolean algebra. Logical minimization in the presented analysis was performed using the Quine–McCluskey algorithm which is implemented in the standard analysis procedure in the case of the fs/QCA software package. The QCA method uses truth table minimization, which can usually identify three kinds of solution, ranging from the most complex to intermediate, and in the lost step to the most parsimonious. Following Ragin's recommendation, the intermediate solution was interpreted. This solution provides the optimal solution between the complex and the parsimonious solutions [89]. In the next stage, the resulting combinations in this approach describe a sufficient blend of configurational paths or conditions leading to the outcome. The empirical validity of each configuration used was assessed by measures of coverage. This coverage means indicators of the percentage of cases that follow a given configurational path to the outcome [1,2,89]. If multiple combinations in the particular analysis are sufficient for the outcome, the analysis should be conducted. Raw coverage indicates the relative importance of a configuration. The unique coverage indicates which cases of the analysis are explained only by that solution [89]. In this research, it should be noted that coverage statistics are similar to R-squared in regression [2].

Step 4 of the analysis: robustness checks. The final step of the analysis involved a series of robustness checks. There is a discussion in the literature on appropriate robustness tests for QCA method analyses, but it has not yet been well developed in published empirical studies on QCA in management [4]. In this research, the robustness of the results obtained for choices made in terms of calibration of frequency thresholds, leadership competencies, and levels of consistency was examined [89,103]. In the case of these calibrations, several turning points for the leadership competency score were tested (2.5, 3, and 3.5), and based on this analysis it was found that changes in turning points had only a marginal effect on the solutions and the results obtained. Most of the identified primary configurations were either identical or very similar to the baseline result obtained. For the frequency threshold, as mentioned earlier, the limit was set at three cases. In this research, the frequency thresholds were set to two and four cases as a robustness test. Using this approach, the results were very stable, but it should be mentioned that relaxing the threshold to two resulted in a slight increase in the number of solutions generated. Moreover, it should be known that all solutions were logically substitutable. In the research presented for achieving consistency levels, the level of consistency in the analysis process was changed while keeping all other values constant. In this situation, changing the threshold to a more demanding level (0.85) led to a slight decrease in the number of configurations obtained from the results, and changing them to a less demanding level (0.72) led to a slight increase in the number of configurations obtained. After having performed all the robustness checks, it was concluded that this analysis was robust; no significant deviations from the results presented were found.

Condition —	4.0 Leadership Effectiveness			
	Consistency	Coverage		
CV	0.51	0.42		
CV	0.64	0.58		
SP	0.53	0.45		
sp	0.58	0.52		
СМА	0.45	0.40		
cma	0.68	0.59		
ED	0.74	0.43		
ed	0.63	0.57		
SEI	0.48	0.42		
sei	0.60	0.57		
S	0.71	0.47		
s	0.57	0.68		
Ι	0.77	0.32		
i	0.55	0.43		

Table 4. Analysis of necessary conditions for low 4.0 leadership effectiveness.

Capitalized letters indicate the presence of conditions. Lower case letters indicate the absence of conditions. Source: own study.

5. Results

Our analysis yielded four combinations of conditions for low 4.0 leadership effectiveness. Table 4 summarises our four solutions and their statistics that are sufficient for the outcome, employing the notation of Ragin and Fiss (2008) [89]. In line with previous QCA studies, these solutions can be interpreted as alternative configurational paths or "recipes" related to the outcome. The bottom part of Table 5 shows the overall consistency and coverage results for the configurations as a whole, as well as the raw coverage and the unique coverage for each configuration.

Overall, our table shows high overall consistency scores, indicating that the sufficient conditions were met and that the causal relationships are in place for each solution. Moreover, the overall coverage scores of the solutions in each table are good—greater than 0.5 [89]. We can now seek to understand how the different configurations of shortages of leadership competencies may lead to low 4.0 leadership effectiveness. The overall solution reveals a total of four configurations associated with low 4.0 leadership effectiveness, with an overall consistency index of 0.83, indicating that all four configurations should be treated as equally valid, as each provides a sufficient solution for low 4.0 leadership effectiveness. Taking each configuration in turn, configuration C1 (raw coverage 0.18) indicates that low 4.0 leadership effectiveness is due to a complete lack of leadership competencies related to strategic perspective, as well as to communication, resource management, achievement, and influence (including motivation and conscientiousness), despite the presence of high sensitivity competences. Configuration C2 (raw coverage 0.17) shows a causal condition involving the low presence of leaders' skills in critical analysis and vision; communication, resource management and achieving results; and empowering and developing teams, despite the presence of highly sensitive competencies, leading to low 4.0 leadership effectiveness. Configuration C3 (raw coverage 0.15) indicates that low 4.0 leadership effectiveness is also influenced by the lack of such competencies as strategic perspective, empowering and developing teams, and influence (including motivation and conscientiousness), despite high competencies related to critical analysis and vision. The last configurational path C4 (raw coverage 0.14) draws attention to the lack of competencies

such as critical analysis and vision, strategic perspective, and self-awareness and intuitiveness, which also leads to low 4.0 leadership effectiveness. To summarise our findings on low 4.0 leadership effectiveness, the following observations may be made. First, four equifinal configurations were found to lead to low 4.0 leadership effectiveness. Second, all configurations had a low leadership competence related to strategic perspective, apart from C2, where strategic perspective was non-binding. Third, depending on the context, both the presence and the absence of critical analysis and vision had an impact on low 4.0 leadership effectiveness. Fourth, depending on the context, the presence of non-binding conditions related to sensitivity competencies was associated with low 4.0 leadership effectiveness.

Table 5. Analysis of sufficiency for the causes of low 4.0 leadership effectiveness (frequency cut-off = 3 or more, consistency cut-off = 0.81).

Lee dearbin Commeten inc	Configurational Paths			
Leadership Competencies	C1	C2	C3	C4
Critical analysis and vision (CV)		θ	٠	θ
Strategic perspective (SP)	θ		θ	θ
Communication, managing resources, and achieving results (CMA)	θ	θ		
Empowering and developing teams (ED)		θ	θ	
Self-awareness and intuitiveness (SEI)				θ
Sensitivity (S)	•	٠		
Influence (I)	\ominus		θ	
Consistency	0.96	0.87	0.82	0.91
Raw Coverage	0.18	0.17	0.15	0.14
Unique Coverage	0.01	0.03	0.02	0.01
Solution Consistency	0.83			
Solution Coverage	0.64			

Full circles (ullet) indicate the presence of a condition, while barred circles (Θ) indicate a condition's absence; blank cell is non-binding condition.

Source: own study.

6. Discussion

Organizations respond to technological progress, but their strength and the scope of their changes depend on their resources, the strategy adopted, and strong leadership. For two decades, the concept of Industry 4.0 has been frequently publicized in various circles: political, business, and scientific. Among the many topics discussed is the evolution of leadership and the characteristics of a 4.0 leader. The literature review showed the features of bad leadership in terms of effectiveness. Leadership is a complex research topic due to the multitude of characteristics that form the image of an effective leader. Leadership is a specific combination of intellectual, managerial, emotional, and social dimensions [108–110]. The set of positive features of the Industry 4.0 leader is currently being studied by scientists and practitioners. For instance, 4.0 leaders who are just entering the labour market should have soft skills, which are difficult to replace with machines and algorithms. The task of future managers is to popularize the belief that the centre of modern manufacturing is not only technology, but also people working with digital solutions. The leader of digital transformation should add value to increase the company's competitive advantage based on Industry 4.0 tools [110,111]. The set of features of the 4.0 leader is not closed, but open. The leader evolves with the dynamics of the environment and the changeability of the organization [112]. Research on the role and characteristics of leaders in Industry 4.0 is lacking, as is research on the characteristics of a bad leader. Although the literature on the subject indicates the features of bad leaders, they have not

been the subject of research in the relationship (configuration) system. The authors of the publications cited in the literature review admittedly cite the features of bad leadership, but they do not build a configuration of dependence between them. Individual traits make up a list of bad leadership traits, but they have not been the subject of further research in a system of mutual dependence.

The authors of this paper answered the following questions:

- 1. How does the lack of one feature affect other competences of managers (leaders)?
- 2. What is the effect of the lack of a given feature on a leader's effectiveness?
- 3. How can individual negative features (features of a bad leader) be grouped into common sets?

Assuming that the leader's competencies are created by many features (skills), which are dependent features, and that their set creates the leader's profile, competency shortages should be investigated in order to fill them. The innovativeness of the research carried out lies in the fact that the authors examined the relations of deficiencies (gaps) of certain features attributed to leaders, which are dependent on each other and determine the effectiveness of the leader. The lack of configuration of certain characteristics makes the behaviour of leaders maladaptive. However, in the process of building Industry 4.0, the adaptive behaviour of leaders is important, since this makes it easier for companies to follow the path of evolution. By adopting each of the configurations in turn (from C1 to C4) which were determined in our research, the links between low leadership effectiveness and individual areas of lack of competencies should be indicated. In the area of C1, a decrease in effectiveness at the level of building and promoting the organization's development strategy is due to poor communication, low motivation, and low or no conscientiousness among leaders. The lack of such features among the leaders was indicated (in the literature) by Gonf (2019). This author's list of negative traits of leaders includes poor communication skills, poor motivational skills, and lack of management skills. The C2 configuration area was created from the negative characteristics of leaders which have a causal nature, e.g., lack of development vision, lack of critical analysis, and difficulties in building a team. The features listed in our research can be compared with the list of behaviours of bad leaders in Burns (2019). The low effectiveness of leaders with negative traits from the C1 and C2 areas was achieved despite the presence of highly sensitive competencies. In contrast, C3 indicates the low effectiveness of 4.0 leadership as being due to deficiencies in strategic thinking, empowering and empowering teams, and exerting an influence (including motivation and conscientiousness), despite the presence of high competencies related to critical analysis and vision. The last configuration path, C4, highlights the lack of such competencies as critical analysis and vision, strategic perspective, and selfawareness and intuitiveness, which also leads to low effectiveness of 4.0 leadership. The configurations created in the research are characterized by the increasing effects of the lack of individual competencies on the effectiveness of leadership. Deficiencies in one trait carry over to other competence levels. This finding of dependence seems to have extremely important implications: it draws attention to the effectiveness of leadership. Leadership is a group of traits of a leader whose qualities (skills) are multidimensional and create a picture of the leadership competency profile. Requirements regarding various aspects of leaders' behaviour, relating, for example, to their task-oriented or interpersonal functioning, analysed according to the lack of the characteristics of a good leader, make it possible to identify the basic dimensions of leadership differentiation. The various characteristics of leaders provide information about possible functions in the organization. It is possible at this stage to match leaders with a role in an organization toward Industry 4.0 with the types of leaders identified by Oberer and Erkollar (2018) [22]. The position we present regarding the configurations of competency shortages in the context of leadership effectiveness is important for considering the development of the profile of leaders in organisations. The research presented complements the characteristics of leaders in the context of building Industry 4.0 by companies. The authors show that the features included in the research are only one example of the relationship between the lack of features and the effectiveness of

the leader. This is because leaders use various forms and ways of influencing the behaviour of others, assuming that the activities of the businesses operate more effectively.

7. Conclusions

It is not easy to guess what qualities leaders will have in a dozen years or so. However, strategic vision, team building, motivation, diligence, dialogue, and loyalty have given meaning to leadership for many years. The Fourth Industrial Revolution (Industry 4.0 technologies) has resulted in the emergence of new forms of leadership (e.g., digital leadership, virtual leadership, e-leadership). In Industry 4.0, the leader will have to be more open and courageous toward the changes that Industry 4.0 technology places before him. The analysed configurations of the lack of the features of good leadership may be useful at the stage of building the competency profile of a 4.0 leader. A leader with competence shortages can be a barrier for a company on the path toward Industry 4.0, since 4.0 leaders are expected to initiate changes to transform the existing reality into a new one with a longer perspective of development. Kouzes and Posner (2009) put it [113]: Leaders create and share a vision. The authors of this study are aware of the limitations of the application of the research results due to the breadth of the topic (a wide range of leadership characteristics) and the difficulty of "fully" understanding leadership [114]. Despite filling an existing gap in the literature and the sparse empirical research on the competency shortages of leaders 4.0, this study has several limitations that could inform future research. First, it would be interesting to see whether the configurations of leaders' competency shortages change over time. Secondly, although this study used reliable leadership competency sets, future research should consider other variables, such as cognitive competencies or meta-competencies. Leadership competency shortages may differ between regions or countries. Therefore, future studies could investigate and even compare leadership competencies in different geographical regions. Leaders in transforming process to Industry 4.0 should be oriented towards customers and cooperation to be successful [115,116].

The paper has some limitations. The main limitation is connected with the operationalization of the variables. The leadership concept can be operationalized in various ways. Our proposition and our tool to measure this concept are among the many possibilities. Moreover, the research sample on the base of a Polish organization provided us only with the possibility to say something about the Polish organization, and it is difficult to generalize the results to the other countries. The LCA analysis which was used in the research can be thought of as a new and interesting approach but not the only one that can be used to analyse the data.

The research may have implications for managers working in an organization implementing the Industry 4.0 concept in their activities. Those organizations can learn about the problems leading to bad leadership and on this basis achieve knowledge of what should be avoided by leaders. This may be very useful because most of the papers on the subject concentrate on the examples of good, effective leadership, whereas the analysis of what ineffective leadership and the factors that lead to this less effectiveness can also be very useful from a business point of view.

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Institutional Review Board Statement: According to our University Ethical Statement following the following shall be regarded as research requiring a favourable opinion from the Ethic Commission in the case of human research (based on document in polish: https://prawo.polsl.pl/Lists/Monitor/ Attachments/7291/M.2021.501.Z.107.pdf, accessed on 10 February 2022): research in which persons with limited capacity to give informed or research on persons whose capacity to give informed or free consent to participate in research and who have a limited ability to refuse research before or during their implementation, in particular: children and adolescents under 12 years of age, persons with intellectual disabilities persons whose consent to participate in the research may not be fully voluntary prisoners, soldiers, police officers, employees of companies (when the survey is conducted at their workplace), persons who agree to participate in the research on the basis of false information about the purpose and course of the research (masking instruction, i.e., deception) or do not know at all that they are subjects (in so-called natural experiments); research in which persons particularly susceptible to psychological trauma and mental health disorders are to participate mental health, in particular: mentally ill persons, victims of disasters, war trauma, etc., patients receiving treatment for psychotic disorders, family members of terminally or chronically ill patients; research involving active interference with human behaviour aimed at changing it research involving active intervention in human behaviour aimed at changing that behaviour without direct intervention in the functioning of the brain, e.g., cognitive training, psychotherapy psychocorrection, etc. (this also applies if the intended intervention is intended to benefit (this also applies when the intended intervention is to benefit the subject, e.g., to improve his/her memory); research concerning controversial issues (e.g., abortion, in vitro fertilization, death penalty) or requiring particular delicacy and caution (e.g., concerning religious beliefs or attitudes towards minority groups) minority groups); research that is prolonged, tiring, physically or mentally exhausting. Our research is not done on people meeting the mentioned condition. Any of the researched people: any of them had limited capacity to be informed, any of them had been susceptible to psychological trauma and mental health disorders, the research had not concerned mentioned above controversial issues, the research had not been prolonged, tiring, physically or mentally exhausting.

Informed Consent Statement: Not applicable.

Data Availability Statement: Data are contained within the article.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Elements of the leadership competencies questionnaire Critical analysis and vision

- 1. My leader has a critical faculty that probes the facts, identifies advantages and disadvantages, and discerns the shortcomings of ideas and proposals.
- 2. My leader makes sound judgments and decisions based on reasonable assumptions and factual information, and is aware of the impact of any assumptions made.
- 3. My leader is imaginative and innovative in all aspects of one's work.
- 4. My leader establishes sound priorities for future work.
- 5. My leader has a clear vision of the future direction of the organisation to meet business imperatives.
- 6. My leader anticipates the impact of external and internal changes on one's vision that reflect implementation issues and business realities.
- 7. My leader sees the wider issues and broader implications.

Strategic Perspective

- 8. My leader explores a wide range of relationships, and balances short- and long-term considerations.
- 9. My leader is sensitive to the impact of one's actions and decisions across the organisation.
- 10. My leader identifies opportunities and threats.
- 11. My leader is sensitive to stakeholders' needs, external developments, and the implications of external factors on one's decisions and actions.

Communication, managing resources, and achieving results

- 12. My leader clearly communicates instructions and vision to staff.
- 13. My leader's communication style expresses approachability and accessibility.
- 14. My leader plans ahead, organises all resources, and coordinates them efficiently and effectively.
- 15. My leader regularly and effectively monitors and evaluates staff performance and provides sensitive and honest feedback.
- 16. My leader selects and uses actions that bring the greatest benefit to the organisation and increases productivity.

Empowering and developing teams

- 17. My leader knows the strengths and weaknesses of his direct reports.
- 18. My leader provides autonomy, encouraging others to take on personally challenging and demanding tasks.
- 19. My leader encourages problem solving, innovative ideas and proposals, and the development of his vision for his area and a wider vision for the company.
- 20. My leader encourages a critical faculty and a broad perspective, and encourages the challenging of existing practices, assumptions, and policies.
- 21. My leader believes that others have potential to take on ever more demanding tasks and roles and encourages them to do so.
- 22. My leader develops subordinates' competencies and invests time and effort in coaching them to work effectively and grow.
- 23. My leader believes that critical feedback and challenge are important.

Self-awareness and intuitiveness

- 24. My leader has an awareness of one's own feelings and the ability to recognise and deal with them in a way that gives them a sense of control.
- 25. My leader has a degree of confidence in his or her ability to manage emotions and control their impact in the work environment.
- 26. My leader arrives at clear decisions and drives their implementation when presented with incomplete or ambiguous information.
- 27. My leader uses both rational and 'emotional' or intuitive perceptions of key issues and implications.

Sensitivity

- 28. My leader is aware of the needs and views of others and takes them into account when making decisions and proposing solutions to problems and challenges.
- 29. My leader demonstrates a willingness to think openly about possible solutions to problems and to actively listen to and consider the reactions and contributions of others.

Influence (including motivation and conscientiousness)

- 30. My leader persuades others to change views based on an understanding of their position and a recognition of the need to listen to this perspective and provide a rationale for change.
- 31. My leader has the drive and energy to achieve clear results and make an impact and, also, to balance short- and long-term goals with an ability to pursue demanding goals in the face of rejection or questioning.
- 32. My leader balances the needs of the situation and task with the needs and concerns of the individuals involved.
- 33. My leader demonstrates a clear commitment to the chosen course of action in the face of challenges, and matches 'words and deeds' in encouraging others to support the chosen direction.
- My leader demonstrates a personal commitment to finding an ethical solution to a difficult business issue or problem.

Measurement items for 4.0 leadership effectiveness Leaders' performance

- 35. My leader has the ability to trigger a change in this company.
- 36. My leader has had a significant impact on increasing networking with other companies.
- 37. My leader has had a significant impact on increasing effectiveness in this company.
 - 38. My leader has had a significant impact on increasing profitability in this company.

Worker satisfaction

- 39. We are satisfied with the facilities provided by our leader.
- 40. We are satisfied with the fairness demonstrated by our leader.
- 41. We are satisfied with the promises delivered by our leader.

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