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Moving Away from the Norms: Adopting Classic Grounded Theory in Information Systems Research

Research-in-Progress (Developmental Paper)

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Abstract

Information Systems (IS) discipline have evolved over the years and new areas of research have emerged such as Artificial intelligence (AI), Big data, cyber and internet related research. But often researchers tend/ to rely on existing theories which have either been outdated or are not often fit for purpose in a research setting. Due to this, there is often a need for development of new theories to allow researchers to approach research from a different theoretical lens. We suggest that this need for new theory development can be met by the adoption of Classic Grounded theory (CGT) methodology within the IS discipline. CGT is argued to be an approach specifically designed for theory development and allows researchers to make contributions in a form of new theories. We argue that by using CGT methodology researchers can develop new theories which are unique and tend to help providing new theoretical perspectives for future research

Keywords: Classic Grounded Theory, Information Systems, Research Methods, Theory development. Discovery, Emergence, Rigour, Relevance

As is widely recognised, research in the field of Information Systems (IS) has evolved over the years. Early research covered topics such as IS implementation, Information Technology (IT) adoption and business value of IT (Banker and Kauffman, 2004). More recently, research has progressed onto topics such as Big Data and social media (Abbasi, Sarker and Chiang, 2016), whereas artificial intelligence has received a resurgence of interest (Dwivedi et al, 2019). Moreover, Jeyaraj and Zadeh's (2019) review of IS research identifies research topics such as online trust, social media, e-commerce and computer-mediated communication.

Many researchers agree that when research interests and topics evolve and change, IS research methodology needs to follow suit (Duane, Jonny and Mark, 2006; Lim et al, 2009; Hassan, Mathiassen and Lowry, 2019). For example, it can be argued that in the context of technology adoption and diffusion, studies are often restricted to examining factors that constitute well-known models (Lal et al, 2018) such as the Technology Acceptance Model (TAM), Diffusion Theory and Decision Theory (Halawi and McCarthy, 2006; Lim et al, 2013). Due to the emergence of new topics and areas in

the IS literature, reliance on traditional theories can limit the scope for further knowledge development.

In order to move beyond the use of traditional theories, as suggested by Webster (2016), IS researchers need to consider and adopt new methodological approaches to new theory creation which also has the potential to provide fresh perspectives on the phenomena being studied. This can be considered to be of increasing significance when researching and exploring 'new' technologies or social situations that have arisen as the result of new technology deployment; for example, the purpose of emoji on effective communication on Facebook (Ahmed and Haag, 2017) and the role of social media platforms in creating more inclusive societies by providing citizens with opportunities to engage in political discussions which, previously, they may not have had (Lal, Kwayu, and Ahmed, 2020). In light of the need for new theory creation, this paper recommends the use of Classic Grounded Theory (CGT) in IS research. CGT methodology can help to address the ongoing debate of IS as a distinct discipline by making contributions to new theories (Khazanchi and Munkvold, 2003). This is further supported by Wiesche et al (2017) who state that GT articles that have developed theories are of great interest as they are highly cited in comparison to articles which provide rich descriptions or models.

There is debate on the importance of the quality of theories (e.g., Benbasat and Zmund, 1999; Gregor, 2006; Mårtensson and Mårtensson, 2008; Chukwuere *et al.*, 2018; Weber, 2012; Mueller and Urbach, 2013). This paper makes the case for the use of Grounded Theory (GT), specifically Classic Grounded Theory (CGT), for developing new theory in IS research. The goal of the paper is not to explain how CGT is applied but rather to show how specific features of CGT can bring distinct value to IS research.

1.0 Grounded Theory Methodology and IS Research

GT literature stresses the importance of using GT methodology as a way of developing new theories and further highlighting rigour and relevance as an embedded part of the GT methodology (Corley, 2015). In disciplines such as Nursing, GT is seen to be promising in developing new theories (O'Brien, Andrews, and Savage, 2018).

A researcher needs to make a decision on whether a specific version of GT should be used as opposed to only specific features of GT. Depending on how GT and its

procedures are used, each study would have different results: the end result could be a substantive theory versus rich description data (Wiesche et al, 2017). Lehmann (2010a) argues that although the use of GT methodology has increased over the years, many researchers have not applied it accurately. Lehmann (2010a) further indicates that only about 20% of GT studies have applied the methodology comprehensively: this is further confirmed by Wiesche et al (2017). Misuse or incomplete understanding of GT has caused some studies to have made a limited contribution in new theory development (Urquhart, Lehmann, and Myers, 2010). Glaser (1992, 2002) highlights that the purpose of GT methodology is to develop a theory by carefully applying all the GT procedures and warns researchers that the purpose is not to develop a model or provide accurate description based on data. It is important to understand that versions of GT other than CGT, namely Straussian GT (Corbin and Strauss, 1990; Strauss and Corbin, 1998) and Constructivist GT (Charmaz, 2006, 2008, 2014), have taken a slightly different stance by moving away from the notion of developing a theory towards the notion of developing models and providing descriptions of a phenomenon. Thus, only Classic GT (also known as Glaserian GT), if applied accurately, can help contribute towards theory development.

1.1 Uniqueness of Classic Grounded Theory

Sutton and Staw (1995) explain what is and what is not a theory. They indicate that the collection of facts or knowledge relating to the research matter cannot be regarded as a theory and that data is not theory. Nevertheless, data can be used to develop a theory. Further, Gregor (2006) classifies theories based on two criteria of generalisation: i) the level of abstraction and ii) the breadth of scope of a theory. Weber (2012) indicated that IS as a field is in need of theories which are positioned at a high level of abstraction and are not bounded by time and space. In line with this need, one very attractive feature of CGT is that it requires researchers to develop theories which are abstract of “time, place and people” (Glaser, 2001, p. 129). Any research that does not fit this requirement of abstraction of time, place and people is not considered to be CGT. CGT focuses more on the conceptualisation of abstract ideas based on data. It is not focused on providing explanations or descriptions. As shown in Figure 1, the degree of conceptualising is high in CGT research and the scope of theory is within the range of substantive and formal theory.

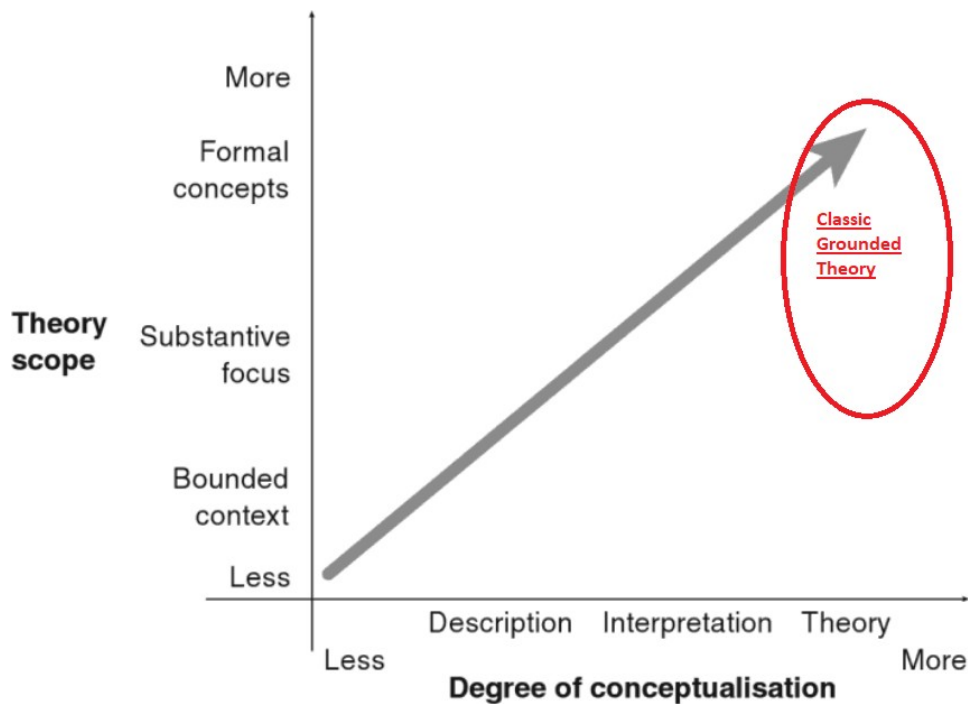


Figure 1. Scope of Classic Grounded theory research, adapted from Urquhart (2012)
 Data in CGT research can take any shape or form - whether it is quantitative, qualitative, primary or secondary (Glaser, 1978) - unlike other methodologies which rely on specific types of data. Abstraction within GT comes from the requirement of not binding the research process to a specific type of data or to a specific unit of analysis. Research that focuses on specific data or units tends to develop rich descriptions about the phenomenon, which is not the goal of CGT. Binding specific data types or specific units to research may even inhibit the ability of the research to discover or develop a theory.

1.2 Theory-Building Using Classic Grounded Theory

Merton (1967) and Mackie and Kaplan (1966) highlighted a strong feature of a theory, signifying that a theory is not concerned with the 'why' question; rather, a theory is about connections between occurrences within a phenomenon. A strong theory provides understanding of reasons for occurrences or non-occurrences. CGT advises researchers to not rely on one or specific units within the research process and discusses the importance of working with multiple units of analysis which are easily modifiable (Glaser, 1998). A feature which makes CGT an attractive methodology for theory development in IS research is that it meets the criteria of high-quality theory outlined by Witkin and Gottschalk (1988), Weber (2012) and Mueller and Urbach (2013). Additionally, Wacker's (2008) guidelines on developing good theory are also

in line with procedures and requirements of a CGT methodology. Wacker (2008) states that any research that claims to develop a theory should adhere to the properties of theory which include definitions, domain, relationships and predictions.

All good theories require precise definitions of terms and must be conservative, parsimonious and unique (Mueller and Urbach, 2013). Furthermore, all concepts should be clear and concise so they can be used for empirical research. In line with this, Glaser (1998, p. 197) mentioned two guiding principles for writing up GT results: i) “think theory write substance” ii) “always relate concepts to concept and not concepts to people”. Unlike traditional qualitative or quantitative research, results are presented in forms of explanations of themes and variables and often findings are presented from the perspective of the participants. However, in CGT research the end result is an explanation of the developed theory in a form of integrated conceptual hypotheses and propositions. The goal in CGT is to discover and provide explanation of relationships between concepts.

Finally, the uniqueness of CGT originates from the reliance on emergence and discovery. Glaser (1992) emphasises that researchers should not enforce predefined ideas or concepts on the research. Rather, researchers should trust the research process and let the concepts emerge from the process itself. One critical guideline for any CGT researcher is not to engage in any form of literature review during the research process as this may force existing ideas on the research and limit the researcher’s ability to develop a unique theory (Glaser, 1992). It is important to allow ideas and concepts to emerge from data. Emergence and discovery within CGT is not easy as it often pushes researchers towards uncertainty (Glaser, 1978; 1998). Often researchers will get lost and will not have a clear idea on which codes or categories are important or not but it is through this uncertainty that the researchers can derive meaning from the data using “creative, inductive processes” (Hussein et al, 2014, p. 5).

1.3 Suggestions for Theory Development Using Classic Grounded Theory in Information Systems research

As mentioned above, IS research tends to deploy well-established theories and models which results in fewer research papers providing contributions in the form of new theory. This is because many researchers tend to apply methodologies that are not designed for theory development but instead are designed to provide explanations. CGT, on the other hand, is a methodology specifically designed for theory development (Duchscher and Morgan, 2004) where different concepts and actions are

interrelated to form a singular substantive or formal theory (Fernández, 2003). The key to theory development lies in the following guiding principles of CGT:

- Focus on emergence and discovery and not allow predefined ideas to influence the research process
- Focus on conceptualisation of abstract ideas rather than explanations of incidents
- Focus on providing interrelated concepts in the form of hypotheses and propositions which can guide future research
- Focus on abstract ideas which are independent of time, place and people
- Focus on rigour and relevance

2.0 Conclusion

This paper argues that CGT as a research methodology is open and avoids restricting the researcher to an overly narrow and inflexible ‘lens’ of looking at phenomena. This can result in the discovery of new insights, which otherwise researchers may not have made using more traditional approaches.

Hence, researchers breaking away from the norms, i.e. breaking away from using theories/approaches with which they are familiar and comfortable with, can enable alternative perspectives on the research phenomenon being investigated and potentially lead to a bolder development of theory which is potentially more ambitious in its scope of discovery. Some examples of such research papers are as follows: Value Exploring Analyst-Client Communication (Urquhart, 1997); Proposition in IT Outsourcing (Levina and Ross, 2003); Rehumanising Knowledge Workers (Holton, 2007); Dynamics of International Information Systems (Lehmann, 2010b), Living in an IOIS Project (Hekkala and Urquhart, 2013) and Examining Philosophy of Technology (Webster, 2016). The final takeaway we want to emphasise from this short paper is that as more technological affordances emerge, breaking away from the norm is required to discover something new and CGT is just one way of doing that, as long as it is understood and applied comprehensively.

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