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The influence of non-rational factors on managerial decision-making and their impact on organizational performance in Indonesian Information Institutions

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ABSTRACT

This study aims to identify non-rational factors that affect the decision-making of managers in Indonesian information institutions, and the impact these have on organisational performance. It was conducted using a quantitative descriptive research design. The 498 respondents were selected using purposive sampling, and questionnaires were distributed from August to October 2022. The findings showed that the influence of non-rational factors on organisational performance was weak, with an r-value of 0.246. Five non-rational factors were found to play a significant role in influencing the decision-making process: experience, religious beliefs, local wisdom, personality, and intuition. Other influence factors were obeying orders from superiors and workplace culture. Non-rational factors with a weak impact were emotions and irrational considerations. It can be concluded that the influence of the five non-rational factors on managers' decisions, coupled with a working relationship based on negotiation, can help strengthen the quality of decision-making. It can also improve organisational performance.

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decision-making; non-rational factors; organisational performance; information institution manager

Introduction

At the moment, decision-making practices using non-rational factors, such as intuition or local wisdom, are on the increase (Cristofaro, 2021; Elbanna & Fadol, 2016). Businesses have been challenged by the emergence of the COVID-19 pandemic, economic and political turmoil, market globalisation, and the ever-growing use of information and communication technology. In such situations, managers need to be able to make decisions quickly and accurately. The use of non-rational factors during decision-making, however, is not recommended in organisations. Moreover, this kind of approach can often be avoided by people due to their fear of negative consequences (Bruch & Feinberg, 2017; Virkus & Salman, 2021). Thus, management practices tend to rely on analytical information and systematic data in the search for the best results. The value of non-rational factors in

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decision-making, however, is still open to debate. Decision-making practices based on non-rational factors often occur during urgent situations when there is no time to carry out a more systematic approach (Adam & Dempsey, 2020; Bell, 2019; Phillips-Wren & Adya, 2020), create the impact that is not necessarily negative. Conversely, decisions based on rational factors do not always have a positive impact (Bruch & Feinberg, 2017; Hulpke & Fronmueller, 2022).

The heuristic theory shows that individuals take shortcuts or apply simple rules in decision-making, especially when faced with complex and uncertain situations and conditions (Gigerenzer & Gaissmaier, 2015). Individuals interpret present events or situations in the light of their past experiences. That is, they do not analyse a particular situation rationally based on all the relevant data and information, because every situation is going to differ according to its specific place and time. This behaviour is also driven by environmental factors. Most people will assume that the behaviour of the majority in their environment cannot be wrong. It is likely that they will imitate what is happening around them, or follow the thinking of the local people. In the light of this explanation, it can be seen that non-rational factors are different from irrational factors. The most significant difference is that non-rational factors are based on logic on a small scale, whereas irrational factors are not based on logic at all.

Non-rational factors include the social norms, people's sense of justice, experience, intuition, vested interests, religion, spirituality, superstition, and so on (Etherington, 2019; Phipps & Shelton, 2021; Wu, 2020). Non-rational factors come into play when individuals are not able to grasp all the complexities of a situation, or do not have the computational ability to determine the optimal result even when sufficient information is available (Campo et al., 2016; Mamun et al., 2022). Such limitations may result in bias. Studying this practice more deeply is essential because many aspects of modern life intensify uncertainty, and competition between organisations in the current era of globalisation is also increasing (Gigalová, 2017; Wu, 2020). To survive in such a world, individuals need to adopt a multidimensional strategy, and specifically, one that incorporates non-rational factors.

The empirical findings suggest that non-rational behaviour, or at least a blend of rational, bounded, and non-rational influences, is used in modern organisations (Morozova et al., 2019; Scott & Merton, 2023). Herbert A. Simon explains that although humans are rational beings, the processes of the rational mind are constrained by a whole range of limitations. This leads to Simon's concept of 'bounded rationality'. Bounded rationality is oriented towards producing the most satisfactory result that can be achieved in a particular situation, rather than the best possible result. Managers who cannot obtain all the information they need to make a decision are liable to draw on non-rational factors instead.

As has been shown in the research of Pieter Sahertian and Umiati Jawas (2021), local wisdom in terms of non-confrontation and mutual respect is a dominant factor influencing the decision-making process of leaders in Kota Malang, East Java, Indonesia. The majority of Indonesians are people who try to live in harmony with nature and other human beings, and prefer amicable, non-confrontational intrapersonal interactions. They maintain a submissive attitude in society, and recognise the existence of unequal relationships between young and old, superiors and subordinates (Larsson & Björklund, 2021). Community interactions are based on strong social ties

and adhere strongly to local wisdom, and this encourages managers to use non-rational factors in decision-making (Jumino, 2018; Tingey-Holyoak et al., 2023; Ullah et al., 2023).

Other non-rational factors, such as superstition, have been shown to have a positive impact on improving organisational performance. In their research, David Hirshleifer, Ming Jian, and Huai Zhang (2018) found that Stock Exchange organisations in China can make decisions based on lucky numbers, or include lucky listing codes on their stock. Numbers considered to be lucky are 6, 8, or 9, while unlucky numbers are 4 or 0. Evidence of the impact of these lucky numbers can be seen in the way companies that have lucky listing codes trade at a higher price in comparison to those that use unlucky listing codes. These number choices, believe it or not, can actually increase an organisation's financial returns.

The formulation of the research problem is that in Indonesian society, which has a collective character and is bound by customs, there are many unwritten rules that need to be obeyed. Within an organisation, as well as having to comply with organisational rules and procedures, members must also follow unwritten rules in carrying out their daily work, including when making decisions. Indonesia is a multicultural country, and in this respect, it differs from other Southeast Asian countries. It contains various ethnic groups, languages, religions, customs, and forms of local wisdom, and this is all reflected in the behaviour of its people. For example, leadership within modern organisations in Javanese society has been shown to follow the principle of *ewuh pakewuh* (Sylvina et al., 2021). This form of local wisdom, which is a way of life in Javanese society, can be interpreted as behaviour that is based on mutual consideration and respect for the feelings of others. Business leaders feel that applying these beliefs can help maintain a sense of harmony among the members of their organisation, and thus lead to a pleasant and congenial atmosphere that is conducive to improving organisational performance. It can be concluded from this that the local wisdom of the community is a non-rational factor that can sometimes be relied upon in management practices.

Following on from this earlier research, there are two issues that need further exploration. The first involves the way non-rational factors influence decision-making behaviour among a group of managers who think rationally and live in a society with strong traditions. The second relates to the influence this has on their organisation. Thus, the research questions in this study are:

RQ 1: Do non-rational factors influence the decision-making practice of information institution managers?

RQ 2: Do non-rational factors affect organisational performance?

The novelty of this research lies in its unique application of non-rational factors to managers working in information institutions in Indonesia. These people are required to make their decisions in a culture that is built on strong social bonds and traditions. This culture is a rich source of non-rational factors, especially because of its various forms of local wisdom and related rules, values, and norms that need to be obeyed. These factors lead to certain behaviours in decision-making which may help to improve organisational performance.

Theoretical framework

Non-rational factors in decision-making

A) Non-rational factors

Gigerenzer and Gaissmaier (2015) define non-rational factors as conscious and unconscious preferences, inferences, classifications, and judgements. These factors become prominent in uncertain or unexpected situations, where emotions, limited knowledge, and limited time come to influence decision-makers (*Adam & Dempsey, 2020*; *Ronda* et al., *2021*). In contrast, rational factors dominate in situations where all the alternatives and future risks are known (*Gigerenzer & Gaissmaier, 2015*). Rational decision-making is defined as a process that involves collecting the data and information relevant to a decision and then analysing this before making any choice (*Kolbe* et al., *2020*).

Non-rational decision-making, on the other hand, can be thought of as a judgement process. It tends to get used when an urgent response is required, when there is not enough time to undertake a systematic analysis, or in situations involving a high degree of uncertainty (Gigerenzer & Gaissmaier, 2015; Phillips-Wren & Adya, 2020). Informal, non-rational judgements may need to be employed whenever a situation forces an individual to make an immediate decision. The VUCA scenario has long been recognised in the business world. The term itself is an acronym, standing for volatility, uncertainty, complexity, and ambiguity (Bell, 2019; Robinson et al., 2017). Decision-making individuals do not typically stop to consider all the data and information, but rely instead on heuristic factors (Ahmad, 2022; Gigerenzer & Gaissmaier, 2015). Data and information recorded in the form of documents represent completed work, taking in the full range of relevant thoughts, experiences, and emotions (Irvine-Smith, 2019). In contrast, heuristic techniques, according to cognitive psychology, involve using approximations and shortcuts for finding solutions (Bruch & Feinberg, 2017; Campo et al., 2016). There is also the irrational factor known as bounded rationality. This refers to a situation in which an individual cannot take in all the possibilities available to them and therefore cannot predict which of their choices will provide the optimal outcome (Gold et al., 2022; Liu, 2019; Sony & Baporikar, 2021).

From a sociological perspective, the decision-making process is influenced by cognitive, emotional, and contextual factors. The first of these, cognitive factors, relates to the way individuals use their judgement when faced with the choice of several alternatives. For example, individuals must weigh up the pros and cons when choosing between different jobs, such as: a high-paying job close to home but in a toxic organisational culture; a low-paid job close to home in a family-oriented workplace; or a medium-paying job in a company with a family atmosphere but located far away (Dadheech & Sharma, 2022; Gibb & Pautz, 2022; Wickramasinghe, 2022).

The second category, emotional factors, in the form of strong feelings such as anger and fear, can affect a person's level of awareness when dealing with choices. These emotions stimulate affective reactions that influence information processing in cognition. Although decision-making is an art and a talent, the process is still influenced by numerous personal factors that come from within the individual (*Mashhady* et al., *2022*).

Thirdly, contextual factors relate to the way aspects of the social environment (e.g. being in an uncertain situation, such as the COVID-19 pandemic, a disrupted family

environment, or having limited resources and energy) can reduce an individual's focus on the decision-making process (*Bruch & Feinberg, 2017*). Contextual factors may include the local culture, with its particular values, ethics, philosophy, and attitudes (*Dewi, 2020*; *Glazer & Karpati, 2014*; *Sahin & Zaitoon, 2021*). Or they could involve belonging to a group, where members can often develop a consensus to produce joint decisions based on social capital, openness, mutual respect, and trust (*Permana & Harsanto, 2021*).

Using these three types of non-rational factors as a basis, the particular elements that will be examined in this study are as follows:

(1) Personality, defined as the way a person reacts and interacts with the environment and other individuals. The five key personalities are characterised as openness, conscientiousness, extraversion, agreeableness, and neuroticism (having unstable emotions; *Erjavec* et al., *2019*; *Othman* et al., *2020*).
(2) Experience. Individuals tend to rely on their experience when faced with particular environmental triggers, such as not having enough time to think (because they are too busy with other work; *Campo* et al., *2016*).
(3) Intuition. Individuals can on occasion make decisions without any logical reason, and this is what usually happens in high-pressure situations (*Adam & Dempsey, 2020*; *Elbanna & Fadol, 2016*; *Kolbe* et al., *2020*; *Robinson* et al., *2017*).
(4) Religious beliefs. A commitment to a religion, or a strong belief in God, can influence decision-making practices (*Etherington, 2019*; *Wood* et al., *2020*). The stronger one's belief in God, the more likely this will affect one's behaviour (*Alavi & Azizi, 2021*).
(5) Emotion. This factor usually appears during a crisis or when something unexpectedly joyful occurs. Such events can make individuals stressed and overexcited, and in turn trigger managers to make decisions quickly, spontaneously, and impulsively (*Bell, 2019*; *Liu, 2019*). The idea of emotion used here relates to the concept of emotional intelligence (*Othman* et al., *2020*).
(6) Irrational considerations. Every human being has the potential to think irrationally due to factors learned from their culture, such as myths, lucky numbers, zodiac predictions, or superstitions (*Glazer & Karpati, 2014*; *Hirshleifer* et al., *2018*; *Liu, 2019*; *Sony & Baporikar, 2021*).
(7) Local wisdom. This relates to the inherited values and virtues of a community group, which affect its perspective regarding particular matters or ideas. Local wisdom creates a sense of trust and leads away from confrontation, with the result that decision-making practices across a community tend to become similar (*Sahertian & Jawas, 2021*; *Sahin & Zaitoon, 2021*).

B) Decision-making

Decision-making is defined as a process of selecting the best option from several alternatives in a way that is considered the most efficient according to the situation. It is usually conducted in six stages: identifying problems, collecting and analysing data, developing a range of alternatives, choosing the best alternative, implementing decisions, and monitoring and evaluating the implemented results (Guo, 2020). However, in this study, the six stages are condensed into four: identifying the problem, developing and

evaluating various alternative solutions, choosing the best alternative, and implementing decisions. These are described in more detail below:

(1) Identifying the problem. This is the first step in the decision-making process. If individuals misunderstand a problem, then their response to it is likely to be unsuccessful. During the process of understanding, non-rational factors will influence an individual's point of view.
(2) Developing and evaluating various alternative solutions. Individuals will look for the alternatives available to them, and then carefully consider the pros and cons before making a decision.
(3) Choosing the best alternative. Alongside any other factors, the final choice of decision can also be influenced by organisational structure.
(4) Implementing decisions. When implementing a decision, individuals need to take into consideration a range of factors, including whether anybody opposes their decision, and whether they believe their decision will have a successful outcome.

The combination of elements is reflected in the second and fourth stages here. The second stage combined collecting and analysing the data the process of developing possible solutions. Meanwhile, the fourth stage in this study is a combination of the fifth and sixth stages above. These combinations were designed to help the respondents by providing them with a more manageable number of statements. A more complete explanation of this can be seen in the section on the limitations of this research, at the end of this paper.

Decision-making greatly affects organisational performance (Asikhia & Mba, 2021). The right decision will improve an organisation's performance, but the wrong decision will damage it. Organizational performance can be defined as the set of achievements gained through the implementation of a particular set of practices (Alosani et al., 2020). The achievements obtained are the result of implementing working practices that are based on predetermined objectives. Good performance in this context, therefore, involves improving quality across a range of areas. These include: problem-solving, products and services, organisational results, efficient use of resources, staff performance, and the working environment.

Managers at information institutions

Sony and Baporikar (2021) refer to managers as rational professionals. A manager or leader has a very strategic primary function: making decisions (Jumino, 2018). They have the obligation and authority to direct the actions of subordinates to reflect the performance goals of the organisation. Top-line, mid-line, and lower-line managers in information institutions generally occupy the positions of head of institution, head of division, and head of section, respectively, moving upwards through these sequentially. Leadership is influenced by the ethical values and level of integrity inherent in the workplace culture (Lo & Stark, 2021; Nurdin & Saufa, 2020; Sahertian & Jawas, 2021).

In Asia, there are three leadership styles, which can be distinguished according to cultural background: (1) East Asia, including Japan, China, and Korea: research conducted by Jyuji Misumi (as cited in Sahertian & Jawas, 2021) found that in this region, a

democratic style tends to be used when a task is easy, and an autocratic style is more common when a task is complex. (2) Southeast Asia, including the ASEAN countries. According to Hofstede's research, superiors tend to display an authoritarian attitude. The leadership style in Indonesia itself is oriented towards masculinity (Murniati et al., 2018), and integrates traditional culture into modern organisations (Sylvina et al., 2021).

An information resource centre is an institution that selects, obtains, and stores information by preparing abstracts and information indexes. It then disseminates this information in ways that meet and anticipate the information needs of its community (Akinola & Adewusi, 2020). Managers in information institutions are assumed to have information literacy and competence in analysing data and information. In addition, they are considered capable of making decisions efficiently and effectively in order to help optimise their organisation's performance (Yildiz, 2017). This particular branch of the profession also manages knowledge to help guide the staff of the parent institution in making decisions (Ottonicar et al., 2021).

Research methodology

This study was conducted using a quantitative descriptive research design. This approach was adopted to show the influence of non-rational factors on managers at information institutions in Indonesia when making decisions relating to organisational performance (Creswell, 2014). Respondents were selected using purposive sampling, because the members of the study population exhibited almost the same characteristics across all the institutions involved. In this situation, the researcher determined and contacted the institutions and community groups in question. For this research, these included public libraries, school libraries, university libraries, special libraries, information units, archive units, museums, and galleries. These institutions were chosen because they all have manager position who manage information, as an object of this research. The respondents could all be reached through social media, either as social media friends or with the help of friendship networks.

There is no official data for the population of information managers in Indonesia, but it can be estimated that the number could be in the hundreds of thousands. This number gives a margin of error of less than 5% for an infinite population, based on Isaac and Michael's formulation (Adhikari, 2021; Sugiyono, 2013). Questionnaires were distributed from August to October 2022, via Google Form. They were sent to 610 people. Of the questionnaire answers that were submitted to the researchers, a total of 498 were considered to be valid. The acquisition of this number of respondents exceeded the standard required according to the unlimited population concept (384).

The questionnaire was designed to address the concept of decision-making from a heuristic perspective. The independent and dependent variables were used as the basis for developing the components of the survey questionnaire, according to their particular characteristics. The variables, dimensions and indicators were all defined. Operational definitions of the variables can be seen in Appendix 1. Based on the descriptions of the two variables, 41 questions were formulated and arranged into sections, as appropriate. Respondents answered using a Likert scale with the following options: Strongly agree (5); Agree (4); Slightly agree (3); Disagree (2); Strongly disagree (1). A list of the survey questions included in the questionnaire can be seen in Appendix 2.

Validity test

A validity test of the research instrument was conducted by comparing the calculated r-value with the r-table. The question indicators in the questionnaire can be declared valid if the calculated r-value is greater than the r-table value (Adhikari, 2021; Siregar, 2013). The value of the r-table from the study, with N = 30 (df = 28), was 0.3610. The results of the test showed that almost all of the indicators were valid. Only one indicator (indicator 1 in the statement 'developing and evaluating various alternative solutions') was invalid, because the calculated r-value was lower than the r-table figure.

Reliability test

A reliability test, which aimed to measure the reliability of the research instrument as a data collection tool, was conducted using Cronbach's alpha formula. By the terms of this formula, the nearer the Cronbach's alpha value of the instrument approaches 1, the higher its reliability. If the alpha value is > 0.70, the research instrument has sufficient reliability; if the alpha value is > 0.80, the reliability is strong; and if the alpha value is > 0.90, the reliability of the instrument is extremely high (and verging on perfect; Adhikari, 2021; Siregar, 2013). The following were the test results for instrument reliability:

As can be seen at Table 1, the results for each of the tests here came in at > 0.90, showing that the reliability of the questions indicators was extremely high for both variable X and variable Y, and also for the research instrument overall.

The data were analysed using SPSS, which can be used to calculate the 95% confidence level. Simple linear regression was employed, which seeks to measure the effect of an independent variable (here, the non-rational factors in decision-making) on a dependent variable (organisational performance). The results showed that there was a positive relationship, but this was only weak. Furthermore, to answer research question number RQ 1 (do non-rational factors influence the decision-making practices of information institution managers?), the data were analysed based on the highest and lowest percentages of each non-rational factor, and interpreted accordingly. To answer RQ 2 (do non-rational factors have an impact on organisational performance?), the data were analysed in the same way.

Findings

Respondents' data

After a data collection process lasting three months, from August to October 2022, the number of respondents obtained was 498. Table 2 provides details of the respondents' demographic data, moving from the largest number to the smallest:

It can be seen from this that most of the 498 respondents were professional library workers, mainly from college and public libraries. More than half of them had more than ten years' work experience in this field, and were top-line managers working in user services and information/archive units. The figures also show that more than half of the respondents worked in urban areas, namely the 3 provinces with the highest number of respondents (Jakarta, West Java, and Banten). The rest were spread across 13 of the other provinces. The urban environment is a business centre, and filled with people with a more

Table 1. Reliability test results.

Test Results	Cronbach's Alpha	Number of Question Items
Variable X Reliability Test Result	0.937	35
Variable Y Reliability Test Result	0.911	6
Research Instruments Reliability Test Results	0.944	41

Table 2. Respondents' demographic data.

Gender	Women 276 (55.42%), Men 222 (44.58%); Total: 498
Time spent working	>10 years, 296 (59.44%) 0–3 years, 79 (15.86%)
Current work	• user service 155 (31.12%) • information/archives processing 146 (29.32%) • policymakers 123 (24.7%) • administration 41 (8.23%) • cooperation and public relations 18 (3.61%) • information technology 15 (3.01)
Current position	• head of group work (Lib./Archives/Information Prof.), 231 (46.39%) • head of library, 154 (30.92%) • subsection head of administration, 45 (9.04%) • head of division, 35 (7.02%) • section head, 24 (4.82%) • head of archives, 5 (1.0%) • head of gallery, 3 (0.60%) • head of a museum, 1 (0.20%)
The institutions	• college libraries 152 (30.5%) • public libraries 141 (28.3%) • school libraries 93 (18.7%) • the National Library and the National Archives 64 (12.9%) • special libraries 48 (9.6%)
Region/City of Institution	• Jakarta 45.2%, • West Java 9.2%, Banten 8.2%, • South Sumatera 5.2%, Bali 5%, • East Java 3.8%, Central Java 3.6%, North Sumatera 3.6%, West Sumatera 3.6%, South Sulawesi 3.2%, • Yogyakarta 2%, • East Kalimantan 1.8%, Lampung 1.6%, West Nusa Tenggara 0.8%, Aceh 1,2%, North Maluku 1%, Papua 1%

Table 3. Non-rational influence on organizational performance.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.246	.061	.059	3.475	.061	32.067	1	496	.000

individual and independent lifestyle. This demographic factor is an important element in encouraging individuals to apply non-rational factors, such as local wisdom (Song, 2022).

The influence of non-rational factors on decision-making

The main data, which consists of two sections, is presented below in Tables 3 and 4. The first section (Table 3) relates to non-rational influences, and includes thirty-five statements; the second section (Table 4) covers the impact on organisational performance, and includes six statements.

Table 3 shows that the correlation between non-rational strength (X) and organisational performance (Y) was weak. The relationship was positive, namely r = 0.246. This means that there is a unidirectional relationship between the variables X and Y. If the non-rational

Table 4. Correlation between non-rational strength and organizational performance.

		Organizational Performance	Non-Rational Strength
Pearson Correlation	Organizational Performance	1.000	.246
	Non-Rational Strength	.246	1.000
Sig. (1-Tailed)	Organizational Performance		.000
	Non-Rational Strength	.000	
N	Organizational Performance	498	498
	Non-Rational Strength	498	498

influence becomes stronger, then the impact on organisational performance will be higher, and vice versa. The contribution of influence for the non-rational factors (X) in relation to organisational performance (Y) was 6.1%. These results can be seen in the R Square column.

Table 4 shows that the correlation level and the strength of the relationship were in the positive direction, namely r = 0.246. With these two tables, the correlation value (r) to the relationship's strength level is as follows: 0.00–0.199 = very weak; 0.20–0.399 = weak; 0.40–0.599 = quite strong; 0.60–0.799 = strong; 0.80–1.00 = extremely strong. The positive result shows that the relationship between the variables X and Y is in the same direction, meaning that the stronger the non-rational influence, the higher the organisational performance value. This also applies the other way around.

The analysis below of the answers to each of the statements about decision-making practices shown in Table 5 is based on the frequency values for the positive (strongly agree) and negative (strongly disagree) statement scales. The highest frequency on the statement scale, either positive or negative, is likely to indicate the most usual action of the information institution managers. The discussion covers in turn identifying problems, developing and evaluating alternative solutions, making decisions, and implementing decisions.

Table 5 shows that during their decision-making, information institution managers consistently follow the same pattern in relation to the seven non-rational factors. This pattern is explained below:

(A) Identifying problems. Based on the highest positive scale, managers are most likely to know there is a problem when overseeing a case as a result of experience (297 respondents, 59.6%). The experience involved usually comes from an individual's personal experience, which they have examined over time, and which has come to serve as an internal guide. However, experience can also be obtained from other people in relation to how they have faced a problem. Learning from experience is the best teacher; however, managers still need to pay attention to context, because the same phenomenon can have a different impact in different times and places (Adam & Dempsey, 2020; Bruch & Feinberg, 2017).

The second highest figure on the positive side of the scale here was for local wisdom. 284 information managers (57%) identified problems by paying attention to local wisdom. When faced with a problem, managers are always likely to pay attention to the values and beliefs of their local community. This is particularly the case if a problem needs to be discussed together with or requires input from the local elders. Joint third on the positive side of the scale were religious beliefs (227 respondents, 45.6%) and personality (227 respondents, 45.6%). These two factors are closely interrelated; the more robust the religious belief, the stronger the

Table 5. Decision-making in relation to the influence of non-rational factors.

	SCALE				
STATEMENT	5 (%)	4 (%)	3 (%)	2 (%)	1 (%)
A Identifying Problems					
(1) I identify a problem according to my personality characteristics	81 (16.3)	**227 (45.6)**	67 (13.5)	106 (21.3)	17 (3.4)
(2) I identify a problem based on experience	155 (31.1)	**297 (59.6)**	33 (6.6)	11 (2.2)	2 (0.4)
(3) I identify a problem based on emotion	8 (1.6)	34 (6.8)	46 (9.2)	**282 (56.6)**	128 (25.7)
(4) I identify a problem based on intuition	31 (6.2)	**187 (37.6)**	150 (30.1)	107 (21.5)	23 (4.6)
(5) I identify a problem based on religious beliefs	110 (22.1)	**227 (45.6)**	74 (14.9)	65 (13.1)	22 (4.4)
(6) I identify a problem based on irrational considerations	15 (3)	72 (14.5)	54 (10.8)	**242 (48.6)**	115 (23.1)
(7) I identify a problem based on local wisdom	50 (10)	**284 (57)**	114 (22.9)	42 (8.4)	8 (1.6)
B Developing and evaluating various alternative solutions					
(8) I can develop and evaluate various alternative solutions based on my personality	62 (12.5)	**284 (57)**	78 (15.7)	67 (13.5)	7 (1.4)
(9) I can develop and evaluate various alternative solutions based on my experience	111 (22.3)	**344 (69.1)**	32 (6.4)	8 (1.6)	3 (0.6)
(10) I can develop and evaluate various alternative solutions based on emotion	11 (2.2)	67 (13.5)	72 (14.5)	**272 (54.6)**	76 (15.3)
(11) I can develop and evaluate various alternative solutions based on intuition	30 (6)	**192 (38.6)**	158 (31.7)	101 (20.3)	17 (3.4)
(12) I can develop and evaluate various alternative solutions based on religious beliefs	81 (16.3)	**255 (51.2)**	102 (20.5)	49 (9.8)	11 (2.2)
(13) I can develop and evaluate various alternative solutions based on irrational considerations	16 (3.2)	84 (16.9)	67 (13.5)	**244 (49)**	87 (17.5)
(14) I can develop and evaluate various alternative solutions based on local wisdom	48 (9.6)	**296 (59.4)**	118 (23.7)	32 (6.4)	4 (0.8)
(15) I develop and evaluate various alternative solutions based on orders from superiors and/or prevailing customs	41 (8.2)	**265 (53.2)**	127 (25.5)	59 (11.9)	6 (1.2)
C Choosing the best alternative to make decisions					
(16) I choose the best alternative to make decisions based on my personality	49 (9.8)	**225 (45.2)**	95 (19.1)	122 (24.5)	7 (1.4)
(17) I choose the best alternative to make decisions based on experience	102 (20.5)	**323 (64.9)**	59 (11.9)	12 (2.4)	2 (0.4)
(18) I choose the best alternative to make decisions based on intuition	35 (7)	**208 (41.8)**	152 (30.5)	87 (17.5)	16 (3.2)
(19) I choose the best alternative to make decisions based on religious beliefs	88 (17.7)	**260 (52.2)**	81 (16.3)	53 (10.6)	16 (3.2)
(20) I choose the best alternative to make decisions based on emotion	4 (0.8)	45 (9)	52 (10.4)	**292 (58.6)**	105 (21.1)
(21) I choose the best alternative to make decisions based on irrational considerations	13 (2.6)	64 (12.9)	56 (11.2)	**270 (54.2)**	95 (19.1)
(22) I choose the best alternative to make decisions based on local wisdom	46 (9.2)	**261 (52.4)**	133 (26.7)	51 (10.2)	7 (1.4)
(23) My decision will have the expected result	104 (20.9)	**335 (67.3)**	47 (9.4)	11 (2.2)	1 (0.2)
(24) My decisions are better than other people's decisions	22 (4.4)	**171 (34.3)**	140 (28.1)	152 (30.5)	13 (2.6)
(25) I defend my decisions even if many people disagree with them	19 (3.8)	121 (24.3)	115 (23.1)	**211 (42.4)**	32 (6.43)
D Implementing Decisions					
(26) I implement decisions based on my personality	46 (9.2)	**199 (39.9)**	105 (21.1)	141 (28.3)	7 (1.4)
(27) I implement decisions based on experience	93 (18.7)	**330 (66.3)**	55 (11)	18 (3.6)	2 (0.4)

(*Continued*)

Table 5. (Continued).

(28) I implement decisions based on intuition	31 (6.2)	**201 (40.4)**	139 (27.9)	109 (21.9)	18 (3.6)
(29) I implement decisions based on religious beliefs	87 (17.5)	**258 (51.8)**	86 (17.3)	56 (11.2)	11 (2.2)
(30) I implement decisions based on emotion	11 (2.2)	33 (6.6)	64 (12.9)	**292 (58.6)**	98 (19.7)
(31) I implement decisions based on irrational considerations	9 (1.8)	59 (11.9)	72 (14.5)	**272 (54.6)**	86 (17.3)
(32) I implement decisions based on local wisdom	50 (10)	**255 (51.2)**	140 (28.1)	47 (9.4)	6 (1.2)
(33) I still implement a decision, even if it is opposed by many parties	15 (3)	90 (18.1)	116 (23.3)	**231 (46.4)**	46 (9.2)
(34) I continue to implement a decision, even when I experience many obstacles (lack of facilities, funds)	34 (6.8)	**177 (35.5)**	126 (25.3)	152 (30.5)	9 (1.8)
(35) I believe that the decisions that I implement will be successful	58 (11.7)	**283 (56.8)**	95 (19.1)	61 (12.3)	1 (0.2)

personality. Another high positive figure was for intuition (187 respondents, 37.6%). This was the last factor to have a positive influence on decision-making. The highest figure on the negative side of the scale was for emotion (282 respondents, 56.6%), which was followed by irrational considerations (242 respondents, 48.6%). Emotions and irrational considerations are factors these managers avoid when identifying problems (Wood et al., 2020).

(B) Developing and evaluating various alternative solutions. Based on the highest positive score, the key non-rational factor influencing managers in evaluating solutions was experience (344 respondents, 69.1%). The second highest positive score was for local wisdom (296 respondents, 59.4%), followed by personality (284 respondents, 57%), religious beliefs (255 respondents, 51.2%), and intuition (192 respondents, 38.6%). The last four non-rational factors look fairly balanced, so it can be concluded that managers tend to draw on a lot of different points of view in evaluating alternative solutions.

Highest on the negative scale was emotion (272 respondents, 54.6%), followed by irrational considerations (244 respondents, 49%). As when identifying problems, in evaluating alternative solutions, managers do not rely on personal emotions, nor do they draw on irrational considerations. Other factors that do help them come up with alternative solutions, though, are their superiors' orders and/or the prevailing customs within their organisation (265 respondents, 53.2%). Information institution managers generally consider their working environment, and specifically their superiors and the voices around them. Finding alternative solutions that fit the organisational environment is believed to maintain togetherness and protect their own position, in addition to serving the needs of users (Korkmaz & Demirsoy, 2022; Matteson et al., 2015; Ravenwood et al., 2019).

(C) Choosing the best alternative to make decisions. Based on the highest positive value scale, experience had a strong influence on choosing the best alternative to make decisions (323 respondents, 64.9%), followed by local wisdom (261 respondents, 52.4%), and religious beliefs (260 respondents, 52.2%). This factor was followed by personality (225 respondents, 45.2%) and intuition (208 respondents, 41.8%). The managers at information institutions choose what they believe to be

the best solution once they feel sure they have considered everything relating to the situation. This fits in with the view of Adam and Dempsey (2020) that intuition involves affectively charged judgements that arise through rapid, non-conscious, and holistic associations. Personality and religious beliefs also help managers strengthen their decisions (Etherington, 2019; Song, 2022; Wood et al., 2020).

The highest negative figures were for emotion (292 respondents, 58.6%) and irrational considerations (270 respondents, 54.2%). Managers do not rely on personal emotions or irrational considerations when making decisions (Beare et al., 2020). In addition, many managers will not defend a decision if someone disagrees with it (211 respondents, 42.4%), even if they believe that their decision will produce the expected results (335 respondents, 67.3%), and is better than other people's decisions (171 respondents, 34.3%).

(D) Implementing decisions. Going by the highest figures on the positive scale, the non-rational factors that most affect managers' implementation of their decisions are experience (330 respondents, 66.3%), religious beliefs (258 respondents, 51.8%), and local wisdom (255 respondents, 51.2%). Lower on the scale of influence were intuition (201 respondents, 40.4%) and personality (199 respondents, 39.9%). When implementing decisions, managers at information institutions are generally confident that their decisions are the best (283 respondents, 56.8%). They will implement their decision even in the face of obstacles (177 respondents, 35.5%).

The highest figures on the negative side of the scale were for emotion (292 respondents, 58.6%) and irrational considerations (272 respondents, 54.6%). Managers do not rely on personal emotions or irrational considerations when implementing decisions (Othman et al., 2020). Nearly half of these managers (59.44%) had more than 10 years' experience, so they can be considered reasonably wise and knowledgeable in making decisions. Moreover, almost half of them (30%) worked in college libraries, where the academic environment presumably helps them to act critically. Having people around them who oppose their decision, however, will stop them from implementing it (231 respondents, 46.4%). So, although most managers believe their decisions will be successful, many of them will cancel the implementation of a decision based on the considerations of those who disagree with it.

(E) Table 6 shows the impact of non-rational decision-making on the level of organisational performance. The impacts are described in six statements, relating to: improving the quality of problem-solving; improving the quality of goods and services; improving the achievement of objectives; improving the efficiency of resource utilisation; improving staff performance; and creating a conducive working environment. In general, non-rational factors in decision-making in information institutions were believed to improve organisational performance. Table 6 shows the impact of non-rational decision-making on organisational performance. Of the six indicators, the most dominant was statement number 39, relating to whether respondents felt they could improve resource utilisation (348 respondents, 69.9%). This was followed by statement number 37, regarding whether respondents could improve service quality (335 respondents, 67.3%). The next indicator was statement number 40, which asked whether respondents felt they could improve

Table 6. Impact of non-rational decision-making on organisational performance.

STATEMENT	SCALE				
E Organizational performance	5 (%)	4 (%)	3 (%)	2 (%)	1 (%)
(1) I can improve the quality of problem-solving in my organisation	58 (11.7)	**283 (56.8)**	95 (19.1)	61 (12.3)	1 (0.2)
(2) I can improve the quality of goods and services	72 (14.5)	**335 (67.3)**	65 (13.1)	23 (4.6)	3 (0.6)
(3) I can improve the achievement of the organisation's goals	75 (15.1)	**329 (66.1)**	73 (14.7)	18 (3.6)	3 (0.6)
(4) I can improve efficiency in the use of organisational resources	70 (14.1)	**348 (69.9)**	59 (11.9)	18 (3.6)	3 (0.6)
(5) I can improve staff performance achievement	81 (16.3)	**332 (66.7)**	62 (12.5)	21 (4.2)	2 (0.4)
(6) I can create a conducive working environment	116 (23.3)	**328 (65.9)**	41 (8.2)	12 (2.4)	1 (0.2)

performance (332 respondents, 66.7%). Then came statement number 38, referring to whether respondents can improve the achievement of organisational goals (329 respondents, 66.1%). The next indicator was statement number 41, which addressed respondents' views on whether they could create a more conducive working environment (328 respondents, 65.9%). The lowest indicator was statement number 36, which had to do with whether respondents believed they could improve problem-solving within the organisation (283 respondents, 56.8%). On the basis of these findings, it appears that managers are essentially capable of working in accordance with their daily tasks as leaders and top-line managers in their respective units. This ability is supported by appropriate work experience, as reflected in the data that most of the managers had more than 10 years' work experience. However, those managers had the lowest ability in solving problems. This is understandable, because solving problems relates to the common interests shared within an organisation. When making decisions, these individuals are aware of the risks not only of facing failure but also of becoming an object of ridicule.

Discussion

Based on the answers from the questionnaires, non-rational factors that significantly affect decision-making are experience, local wisdom, religious beliefs, personality, and intuition. Meanwhile, non-rational factors that have a weak influence are emotions and irrational considerations. The model we propose is essential research, in that it develops the concept of decision-making influenced by non-rational factors. This is important as a way of dealing with situations that are unpredictable, especially in a modern world that is often faced with new and uncertain situations. In today's modern business systems, decision making often uses experience more than using data (Morozova et al., 2019). Pandemics, wars, globalisation, increasingly sophisticated technology, and recessions can all create chaos and confusion. Our research provides a challenge to decision-makers, in both profit and non-profit organisations, to use more non-rational factors in making their decisions in response to such situations.

Both individual and group experience is important within a collective society. It is important to discuss the role of non-rational factors in decision-making because this can demonstrate to leaders that such factors can be viewed as rigorous and appropriate for their organisation, if used correctly. This means they need to be applied with reflection and understanding. In a study by Jennifer Robinson et al. (2017), it is stated that the practice of combining tacit and explicit knowledge can promote a deeper understanding of and more effective decision-making processes. Managers learn from events experienced by them or others. They also learn about the direct and indirect impact of their decisions, and see the reactions of other groups within their organisation (Asikhia & Mba, 2021; Moran & Morner, 2018). From identifying problems, and developing and evaluating alternative solutions, through to implementing decisions, managers constantly adapt to the environment around them. This adjustment takes into consideration local wisdom, leaders, and colleagues, and is also affected by their own personality and religious beliefs (Etherington, 2019; Wood et al., 2020). These experiences teach them to avoid personal emotions, obey their superiors (Sahertian & Jawas, 2021), and conform to customs or rely on local wisdom, so that they remain respected within their society (Murniati et al., 2018; Sylvina et al., 2021).

As mentioned above, more than half of the managers (53%) live in urban areas in 3 of the major provinces. The environment where they work, therefore, is a modern space that encourages an individual and independent lifestyle, as well as being full of competition. These conditions encourage them to make their respective positions feel safe by maintaining a harmonious working relationship, so they are careful in making decisions, and take advantage of local wisdom. This is in line with heuristic theory, which emphasises the importance of environmental influences (Gigerenzer & Gaissmaier, 2015; Scott & Merton, 2023). Chart 1 below shows the role of non-rational factors in influencing managers' attitudes in making decisions, and how this can help build better organisational performance.

Chart 1 shows the non-rational factors in the left box; those highlighted in yellow have a strong influence, while those with a weak influence are highlighted in blue. The chart also shows how the decision-making practice affects organisational performance.

Emotions The emotions referred to here are personal emotions, such as anger, anxiety, and impatience, which are usually related to individual personality (Beare et al., 2020; Othman et al., 2020). Individuals who have a high level of emotional intelligence have a stable nature. They are not easily influenced by emotions, so will consider their decisions carefully. If emotional intelligence is low, however, this can encourage an individual to make a decision spontaneously. Most respondents (more than 50%) stated that they were not affected by emotions when making their decisions. As managers of information institutions that aim to serve the public, they realise that emotional stability is essential (Moran & Morner, 2018).

Leaders are responsible for improving organisational performance and setting an example to their subordinates in serving the community (Moran & Morner, 2018). This relates to the research of Ibneatheer et al. (2021), which found that all of the Afghan managers they studied (8 informants) had used emotion in their decision-making, although not very often. One of them stated that he made decisions depending both on the particular situation and on human values. Thus, he reversed the decision to fire a staff member, because the person appeared to be poor and in need of a job. Including

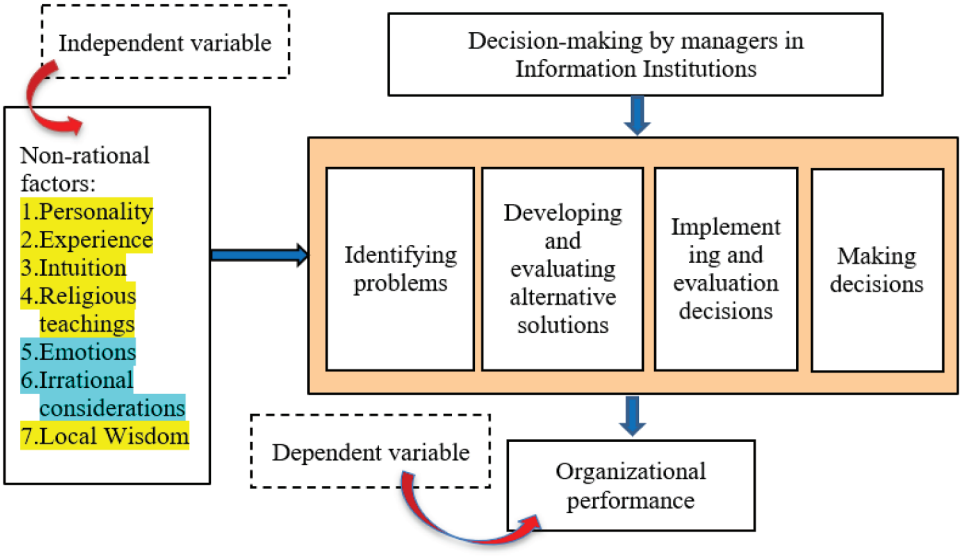

Chart 1. Diagram showing the influence of the independent variables on organisational performance.

emotions in decision-making can have a positive impact on an organisation, but the context needs to be considered. The use of emotions can be useful in building harmony and creating an atmosphere for the staff that is conducive to achieving the organisation's goals.

However, a small proportion of respondents stated that non-rational factors in the form of personal emotions still influenced their decisions. This condition can be related to bounded rationality (Scott & Merton, 2023). A poor workplace environment (which can be caused by unhealthy relationships between superiors and subordinates, individualistic collectivism, unequal power relations, conflicts between masculinity and feminism, and other similar behaviours) is liable to trigger personal emotions (Szanto, 2022). Such emotions can also be triggered by other people's disapproval of a manager's decisions. Even when the managers believed that their decisions would be successful, they still took others' opinions into account, and would stop implementing a decision if there were too many conflicting voices. This also shows the way in which managers may adapt their behaviour to a particular cultural environment (Sylvina et al., 2021).

Similarly, irrational considerations did not affect most respondents (more than 50%) during decision-making. They believed that their behaviour would appear unnatural if they were seen to be relying on irrational factors. In turn, if their behaviour was regarded as unnatural, they would receive negative judgements from the people around them, and be thought to be going against religious beliefs. This would also undoubtedly damage their social relations and threaten their reputation as leaders (Moran & Morner, 2018).

For a few respondents, the power of irrational considerations, including myth, superstition, and the supernatural, did influence their decision-making practice. Individuals faced with unknown situations or uncertain risks can feel highly fearful. This may cause them to rely on irrational actions, such as wearing lucky clothes, looking for a good day to conduct a meeting, and so on (Hirshleifer et al., 2018; Liu, 2019).

From our study, it can be seen that the use of non-rational factors in decision-making can have a positive impact on organisational performance. These factors can help managers feel more confident that the decisions they take will have their intended effect. Our results show that when managers are faced with problems, they draw on experience, local wisdom, religious beliefs, personality, and intuition to identify and respond to the factors involved.

Among the people involved in this research, intuition does not seem to be used much in decision-making, even though intuitive thinking and rational thinking can support each other. According to Giulia Calabretta, Gerda Gemser, and Nachoem M. Wijnberg (2017), intuitive judgements should be based on a solid and complete experience and understanding of a problem. Repeated practice will hone intuitive judgements so that they become sharper, and the results of this may show up alongside rational judgements during data analysis. Personal characteristics such as intuition and empathy, which can be supported by local wisdom from the surrounding culture and religious beliefs, enable managers to maintain good relationships with their staff. Even though more than half of the respondents believed that their own decision would be better than the result of deliberation with others, decision-making was still carried out through a process of consultation and mutual respect. This method then became the basis for strengthening their own decision, so that the quality of organisational performance could be maintained (Agusta & Nurdin, 2021; Czernek-Marszałek et al., 2023).

Conclusion

Seven non-rational factors affecting managers' decision-making practices in Indonesian information institutions were identified: personality, experience, intuition, religious beliefs, emotions, irrational considerations, and local wisdom. Out of these, experience, religious beliefs, and local wisdom were the most powerful non-rational factors influencing decision-making. On the other hand, emotional factors and irrational considerations only had a small role. Managers tend to avoid these two factors. It can be concluded that the other five factors greatly affect the improvement of organisational performance. These five main factors all influence the improvement of organisational performance in a positive way, which in turn makes managers feel more confident. They have faith that their decisions will lead to the good results they expect, with the effect that organisational performance will be improved. The use of local wisdom in their deliberations, along with maintaining good relations by obeying their superiors' orders and following prevailing customs, can all lead to better decisions.

Theoretical contributions and implications

First, the theoretical contribution of this research is to develop a theory of non-rational factors in decision-making practices from a cultural perspective. The practice of decision-making is a socially constructed phenomenon. This practice is built up by people who share certain values, beliefs, customs, superstitions, and even interests. In the process of social construction, the role of non-rational factors is often invisible, but it cannot be denied. In addition, the non-rational factors involved all relate to highly subjective aspects of behaviour, and some of them are still considered taboo and embarrassing

(superstitious beliefs, amulets, and the like). In this theory, things that are considered negative do not necessarily lead to poor performance. On the contrary, reliance on non-rational factors such as experience, religious beliefs, irrational considerations, and local wisdom can actually foster togetherness, leading to a sense of belonging and self-confidence. The social values aroused from within the individual will create a collective commitment to improving organisational performance. Consequently, experts need to look at each of the elements involved here in more detail.

Second, the contribution of this research also relates to knowledge preservation. This concept is part of knowledge management theory, and has a role to play in organisational learning processes. Non-rational factors, which mostly arise from the results of empirical experience, can be regarded as tacit knowledge. Contemporary management theory emphasises the idea that a strong organisation is an organisation that has knowledge, as knowledge is considered a major asset (Moran & Morner, 2018). Furthermore, tacit knowledge is generally not recorded, but it still needs to be preserved in order to be used in learning. Knowledge preservation here needs to be supported by technology, so that such knowledge can be captured, managed, stored, and disseminated in a comprehensive and holistic manner. Data and information recorded using specific information and communication technology (ICT) can be studied and discussed by members of the organisation and used for the completion of daily work. Organizations need to preserve the tacit knowledge that is hidden within their systems, in order to facilitate effective learning among their staff.

Third, this study contributes to the theory of decision-making in leadership. The non-rational factors identified affect leadership style, especially in terms of managerial abilities, critical thinking, general insight, and also sensitivity. A leader in an information institution is required not only to possess information literacy and be equipped with the ability to manage data accurately, but also to understand and respect the culture and traditions that apply in the workplace environment (Bell, 2019). Such a form of management enables the leadership to foster a sense of equality, democratisation, and togetherness. Wise leadership that is in line with the values of the local community will encourage and develop the motivation, independence and performance of employees, and in turn have a positive impact on the organisation as a whole.

Practical implications

This study should positively impact managers of information institutions by providing the knowledge that non-rational factors (experience, religious beliefs, and local wisdom) have the potential to help improve organisational performance. Other factors that can have a slight positive effect on organisational performance are personality and intuition. Meanwhile, the factors that need to be avoided are negative personal emotions and irrational considerations. These both have the potential to damage harmony within the workplace, thereby preventing an organisation from achieving a high performance (Sylvina et al., 2021).

It follows from this that there is a need to increase the awareness of managers at information institutions of the value of capturing the individual knowledge of the other members of their organisation. Such tacit knowledge should be recorded into an information system, and managed so that it is easily accessible to all members of the

organisation. Even though the decision-makers and the specific situations involved will be different in the future, the next generation can still learn from this knowledge and apply it to their new situation. It is widely known that non-rational factors have an enormous potential to overcome VUCA situations and other similar issues. Recording the knowledge involved here can offer a way of optimising an individual's ability to understand how non-rational factors can be valuable in decision-making.

Research limitations and suggestions future works

The first limitation in this study is the very small sample size, namely 498 respondents. There are no official data for the population of information managers in Indonesia, but it can be assumed that this number represents less than 1 percent of the total. The second limitation lies in the large number of research statements, namely 41, plus 5 in the respondent data section. This number can be regarded as too high, considering both the number of managers involved and how busy they are, and also the character of the people in Indonesia, who are not familiar with research surveys. In principle, therefore, the statements in the survey need to be reformulated by reducing their number and using simpler sentences.

One suggestion for further research would be to explore these factors using qualitative research methods, which focus on human behaviour. Given the elements of personal experience, religious belief, local wisdom, intuition, emotion, and irrational considerations involved here, a qualitative approach might be very useful. This could provide deeper insight into managers' reasons for using (or avoiding) non-rational factors in their decision-making. Similarly, it could also dig deeper into the non-rational factors that are most frequently used, their application, and their impact on individuals and the wider organisation. Through intensive behavioural observations and in-depth interviews with informants, this method could discover the meaning and unique nature of the non-rational factors that are used in the decision-making process within a particular organisation.

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Appendix 1. Operational definitions of variables

Variable	Definition of variable	Dimension	Indicator	Number of statements
Factor non-rational in decision-making (Independent variable)	Both conscious and unconscious preference, inference, classification, and judgement (Gigerenzer & Gaissmaier, 2015).	1. Personality characteristics	1. Personality characteristics used in identifying problems	1
			2. Personality characteristics used in developing and evaluating various alternative solutions	8
			3. Personality characteristics used in choosing the best alternative to make decisions	16
			4. Personality characteristics used in implementing decisions	26, 34
		2. Experience	1. Experience used in identifying problems	2
			2. Experience used in developing and evaluating various alternative solutions	9, 15
			3. Experience used in choosing the best alternative to make decisions	17, 23
			4. Experience used in implementing decisions	27
		3. Emotion	1. Emotion used in identifying problems	3
			2. Emotion used in developing and evaluating various alternative solutions	10
			3. Emotion used in choosing the best alternative to make decisions	20
			4. Emotion used in implementing decisions	30

(*Continued*)

(Continued).

Variable	Definition of variable	Dimension	Indicator	Number of statements
		4. Intuition	1. Intuition used in identifying Problems	4
			2. Intuition used in developing and evaluating various alternative solutions	11
			3. Intuition used in choosing the best alternative to make decisions	18, 24, 35
			4. Intuition used in implementing decisions	28
		5. Religious beliefs	1. Religious beliefs used in identifying problems	5
			2. Religious beliefs used in developing and evaluating various alternative solutions	12
			3. Religious beliefs used in choosing the best alternative to make decisions	19
			4. Religious beliefs used in implementing decisions	29
		6. Irrational considerations	1. Irrational considerations used in identifying Problems	6
			2. Irrational considerations used in developing and evaluating various alternative solutions	13
			3. Irrational considerations used in choosing the best alternative to make decisions	21
			4. Irrational considerations used in implementing decisions	31

(*Continued*)

(Continued).

Variable	Definition of variable	Dimension	Indicator	Number of statements
		7. Local wisdom	1. Local wisdom used in identifying Problems	7
			2. Local wisdom used in developing and evaluating various alternative solutions	14
			3. Local wisdom used in choosing the best alternative to make decisions	22, 25
			4. Local wisdom used in implementing decisions	32, 33
Organizational performance (Dependent variable)	A set of achievements gained after implementing a set of practices (Alosani et al., 2020).	Achievement of task implementation	1. the quality of problem-solving in the organisation	36
			2. the quality of goods and services	37
			3. the achievement of the organisation's goals	38
			4. I can improve efficiency in the use of organisational resources	39
			6. staff performance achievement	40
			7. a conducive working environment	41

Appendix 2. Survey questions

A. RESPONDENT DATA
Gender: Male/Female
Working period:
1) 0–3 years
2) 4–6 years
3) 7–10 years
4) More than 10 years

Current work unit:
1) Policymakers
2) Administration
3) Cooperation and public relations
4) User service
5) Information/archives processing
6) Information Technology

Current position:
1) Head of library
2) Head of archives
3) Head of gallery
4) Head of a museum
5) Head of division
6) Subsection head of administration
7) Section head
8) Head of Group Work (Librarians/Archives/Information Professionals)

Name of institution: … … … … … … … … … … … … … … … … … .
Region/City of Institution: … . … … … … … … … … … … … … …

B. DECISION-MAKING PROCESS IN THE LAST 3 YEARS (2020–2022)
Please choose the option that is CLOSEST to the facts.

- **Irrational considerations**: considerations that are not based on reason/reasoning, such as myths, lucky numbers, zodiac predictions, etc.
- **Local wisdom**: the inherited values and virtues of a community group, which affect its perspective regarding particular matters or ideas.

STATEMENT	SCALE 5 (%)	4 (%)	3 (%)	2 (%)	1 (%)
1 Identifying Problems					
1) I identify a problem according to my personality characteristics					
2) I identify a problem based on experience					
3) I identify a problem based on emotion					
4) I identify a problem based on intuition					
5) I identify a problem based on religious beliefs					
6) I identify a problem based on irrational considerations					
7) I identify a problem based on local wisdom					
2 Developing and evaluating various alternative solutions					
8) I can develop and evaluate various alternative solutions based on my personality					
9) I can develop and evaluate various alternative solutions based on my experience					
10) I can develop and evaluate various alternative solutions based on emotion					
11) I can develop and evaluate various alternative solutions based on intuition					
12) I can develop and evaluate various alternative solutions based on religious beliefs					
13) I can develop and evaluate various alternative solutions based on irrational considerations					
14) I can develop and evaluate various alternative solutions based on local wisdom					
15) I develop and evaluate various alternative solutions based on orders from superiors and/or prevailing customs					
3 Choosing the best alternative to make decisions					
16) I choose the best alternative to make decisions based on my personality					
17) I choose the best alternative to make decisions based on experience					
18) I choose the best alternative to make decisions based on intuition					
19) I choose the best alternative to make decisions based on religious beliefs					
20) I choose the best alternative to make decisions based on emotion					
21) I choose the best alternative to make decisions based on irrational considerations					
22) I choose the best alternative to make decisions based on local wisdom					
23) My decision will have the expected result					
24) My decisions are better than other people's decisions					
25) I defend my decisions even if many people disagree with them					
4 Implementing Decisions					
26) I implement decisions based on my personality					
27) I implement decisions based on experience					
28) I implement decisions based on intuition					
29) I implement decisions based on religious beliefs					
30) I implement decisions based on emotion					
31) I implement decisions based on irrational considerations					
32) I implement decisions based on local wisdom					
33) I still implement a decision, even if it is opposed by many parties					
34) I continue to implement a decision, even when I experience many obstacles (lack of facilities, funds)					
35) I believe that the decisions that I implement will be successful					

(*Continued*)

(Continued).

5 Organizational performance
36) I can improve the quality of problem-solving in the organisation
37) I can improve the quality of goods and services
38) I can improve the achievement of the organisation's goals
39) I can improve the efficiency of the use of organisational resources
40) I can improve staff performance achievement
41) I can create a conducive working environment