

Knowledge Management System Model for Start-Up Business Community

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Abstract

Business start-ups are companies that are newly established and are in the development and research phase to find the right market based on information technology. However, business start-ups as a new business have difficulty developing their business due to their limited knowledge and experience, therefore business start-ups need a system or model that can provide information and knowledge with a social approach so that business start-ups can develop

according to expectations. Collaborative E-learning is an e-learning approach where members interact socially with other members and also with teachers. Knowledge management system is a system that aims to maintain, analyse, organize, improve, and share knowledge and experience. The purpose of this research is to build a collaborative learning model with a knowledge management system for business start-ups. The research method uses literature and observation studies to find open problems and solutions with an information technology approach.

Keywords

Collaborative learning, Knowledge Management System, Start-Up Business Community.

1. Introduction

The development of start-up businesses in Indonesia is growing quite rapidly. This happens in line with the development of the use of information technology in various fields, for example in the government sector (Ramadhan et al. 2011) and the business sector (Ramadhan 2022). Currently, there are at least more than 900 local start-ups in Indonesia. The potential of Indonesian internet users which is increasing from year to year is certainly a potential to establish a start-up. The internet infrastructure in Indonesia is also starting to develop, although it is still lagging behind compared to developed countries (Ramadhan et al. 2021). However, in other words, the more use of the internet, the more startup companies. Start Up is a business that has just been established and is still in the development and research stage to find market potential, target markets, and all those belonging to the technology, information, and communication business fields. However, most start-up companies go bankrupt because of several things, one of which is the knowledge and experience of digital technology-based business.

Collaborative learning is a learning method using social interaction where this approach is suitable for business start-ups where the interaction between business start-ups and Seattle companies or digital business practitioners is to share knowledge and experiences. On the other hand, a knowledge management system is a system that aims to create, distribute and use knowledge. The purpose of this research is to build a collaborative learning model using knowledge management for business start-ups. Open problems are found through literature review and observation where these 2 steps are part of a qualitative approach. This approach is also used to find alternative solutions using information technology (Inayatulloh 2022).

2. Literature Review

Startup company

start-up company is a term that refers to all companies that have not been operating for a long time. These companies are mostly newly established companies and are in the development and research phase to find the right market in the technology realm of course. Start-up companies are included in the category of small and medium-sized businesses that involve or are engaged in technology or at least use technology as a companion and hardware, software as a tool to support their business. The benefit of setting up a start-up is to expand investment capacity in new products.[1] The term "start-up" became popular internationally during the dot-com bubble. At that time many dot-com companies were founded simultaneously. Startup in **the** organizational approach argues the conditions under which an organization is planned and the processes followed in its initial development phase, which have important consequences on its structure and performance in later life. start up in **the** entrepreneurial approach argues the characteristics of the founder and promoter of a new organization (Salamzadeh et al. 2015).

Collaborative learning

Collaborative learning is an educational approach to teaching and learning that involves groups of learners working together to solve a problem, complete a task, or create a product. There are a number of benefits that are associated with the concept of collaborative learning (CL). It is through understanding the benefits, that we can truly use this learning style to our benefit. Before one can make a judgment on the merits of CL, it is important to understand exactly what CL is (Marjan, and Mozhgan 2012).

Collaboration is a philosophy of interaction and personal lifestyle where individuals are responsible for their actions, including learning and respect the abilities and contributions of their peers. In all situations where people come together in groups, it suggests a way of dealing with people which respects and highlights individual group members' abilities and contributions. There is a sharing of authority and acceptance of responsibility among group members for the groups' actions. The underlying premise of collaborative learning is based upon consensus building through cooperation by group members, in contrast to competition in which individuals best other group members (Laal,

Marjan, et al. 2013). CL practitioners apply this philosophy in the classroom, at committee meetings, with community groups, within their families and generally as a way of living with and dealing with other people. There are three ways when individuals take action in relation to the actions of the others. One's actions may promote the success of others, obstruct the success of others, or not have any effect at all on the success or failure of others. In other words, individuals may be: Working together cooperatively to accomplish shared learning goals and Working against each other (competitively) to achieve a goal that only one or a few can attain; Working by oneself (individualistically) to accomplish goals unrelated to the goals of others (Ruengtam 2018).

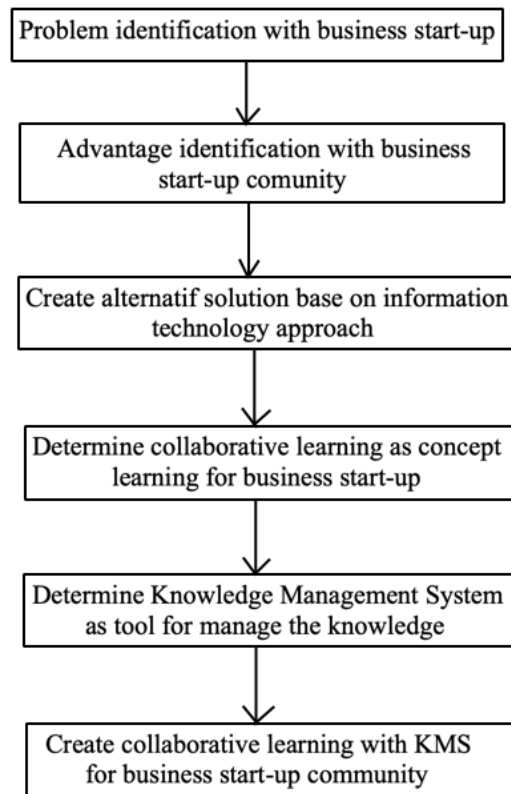
Knowledge Management System

Knowledge Management System, which is a computer system that allows the processes of creating, collecting, organising, accessing and using knowledge to be automated as far as possible (Schniederjans et al. 2020).

knowledge can be seen from five different perspectives (1) as a state of mind, (2) as an object, (3) as a process, (4) as a condition for accessing information, or (5) as a capability. Taking this context and our own empirical observations as our starting point, we define knowledge as the awareness that enables us to possess the skill or the capacity required in a particular situation (1) to deal with and resolve complex issues in an efficient and creative manner, and (2) to take advantage of opportunities by making the most appropriate decisions. (Woodman et al. 2012).

3. Methods

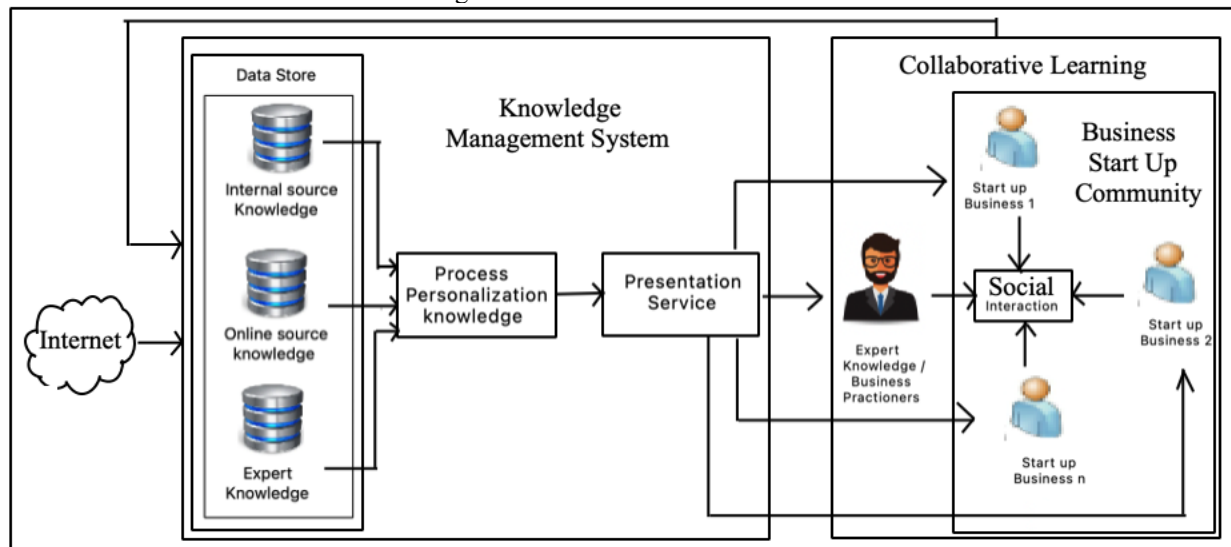
A start-up company as a new business has many challenges and problems, this is our trigger for research on potential challenges and problems of start-up companies. Based on a literature study, business start-ups face several problems and in this research we focus on the lack of digital business knowledge owned by business start-ups. The next research step is to identify alternative solutions using an information technology approach. From several literature reviews, a combination of knowledge management and collaborative learning is determined to increase knowledge of business start-ups. The final step is to build a collaborative learning model with a knowledge management system for the business start-up community.



4. Results and Discussion

The collaborative learning model with a knowledge management system for business startups offered consists of:

- a. Storage Layer
Is part of the KMS that stores all the knowledge from internal and external business startup communities. Internal knowledge is knowledge that comes from within the startup community based on the knowledge and experience they have. When collaborative learning occurs, business startups can become instructors with their knowledge. The storage layer also stores knowledge from experts where knowledge will be discussed and shared when collaborative learning occurs. In addition to the two types of knowledge described above, there is one knowledge that comes from online sources such as social media and other online sources.
- b. Personalization Knowledge Process
This section is the section that processes knowledge based on the specific needs of the user. One of the common needs for knowledge is search engine knowledge where users can search for the required knowledge based on this feature. Another example is data mining knowledge where the feature provides the ability to find relationships in the knowledge database .
- c. Presentation Service
- d. This feature provides a set of services that can be used to use the system. The initial design allows users to access the system with various different software and hardware platforms with the aim of making it easier for users to use the system
- e. Social Interaction
This section is the core of collaborative learning in the business startup community where there are 2 different main actors, namely business startups and digital business experts or practitioners. In collaborative learning, the two actors can take turns being a student and an instructor.



5. Conclusion

A model that integrates a knowledge management system with collaborative learning is an ideal solution for business start-ups because social interactions will generate new knowledge. During social interaction, it is also a means to share knowledge. If you pay more attention to social interactions during collaborative learning

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Biography

Inayatulloh SE.MMSI,CDMS.CSCA is a lecturer at Bina Nusantara University, School of Information System Jakarta Indonesia and also a doctoral candidate of computer science, experienced in managing systems in the retail, automotive, convection and education industries. research domain in e-learning, e-business, e-commerce, cloud computing, IoT and block chain technology.

Siti ELda Hiererra is a doctoral student in computer science/information systems (DCS) at Bina Nusantara University Jakarta. She was practically experienced working as a business and technology development for Digital Creative Start Up Company especially in Child Education. Her academic background has obtained a bachelor and master degree from Bina Nusantara University majoring in Information Systems. ELda is currently a faculty member at School of Information Systems Binus University.