EMPLOYEES’ INTENTION TO SHARE KNOWLEDGE: THE EGYPTIAN BANKING INDUSTRY

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Abstract

In order to compete and achieve stability, innovative organizations have been more concerned about Knowledge management; especially with the rapid technological changes and information overload. Accordingly, this study investigates the main criteria that affect employees’ intention to share knowledge in the banking industry and proposes a model that helps banks increase their employees’ intention to share knowledge within the organization. A questionnaire was distributed to survey employees working at 3 different banks, in 9 different branches in order to measure their intention to share knowledge. The survey was administered at: NSGB, HSBC, and NBE. These three banks are classified into three main categories: Foreign, Public and Commercial. Data collected was statistically analyzed using SPSS and the findings could be used as a road map for employers on how to promote knowledge sharing inside organizations.

1. Introduction

With increased levels of competition in the marketplace, high costs associated with human resources and shortage of qualified knowledge workers, organizations have actively noted the importance of making more effective use of knowledge and expertise that exists within their existing employee base [1].

For many organizations this notion of managing knowledge as a corporate resource has been viewed as a weapon that promised to deliver sustainable, distinctive competencies in the future [2].

In recent decades, many countries have experienced banking problems requiring major reforms of their banking systems. Countries resolve their banking problems by adopting strategies, policies, and tools for reform and successful restructuring. The term knowledge sharing is quite novel and infrequently heard to the firms and organizations in Egypt. Organizations are not able to realize and perceive the importance of knowledge sharing culture as one of the factors that is critical to ensure the success of an organization. Knowledge sharing can be defined as the dissemination of knowledge and information throughout the organization.

Sharing knowledge of knowledge workers within banking industry can realize potential gains and is critical to survive and prosper in competitive environments [3]. Knowledge sharing in this sense becomes all the significant for knowledge workers in banking industry, since they are required to be research-oriented, resourceful, creative in banking service, and prepared to take knowledge opportunities that can be acquired. The vital purpose of knowledge sharing in banking industry is to raise the quality and efficiency of banking service.

Banks operating in Egypt can also be classified as public sector, Commercial and foreign according to ownership. The Egyptian banking sector comprises 57 banks; this number includes 28 commercial banks of which four banks are state owned banks, 26 investment banks of which 11 are joint ventures banks and 15 branches of foreign, in addition to three specialized banks of which two are state owned. The number of licensed branches of those banks in Egypt reached 243 branches in addition to 39 branches which are licensed to operate overseas. This rapid growth of the banking sector during the 1990s together with the liberalization of the whole economy has lead to the existing of Knowledge sharing in banking whether it is done formally or informally. Knowledge sharing in banking sector is now expanding to be a culture because these banks require a knowledge network to make decisions regarding their work. The culture of knowledge sharing in the banking sector will be investigated to get a clearer image on the existing guide of knowledge sharing culture in banking sector, particularly in Egypt.
Organizational researchers and business writers have recently recognized the importance of knowledge as an asset to organizations and as one of the key factors for sustainable competitive advantage [4]. Sharing knowledge within the banking industry can realize potential gains and its importance to survive in competitive environments [3]. The focus of knowledge management is how to share knowledge in order to create value added benefits to the organization [5] [6].

Continuous knowledge management (KM) can promote organizational innovation and play a key role in the organization’s success [7]. In addition, problems such as maintaining, locating and applying knowledge have intensified the importance of organizational KM [1]. Without their employees, firms are unable to develop knowledge [8]. Blair believes that when organization’s employees “have knowledge” that is beneficial to their organization, they own something more than the data and information stored in the organization’s information systems [9].

2. Research Aim

Like most service providers, banks have realized the importance of Knowledge sharing as a positive force for the survival of an organization. Yet, the factors that promote or discourage knowledge sharing behaviors in the organizational context are poorly understood [10] [11].

Accordingly, the main subject of the research is to investigate on knowledge sharing within banks in Egypt context through identifying the main factors that affect employees’ intention to share knowledge. The research proposes a model that would support decision makers enhance employees’ intention to share knowledge. Thus, the research question is given below:
What are the main factors that affect employees’ intention to share knowledge in the Egyptian banking industry.

Research Hypotheses

In order to answer the above research question, literature has been extensively reviewed to devise the following five hypotheses:

H.1: There is no significant difference between Climate capabilities and employees’ intention to share their knowledge.
H.2: There is no significant difference between Structural capabilities and employees’ intention to share their knowledge.
H.3: There is no significant difference between technological capabilities and employees’ intention to share their knowledge.
H.4: There is no significant difference between human capabilities and employees’ intention to share their knowledge.
H.5: There is no significant difference between employees’ intention to share knowledge with regards to the bank type

3. Knowledge Management and Sharing

In the existing knowledge-intensive economy, knowledge is recognized as a vital strategic resource for the organizations. A common method of defining knowledge is to categorize knowledge into different forms. For instance, [12] following the work of [13], categorizes knowledge into two forms: explicit and tacit. Explicit knowledge can be formalized, documented, archived, codified, and easily communicated or transferred between individuals. Tacit knowledge, in contrast, is deeply rooted in individual’s actions, experiences, ideals, values and is more difficult to write down or formalize.

Nonaka states that tacit knowledge is divided into two components: technical and cognitive. The technical component refers to informal personal skills of crafts and the cognitive component refers to individual’s embedded beliefs, values, and mental models [12].

According to [2], the source for competitive advantage does not reside in the mere existence of knowledge, but rather in the organization’s capability to effectively use the existing knowledge, to generate new knowledge assets and to act upon them. To leverage and manage organizational knowledge resources, organizations are continuously adopting KM initiatives and are investing heavily in information and communication technologies in the form of knowledge management systems (KMS) [1] [4] [15] [18].

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Knowledge Sharing has been defined differently by different authors. KS is defined as “a set of behaviors that involve the exchange of information or assistance to other” [11].

Equating KS to knowledge flows theorize that knowledge flows comprise of five elements [18]: value of the source knowledge, source willingness to share knowledge, media richness of the communication channel, willingness to acquire knowledge, and absorptive capacity of the recipient. Later in 2001, KS was associated to knowledge transfer and defined it as the process of disseminating knowledge throughout the organization [1].

A number of studies have demonstrated that Knowledge Sharing (KS) is essential because it enables organizations to enhance innovation performance and reduce redundant learning efforts [19] [20]. A firm can successfully promote a KS not only by directly incorporating knowledge in its business strategy, but also by changing employee attitudes and behaviors to promote willing and consistent KS intentions [10].

Another three variables have been found to be important for effective KS: Extrinsic Motivation, absorptive capacity and channel richness [22]. Individual Variables (Personality, Self-Efficacy, and Organizational Commitment), Organizational Variables (Job Autonomy, Reward associated with KS and Perceived Support from co-workers and supervisors) and Knowledge Management Systems (Availability and Quality of the systems).

Finally, it was found that the organizational Climate plays a dominant role in knowledge management and it’s also an important factor in organizational learning as it motivates individual’s creativity and create an innovative climate. In his study he identified organizational structure, reward system and management style as the important dimensions of innovative climate.

Based on an extensive review of literature, the following dimensions have been highlighted in relation to Knowledge Sharing:

**Climate Capabilities**
- **Affiliation**
  The affiliation motive is described as maintaining a friendly relationship with others or being emotionally concerned when separated from others [23]. In the context of brand community, it’s defined affiliation motive as “members’ interest in having relationships with others inside the community”. The desire to make relationships with others is a basic human need [24] and kinship and friendship are expressions of this [25]. An owner’s relationship with other owners of the same brand yields a “we-ness” [26] and when each owner has similar connections to the brand, he/she has a stronger attachment to other members of the group [22].

- **Innovativeness**
  If an organizational learning culture is to lead to innovation and long-term performance improvement, then the production and sharing of knowledge must be accompanied by efforts at applying or transferring that knowledge in ways that help the organization function more effectively. This fundamental requirement highlights a crucial element linking both learning organization cultures and innovation in organizations: that is, the need for a positive, supportive psychological climate for learning application (i.e., transfer).  

- **Fairness**
Each and every person is eager to pursue fairness, hoping to maintain and protect their equal benefits in an organization. Whether a person’s appeal for fairness is satisfied will affect his thoughts and actions [27].

**Structural Capabilities**
- **Formalization:**
  Formalization indicates the extent to which the rights and duties of the members of the organization are determined and the extent to which these are written down in rules, procedures, and instructions. Formalization has similar disadvantages as centralization for KS. It creates an environment of control and reduces flexibility in KS. Hence, formalization is again ineffective to reach integration from a KS point of view [28].

- **Centralization**
  Centralization refers to the extent to which the decision-making power is concentrated at the top management level in the organization [29] [30]. Although centralization achieves integration and coordination among units in the organization, it is not considered to be positively related to KS. Centralized decision-making is criticized within the KS context for two reasons:
  1. Decisions about the sharing of specialized knowledge can only be effective if the centralized decision-maker knows which knowledge is held individually [31]. Hence, centralized decision-making driving the KS process can be ineffective, especially when complex knowledge is involved.
  2. Top-down directives can reinforce an environment of fear, distrust, and internal competition reducing collaboration and integrative actions [32] [33].

**Technological Capabilities**
Technology is an important mediating factor in KS. The intervention of information technology (IT) is inevitably important as a tool for a successful KM implementation [34] [35]. However, it was suggested “The role of ICT for knowledge sharing can only be fully understood if it is related to the motivation for knowledge sharing…”

On top of the motivation for KS, technology alone may not effectively encourage KS activities [36].

**Human Capabilities**
- **Absorptive Capacity**
  Absorptive capacity is considered a filter to knowledge access and utilization or the ease with which learning can take place. The absorptive capacity of the firm is not the sum of the individual levels and therefore organization specific factors should accordingly be identified separately [37]. In particular, it’s stressed that the mere absorption of knowledge is not sufficient but should be followed by a transfer within the firm among units and individuals. Absorptive capacity is thus both a process between a firm and an external environment but also a transfer of knowledge within the organization.

- **Sense of Self-Worth**
  Sense of self-worth assesses the extent to which organizational members perceive themselves as contributing to their employer via their knowledge sharing [26]. Self-worth is regarded as one’s self-image of feelings of competence, effectiveness, status and moral worth regarding behavior in the eyes of one’s peers. When others react in the way that one has expected, we feel that our thinking and behavior are confirmed to be correct, and role taking will be enhanced with continual exchange of information/knowledge [38]. Such confirmation of reflected appraisal leads to the increased feelings of self-worth.

In this regard, organizational members who receive feedback on previous KS processes are more likely to recognize the value of the work of other members and the resulting enhancement of organizational performance [26].

- **Motivation**
  Motivation is a force that shapes members’ desires or readiness to participate in knowledge and information sharing with other members [38].
• Personal Attitude
Personal factors, like recognition as experts in the relevant fields of study, group identity and self-esteem are important considerations determining the passion to KS [39] [40] [41].

However, not all knowledge will be shared. The type and the amount of knowledge shared depend upon perceived value of knowledge [42]. It also depends on the availability and extent of intellectual property protection for KS activities. The fears that one might receive unfair recognition and accreditation, plus the risks of one’s intellectual property being stolen, are some of the key reasons that discourage knowledge-sharing activities [43].

5. Research Framework

As part of a wider investigation of KS within organizations in the Egyptian context, a questionnaire was designed to survey employees working at 3 different banks, in 9 different branches in order to measure their intention to share knowledge. The survey was administered at:

1. National Societe General Bank (NSGB) which is the second largest private bank after CIB in terms of its market shares, comprising 117 branches. It is also one of the largest commercial banks operating in Egypt, it is established in 1978 by SG group (one of the largest financial services groups in the Eurozone), NSGB is one of the top Egyptian Banks serving more than 600 thousand clients through 4200 banking professionals.

2. HSBC Bank Egypt is one of the largest multinational banks operating in Egypt providing a comprehensive range of banking and related financial services through a network of 83 branches.

3. National Bank of Egypt (NBE) is the oldest public bank in Egypt. It has an extensive network of 258 branches nationwide. To this may be added NBE’s effective international presence through the National Bank of Egypt (UK) Limited, New York and Shanghai branches plus representative offices in Johannesburg – South Africa, Dubai – UAE and Addis Ababa – Ethiopia. To enhance its international presence, particularly in Africa, NBE has founded the National Bank of Egypt- Sudan as an affiliate.

A summary of the questionnaire is presented in Table 1.a and 1.b. The questionnaire contained 32 statements arranged in 5 groups and a demographics section. The used scale in this study is a five-point Likert-scale ranging from 5 ‘Strongly agree’ to 1 ‘Strongly Disagree’.

Group 1: The items for the Intention to share knowledge variable are adapted from [10] research. Four items are used to measure Intention to share knowledge.

• Two items (Question1-2) assess intention to share explicit knowledge
• Two items (Question 3-4) assess intention to share implicit knowledge.

Group 2: The items for measuring first independent variable climate capabilities were adapted from previous organizational climate studies, with the items altered to fit the knowledge-sharing context. The three organizational climate dimensions were then used as indicators to create the super-ordinate organizational climate construct. This scale is represented by seven items to measure organizational climate.

• Questions 5 and 6 assess affiliation.
• Questions 7-9 assess innovativeness.
• Questions10-11 assess fairness.
Group 3: Items for measuring Structural capabilities are adapted from [30] research. Five items are used to measure organizational structure.

- Questions 12-13 assess centralization.
- Questions 14-16 assess formalization.

Group 4: Items for measuring technological capabilities are adapted from [44] research. Seven items are used to measure technological capabilities.

- Questions 17-20 assess IT application usage.
- Questions 21-23 assess End-User Focus.

Group 5: Items for measuring human capabilities are adapted from [22] [10] researches. Nine items are used to measure human capabilities.

- Questions 24-25 assess absorptive capacity.
- Questions 28-30 assess Motivation to share knowledge.
- Questions 31-32 assess Personal attitude towards sharing knowledge.

6. Statistical Analysis

In order to analyze the questionnaire data, statistical analysis was done using the Statistical Package for Social Science (SPSS). The following tests were conducted:

- Reliability Analysis
- Chi-Square
- Kruskal Wallis Analysis

Reliability Analysis
Reliability test is an assessment of the degree of consistency between multiple measurements of a variable. Cronbach’s alpha is the most widely used measurement tool with a generally agreed lower limit of 0.6. Table I, provides an overview of the reliability scores. As can be seen from table 2, all the alpha coefficients were above the required level of 0.6.

Testing the Hypotheses
In order to understand and determine the main factors that affect the employees’ intention to share knowledge, a number of hypotheses were devised and tested as shown below:

H₀₁: There is no relationship between climate capabilities and employees’ intention to share their knowledge.
Testing this using the relevant questions, Chi-square = 41.360 (DF=18, sig. =0.001).
This shows a significant relation between climate capabilities and employees’ intention to share their knowledge. This would enable the authors to reject the null hypothesis. This lead to understanding the importance of the impact of team climate on individuals’ knowledge sharing attitude and behavior when developing strategies to foster knowledge to achieve better organizational outcomes.

H₀₂: There is no relationship between structural capabilities and employees’ intention to share their knowledge.
Testing this using the relevant questions, Chi-square = 44.560 (DF=12, sig. =0.000).
This shows a significant relation between organizational structure and employees’ intention to share their knowledge. This would enable the authors to reject the null hypothesis. The interpretation is that the organization structure seems to affect their intention to share knowledge. When organizations are organic where employees are encouraged to participate in decision making at all levels, there is strong emphasis on team work and employees empowerment, the employees are more likely to share their knowledge with others.

H₀₃ There is no relationship between technical capabilities and employees’ intention to share their knowledge.
Testing this using the relevant questions, Chi-square = 46.880 (DF=16, sig. =0.000).
This shows a significant relation between the technical capabilities and employees’ intention to share their knowledge. This would enable the authors to reject the null hypothesis. The interpretation is that technology is one of the important pillars of knowledge management, which by focusing on it will smooth the flow of knowledge sharing within the organization.
**H.4:** *There is no relationship between human capabilities and employees’ intention to share their knowledge.*

Testing this using the relevant questions, Chi-square = 50.480 (DF=21, sig. =0.000).

This shows a significant relation between human capabilities and employees’ intention to share their knowledge. This would enable the authors to reject the null hypothesis. The interpretation is that knowledge sharing is about interpersonal contact, which provides key evidence for firms to motivate employees to participate actively in knowledge-sharing initiatives in the firm. Therefore in order to create intentions to share knowledge, the organization must support positive recognition of members’ capabilities and organizational knowledge sharing norms.

**H.5:** *There is no relationship between Bank categories and employees’ intention to share their knowledge.*

Testing this using the relevant questions, Chi-square = 4.880 (DF=2, sig. =0.087).

This shows an insignificant relation between bank category and employees’ intention to share their knowledge. This would enable the authors to accept the null hypothesis. The interpretation is that knowledge sharing is not highly concerned with the bank category, whether it is foreign, commercial or public.

*Kruskal Wallis Analysis*

Using the Kruskal Wallis analysis (Test = 5.927, DF = 2, sig. = 0.052). It was found that there is insignificant impact of the Bank category on the intention to share knowledge. This means that employees’ intention to share knowledge is not much affected by bank categories, whether it is foreign, commercial or public. Despite this, it is still found a slight change in the mean rank between different bank categories and knowledge sharing is the best in foreign banks (Mean Rank = 57.21), then in commercial (Mean Rank = 50.00) and the least knowledge sharing is found in public banks (Mean Rank = 42.56).

7. **Conclusion**

The research aim was to investigate the main variables that affect KS among employees within banks in the Egyptian context and to propose a model that helps the banks in Egypt to increase employees’ intention to share their knowledge. The analysis of research results showed consistency with previous studies [22] [38] where there is a significant relationship between organizational climate capabilities and employees’ intention to share their knowledge. In other words, the employees are encouraged to share their knowledge with others; they need fair and innovative climate to foster their intention to share knowledge.

The findings also indicate that when organizations rely on organic structure which is characterized by less formalization, relaxed hierarchy, horizontal communication and decentralized decision making, KS is enhanced among employees; and also when the computer applications applied in the organization are user friendly, this may foster knowledge sharing intention. Moreover, the study also proved that the human personal capabilities characterized by high sense of self worth, motivation and the positive attitude towards knowledge sharing also enhance employees’ intention to share knowledge.

Also, the results illustrate that there is insignificant impact of the Bank category on the intention to share knowledge. This means that the intention to share knowledge between employees does not differ whether the bank is foreign, commercial or public. Despite the result obtained, found a slight change in the mean rank between different banks categories could still be. Knowledge sharing is the best in foreign banks followed by commercial banks and the least knowledge sharing is found in public banks.

So the model tested in the study illustrates that the climate, structural, technological, and human capabilities are among the most important factors that promote the employees intention to share knowledge regardless of the bank category whether it’s foreign, public or commercial. However, this study was conducted in the context of the Egyptian banking industry where bank employees were used as the subject of experiment. It is therefore difficult to generalize the results obtained to other types of organizations such as manufacturing firms.
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8. References


[34] Bhatt, G. D. (2001), Knowledge Management in Organizations: Examining the Interaction between Technologies, Techniques, and People. *Journal of Knowledge Management, 5*(1), 68-75


APPENDIX

Table 1a. Questionnaire Summary

<table>
<thead>
<tr>
<th>Questionnaire Items</th>
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</thead>
<tbody>
<tr>
<td>I will share my work reports and documents with my colleagues.</td>
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<tr>
<td>I will share manuals and methodologies with my colleagues.</td>
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<tr>
<td>I will share my experience or know-how with my colleagues.</td>
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<tr>
<td>I will share my training and educational experience with my colleagues.</td>
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<tr>
<td>Members in my department consider other’s point of views.</td>
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<tr>
<td>Members in my department cooperate with each other.</td>
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<tr>
<td>My department encourages suggesting new.</td>
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<tr>
<td>My department encourages taking risks.</td>
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<tr>
<td>My department encourages new methods to perform a task.</td>
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<tr>
<td>My boss’s evaluation is fair.</td>
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<tr>
<td>My boss’s objectives are reasonable and attainable.</td>
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<tr>
<td>Decision making is highly centralized.</td>
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<tr>
<td>I do not participate in major decisions.</td>
</tr>
<tr>
<td>Each unit has well-established formal rules, task guidelines, and operational procedures.</td>
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<tr>
<td>I always carry out my tasks according to rules and formal organization documents.</td>
</tr>
<tr>
<td>I am constantly being watched to see that I follow the rules.</td>
</tr>
</tbody>
</table>
I regularly use the Internet for my work.
I regularly use the organization’s data base.
I regularly use technology to retrieve knowledge about markets, products and competitors.
I regularly use technology to cooperate with my colleagues.
Information systems and software are user-friendly.
It is easy to use information systems without extra training.
I can easily access the organization’s database.
I am able to recognize the value of knowledge I received.
I am able to apply the knowledge I received to solve problems.
My KS would help other members in the organization solve problems.
My KS would improve the organization.
I will share knowledge if I could avoid punishment.
I will share knowledge if I could gain monetary rewards.
I will share knowledge if I could be recognized.
My KS with my colleagues is beneficial for me.
My KS with my colleagues threatens my power.

<table>
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<th>Personal Data</th>
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<td>Gender</td>
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</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>20 – &lt; 30</td>
</tr>
<tr>
<td>30 – &lt; 40</td>
</tr>
<tr>
<td>40 – &lt; 50</td>
</tr>
<tr>
<td>50 – &lt; 60</td>
</tr>
<tr>
<td>Monthly Income</td>
</tr>
<tr>
<td>&lt; L.E 1,000</td>
</tr>
<tr>
<td>L.E 1,000 – &lt; 3,000</td>
</tr>
<tr>
<td>L.E 3,000 – &lt; 5,000</td>
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<tr>
<td>L.E 5,000 – &lt; 10,000</td>
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<tr>
<td>L.E 10,000 and above</td>
</tr>
<tr>
<td>Education Level</td>
</tr>
<tr>
<td>High school/Average education</td>
</tr>
<tr>
<td>University graduate</td>
</tr>
<tr>
<td>University postgraduate</td>
</tr>
<tr>
<td>Organizational Level</td>
</tr>
<tr>
<td>Administrative</td>
</tr>
<tr>
<td>Specialist</td>
</tr>
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</table>
Years at the job

- < 5 years
- 5 – < 10 years
- 10 – < 20 years
- 20 years and above

Table 1b.

Department
- Credit Department
- Marketing Department
- Human Resources Management
- Customer Service
- Teller
- Other

Questionnaire Summary

Table 2

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of Items</th>
<th>Alpha</th>
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<tbody>
<tr>
<td>Knowledge Intention</td>
<td>4</td>
<td>.84</td>
</tr>
<tr>
<td>Climate capabilities</td>
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<td>.79</td>
</tr>
<tr>
<td>Structural Capabilities</td>
<td>5</td>
<td>.60</td>
</tr>
<tr>
<td>Technological Capabilities</td>
<td>7</td>
<td>.72</td>
</tr>
<tr>
<td>Human Capabilities</td>
<td>9</td>
<td>.75</td>
</tr>
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</table>