

Organizational Knowledge Management Practices and Their Impact on Organizational Focus—Assessing the Case of the Service Industry in Ghana

Kudozia Roland Yaw

Gdirst Institute, Accra, Ghana

Email: kudozia@gmail.com

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Abstract

This research study investigated the importance of organizational knowledge capital in service-oriented firms in Ghana. The study's findings indicate that knowledge capital is a crucial resource for these firms and can be derived from various sources, including government regulations, customer feedback, and training programs. The study found that firms considered knowledge more valuable if it enhanced customer satisfaction and reputation rather than solely focused on developing new products and services. The study found that firms measured the impact of their knowledge based on several metrics, including revenue goals, the facilitation of learning for future efforts, and the development of new products and services. The study further suggests that knowledge asset mapping can aid organizations in properly accounting for and tracking knowledge resources, which can enhance the ability of managers to concentrate these resources on knowledge risks and opportunities. The study also found a positive correlation between organizational focus and the organization's asset map, indicating that a variation in organizational focus may affect how knowledge asset mapping is organized. Additionally, the study found evidence suggesting that productivity increases with increased organizational knowledge, indicating the need for businesses to set up thorough knowledge management systems to compare internal organizational performance to market and consumer expectations.

Keywords

Organizational Knowledge, Organizational Focus, Knowledge Measurement, Knowledge Asset Map, Service Industry in Ghana

1. Introduction

Organizational knowledge capital is an important concept for knowledge-intensive organizations as it refers to the intangible value of an organization's knowledge, relationships, learned techniques, procedures, and innovations (Chatterji & Kiran, 2022). Knowledge capital provides companies with a comparative advantage over their competitors. Knowledge codification, which makes individual knowledge apt for sharing, dissemination, propagation, storage, and retrieval, is an essential part of organizational knowledge (Farooq, 2020).

Measuring organizational knowledge capital is a topic that is receiving significant attention from researchers. Although the concept has existed for a long time, the term was given its name recently (Preece, 2015). The three fundamental components of knowledge management are the process, the people, and the overall technology as applied (McIver & Wang, 2016). The topic related to knowledge management and measurement can be identified to be new when considering the fact that it is focused on analyzing and identifying the key way in which knowledge generation can be managed (van den Berg & Kaur, 2022). As well it can be considered in the context of the enterprise and the overall way the different employees and participants within the enterprise would be able to perform well. An organization's knowledge assets constitute its knowledge capital and reside in many locations within and outside the organization (Kim, Watkins, & Lu, 2017).

An organization's knowledge assets constitute its knowledge capital and reside in many locations within and outside the organization (Beccera-Fernandez & Sabberwarl, 2015). Therefore, a study of knowledge capital must account for intangible knowledge's vagaries in examining how a business develops (Westeren, 2008). Organizational knowledge assets or capital generally refer to intangible assets such as human capital, structural capital, relationships (customer and external stakeholders), processes, procedures, innovation capital, and any technologies developed or acquired to use these assets. In short, knowledge capital is an organization's entire body of knowledge (Ramezan, 2011; Beccera-Fernandez & Sabberwarl, 2015).

Research and literature abound on organizational knowledge capital measurement, but there needs to be more knowledge of capital management applications within Ghana's corporate service enterprises. It remains a problem of the availability of knowledge regarding how service companies operating in Accra actually manage the knowledge capital they generate, measure it, develop their knowledge asset map and then harness these resources towards meeting the organizational focus. Existing research on the management of organizational knowledge capital by Ghanaian enterprises has been limited to sectors such as construction (Ohemeng, 2011), industrial (Agyemang, Ngulube, & Dube, 2019; Boateng, Dzandu, & Tang, 2016), telecommunication (Ofori, Osei, Ato-Mensah, & Affum, 2015), Information Communication Technology (Ofori-Dwumfuo & Kommey, 2013), and education (Dei & der Walt, 2020; Musa, 2012).

The focus of this research is to consider the knowledge capital management practices of organizations in the service sector in Ghana, and it will explore the generation and measurement of knowledge capital, as well as linkages between the organizational knowledge asset map with the organizational focus. The research will finally consider how organizational knowledge capital drives productivity.

The research questions arising from this research aim include the following;

RQ1. How do business organizations in Accra measure the organizational knowledge capital they acquire?

RQ1a—Acquisition of organizational knowledge capital by service organizations in Ghana

RQ1b—Measurement of organizational knowledge capital by service organizations in Ghana.

RQ2—How is the organizational knowledge asset map for service enterprises in Ghana linked to their organizational focus?

RQ3—How is organizational knowledge capital for service organizations in Ghana linked to their productivity?

2. Literature Review

The importance of knowledge capital for gaining a competitive advantage and achieving a sustainable competitive edge has been recognized by scholars (Garcia-Perez, Gheriss, & Bedford, 2019). It is necessary for organizations to identify their knowledge assets and develop approaches to evaluate the impact of organizational knowledge capital and its activities on performance and market value (LaFayette, Curtis, Bedford, & Iyer, 2019). Knowledge creation involves internal and external processes, and individual and collective factors, while inter-firm collaboration and a common inter-organization platform can facilitate knowledge development (Handa, Pagani, & Bedford, 2019).

The success of knowledge activities in an organization depends on measuring and evaluating knowledge, which helps determine its worth and benefits (Garcia-Perez et al., 2019). However, the debate over whether knowledge should be given a monetary value continues. Different models and methodologies have been presented to measure knowledge, such as Skandia Navigator and EVA/MVA, but the approach must be appropriate for the organization's structure and operational aspects (Bedford & Sanchez, 2021). Indicators and methods used to measure knowledge can vary within and across industries. Designing a three-dimensional knowledge measurement conversion system that is adaptable and sensitive to organizational shifts is crucial for measuring knowledge in an organization (Heidary Dahooie, Ghezel Arsalan, & Zolghadr Shojai, 2018).

Probst's Knowledge Management Framework identifies four methods that organizations can use to acquire and utilize knowledge, including obtaining knowledge from other firms, external stakeholders, experts, and certain products (Aljuwaiber, 2016). However, the framework needs to include real-life examples of

strategies for each of these methods. A mixed methods study by [Oliva and Kotabe \(2019\)](#) found that startups in Sao Paulo, Brazil utilized practices such as internal meetings, brainstorming sessions, market assessments, obtaining customer reviews, consulting mentors and experts, and partnering with other startups to manage their knowledge effectively.

Effective implementation of knowledge management practices can positively impact a company's productivity and performance ([Hussinki, Kianto, Vanhala, & Ritala, 2017](#)). Studies have shown that firms engaging in high levels of knowledge management practices demonstrate better performance and are able to engage in innovation. Approaches to evaluating and measuring organizational knowledge capital include direct intellectual capital, market capitalization, return on assets, and scorecard methods ([Inkinen, 2016](#)). There are also various methods and tools for measuring organizational knowledge, such as project management and knowledge management tools and software, assessment tools for total quality management, and educational or training courses to evaluate the knowledge management capabilities of employees ([Oliva & Kotabe, 2019](#)).

The importance of knowledge capital for organizations is widely accepted, but managing knowledge assets and resources can be challenging ([Ashok et al., 2021](#)). A knowledge map is a useful tool for evaluating an organization's knowledge stock, providing a graphical representation of key assets and resources and their impact on strategic direction ([Carlucci, 2012](#)). It can also help to identify knowledge risks, such as forgetting or missing knowledge, technological risks like cybercrime, and operational risks ([Sadeghi Dastaki, Afrazeh, & Mahootchi, 2022](#)). There are various tools available for knowledge asset mapping, including Compendium, Mind Mapping, Concept Mapping, Dialogue Mapping, and Argument Mapping. Overall, knowledge asset mapping can improve organizational focus by improving managerial awareness of existing risks of knowledge sharing and management practices ([Lerro, Santarsiero, Schiuma, & Bartuseviciene, 2023](#)).

Organizations face several limitations when it comes to implementing organizational knowledge management practices, such as a need for more resources and employee engagement. Studies by [Oliva and Kotabe \(2019\)](#) and [Akgün et al.](#) found various barriers that hinder knowledge sharing practices, including inadequate time and resources, a focus on routine work, lack of trust and competition among employees, and a lack of culture and infrastructure to support knowledge management practices ([Garcia-Perez, Cegarra-Navarro, Bedford, Thomas, & Wakabayashi, 2019](#)). These barriers can impact an organization's ability to share knowledge, but recommendations to improve practices include reducing excessive codification of tacit knowledge and improving coherence between codified and tacit forms of data ([Shekhar & Valeri, 2023](#)).

3. Methodology

The quantitative research approach was adopted for this research, and it drove the data collection and analysis decisions. In line with the quantitative research

approach, the data was collected from respondents using the questionnaire survey. The quantitative research approach offers the advantage of targeting a larger sample population for data collection, which can increase the generalization of the results. Where there is the need for increased objectivity in the analysis and conclusions drawn, the quantitative approach is a better choice, and the findings can support greater generalizations.

The descriptive research design was selected in line with the quantitative approach, which allowed for the observation and collection of data related to the phenomenon in question. The structured research questionnaire was adopted for data collection using ordinal and nominal scaled questions modelled along the Likert-type rating, and this allowed for a comprehensive measuring of quantitative data that would validate statistical findings. The use of structured questionnaires as an instrument in this quantitative approach allowed for a large population sample to be reached with the same questions so that uniform analysis related to the objectives and hypotheses could be carried out. The questionnaire was self-designed based on the framework for managing knowledge in an organization by Probst (1998). The distribution of questionnaire was both paper and web-based.

A purposive sampling technique was adopted to select twenty (20) service-based firms operating within the central business district of Accra. This was to ensure that the data collection properly targeted the firms providing services in the city of Accra. The total population of employees in the selected firms was around 750. A sample size of 250 participants was determined using the Table for Determining Sample Size from a Given Population by Krejcie and Morgan (1970). The participants were eligible to complete the questionnaire if they had worked at least six months in their current firm and are over 18 years old.

Correlation analyses were utilized to examine associations between two variables in order to evaluate the study's assumptions. The hypotheses were put to the test using the Related-Samples Wilcoxon Signed Rank Test and Spearman Correlation Coefficient. Shapiro-Wilk was also employed to check the data's normality.

The analyses were distinguished by the determination of the central tendency (mean, median, and mode), the dispersion around the central tendency (standard deviation and range), and the distribution of responses (frequency distributions and percentage of responses), in addition to the visuals like pie charts, histograms, bar charts, and line graphs. The management members and employees of the chosen organizations took part in the study.

The questionnaire served as a design guide for the equipment used to gather data for the study. The primary factors taken into account were the respondents' biographical information, how organizational knowledge was acquired and measured, how the asset map and organizational focus related, and how the organizational knowledge management approach affected achieving the organizational focus.

In order to conduct a literature review, understand the various presumptions underlying organizational knowledge management research practices, and address definitional issues in this study, secondary data from scholarly books, journal articles, magazines, published and unpublished papers, working papers, and some internet sources were taken into consideration.

For this study, content analysis techniques were applied to all secondary data sources. The Statistical Package for Social Sciences (SPSS) and Microsoft Excel programs were used to conduct the primary data analysis. Data was adequately cleaned, variables were meticulously tagged, and questionnaires were serialized before being imputed into SPSS for analysis. Statistical graphs and charts were produced using the pertinent frequencies, cross-tabulations, and percentage frequencies.

In order to examine organizational knowledge management and measurement among Ghanaian service firms with a base in Accra, this study employed a quantitative survey. Out of the 250 questionnaires, 210 (210) were totally filled and submitted, and the information they contained served as the foundation for the study.

4. Results

The service sector companies operating in Accra formed the target population. The firms which took part in the survey were banking, telecommunications, broadcasting, engineering services, computer software development, support and research, consumer services, freight services, and those providing services on behalf of the state. A total of 210 of the 250 surveys were successfully completed and submitted, translating to an approximate response rate of 84%. The research participants' demographic profile includes staff from twenty (20) service-focused businesses, with 63% of them having at least four (4) years of experience in the service industry. **Table 1** indicates respondents' experience with their current firm, showing that about 78% of the respondents have been working with their current firm for at least four (4) years.

In this research, Cronbach's alpha for the computed variables under consideration was 0.707, which is very good for internal consistency reliability. This was interpreted as the variables having relatively good internal consistency and the instrument consistently measuring the same, as per Taber (2017). This is shown in **Table 2**.

Table 3 shows the descriptive statistics for the variables examined in the study. The six variables' means and standard deviations indicated that Post Acquisition Productivity Level had the highest mean ($M = 4.50$), followed by Organizational Knowledge Acquisition ($M = 4.19$). However, all variables achieved a mean score of about 4.00 on the Likert Scale from 1 - 5, signifying their level of relevance to knowledge management practices.

Findings Relative to RQ1—How do business organizations in Ghana measure the organizational knowledge capital they acquire?

Table 1. Experience with current firm.

Length of Time	Frequency (N)	Proportion (%)
6 Months - 3 Years	46	21.9
4 Years - 6 Years	41	19.5
7 Years to 10 Years	45	21.5
11 Years - 14 Years	16	7.6
Above 15 Years	62	29.5
Total	210	100

Table 2. Reliability of computed variables.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.707	0.710	6

Table 3. Descriptive statistics for the variables under investigation.

Variables	Mean Statistic (M)	Std. Error	Std. Deviation Statistic
Post-Acquisition Productivity Level	4.50	0.029	0.419
Organizational Knowledge Acquisition	4.19	0.030	0.040
Knowledge Capital Management Strategy	4.16	0.050	0.660
Organizational Focus	4.15	0.030	0.420
Organizational Productivity	4.12	0.030	0.430
Organizational Asset Map	4.07	0.030	0.380
Grand Mean	4.19	0.016	0.153

RQ1a. How do service businesses in Ghana acquire organizational knowledge capital?

This section presents findings relating to RQ1a of this study: How do businesses acquire and utilize organizational knowledge to produce capital? The respondents were required to show the extent to which their firms gained knowledge through the under-listed sources.

The statistics in **Table 4** indicated a grand mean of 4.18 (4) for all the sources, which translated to "Agree" on the Likert Scale. This indicated that the sources were all relevant to the firms' acquiring knowledge. The standard errors of the means from **Table 4** were close to zero, which indicated that the sample mean was closer to the population mean.

With all respondents indicating that the sources of organizational knowledge identified in the research were relevant to service businesses in Accra, the next focus of this research was on how these firms measured the knowledge generated. The results in **Table 5** showed a grand mean of 4.11 (4, High on the Likert

Table 4. Sources of organizational knowledge.

	Mean	
	Statistics	Std. Error
Government rules/regulations/directives	4.70	0.032
Lesson learned from Successful Products and Services	4.49	0.046
Our Products and Services	4.39	0.046
Lessons learned from failed Products and Services	4.39	0.055
Training/Workshop	4.33	0.053
Customer Feedback	4.31	0.054
Records/Books/Publications/Guidelines/Standards	4.29	0.052
External Partners	4.19	0.052
Internal Sources	4.16	0.045
Recruitment	4.02	0.062
Products/Services of Rivals	3.96	0.071
Licensing/Copyrights/Patents/Trade Secrets	3.72	0.06
Research & Development	3.72	0.076
Grand Mean	4.18	0.063

Table 5. Measurements of organizational knowledge.

Measures	Mean Statistic				
	Minimum Statistic	Maximum Statistic	Mean	Std. Error	Std. Deviation Statistic
The Degree to which knowledge acquired (K.A.) helps in meeting Revenue goals	3	5	4.08	0.038	0.548
The Degree to which the K.A. projects achieve customer satisfaction	2	5	4.41	0.043	0.622
The Degree to which the K.A. project provides a competitive advantage	1	5	3.78	0.070	1.016
The Degree to which the K.A. project allows new markets to be entered in the future	1	5	4.01	0.051	0.735
The Degree to which the company enhanced its reputation to being trusted	3	5	4.36	0.041	0.596
The Degree to which knowledge acquire facilitates the development of new products and services.	1	5	3.98	0.058	0.836
The Degree to which the project facilitated “learning” for “future efforts”	3	5	4.15	0.041	0.597
Grand Mean			4.11	0.08	0.707

Scale), which was interpreted that respondents agreed that items on the Scale were essential to the measurement of knowledge. The reliability of the Scale was 0.816.

Findings Relative to RQ2—How is an organizational asset map linked to its organizational focus?

The respondents were asked to show the extent to which they agree with the statement “Asset Mapping system is linked to our organizational focus.” From the results shown in **Table 6** below, respondents agree that their firms’ knowledge asset map was linked to their organizational focus. This was demonstrated by a mean of 4.18. The standard error of the mean (0.041) was close to zero (0), which showed that the sample mean closer to the population’s true mean.

The reliability test across the eight items resulted in a Cronbach’s Alpha of 0.836. **Table 7** showed a grand mean of 4.18 (4 on the Likert Scale), showing that the respondents agree with the areas that linked the organizational asset map to organizational focus. The results indicated that organizational knowledge asset maps were accordingly linked to organizational focus through the knowledge asset management systems, followed by the position of knowledge artefacts and organizational systems and structures.

The results shown in **Table 8** show the Spearman correlation coefficient $\rho = 0.485$, indicating that a moderately positive correlation existed between Organizational Focus and Organizational Asset Map. This means that a change in Organizational Focus will likely cause a significant difference in the organizational asset map in the same direction.

Findings Relative to RQ3—How is organizational knowledge capital for service organizations in Ghana linked to their productivity

The Spearman Correlation Coefficient was therefore used to test the HP20. From

Table 6. Organizational focus and organizational knowledge map linkage.

Organizational focus and Organizational Knowledge Map Linkage	Respondents		Mean Statistics
	Statistic	Mean	Std. Error
@29Q24	210	4.18	0.041

Table 7. Areas of linkage to organizational focus.

Areas of Linkages	Respondents		Std. Deviation
	Statistic	Mean	Std. Error
The number of links each artefact has	210	3.68	0.054
Value of task assigned	210	4.13	0.036
The volume of assigned tasks	210	3.88	0.054
Operational activities and goals	210	4.25	0.038
Number of innovative products/services by the asset	210	4.23	0.039
Positioning of the Knowledge Asset	210	4.31	0.038
Knowledge Asset Management System	210	4.42	0.040
Through organizational systems and structures	210	4.31	0.040
Grand Mean	210	4.15	0.042

Table 8. Results of hypothesis testing using spearman's Rho correlation coefficient.

		Organizational Focus	Organizational Asset Map
Spearman's rho	Organizational Focus	Correlation Coefficient	1.000
		Sig. (2-tailed)	0.485
		N	<0.001
	Organizational Asset Map	Correlation Coefficient	210
		Sig. (2-tailed)	210
		N	<0.001

Table 9. Results of hypothesis testing using spearman's Rho correlation coefficient.

		Knowledge Capital Strategy	Organizational Focus
Spearman's rho	Organizational Knowledge Capital	Correlation Coefficient	1.000
		Sig. (2-tailed)	0.387
		N	<0.001
	Organizational Productivity	Correlation Coefficient	210
		Sig. (2-tailed)	210
		N	<0.001

the results in **Table 9**, the Spearman correlation coefficient $\rho = 0.387$ indicated that a moderate positive correlation existed between organizational productivity and organizational knowledge volume. This means that an increase in organizational productivity is likely to cause an increase in organizational knowledge volume.

5. Conclusion

This study's main finding is that organizational knowledge capital in Ghana is a crucial resource for service-oriented firms. According to the research, these companies derived organizational knowledge from a variety of sources, including government norms and regulations, lessons learned from the creation of products and services, training and workshops, and consumer feedback, among others. According to [Crespi, Criscuolo, Haskel, and Slaughter \(2008\)](#), the use of existing knowledge from inside the firm, investment in new knowledge within the firm, and use of knowledge from outside the organization are all examples of primary sources that can contribute to a growth in knowledge.

The measurement of knowledge or its impact reflects its use (ability to create capital) in an organization of knowledge within the organization, primarily in the context of the organizational focus. The measures used in the research were based on the impact or usefulness of the knowledge in the context of the organization's activities. From the results, it was seen that firms considered knowledge acquired to be more valuable if it 1) enhanced Customer satisfaction and 2) enhanced its reputation to be trusted by partners and customers. Other metrics

used by the firms included the Degree to which the project facilitated “learning” for “future efforts,” the Degree to which knowledge acquired helped in meeting revenue goals, and the Degree to which knowledge acquired facilitated the development of new products and services and the Degree to which the knowledge acquired provides a competitive advantage. This finding agrees with the study by [Lebtag \(2020\)](#), which noted the importance and the need for participation in productivity measurement in the knowledge economy and knowledge management. Whereas it is well known that many organizations pursue organizational knowledge to remain competitive, the findings indicated that the firms in the service industry were more concerned about customer satisfaction and reputation than developing new products and services.

[Harper \(2018\)](#) of the American Productivity and Quality Center (AQPC) defines a knowledge map as a visual representation of the organization’s intellectual capital and further notes that knowledge maps aid stakeholders in finding where critical knowledge resource is, how it flows, and any barriers or gaps. Knowledge asset maps enhance the ability of managers to properly account for and track knowledge resources and the progress of the organization’s focus. In effect, asset maps assist managers in concentrating these knowledge resources on the knowledge risks that pose the greatest threat and the knowledge opportunities that promise the greatest reward.

It was determined from the results of this study that organization mapped their knowledge artefacts intending to achieve organizational focus. The findings further showed that these mappings were achieved through the capability of the Knowledge Asset management systems, the positioning of the knowledge asset, several innovative products or services by the asset, the operational goals of the firm and volume of tasks previously assigned, and the number of references or citation to the assets. The hypothesis testing results showed a moderately positive correlation between Organizational Focus and Organizational Asset Map. This indicates that a variation in the organizational focus is highly likely to affect how the knowledge asset map is organized.

The amount of organizational knowledge that the businesses had gained and their productivity needed to be compared in order to discover how the firms measured that knowledge. The findings showed a somewhat favourable association between organizational productivity and the volume of organizational knowledge. Also, there was evidence suggesting that productivity would rise with an increase in the amount of information obtained. The premise is that when an organization has a great amount of information available, it will likely be used, which will lead to knowledge capital.

It is advised that businesses in Ghana’s service industry set up thorough knowledge management databases or information systems so that internal organizational performance may be compared to current market and consumer expectations ([Kane, 2017](#)). This will enhance the processes for applying, acquiring, and utilizing knowledge.

The objectives of knowledge management with regard to organizational focus, stakeholders, and personnel should be understood by managers. The manager will then have a better understanding of managing knowledge resources. Normally, a manager should select if the management's goal is value management or value communication. This allows the manager to choose the methodologies for knowledge asset assessment that will be used in the knowledge management framework.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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