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EXPLORING SELF-ORGANIZED STARTUP BUSINESS AS A COMPLEX SYSTEM OPERATING SYNERGISTICALLY FOR COMPETITIVE EDGE

Ann Dodor[1], Cai Li[2], Isaac Gumah Akolgo[3], Shumaila Naz[4], Daniel Quacoe[5]

[1]Takoradi Technical University, Faculty of Business Studies, Department of Marketing. P. O. Box 256, Takoradi. Ghana.
[1,2,3,4,5] Jiangsu University School of management No.301 Xuefu Road, Zhenjiang, 212013, P.R.China

ABSTRACT: *People are motivated by one thing or the other to start a business. Globally, entrepreneurship has become the primary trend which is necessary to build-up a developed economy. There is a consistent relationship between economic prosperity and entrepreneurial activities which have been confirmed by numerous studies from different theories perspectives at a universal level. Drawing on grounded theory, the study attempts to discuss the eminent problem of the inability of entrepreneurs to set up their business correctly and form synergies and integration in the organizational system for added value and a competitive edge. Raw data for self-organized startups were collected from self-organized entrepreneurs. The research question was answered with in-depth interviewing. NVIVO software was the analytical tool used for analyzing the findings. The findings for the qualitative research showed three major groupings that emerged from the coding of the interviews; these are Synergies, Integration and specialization*

KEYWORDS: Entrepreneurship; Competitive edge; Complex system; Self-organized startups

INTRODUCTION

A self-organized entrepreneurial venture which is established by entrepreneurs who recognize the venture as an organized system, design the organization as a process of purposefully configuring elements or individuals in the organization to effectively and efficiently achieve its strategy and deliver intended business and become competitive. The enterprise is also driven by the business strategy and operating context which requires holistic thinking (systems, structures, people, differentiation, processes, specialization, skills, integration, and so on.) Entrepreneurs who can recognize their organization as a unified system working in synergy with differential roles integrating between each other with the aim of adding value to the organization achieve competitive edge (Phadermrod, Crowder, & Wills, 2019). The primary objective for the qualitative study is to augment the quantitative study and also to establish the significance of synergies in self-organized startup business system for a competitive edge.

Role of Entrepreneurs in self-organized startup businesses

Globally, every country tries to achieve maximum economic development. The economic developments of a country mostly depend on human resources (Bailey, Mankin, Kelliher, & Garavan, 2018). Human resources alone cannot produce economic development; there is a need for dynamic and innovative entrepreneurs (Chen, Yin, & Mei, 2018). A country may be rich in

natural resources but it may lack entrepreneurship (Frederick, O'Connor, & Kuratko, 2018), it may not be able to use the available resources effectively, and it may lag in economic development. Entrepreneurs play a significant role in the economic growth and development of every country through startup businesses. Kazanjian et el (2017) have iterated that, entrepreneurs promote the prosperity of a nation by their innovation and dynamic leadership skills and knowledge (Kazanjian, Drazin, & Glynn, 2017). They create wealth and employment opportunities. According to Bjørnskov & Foss, (2016) entrepreneurs are prime movers of innovation, growth and as such, entrepreneurship is a dynamic force (Bjørnskov & Foss, 2016). Entrepreneurs assist in stabilizing societies, increases productivity, create employment, and grow the economy through innovation. Every innovational activity raises the productive efficiency and effectiveness of an economy, resulting in greater output and income. Development occurs when output increases as a result of entrepreneurial activities like self-organized business startups. The process of economic development according to Malecki (2018) is complex and involves many players including large firms, small firms, and the government (Malecki, 2018).

Thus, innovational activities of an entrepreneur raise the productive efficiency of an economy resulting in greater output and income (Chen et al., 2018). The entrepreneur as an innovator is the central figure in the process of development of innovative startup (Spender, Corvello, Grimaldi, & Rippa, 2017). Thus, entrepreneurial activity stimulates progress and forms the mainspring of economic development. Entrepreneurs take action at the right time and aim to achieve their goals by taking risks. To attain economic gains and profit, an entrepreneur is one who identifies and seizes opportunities (Gaglio, 2018). Entrepreneurs seizing opportunities establish businesses thereby bringing economic transformation. By their actions, inhabitants of counties have a better standard of living, get innovative products and satisfaction, and the wide disparity in the levels of income gradually reduces. Entrepreneurs need to be competent enough to start businesses and sustain them.

Entrepreneurial Competencies

Entrepreneurial competency is the individual characteristic including attitude and behaviour, which allows the entrepreneur to achieve business success (Mohsin, Halim, & Farhana, 2017). Generally, competencies are the characteristics of people that differentiate performance in a specific job or role. Basic theories of competence indicate that the competitive advantage of an enterprise lies in the ability to match and utilize resources (Mosakowski, 2017), that is, the ability of an enterprise, which determines the ability of an enterprise to possess knowledge (Kazanjian et al., 2017). Specifically, productive knowledge, institutional knowledge, managerial knowledge and tacit knowledge owned by enterprises are unique to enterprises, because this knowledge conforms to Barney's description of competitive resources (Barney, 2014), that is, value-based, scarcity, imperfect imitation and non-equivalent substitution. Therefore, knowledge is regarded as a kind of resource with specific attributes and is extracted from the underlying resources (Hislop, Bosua, & Helms, 2018). It becomes a unique resource which is different from the general resources.

Enterprise's competence based on its general resources (Nielsen et al., 2017) does not create a sustainable competitive advantage for the enterprise. The core competence, which is based on knowledge resources (Hislop et al., 2018), can bring lasting competitive advantage to enterprises.

Core competence derives from the cumulative knowledge of the organization, especially the knowledge of coordinating different production skills and various technical schools. Tacit knowledge is the key for enterprises to accumulate, maintain and utilize their ability to gain long-term competitive advantage (Kazanjian et al., 2017). Leonard Barton (1992) however, points out (and cited by Brown and Duguid, 2017) that once core competencies are formed, they tend to form core rigidities, which makes it difficult for companies to respond quickly to changing circumstances (Brown & Duguid, 2017; Leonard-Barton, 1992).

Therefore, core competence is likely to become a double-edged sword for the development of enterprises. On the one hand, it creates competitive advantages for enterprises; on the other hand, because of the dependence on the inherent path, enterprises lose the ability to change in time. In changing this state, enterprises need to break the dependence on rigid paths employing dynamic capabilities in order to maintain a competitive advantage in the new environment (Hannah & Eisenhardt, 2018). Integration of industry and finance is an essential organizational mode for enterprises to break this path dependence. Expounded comprehensively below is the theory used for the exploratory study.

Grounded Theory (GT

Grounded theory (GT) is the qualitative research methodology that is used in this study. Any research that aims to build a theory (Danks & Ippoliti, 2018) can use GT as it is an interpretative enquiry. GT method has been identified as a superior research method where theories are generated inductively which are 'grounded' in data (Bryant, 2017) and not derived deductively from the existing theory. Other research methods can be differentiated from GT establishing six criteria which are based on literature. (1) the aim of qualitative data analysis is to generate new theories (Danks & Ippoliti, 2018) or concepts. (2) the theories that are generated are empirically "grounded" in data about reality (Forrester & Sullivan, 2018). (3) the use of pragmatic data analysis approach; (4) the outcomes are usually based on inequality individuals and unique situations. (5) it is based on an open-minded study approach and (6) to allow flexibility in research designs to take care of unpredicted participants such as sampling size.

One basic fact about GT is that data gathering and analyses phases are done at the same time and systematically using the constant comparison method (King, Horrocks, & Brooks, 2018). Results that are expected from the study of GT is an emerging theory (Danks & Ippoliti, 2018), which is derived from data, not from inferences of existing theories. Finally, one thing that makes GT method unique is that in order to generate a theory, a flexible and creative research process is used and at the same time revising and writing of memo during the analysis (Corbin, Strauss, & Strauss, 2014).

The process of the grounded theory by Chamez, (2017) starts with a research question. The question is followed by data collection and initial coding. After the initial coding, focused coding will lead to conceptual categories that will result in theoretical sampling. The final step is to integrate categories to core concepts which will result in a theory (Charmaz, 2017).
Justifications for adopting GT

Enumerated below are some few justifications to support the use of GT in the study. First and foremost, this case study is categorized as an exploratory research study, which is suitable for a qualitative research approach employing the GT method. Secondly, it is exceedingly useful for this type of enquiry that needs to observe and understand how entrepreneur behaviour can affect self-organized startup businesses. Thirdly, the qualitative research study methodology using the GT method is suitable to conduct an in-depth study using a richer set of data from research participants, which could not be provided by a quantitative study method. Next, as an exploratory study that focuses on a specific group of participants, it is possible to conduct a meaningful study to determine self-organized business as a complex system operating synergistically for a competitive edge. The most important thing about this exploratory study is to develop a substantive theory that is 'grounded' in the data as contrasts to the quantitative method, which aims to test the existing theory (Richards & Farrokhnia, 2016). However, with the dynamic nature of GT method, new researchers are advised to focus on generating substantive theory (Danks & Ippoliti, 2018; Rickard & Clarke, 2015) rather than formal theories which are developed from many substantive theories. GT approach is, therefore, chosen in this exploratory study to construct a substantive theory on self-organized Business as a complex system operating synergistically for a competitive edge. Finally, by using GT method, the researcher hopes to provide another perspective on self-organized Startup Businesses studies that will contribute valuable input to the body of knowledge as most literature so far employed quantitative research approach, i.e. survey method only. Thus, GT, as a qualitative method is highly needed for the research on self-organized Business as a complex system operating synergistically for a competitive edge.

Chamaz (2017) has iterated that the Classical GT approach stresses on objectivity; external reality and acting as an unbiased observer (Charmaz, 2017). Other researchers like Strauss and Corbin, proposed a GT approach which is classified as the emerging GT (Corbin et al., 2014). This approach according to the authors assumes that researchers should have an unbiased position, emphasizing on applying prescribed procedures, yet still allowing the participants to have their voices (Bryant, 2017). Constructivism is another GT approach (Charmaz, 2017) this approach is based on a constructivist perspective, emphasizing on being a pragmatist and contemporary constructivist. Constructivist grounded theory adopts asking evolving critical questions throughout the inquiry. This method also encourages interviewing the taken-for-granted methodological individualism pervading much of qualitative research (King et al., 2018) and also taking a deeply instinctive stance called methodological self-consciousness, which leads researchers to examine their data, actions, and emerging analyses. This exploratory study adopted the constructivism GT approach. This approach is considered relevant to the study as having a research background as a new researcher for grounded theory. Hence, based on this approach, the researcher employs initial coding, focus coding and theoretical coding during the analysis (Forrester & Sullivan, 2018). Explained extensively below are the materials and methods used for the exploratory study.

MATERIALS AND METHODS

Motoyama and Knowlton (2017) have observed that the nature of business startups and subjective understanding of their reality require qualitative methods (Motoyama & Knowlton, 2017). The qualitative direction is fully compatible with interpretive information systems research. Therefore,

what is needed is an accent on an evaluation that is concerned with the process of devising questions (King et al., 2018), and interpreting the answers that systematically give results.
The exploratory study adopted a Grounded Theory (GT) method to explore self-organized Business as a complex system operating synergistically for a competitive edge. Grounded Theory presents a method to study how human behaviours are generated through social interaction and influenced by physical, situational or interrelated contextual factors. These factors will be identified and described through the generation of codes and categories during the analysis.

Sampling for Qualitative In-depth Interview
Since the study also made use of a case study, a sample for case study research was required. The case sample consisted of a few informants selected from the target population. It was consistent with a suggestion from Gerring (2008) that all enquiries are case studies and that they take place at particular times in a particular place with particular people (Gerring, 2008). It means that the case sample size is more specific and quite small compared to other sample sizes. Considering the timing and expenditure of the research, as well as the target population and informant type, only 40 entrepreneurs were selected for in-depth interviews. Finally, in order to enhance the practicability of findings, a purposive sampling technique was used to evaluate the opinions of self-organized startup entrepreneurs in Zhenjiang China, in the in-depth interview case study. The reason for adopting a purposive sampling technique was that the informants were selected on purpose. The sample needed by the researcher was self-organized startup entrepreneurs.

Reliability and validity check
Although the concepts of validity and reliability have their roots in quantitative research and therefore hold particular meaning in that paradigm, the underlying concerns are essential to qualitative research. However, because different theoretical assumptions underlie quantitative and qualitative research, it is appropriate to address measures taken to ensure the validity and reliability of the findings presented in this thesis.

In qualitative research, the concept of ‘validity’ refers to the extent to which the researcher adequately represents the reality of the people being studied, while ‘reliability’ refers to the degree of consistency of the research findings (Flick, 2018; Guest, MacQueen, & Namey, 2012). As Corbin et al., (2014) argue, research findings can be said to be reliable, and the interpretations and conclusions valid only when the researcher can demonstrate to readers that appropriate methods of data collection and analysis were used (Corbin et al., 2014).

The validity in this exploratory study was ensured by providing a step-by-step description and reasoning of the data collection and analysis processes to help readers to understand and judge how conclusions arrived. Practical issues that arose during the research process and how they were addressed and logically documented. Coding and categorizing of the data were adequately explained. The rigour of data analysis was ensured by reading and rereading of the transcripts to generate a coding framework.

Pages from the transcripts were sorted into categories, and examined for connections in meaning and grouped into themes. The themes were then regularly and carefully compared with the data until a core category emerged that integrates several concepts. The cycle between interpretation

and data helped to develop categories that are grounded in the data. To help readers to assess whether interpretations were based on the data or not, sufficient segments of texts or quotes that relate to the interpretations are used.
Coding reliability (Smith & McGannon, 2018) was enhanced through the following procedure. Previously coded segments of the data were re-visited and re-coded to ensure reliability in coding (Campbell, Quincy, Osserman, & Pedersen, 2013). Although the evolving nature of the coding framework may not lead to the same results, it allowed re-coding of those segments to bring it in line with what was being coded at the time. The credibility of research findings (Flick, 2018) can also be enhanced through prolonged engagement with the field and familiarity with the study setting. It is because the aforementioned helps the participants to feel comfortable and to share their story with the researcher.

The technique of triangulation (Torrance, 2012) was also used to improve the rigour of the findings. It entails using multiple and different data sources, methods, investigators, and different theoretical perspectives in the study of a social phenomenon (Forrester & Sullivan, 2018). In this exploratory study, findings from different data collection methods were triangulated to provide a broader understanding of self-organized business startups and to strengthen the credibility of the interpretations. Triangulation also helped to provide a further level of perspective that may be available using either of the data collection methods, for example, individual interviews alone. The combination of the two data collection techniques in the different settings and participants enhanced the understanding of how self-organized business startups are constructed in different ways in different contexts.

Through this, patterns of convergence or corroboration of the overall interpretation were enhanced making the findings more comprehensive. It also helped to identify the context-specific nature of the different accounts.

Model for self-organized business startup

An organization is a complex system. How, pragmatic and realistic can this idea make sense in a value-adding way rather than just an academic concept? With the organizational system, an organization has a vision. A reason for its being and this is translated into its goals, objectives and strategies. Employees who fulfil roles and duties deliver those objectives. Organization design is not about who reports to whom; it is about what the role is required to do. What decisions and activities need to make? In doing these things, competencies are required, and employees have competencies, abilities and capabilities. The ultimate of every business is to serve its customers very well and remain competitive. Organizations that recognized its setup venture as an organized system have specialized people who play different and diverse roles and are all integrated into a system for a common goal and objective. Depicted below with Vensim PLC is a well-structured self-organized business system with different variables.

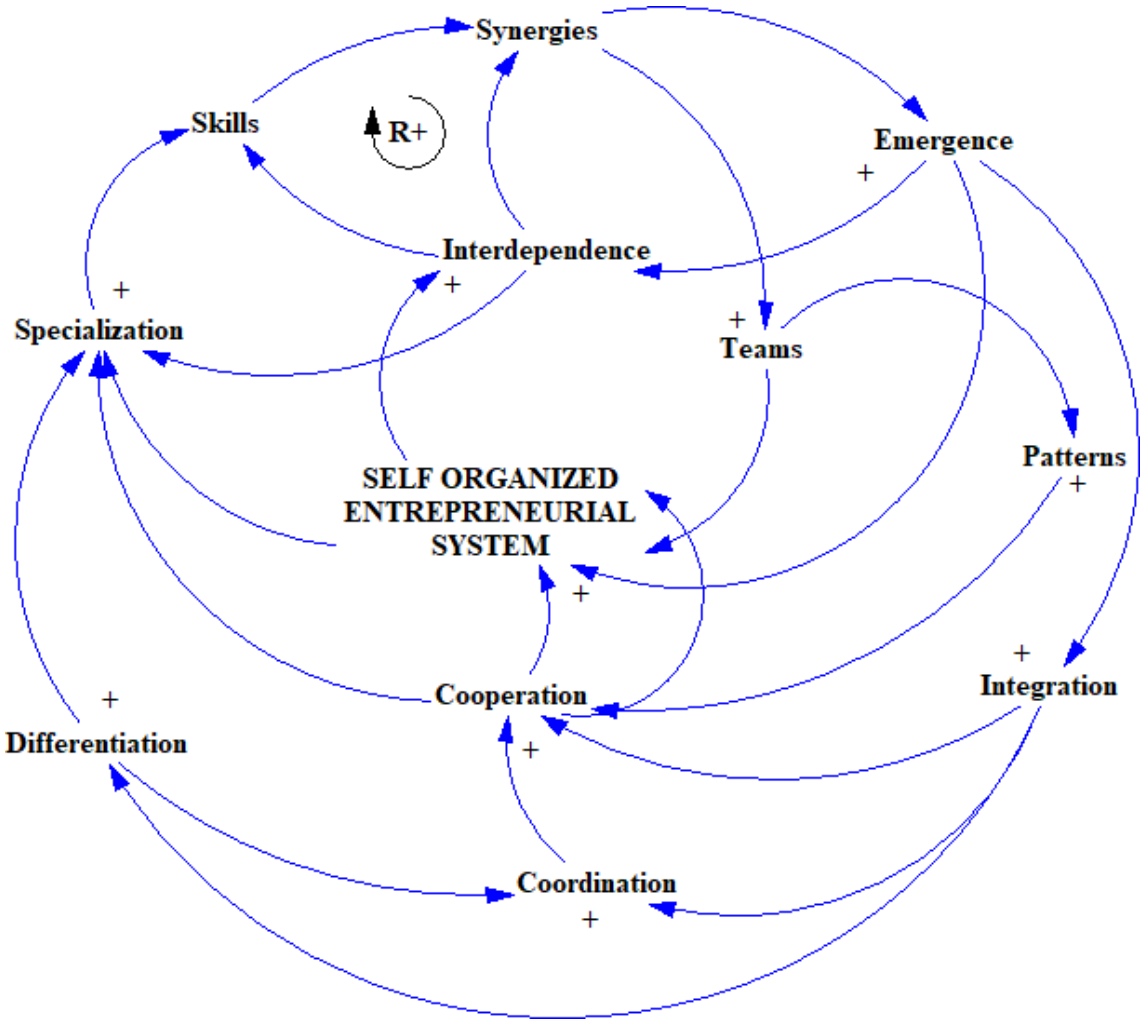

Figure 1. Researcher's construct - Self-organized synergetic system
The above diagram describes a self-organized entrepreneurial system in a unified synergy. The system with specialized individuals have different roles to play for dynamism and are all integrated to add value to the organization to out-compete their rivals for greater performance and competitive edge.

Description of Field studies
Research participants were selected during field study to gather data, using initial and purposive sampling (Etikan, Musa, & Alkassim, 2016) (that is the use of sampling which is picking relevant participants that fulfil criteria that will lead to relevant data). They are selected from entrepreneurs who have started their own business in Zhenjiang city, China. This purposive sampling plan was done immediately after a meeting with the members of the Entrepreneurs' Association in Zhenjiang, Jiangsu Province, China.

Data was gathered using a semi-structured interview with entrepreneurs who have started their businesses and have employed some specialized people to work in their organizations. During the interview session, participants were interviewed in-depth using an interview guide and recorded instruments. Interview sessions (around 20 minutes each) were aimed to let participants express (1) their knowledge in the basics of entrepreneurship and (2) their knowledge of working in synergies and its benefits.

1) Face to face Interview with a participant in Zhenjiang City, China.

Q1. Do you see self-organized business as one whole system that needs to be managed and controlled well?
Answer: Yes. A Self-organized system should be recognized as an entrepreneurial system that needs to be planned, organized, coordinated and controlled for greater performance.
Q2. Do you have other people who work with you?
Answer: When I started the business initially, it was just my wife and myself, but now I have employed other people to help with the business.
Q3. Do the people you work with have different roles they play?
Answer: That was the reason why I employed them. They have special skills to assist me in the business. I have an IT person, an Accountant and a marketer to help with different roles.
Q4. Are the different specialized people integrated very well into the self-organized system?
Answer: I guess they are integrated very well because no one works in isolation. We all have a focal point, that is to get more clients.
Q5. Is there coordination between the different parts or roles?
Answer: Every individual in my organisation, knows what to do and when to liaise with other co-workers. There are great coordination and inter-dependence between the different parts.
Q6. Do different individuals work as a unified team or synergy?
Answer: Yes. No one works in isolation. We hold meetings for all employees in the morning to know what individuals are doing and the progress of their work.
Q7. Are the different individuals occasionally given training to upgrade and enrich their skills?
Answer: Very well, specialized skilled individuals go for sandwich courses to upgrade and enrich their skills.
Q8. Do you benefit from working in synergies as an organisation?
Answer: There are some benefits that we get as an organisation to work in synergies. For instance, each person knows what to do at the right time and coordinate with other co-workers all to get more clients.
Q9. Do you have any advantage over your competitors for working in synergies?
Answer: Most of my competitors do not see their organisation as an entrepreneurial system, and so most of their employees work in isolation. There is no integration, and so their focus is not clear. We have a great competitive edge because we do not 'break our front'. We always work together as a team.
Q10. Does the relationship between the different roles add value to the organisation?
Answer: The integrated relationship adds value a lot to the organisation. The synergies have resulted in greater customer base and competitive advantage.

Data Transcription

Research assistants (RA) used recorded audiotapes and written notes for the collection of data from the field. They then literally translated and transcribed all interviews into word processed. Computer-assisted qualitative data analysis software (CAQDAS) package was used in the facilitation of the study (Woods, Macklin, & Lewis, 2016).

NVivo 12 was used to expedite data analysis in this study (Bell, Bryman, & Harley, 2018). The decision to use this package was based on the nature of the research topic; Exploring Self-Organized business as a complex system operating synergistically for a competitive edge. Hence, a research perspective that permits exploration of ideas and theory building was needed. The Grounded Theory procedures and techniques were therefore adopted since it facilitates exploratory research (A. Dodor, 2018; Glaser & Strauss, 2017) and is supported by the NVivo software.

NVivo was instrumental in terms of ordering the data and keeping track of the coding process. The use of the software expedited constant comparison between interpretations and illustrative statements from the original text. It also allowed the search for inconsistent instances to guard against data misinterpretation and to ensure that the findings are grounded in the data (E. A. Dodor, 2009).

Analysis of findings with Nvivo

The documents were imported into NVivo for analysis after editing and formatting the transcripts. A project in NVivo refers to a collection of stored information, such as transcripts, background data, and personal notes for analysis. From within the project, documents can be opened, edited, coded and analyzed. In the analysis, one has to look for concepts or ideas (called 'nodes' in NVivo) in the data and seeking to understand their differences and similarities as well as how they link and relate to each other.

1) Coding and Analyzing Data

Coding is a methodical process through which a researcher recognizes one or more discrete passages of text that in some sense, exemplify the same theoretical or descriptive idea (Campbell et al., 2013). It is also described as the assignment of meaningful tags or labels, either descriptive or inferential, to information compiled during a study (Flick, 2018). In the beginning, the transcripts were read through, line by line, to pinpoint key nodes (themes) talked about by the participants. The identification of the nodes was steered both by the words of the participants and also from reading other research work on the concept of entrepreneurial businesses in general, and particularly self-organized startup business in particular.

The identified nodes were used to develop a coding framework for coding the data. The coding process involved reading the transcripts, linking and connecting texts to the nodes they represent. Any new nodes identified while coding was later transcribed and added to the coding framework. Previously coded transcripts were then checked to identify texts representing the new nodes and coded appropriately.

In NVivo, attributes are associated with a document or set of documents and regarded as data about the data (Bell et al., 2018). For example, the attributes 'Integration' and "independence" can be used to search for patterns and variations in the data. A research journal was also kept in which 'memos' about thoughts and comments while editing and coding were written (E. A. Dodor, 2009). A memo is the record of the researcher's analysis, thoughts, interpretations, questions, and

directions for further data collection (Corbin et al., 2014; Flick, 2018). Although such memos are essential notes to the researcher, they are seen as a way of theorizing and commenting about the general development of the analytical framework (Alvesson & Sköldberg, 2017) as well as recognition of the preconceptions and biases of the researcher.

2) Developing Analytic schemes and models

During the analysis, themes that were identified as belonging to each other were organized into discrete categories and subcategories, using their various properties and dimensions (Corbin et al., 2014). In doing this, there were manipulation and organization of free nodes into tree nodes, resulting in the creation of a hierarchy of nodes containing categories and subcategories (Hancock & Algozzine, 2016).

Various searching strategies available in Nvivo for searching nodes and text were also used to explore any developing analytic schemes and concepts. After the search, the texts were retrieved and read through, continually comparing their meaning and contexts, to identify any common and recurring patterns in the data (Campbell et al., 2013).As the analysis advanced, some phenomena were recognized as related to each other. Diagrams of the relationships between the elements of the emerging models were created, and search conducted on their nodes. After the search, the texts were retrieved and examined repeatedly to ensure that the data supported the emerging conceptual model. This enabled the construction of a holistic mental picture of how each element might relate to the others. This process of identifying phenomena and searching for the relationship between them was repeated over and over until a particular phenomenon emerged as central to the research topic. This central phenomenon was recognized because it appeared high up in the coding tree and linked many other elements of the models (Hancock & Algozzine, 2016). It conveyed together most of the elements of the study and was made the pivot around which the findings of this research are constructed.

Visual Coding data with Nvivo

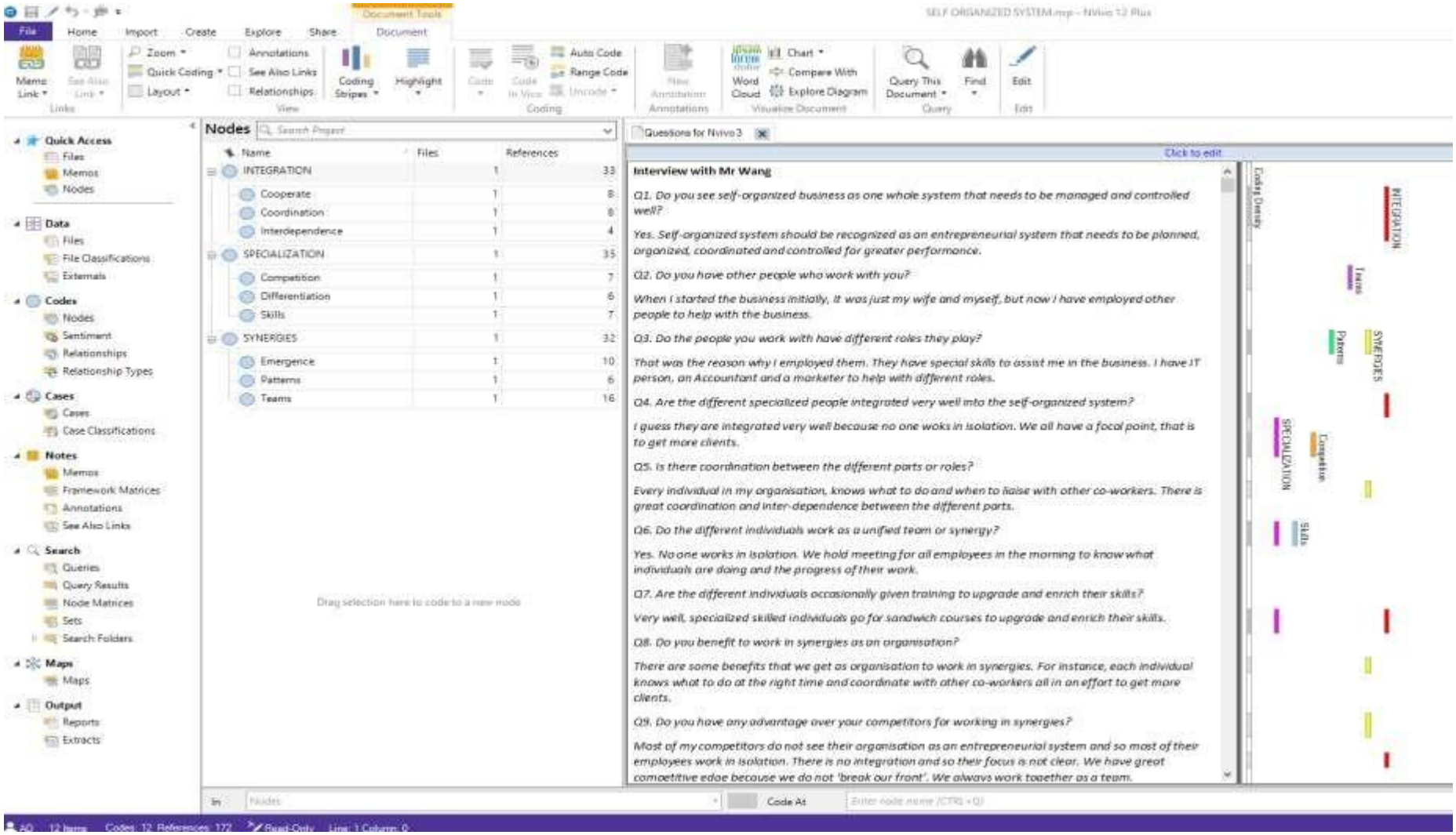

Figure 2 Nvivo software generated coded Interviews with participants

RESULTS FROM QUALITATIVE STUDY

In this exploratory research, an initial result that was obtained from the field study was analyzed with Nvivo software. After analyzing the transcribed interview texts, observations and document inspections conducted with forty participants, the researcher was able to establish that self-organized entrepreneur who operates as an organized system operates synergistically resulting in a competitive edge. Results of the qualitative study are summarized below. Codes related to Synergies were grouped into three categories
(1) Teams, (2) Patterns and (3) Emergence.
Additionally, codes for Integration arose which were categorized into three; namely,
(1) Coordinate, (2) Interdependence (3) Cooperation
Relating to Specialization, the codes which emerged were also grouped into three categories;
(1) Differentiation (2) Skills and (3) Competition
With the use of Nvivo software, the findings from the field were analyzed.
Depicted below (figure 6.3) is the pictorial view of the coding of the participant with the use of Nvivo software. There are codes for patterns, emergence, coordination, differentiation, interdependence, specialization, integration, synergies, competition, cooperate, teams and skills. Figure 6.4 was also generated from Nvivo software portraying the keywords used for the coding of the data in the form of a mind map.

Pictographic Generated Results.

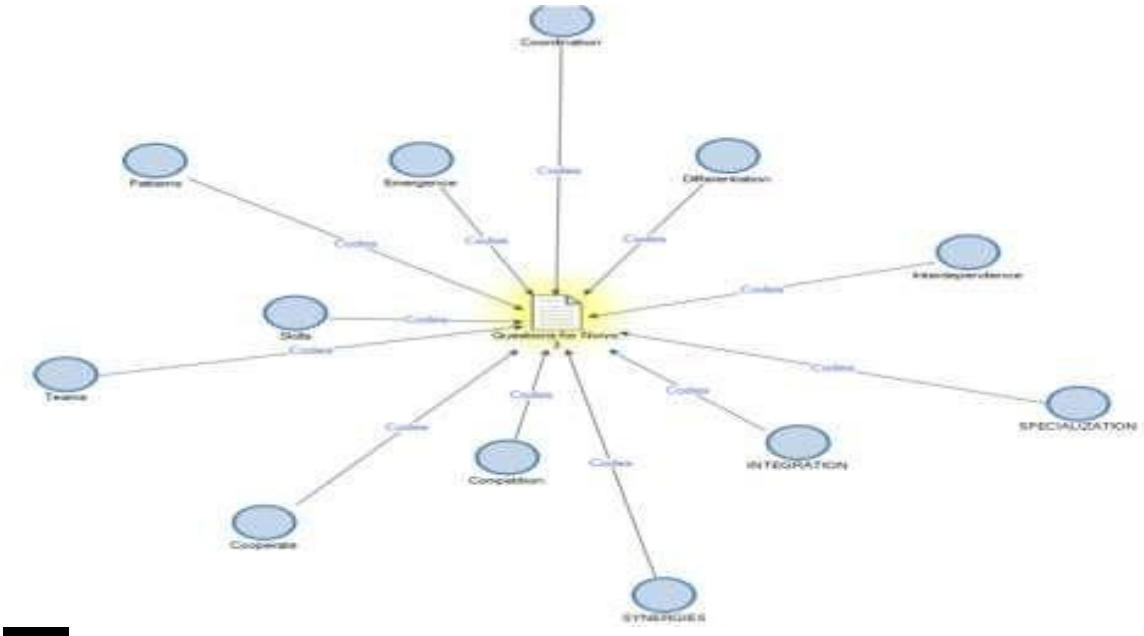

Figure 3. Coding of participants using Nvivo

Figure 4. Mind map of key words generated from Nvivo

SUMMARY AND CONCLUSIONS OF EXPLORATORY STUDY

Self-organized startup businesses over the years have led to entrepreneur competences and entrepreneur performance in self-organized businesses. Recent research seems to acknowledge fierce competition in entrepreneurial business. This has resulted in entrepreneurs strategically planning to achieve a competitive edge and out-perform their rivals.

Based on the findings emanating from the qualitative research, entrepreneurs who recognize their business startup venture as an organized entrepreneurial system and operate synergistically in the organization attain a competitive edge. The entrepreneurs employ specialized individuals to take different roles, and the former assist the latter in integrating into the self-organized system resulting in added value; instead of individuals working in isolation.

It was established in the exploratory research that, entrepreneurs who strategically follow the principles of openness as a complex system for their source of survival develop synergies, teams, pattern and emergence for their employees to add value to their organization.

Secondly, if specialized people are employed to play different roles, differentiation is established leading to effective skills and competitive advantage.

Lastly, the different people employed for different roles are integrated into the self-organized system for coordination, cooperation and inter-dependencies. The linkage of entrepreneurial self-organized business and complex system operating synergistically means the entrepreneur is skilful and competent, has specialized and differentiated employees who operate in synergies and integrate into the self-organized system.

There are also some discussions on some methodological issues relating to adopting Grounded Theory as the research method. A description of the initial phase of data collection, coding and analysis process with discussions of some findings is done. The researcher needs to note some few issues on this study. As a requirement by constant comparative method, after each session of the interview, data analysis has to be done immediately. Also to obtain more data when necessary, follow-up interviews may be needed to conclude the exploratory study. Finally developing trust with participants is very important to produce quality data and ensure the trustworthiness of research findings.

At the concluding stage of this exploratory study, the researcher is expected to provide findings that will add to the existing literature of an entrepreneurial self-organized business as a complex system operating synergistically for a competitive edge.The theory added to extant literature from the exploratory study is that, entrepreneurs who recognize self-organized business as a complex system form synergies' in self-organized businesses with different specialized employees who are integrated into the organizational system resulting in a competitive edge for the organization.

REFERENCE

Alvesson, Mats, & Sköldberg, Kaj. (2017). *Reflexive methodology: New vistas for qualitative research*: Sage.

Bailey, Catherine, Mankin, David, Kelliher, Clare, & Garavan, Thomas. (2018). *Strategic human resource management*: Oxford University Press.

Barney, Jay B. (2014). How marketing scholars might help address issues in resource-based theory. *Journal of the Academy of Marketing Science, 42*(1), 24-26.

Bell, Emma, Bryman, Alan, & Harley, Bill. (2018). *Business research methods*: Oxford university press.

Bjørnskov, Christian, & Foss, Nicolai J. (2016). Institutions, entrepreneurship, and economic growth: what do we know and what do we still need to know? *Academy of Management Perspectives, 30*(3), 292-315.

Brown, John Seely, & Duguid, Paul. (2017). *The Social Life of Information: Updated, with a New Preface*: Harvard Business Review Press.

Bryant, Antony. (2017). *Grounded theory and grounded theorizing: Pragmatism in research practice*: Oxford University Press.

Campbell, John L, Quincy, Charles, Osserman, Jordan, & Pedersen, Ove K. (2013). Coding in-depth semistructured interviews: Problems of unitization and intercoder reliability and agreement. *Sociological Methods & Research, 42*(3), 294-320.

Charmaz, Kathy. (2017). The power of constructivist grounded theory for critical inquiry. *Qualitative inquiry, 23*(1), 34-45.

Chen, Jin, Yin, Ximing, & Mei, Liang. (2018). Holistic Innovation: An Emerging Innovation Paradigm. *International Journal of Innovation Studies, 2*(1), 1-13.

Corbin, Juliet, Strauss, Anselm, & Strauss, Anselm L. (2014). *Basics of qualitative research*: sage.

Danks, David, & Ippoliti, Emiliano. (2018). *Building theories: heuristics and hypotheses in sciences* (Vol. 41): Springer.

Dodor, Ann. (2018). THE USE OF GROUNDED THEORY TO EVALUATE THE INTERACTIVE EFFECT OF FARMER ENTREPRENEUR AND ECONOMIC DEVELOPMENT OF GHANA. *INTERNATIONAL JOURNAL OF MANAGEMENT & INFORMATION TECHNOLOGY, 13*(1), 3207-3221.

Dodor, Emmanuel Atsu. (2009). *An exploration of the causes, manifestations and consequences of tuberculosis stigma in an urban district in Ghana.* University of Nottingham.

Etikan, Ilker, Musa, Sulaiman Abubakar, & Alkassim, Rukayya Sunusi. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1-4.

Flick, Uwe. (2018). *Designing qualitative research*: Sage.

Forrester, Michael A, & Sullivan, Cath. (2018). *Doing qualitative research in psychology: A practical guide*: SAGE Publications Limited.

Frederick, Howard, O'Connor, Allan, & Kuratko, Donald F. (2018). *Entrepreneurship*: Cengage AU.

Gaglio, Connie Marie. (2018). Opportunity identification: review, critique, and suggested research directions *Reflections and Extensions on Key Papers of the First Twenty-Five Years of Advances* (pp. 1-47): Emerald Publishing Limited.

Gerring, John. (2008). Case selection for case-study analysis: qualitative and quantitative techniques *The Oxford handbook of political methodology*.

Glaser, Barney G, & Strauss, Anselm L. (2017). *Discovery of grounded theory: Strategies for qualitative research*: Routledge.

Guest, Greg, MacQueen, Kathleen M, & Namey, Emily E. (2012). Validity and reliability (credibility and dependability) in qualitative research and data analysis. *Applied thematic analysis. London: Sage Publications*, 79-106.

Hancock, Dawson R, & Algozzine, Bob. (2016). *Doing case study research: A practical guide for beginning researchers*: Teachers College Press.

Hannah, Douglas P, & Eisenhardt, Kathleen M. (2018). How firms navigate cooperation and competition in nascent ecosystems. *Strategic Management Journal, 39*(12), 3163-3192.

Hislop, Donald, Bosua, Rachelle, & Helms, Remko. (2018). *Knowledge management in organizations: A critical introduction*: Oxford University Press.

Kazanjian, Robert K, Drazin, Robert, & Glynn, Mary Ann. (2017). Implementing strategies for corporate entrepreneurship: A knowledge-based perspective. *Strategic entrepreneurship: Creating a new mindset*, 173-199.

King, Nigel, Horrocks, Christine, & Brooks, Joanna. (2018). *Interviews in qualitative research*: SAGE Publications Limited.

Leonard-Barton, Dorothy. (1992). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic management journal, 13*(S1), 111-125.

Malecki, Edward J. (2018). Entrepreneurs, networks, and economic development: A review of recent research *Reflections and Extensions on Key Papers of the First Twenty-Five Years of Advances* (pp. 71-116): Emerald Publishing Limited.

Mohsin, Ainul Mohsein B Abdul, Halim, Hasliza A, & Farhana, Nadia. (2017). Assessing the role of entrepreneurial competencies on innovation performance: a partial least squares (PLS) approach. *The Journal of Business Inquiry, 16*(1 Spec), 88-101.

Mosakowski, Elaine. (2017). Overcoming resource disadvantages in entrepreneurial firms: When less is more. *Strategic entrepreneurship: Creating a new mindset*, 106-126.

Motoyama, Yasuyuki, & Knowlton, Karren. (2017). Examining the connections within the startup ecosystem: A case study of st. louis. *Entrepreneurship Research Journal, 7*(1).

Nielsen, Karina, Nielsen, Morten B, Ogbonnaya, Chidiebere, Känsälä, Marja, Saari, Eveliina, & Isaksson, Kerstin. (2017). Workplace resources to improve both employee well-being and performance: A systematic review and meta-analysis. *Work & Stress, 31*(2), 101-120.

Phadermrod, Boonyarat, Crowder, Richard M, & Wills, Gary B. (2019). Importance-performance analysis based SWOT analysis. *International Journal of Information Management, 44*, 194-203.

Richards, Cameron, & Farrokhnia, Farrokh. (2016). Optimizing grounded theory for policy research: a knowledge-building approach to analyzing WTO E-Commerce policies. *International journal of qualitative methods, 15*(1), 1609406915621380.

Rickard, Norman AS, & Clarke, Charlotte L. (2015). The involvement of older people in their rehabilitation: Generating a substantive grounded theory. *International Journal of Therapy and Rehabilitation, 22*(8), 361-369.

Smith, Brett, & McGannon, Kerry R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International review of sport and exercise psychology, 11*(1), 101-121.

Spender, John-Christopher, Corvello, Vincenzo, Grimaldi, Michele, & Rippa, Pierluigi. (2017). Startups and open innovation: a review of the literature. *European Journal of Innovation Management, 20*(1), 4-30.

Torrance, Harry. (2012). Triangulation, respondent validation, and democratic participation in mixed methods research. *Journal of mixed methods research, 6*(2), 111-123.

Woods, Megan, Macklin, Rob, & Lewis, Gemma K. (2016). Researcher reflexivity: Exploring the impacts of CAQDAS use. *International Journal of Social Research Methodology, 19*(4), 385-403.

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