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# A Data-Centric Approach in the Knowledge Management era: An enumeration in Higher Educational Institute

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#### **Abstract**

The publication presents a composition of the Data-Centric Approach out of a Postgraduate study. Further, the Approach bases semi-Structure qualitative method and purposeful iterations. Besides, the Approach was composed to manage what has not been seen/ reported from an industrial concern on the Postgraduate research. As such, the present study intended to present the Data-Centric Approach through the production of Knowledge Management (KM) Practices of Higher Educational Institutes (HEIs). Meanwhile, the Approach took from the Delphi method where literature from Information System present as the best method in giving strategical iterative nature. As such, the Approach mixed the iterations into the semi-structured questionnaires to manage the issues of data. Besides, literature reports that the Data-Centric Approach brings the untouched face through the multidisciplinary method. Resultantly, the present review discovered the method used in the Postgraduate research as a Data-Centric Approach. Accordingly, the current publication proposes the Data-Centric Approach. Further, the present revelation confirmed the validity of the Approach from reviewed the production of KM Practices and its reason behind the existence in the Postgraduate stud.

Keywords: Subjective Collection, Purposeful Iteration, Discovering what has not reported, Knowledge Era

#### **Impact Statement**

The publication proposes a method to bring the untouched face of data through a review in a Postgraduate study conducted for the betterment of Higher Educational Institutes. Further, the Postgraduate study developed the method based on the semi-structured qualitative method and thematic iteration. Besides, literature proposes successful usage of the thematic iterations in similar situations of the Postgraduate study. Further, the Approach is decorated by different phenomena of collecting data such as the creation of an environment for collection as drama likewise environment from a famous Dramaturgical method. Meanwhile, the Postgraduate study reports successes of the approach. Accordingly, the present review proposes the Data-Centric Approach for businesses to bring success factors to toggle challenges of 21st Century.

#### Introduction

The publication proposes a Data-Centric Approach that bases semi-structured questionnaires and attributes of iterations provided by a Delphi method [1]. Further, A Postgraduate study developed the technique to resolve the issues observed in collecting data. Additionally, qualitative research became a research method of the Postgraduate research to inform detail about the subject of the investigation into the data collection and less in several participants of the research. Accordingly, the composition of the research method adopted the rounds of the Delphi Method due to a recommendation of successful usage in graduate study [2] in a situation similar to the case that the Postgraduate study observed for its data collection. As such, the composition prepared questionnaires for the rounds of Delphi methods. Accordingly, the present research found the composed method brought into the Postgraduate revealing what has not been touched from the Postgradature study field. Meanwhile, the refence [3] shows such a revealing as Data-Centric approach. As such, the Present revelation proposes the developed approach of the Postgraduate study as a Data-Centric Approach from a review on the Postgraduate study in this regard.

[6] analysed (Sujatha, N. et al., 2012) and found that the data collection participants to the research were significantly less in numbers. Accordingly, qualitative study became the research method of the Postgraduate revealing. Besides, analysis in the literature regarding investigations conducted in the subject of the survey at the industry of the Postgraduate study revealed no evidence. Accordingly, the qualitative choice became a semi-structured qualitative study. Meanwhile, the reference [2] shows in their graduate study in Information System the rounds of the Delphi method produced the best result. As such, the Postgraduate revelation took those attributes of the rounds into its conduction. Further, the composition of the research method adopted facts reported in reputed research such as [4] and [7] of Emerald databases into its questions. Accordingly, the Postgraduate method introduced the subject into the field. Further, the research method added further field interaction by incorporating purposeful iteration provided by the Delphi method. Accordingly, the Postgraduate study observed the composition managed issues of the data.

Further, the revealing took the strategic position such as exploration and verification to enhance its collection. As such, the design contributed to the finding to answer the question of the Postgraduate study. Besides, the reference [3] presents that

Data-Centric Approach is the Approach that discovers the unseen face of data. As such, the present research recognised the approach composed in the Postgraduate study as the Data-Centric Approach.

The Postgraduate study had initially searched for evidence of conducted research study in Knowledge Management (KM) and possible participants for the study in the context. The search brought the data of fie from the literature Sujatha, N. Et al., (2012), which showed lesser participation to the data collection. Accordingly, the qualitative method became the base method of the Postgraduate study. In contrast, the Postgraduate revealing incorporated the Delphi method to handle further misses in the collection. Further, the Delphi Method is an iterative method [2], and the iteration varies up to iteration 7. Besides, the number of iteration depends on the data collection and aim of the research. That is, deeper the data collection reduces the number of iteration. However, the Delphi method proposes a panel study. Further, the Postgraduate revealing could not find a way to compose a panel study. As such, the Postgraduate study moderated the panel interaction to personnel interactions. As such, the Delphi method is adopted into the qualitative Approach.

Besides, having developed above such scenarios into the conduction of the research, the Postgraduate revealing took facts presented in [4] and (Sharmillah D. R. Et al., 2009) into the development of the questions for the questionnaires. Accordingly, the composition that contributed to the Data-Centric approach prepared the questionnaire to resolve similar issues of different contexts. In contrast, Postgraduate research differs from those publications in the research method. Accordingly, the application of the composition into the field brought what is expected to the Postgraduate study. Further, the Postgraduate research generalised the findings of those publications. Besides, the revealing conducted for the Postgraduate study, while generalising the result of those publications, composed the Data-Centric Approach in managing data issues where the management discovered what doses not seen.

The reference [3] gives that the Data-Centric Approach brings unseen face through the multidisciplinary method. Accordingly, the present research formed the Approach from the qualitative method and the Delphi Method composition. It confirmed the success of the Approach though reviewed the result of the Postgraduate study. As such, the present research proposes the method of the Postgraduate as a Data-Centric Approach.

The finding of the Postgraduate study confirms Knowledge Management based solutions to Higher Educational Institutes in the 21<sup>st</sup> Century through analysing diversified data, which is collected out of the application of the Dramaturgical method [2], which bring drama likewise environment into Data Collection scenario. The diversified data were grounded using the famous Grounded Theory Development Techniquev[9], which uses three coding methods to produce theory out of the data. As such, the Postgraduate study proposed a Knowledge Management based answer to the issues of Higher Education Institutes. Further, the Postgraduate study composed the Data-Centric Approach to managing the problems related to its data. As such, the Data-Centric Approach emerged for discovering what has not been seen in a field out of the Postgraduate study.

#### State of the art and data collection

The refence [6] developed an approach to handle issues in regards to Data. Further, as a method to manage lesser the data, the qualitative method was adopted into the research. Besides, iterations of the Delphi method were incorporated into the qualitative method to handle the unknown Data. Consequently, Data-Centric Approach is the Approach that addresses such issues of data [3]. Accordingly, the present study composed the method that dealt with data problems in the Postgraduate study as a Data-Centric Approach for discovering what has not been seen. Further, the Postgraduate research applied the Approach successfully in Higher Educational Institute (HEIs) to reveal the answer to its research question.

The Postgraduate study intended to manage issues of drastic growth in Higher Educational Instituteseducational, which were found in news and advertisements in newspapers of its context [1]. Further, the issues were emerged out of new courses and institutes. Besides, the emergers show different effects on the Higher Educational Institutes. Additionally, search in research databases for solutions to such problems had not recognised a study conducted regarding its context whereas found a kind of solution to the issues from a survey conducted in other contexts. Accordingly, the Postgraduate study composed a research method based on a semi-structured questionnaire and the Delphi method. The Postgraduate study [6] formed the ways to handle such Data-Centric issues. Besides, the reference [3] gives Data-Centric Approach as an approach that uses multidisciplinary methods to discover what has not been seen. The present research found a Data-Centric Approach based on the qualitative method and the Delphi method to review the management of HEIs proposed in the Postgraduate study. Besides, attributes that the Postgraduate study bases are presented in the research database of Knowledge Management (KM) [4,7,8] which were added into the Postgraduate research method to conduct the Approach. As such, the Postgraduate study tested the Data-Centric Approach in handling those issues of the sector for the betterment of Higher Educational Institutes in the Knowledge era.

It is custom that the qualitative study is in use to handle such popularity issues. Besides, the refence [2] proposes rounds of the Delphi Method to overcome uncertainty in data in its graduate study. Further, a method conducts rounds of iterations of the Delphi Method for different reasons. The Postgraduate study shows the conduction of initial iteration to explore its field. The second round is performed to confirm the discovery in the previous round. A method can take the rounds up to iteration 7, whereas deeper the data collection and research for confirmation restricts rounds. The adaptation of the iterative nature into the qualitative method produced a resolution to the data collection of the Postgraduate research. Having adopted the concern of the Data-Centric Approach as an approach to deal with the unknown [3]. The state of the art to conduct the present research showed the Postgraduate study's Approach in handling its data as a Data-Centric Approach.

The Delphi method is adopted into the Postgraduate study as individual interaction, whereas the standardised Delphi method proposes a panel study. As such, the Postgraduate study incorporated the attributes of the Delphi method to conduct semi-structured questionnaires. Besides, the Dramaturgical Approach was adopted to create drama likewise environment in data collection [5] discusses problems and fit falls of a qualitative study in Information Systems. Further, the method gives the creation of drama likewise environment for data collection. The Postgraduate study believed the modification of panel study of the Delphi method could be managed out of the drama likewise environment into a replacement as individual interaction for the data collection. As such, the present review shows the application of the Data-Centric Approach in the conduction of data collection in the Postgraduate research to see what has not been seen out of the environment.

### **Result and Discussion**

The composition of the semi-structured qualitative method and iteration of moderated Delphi method had collected the relevant Data for the Postgraduate study [6] As such, the present research hypothesised that the composition is a Data-Centric Approach. Further, the Postgraduate research tested the Approach. Consequently, the current investigation revealed that the Approach brought up what has not been seen from the context of the Postgraduate study, such as the KM Practice "aligning management of the course with the proposal of the National budget" had been accepted by more than 70% of data collection's participants. As such, the Postgraduate study grounded that the KM Practices has been in existence in the industry. Further, the KM Practice "conducting exhibition" has also been accepted by more than 60% of the participant. Accordingly, the Postgraduate study confirmed several KM Practices in its context, where other publications reported the importance of those Practices to manage HEIs in the developing/ developed KM era. Besides, the initial searches in research databases did not show the Postgraduate study evidence in recognised those Practices in their context. As such, the method used in the Postgraduate study becomes a Data-Centric Approach from the concern of the multidisciplinary approach that brings the unseen face of data.

The Data-Centric Approach has managed two data phenomena: the fewer participants for data collection and the introduction of the research's subject to the data collection participant. As such, the Postgraduate study picked the Data-Centric solution to manage the issues. Further, the concern of Data is addressed in the Data-Centric Approach that incorporates attributes of the Delphi Method, which brings explore and then confirm kinds of phenomena in collecting data. Besides, drama, likewise phenomenon was added to create a conducive environment for data collection. Further, the diversified sources of the data were gathered strategically into different sampling groups. As such, a purposeful sample and a moderated snowball sample were tested in the Approach.

Meanwhile, Transcription was conducted by the researcher who has experienced in diversified fields of Knowledge Management and Higher Educational Institutes. Meanwhile, Data collection, Transcription, and analysis were performed simultaneously, which were also enhanced data issues [9]. The Postgraduate research developed the Data-Centric to see what has not been seen out of the data.

The qualitative method is the research method used to address the lesser possibility of data in research. Further, Data-Centric Approaches are deal with the unaddressed face of Data. As such, the present Data-Centric Approach bases the qualitative method. Additionally, the Postgraduate study chose

the qualitative study as a semi-structured qualitative method that provides a way to introduce the subject through its questions. Besides, a discussion kind of phenomenon was added to the Data-Centric Approach out of Delphi method that enhanced the Approach to capture the different faces of Data out of a discussion of attributes, which are the attributes of Delphi method. With the guidance of a semi-structured questionnaire, panel interaction was replaced with individual interaction into the Data-Centric Approach, bringing a positive result to the Postgraduate study. As such, the present revealing has seen that the Data-Centric Approach.

The dramaturgical method is the method of interaction for the data collection that has been used to enhance the data collection environment. As such, data collection was also improved by adding the method into the Data-Centric Approach. Besides, data sourcing was also added to the Approach by selecting purposeful sampling. Further, the research supervisor initiated the sampling method and is strengthened out of moderated snowball samples. The following facts emerged from analysis conducted to the representatives of the purposeful models. As such, the present review confirmed the success of the Data-Centric Approach from the Postgraduate study's result.

#### **Conclusion and Future direction**

The present revelation composed the Data-Centric Approach from the Postgraduate research. Further, a semi-structured qualitative method and strategic iterations of the Delphi method contribute to handling unknown phases of data. Additionally, the Data-Centric Approach is the approach that brings the untouched face of data. The composition became a Data-Centric Approach due to bought the Data's new look to the Postgraduate study. Besides, the Postgraduaaate research reports that the field of the study had not been evaluated in its subject. Meanwhile, the Approach composes strategic iterations with the conduction of a semi-structured questionnaire. Further, the Postgraduate study reports successful usage of the Approach. Accordingly, the present research formulated the Data-Centric Approach for revealing the unaddressed face of a field, which is significantly less in number. In contrast, the Postgraduate study bought that discovering fact is quite essential for the current business. Besides, the Data-Centric Approach accommodated the qualitative method and the Delphi method applied in a drama-like environment. Further, the sampling strategy was mixed samples of the purposeful sample and a moderated snowball sample. The sampling technique followed instructions from the

review to conduct data collection, where the instructions were usually collected from the finished collection. Further, the supervisor of the research initiated the sample to perform the data collection. Besides, the instructions were used in the selection of the data source for immediate collection. Accordingly, the Postgraduate revealing enriched the Data-Centric approach and showed the successful application of the approach to answering its research question. Therefore, the present study proposes the Data-Centric Approach while requesting further enumeration of the Approach in a different context.

# **Competing Interests**

None.

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## **Data Availability**

https://data.mendeley.com/datasets/56bk9pd2kv/1

#### References

- 1. Editor (2012/2013) Education Observer. Sunday Observer.
- 2. Gregory JS, et al. (2007) The Delphi Method for Graduate Research. J Infor Tech Edu 6: 1-21.
- 3. Wikipedia Foundation (2021). Data Science.
- 4. Jing L (2012) Striving for survival and success: Chinese private higher education in the twenty-first Century. On the Horizon. 20: 274-283.
- 5. MIichael DM, MIichael, N (2007) The qualitative interview in IS research: Examining the craft. Science Direct-Information and Organisation. 17: 2-26.
- 6. Jeyarajan S (2016) A study on Knowledge Management Practices for the success of Non-State Higher Educational Institutes of Sri Lanka. Moratuwa.
- 7. Sharimllah DR, et al. (2009) The practice of knowledge management processes: A comparative study of public and private higher education institutions in Malaysia. VINE: The journal of information and knowledge management systems. 39: 203-222.
- 8. Sharimllah DR, et al. (2013) Knowledge Management Practices and Strategic Enablers in Public Universities: A Gap Analysis. Campus-Wide Information Systems. 30: 1-25.
- 9. Strauss AL, Corbin JM (1998) Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. New Delhi: Sage Publication Inc.

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