The role of equity crowdfunding company as a knowledge broker in supporting digital transformation of SMEs through knowledge sharing and dissemination process

Ibnu Trunugraha Aji^(a), Anjar Priyono^(b)

^(a) Master of Management, Universitas Islam Indonesia, Yogyakarta, Indonesia

^(b) Senior Lecture, Department of Management, Universitas Islam Indonesia, Yogyakarta, Indonesia

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ABSTRACT

This study aims to understand how Knowledge Brokers can drive digital transformation in SMEs through the process of sharing and disseminating knowledge, thereby increasing digital literacy in their business processes. This study used a multiple case study design with qualitative analysis to examine the data obtained from interviews, observation, and field visits to achieve the objective. The findings highlight that Santara acts as a Knowledge Broker and as a source of knowledge that gives rise to a digital transformation process that can increase digital literacy for SMEs. Research on knowledge sharing and digital transformation has focused on SMEs. The qualitative case study method allows us to carry out an in-depth analysis of a case but it has limited generalizability. To overcome this limitation, further research is expected to use a survey covering various industries to test the theoretical proposals that have been generated from this study, so that they can be generalized.

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Introduction

SMEs provide a large enough contribution to the economy. In Indonesia, SMEs contributed 97% to employment and contributed 60% to the national economy (Hartono, 2020). It is important for SMEs to increase digital literacy to support business operations. Digital literacy, basically the practice of communication to build relationships, think, and other activities related to digital media (Sugihartati, 2020). Deloitte found that only 18% of SMEs have digital connectivity and are also actively involved in social media by integrating their sites with social media, live chat or consumer reviews (Deloitte Access Economic, 2015).

On the other hand, technological advances have an impact on changes in the business environment and various challenges faced by companies in being able to adapt to changes in these environments. Faced with a barrage of uncertain conditions due to new technologies, shorter product life cycles and tougher competition due to easy replication leading to an increasingly hostile business environment, the transformation of strategic business models is key to growth and often survival, especially for entrepreneurial companies (Gupta and Bose, 2019).

Start-up companies are synonymous with new startup companies that utilize digital technology that supports the production operational process to achieve rapid growth targets. The emergence of new and powerful digital technologies, digital platforms and digital infrastructure has transformed innovation and entrepreneurship in significant ways. In addition to opening up new opportunities for innovators and entrepreneurs, digital technology has broader implications for value creation and value capture (Nambisan *et al*, 2019) Start-ups are essential engines for innovation. But they can only grow if they are embedded in a well-functioning start-up ecosystem (Jesemann, 2020).

* Corresponding author. ORCID ID: 0000-0003-3758-994X

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Salamzadeh and Kawamorita (2015) categorizes some of the main common challenges faced by start-ups such as financial challenges, human resources, support mechanisms & environmental elements. The four main challenges are also influenced by the rapid development of technology which aims to be able to provide efficiency and effectiveness in supporting each operational process from each of the challenges, one of the ways is through digital transformation.

The synergy between SMEs and start-up companies is considered important enough to build a sustainable business ecosystem. In this study, the authors made observations on different start-up objects. With technological developments, the business model in the financial industry sector has experienced changes, the emergence of fintech start-ups (financial technology-based start-ups), especially in Indonesia, has also influenced the business ecosystem.

This research tries to understand further about the role of the Equity Crowdfunding Company (ECF) as a Knowledge Broker (KB) in contributing to supporting digital transformation (DX) and increasing digital literacy for SMEs in Indonesia through the process of sharing and disseminating knowledge by utilizing technological resources owned by KB. ECF is a relatively new financial services business model and based on data from the Indonesian Financial Services Authority (OJK RI) there are only 3 start-up equity crowdfunding in Indonesia. So that this research becomes a new literature that is expected to contribute to studies related to sharing knowledge in improving digital literacy in the future. ECF as a Knowledge Broker (KB) is expected to contribute to increasing the scale of the MSE business in Indonesia.

Literature Review

Theoretical Background and Conceptual Framework

Definition of Digital Transformation and Roadmaps

The development of digital technology affects various aspects of life, both individuals and organizations, especially in the economic and business fields. New technological advances change the entire economic structure, the way people live, work and consume information quickly through digital transformation (Matzler *et al.*, 2018). Digital transformation is a fundamental change in the business world through the formation of new technology (Rasch and Koss, 2015). In line with this explanation, Bounfour (2016) argues that digital transformation is a new development in the use of digital artifacts, systems and symbols in and around organizations.

Definitions related to digital transformation have been presented in various previous literatures. Fitzgerald *et al.* (2013) define digital transformation as the use of new digital technologies (social media, mobile, analytics or embedded devices) to enable greater business improvements (such as improving customer experience, streamlining operations, or creating new business models). Wade, (2015) defines digital business transformation as organizational change through the use of digital technology and business models to improve performance. Bouee and Schaible (2015) looked at the consistent network transformation of all economic sectors and the adjustment of actors to the realities of the digital economy. Digital transformation in business models is related to the elements of individual business models, the overall business model, value-added chains, and networks of different actors in value-added networks (Schallmo, 2016).

In the digital transformation process, there are facilitators whose function is to enable applications or services to be used to realize the digital transformation of the business model. Bouee and Schaible (2015) divide facilitators and applications into four categories and group them into a digital transformation radar as follows:

- i. *Digital Data: The collection, processing and analysis of digital data to facilitate and improve predictions and decisions.*
- ii. *Automation: A combination of classic artificial intelligence technologies that enable autonomous work and self-regulatory systems. This reduces error rates, increases speed and allows for reduced operating costs.*
- iii. *Digital Subscriber Access: The mobile internet allows direct access, which is why it is given a high level of transparency and new services.*
- iv. *Network: The cellular or cable network of the entire value-added chain via high-speed broadband telecommunications enables supply chain synchronization, leading to reduced production times and innovation cycles.*

Research related to digital transformation in business has been researched since the last few decades. Souza *et al.* (2020) confirm that a company that is digitally changing its business and creating performance improvements invests massively in increasing their digital intensity through digital partnerships, digital acquisition and investment. In this case, for small & medium enterprises (SMEs) digital transformation is a challenge where costs are needed to gain access to technology. Wang *et al.* (2020) stated that in the digital economy era, digital technology can significantly affect corporate functional departments such as the information technology / information systems department and business operations departments which comprehensively change the organization's business model, structure and business processes.

Knowledge Management

The term knowledge management is popularly used since 1980 and has been developing since the last few decades. Knowledge management continues to develop constantly, along with changes in the critical success factors and becomes a form of response to management challenges in complex environments (Masic, 2017). Knowledge management forms a pattern of interaction between

technology, engineering and humans (Bhatt, 2001). Organizations not only need knowledge, more than that an organization needs skills and competencies to dynamically renew and practice knowledge (Baets, 2005).

Knowledge management is a deliberate and systematic coordination of people within an organization, technology, processes and organizational structures to add value through reuse and innovation (Dalkir, 2005). In a business perspective, knowledge management is defined as a deliberate and systematic business optimization strategy that selects, filters, stores, complies, packages and communicates important information for the company's business in a way that can improve the performance of the company and the competitiveness of the company (Bergenon, 2003). A holistic knowledge management system consists of a comprehensive system of processes, tools, people, and techniques that enable employees to use information effectively (Yee *et al.*, 2019). From this definition, it provides an understanding that knowledge management has an important role for the organization to achieve its goals by integrating its resources. Walczak (2005) argues that preparing organizations for knowledge management initiatives means changing or adapting organizational culture to facilitate, support and encourage knowledge sharing, utilization and creation. Knowledge management is a powerful organizational tool to support the change process, because it provides an organization with a continuous flow of relevant information to achieve better decision making during the administrative process (Oliva and Kobe, 2019).

Wiig (1993) develops a perspective related to knowledge management which is a set of approaches and processes to find and manage positively and negatively the critical functions of knowledge in various types of operations, identify new products and strategies, improve human resources, and achieve a number of other organizational goals according to the target. set. From this perspective, knowledge management focuses on eight important areas including:

- i. *Researching, developing, maintaining and securing the intellectual and knowledge resources of the company.*
- ii. *Promote the creation and innovation of knowledge by all.*
- iii. *Determine the knowledge and skills needed to perform job tasks, organize, create the necessary knowledge, package (in training courses, procedure manuals or knowledge-based systems) and distribute them into relevant points.*
- iv. *Modify and restructure companies to use knowledge efficiently, take advantage of opportunities to exploit knowledge assets, minimize knowledge gaps and barriers and maximize the value-added knowledge content of products and services.*
- v. *Create, organize and monitor future and long-term knowledge-based activities and strategies (particularly new knowledge investment), research and development, strategic alliances, acquisitions, recruitment programs and others based on identified opportunities, priorities and needs.*
- vi. *Maintain competitive ownership and knowledge and control use to ensure that only the best knowledge is used, that valuable knowledge does not stop developing and is not passed on to competitors.*
- vii. *Provide knowledge management capabilities and knowledge architecture so that company facilities, procedures, guidelines, standards, examples, and practices to facilitate and support active knowledge management as part of organizational practices and culture.*
- viii. *Measure the performance of all knowledge assets and account for (at least internally in the organization) as assets that are capitalized to be built, exploited, renewed and managed to fulfill the mission and objectives of the organization.*

Knowledge Sharing and Dissemination in Digital Transformation

In the integration of knowledge management, knowledge sharing is an important part of an organization, both internally and between organizations. The key to sustainable excellence is not knowledge in itself, but technological capabilities that enable the generation of new knowledge (Grant, 1996). Technology transfer within the company has considerable strategic importance, but the management process is often poorly understood (Malik, 2020). Through knowledge sharing, small & medium enterprises (SMEs) have access to ready-to-use information technology (IT) applications, which may come free of charge but are not worry-free (Pelletier and Cloutier, 2019).

Explicit knowledge sharing is an important component of technology sharing, formulating effective technology-sharing relationships rooted in explicit knowledge-sharing mechanisms (such as technical information exchange, technical support) (Gunsell, 2015). Information and communication technology can enhance knowledge sharing by lowering the spatial and temporal barriers between knowledge workers, and increasing access to information about knowledge (Hendriks, 1999). With a set of guidelines on technology infrastructure, organizations can take the right technology to share knowledge more efficiently (Islam *et al.*, 2015).

The success of knowledge transfer in technology is influenced by several factors. Holden and Konishi (1996) identified several main factors that influence the success of technology transfer, including:

- i. Good project management skills
- ii. The lines of communication are strong and used effectively
- iii. Flexible and adaptive collaboration systems and structures
- iv. Selection of partners based on complementary technology and business interests.
- v. Both top management and operations support each other
- vi. Trust and respect each other's abilities
- vii. Commitment to generally defined objectives
- viii. Great timing

ix. Clear statement of intellectual property rights

In the process, it is important for organizations to establish a top-level organizational strategy for technology transfer and use it to facilitate the planning of transfer stages and to build a culture of technology transfer within an organization (Bahane and Grobbelaar, 2018). Like multinational companies, which must have a healthy flow of knowledge through the company to unite the culture and values of the company (Chuan, 2018).

Equity Crowdfunding and Small Medium Enterprises (SMEs) in Collaboration Perspective

Crowdfunding in digital humanities has brought social entrepreneurs to deal with various stakeholders by employing a commercialized workforce with flexible work arrangements and shifting economic risk from the capital market to certain individuals and groups (Pranoto *et al.*, 2020). For small and medium enterprises, crowdfunding is a new funding alternative to expand and grow their business. Using a network of entrepreneurs and investors and supported by a wider social media platform, Crowdfunding is a financial innovation that describes a series of alternative financing tools that can change the way new business is financed (Estrin and Khavul, 2015). Technological advances have an impact on changing business models in the economy, where technology is a supporting tool to help business operational efficiency and reach a wider business scope. Equity crowdfunding Company (ECF) is emerging as a new business model in the financial services sector that utilizes technology as a business operational tool. This has made the financial industry more competitive and has become a new alternative source of funding for business actors in addition to obtaining capital from banks. Investors in a crowdfunding service platform buy shares in companies whose projects are proposed online, and thus become shareholders of the company, on the other hand small and medium enterprises (SMEs) obtain external funds outside the traditional financial sector, thereby reducing the funding gap (Crescenzo, 2016). The presence of technology brings more capacity to facilitate the exchange of capital for shares and for the first time, technology will be used to ensure that both parties comply with federal law (Green, 2014). On the other hand, the presence of equity crowdfunding services is expected to provide new knowledge for small and medium enterprises in the utilization of business digitization.

Conceptual Framework

Literature related to the topic of sharing & disseminating knowledge and digital transformation has developed considerably in the last decade, however, no research has yet observed the process of sharing & disseminating knowledge and digital transformation simultaneously related to increasing digital literacy in SMEs in Indonesia. Based on the description above and the limited literature related to sharing knowledge in improving digital literacy in SMEs, the author builds research questions as follows:

RQ: How can Knowledge Broker (KB) drive digital transformation in SMEs through the process of sharing and disseminating knowledge so as to increase digital literacy in their business processes?

To facilitate understanding of existing research questions, we built a conceptual framework for the research model from the research questions shown in Figure 1.

Figure 1: Conceptual Framework (KB for SMEs Digital Transformation)

Research and Methodology**Methodology and case selection**

This study used a multiple case study design with qualitative analysis to examine the data obtained from interviews, observation, and field visits to achieve the objective. The case study method mostly relies on research questions that are constructed to attempt to explain a situation that answers the "how" or "why" question of a social phenomenon and the method will be relevant if the question is constructed that requires a broad and in-depth description of some social phenonema (Yin, 2014). Case studies are research strategies that focus on understanding the dynamics that exist in a single setting (Eisenhardt, 1989). We chose PT. Santara Daya Inspiratama (we call it Santara in the paper) is the first equity crowdfunding startup company in Indonesia and has several special features in terms of digital technology. Furthermore, to strengthen the research data, we selected several SMEs companies that have joined the equity crowdfunding platform such as NutriShe, LibraCorp and Gemilang Petshop. First, we chose Santara to answer our research because they play a key role in supporting SMEs in introducing digital technology in business / processes, especially in terms of attracting investors to invest in SMEs. Second, they are based on a technology infrastructure that provides access to new knowledge, expertise and technology to support SMEs in their digital transformation. Third, they provide technology support to implement these activities. And finally, the selection of SMEs is carried out randomly to ensure the impact of the technology support that has been provided.

Data Collection

We discussed the data collection protocol at the beginning. Next, we investigate the flow of the collaboration process that occurs between Santara and SMEs. The existence of secondary data sources about Santara, such as media reports, website information, social media, Telegram, YouTube Channel and Smartphone application platforms that can help us gain initial understanding. From the secondary data analysis, we selected events related to the collaborative process flow that occurred. Then, based on these events, we developed an interview protocol. We selected resource persons from unit leaders and SME business owners to gather more detailed information. All interviews used a structured format. We also obtained some related archival data from sources. Various data can form a data triangulation test (Yin, 2014), to ensure the accuracy of the information. For research questions in appendix 1.

Data analysis

The analysis process is a fairly complex stage where in the process the researcher analyzes and connects various sources of data and information obtained to become new findings and strengthen theory development. The analysis process includes within-case analysis and cross-case analysis (several case designs) to identify patterns in research data (Volmar & Eisendhardt, 2020). Analysis involves iterating between theory and data. After each interview, all researchers immediately conducted an in-depth examination and analysis of the data. The stages of the data analysis process refer to (Yin, 2016) five stages of analysis which include: 1. Compile Database, 2. Disassemble Data, 3. Reassemble Data, 4. Interpret Data and 5. Conclude. The basic information of the research methodology is presented in Table 1.

Table 1: Basic information about research methodology

Case company name	Santara	NutriShe	LibraCorp	Gemilang Petshop
Case Industry	Equity Crowdfunding	Cosmetics manufacturer	Consumer Goods Trade	Petshop
Role in research	Knowledge Broker	Receiver of knowledge	Receiver of knowledge	Receiver of knowledge
Data source	Interviews and discussions with:			
	Chief of Technology Head of Digital Marketing	Chief Executive Officer	Chief Executive Officer	Chief Executive Officer
Other data source	Website Smartphone Apps YouTube Channel Social Media Telegram Online Newspaper	Website YouTube Channel Social Media Telegram Prospectus	Website YouTube Channel Social Media Telegram Prospectus	YouTube Channel Social Media Telegram Prospectus
Characteristic case of company	The first technology-based equity crowdfunding platform in Indonesia	A SMEs engaged in the cosmetic production and trading industry	SMEs engaged in the trade of consumer goods with B2C and B2B business models and are connected to e-commerce platforms.	SMEs engaged in pet shop trading.
Data analysis method	Iteration between theory and data, interviews, observation and field visits			

Findings and Discussion

Result

Analysis of the relationship between Santara and SME in achieving digital transformation

We conducted a qualitative analysis to answer the research questions that have been constructed and the results are presented in Figure 2. The data structure is presented as a step to identify exciting propositions on key characteristics that ultimately provide increased digital literacy for SME businesses through the process of sharing and disseminating knowledge.

Synergy of a strategic vision

Strategic vision is a goal that is expected for every company to achieve. In this case, the researcher combines the strategic vision unification relationship between Santara as KB and SMEs, as shown by the following statement:

Santara (KB) statement:

"With Santara's vision to encourage SMEs to move up the "Scale Up "class, we do not only want business actors who join us only to receive business funds, but want the company to grow bigger in terms of business scale" (Head of Digital Marketing Santara)

"We use digital technology to achieve this vision". (Chief of Technology Santara)

SMEs Actors statement:

"With Santara's help, we can (red. Scale Up) [...] for example to build a shop." (CEO of NutriShe)

"Our company goal is to better manage the company and scale up the business." (CEO of LibraCorp)

"The equity crowdfunding funding obtained is used to open new store branches." (CEO of Gemilang Petshop)

Based on the statements obtained from each informant, there is a common direction in terms of strategic vision, Santara has a strategic vision, namely "Scale Up the Indonesian Economy" which in general this vision is related to the objectives of each publisher SME which has the goal of growing and enlarging the business scale. Furthermore, support for achieving this strategic vision is supported by digital technology owned by Santara which provides assistance to SMEs in the use of digital technology, especially in terms of finding investors who will invest so that the goal of "Scale Up" business for SMEs can be achieved.

Figure 2: Data structures are a key characteristics in encouraging digital literacy

Human Resource Support

Human resources are an important component in the process of sharing and disseminating knowledge to support digital transformation for SMEs. From the observations made in each case, the researcher found that educational background, work experience, special skills and creativity are important things that every Santara employee has as knowledge intermediaries to support SMEs in digital transformation. The illustration is shown from the following statement:

Santara (KB) statement:

"Our IT team is supported by a workforce who is experienced in their fields, both from educational backgrounds, work experience, expertise in IT and creativity." (Chief of Technology Santara).

"We have a content bank and are managed by a team of creators to support SMEs to become better known by investors." (Head of Digital Marketing Santara)

SMEs Actors statement:

"During the pre-listing, we collaborated in terms of creating content for company profiles, business prospectuses that will be created digitally as information for potential investors." (CEO of NutriShe)

"We get assistance such as financial management related to financial reporting for investors, corporate governance and financial control because this will be useful for Libra Corporindo investors." (CEO of LibraCorp).

"We provide information related to business conditions such as sales records, business locations and management information to Santara to create a business profile, business prospectus. Because we were previously an individual business, we were directed and assisted to become a company incorporated as a PT in order to sell shares. " (CEO of Gemilang PetShop)

Empirical findings on human resource factors are based on case observations, namely the process of sharing and disseminating knowledge explicitly where the role of KB is to provide assistance and encourage SMEs to transform both in terms of administration and utilization of digital technology. KB has resources such as the level of skilled workforce in the IT team (such as junior staff, middle staff and senior staff) where these levels are measured based on work experience in their respective fields. Assistance by KB for SMEs is established through the Business Team and Digital Marketing Team, the synergy that is built is to provide assistance in the creation of digital content for company profiles, business processes that are attractively packaged so as to provide visual effects when published through digital media channels.

Other assistance that we found in the case was administrative tidying assistance. One of the informants from SMEs received assistance in improving the status of the business from an individual business to a limited liability company (Ltd). In addition, assistance is provided on aspects of business governance (such as organizational structure), financial management related to financial reporting to investors and financial control.

Features Access to Technology Resources

In the era of digitalization, access to technological resources is very necessary, this access is not only for internal companies but is available for business partners so that they can be connected digitally which will facilitate business operational processes. The findings in this section are the provision of access to technological resources for SMEs by Santara as KB. The explanation regarding this access feature is shown in the following statement:

Santara (KB) statement:

"Our job in the IT team is to develop everything related to the Santara digital platform [...], requests can come from the digital marketing team to improve the relationship with users more deeply [...], in the form of a pre-listing platform for SMEs so they can register independently. through available digital platforms. " (Chief of Technology Santara)

"Our role is to provide access to technology, assist businesses to take advantage of technology tools and provide suggestions for optimizing the use of technology for business progress." (Head of Digital Marketing Santara)

SMEs Actors statement:

"Santara offers us a new funding alternative with a public crowdfunding service scheme through a digital platform" (CEO of NutriShe)

"We register through a digital platform in the form of a pre-listing feature provided [...], this access makes it easier for us to connect even though we are far away." (CEO of Libra Corporindo)

"One of the activities during the stock offering period, such as live streaming via Instagram, YouTube, Peel Tuntas publishers through a Telegram Chat Room accommodated by Santara to attract investors." (CEO of Gemilang PetShop)

From the results of observations and discussions with informants, Santara's role as KB is implemented through a digital platform that can be accessed by SMEs players. For example, with the pre-listing feature, SMEs players are directed to be able to access registration independently through available digital platforms so that it can be the first step for both parties to establish cooperation. This feature can be accessed freely for SMEs without getting lost because of the location distance through digital devices. On the other hand, the existence of a digital platform that is built will direct business actors to be able to access financial technology to obtain funding from investors so that it can lead to enlargement of the business scale.

Another finding from the observation is collaboration in terms of communication through digital devices such as live broadcasts via social media (Instagram), virtual discussion forums through Chat Rooms (Telegram), access to video sharing sites (YouTube) which ultimately aims to increase investors' interest in investing in SMEs that make stock offerings. Of the various access to technology provided, the ultimate goal is to direct SMEs to transform digitally so that they can achieve increased business scale.

Credibility of a knowledge broker

Credibility is an important factor for a business, especially in the field of financial services such as Fintech, crowdfunding services. In this study, researchers observed the characteristics possessed by Santara as KB in its capacity to support digital transformation in SMEs. The various information that the researchers obtained were shown from several informants as follows:

Santara (KB) statement:

"... we use big data to see business trends that are developing well in Indonesia, replicate the success of one business so that it can be replicated in other businesses and as a means of scoring business risk profiles." (Chief of Technology Santara)

"... the impact of digitization itself on business entities can help in terms of business monitoring, better corporate governance and corporate branding as we apply to issuing SMEs." (Head of Digital Marketing Santara)

SMEs Actors statement:

"The media supports businesses, one of which is digital marketing, delivery of business prospects, and tidier corporate governance." (CEO of NutriShe)

"By joining Santara, we learned to become a public company with good corporate governance." (CEO of LibraCorp)

"With discussion forums through social media, our telegram group shares are sold, investors believe in us." (CEO of Gemilang PetShop)

The credibility factor is part of Santara's support as KB to encourage SME businesses to transform digitally. The availability of digital platforms has decreased to support digital marketing activities to sell shares of issuing SMEs so that they have new financial resources to grow. On the other hand, Santara's role in helping direct SME businesses in terms of business governance that can be digitally connected and collaboration with various parties such as regulators, government, Fintech associations and other business partners has an impact on the credibility of all parties and gives investors confidence to invest.

Business Relations Network

Relationship network in a business is very important, this is because the network will form an economic ecosystem that will provide added value to customers. In our observations, we found several findings that occurred in the field related to the support of the digital platform built by Santara as KB. These findings were obtained from the results of discussions with informants as follows:

Santara (KB) statement:

"We are working with several parties such as the government, regulators, the Central Securities Depository to store data on share ownership of SMEs, the Fintech Association and Point of Sale (POS) service providers to support this activity ..." (Chief of Technology Santara)

"Through the Santara platform, it can open up various new business opportunities, for example SMEs get offers of new suppliers as business partners and distributors of these SME products. This is of course thanks to the support of digital technology that we collaborate with SMEs." (Head of Digital Marketing Santara)

SMEs Actors statement:

"... through a discussion forum via the telegram application, we can connect well with potential investors ..." (CEO NutriShe)

"... by means of a digital platform, access to information to various companies is opened, thus providing a wider network" Business collaboration between publishers can be realized." (CEO of LibraCorp)

"Initially from MOKA POS, Santara obtained our business information and contacted us... .. I received an offer to list on the Santara platform." (CEO of Gemilang PetShop)

The results of the discussion with the information provide empirical evidence of a network of business relationships that are built from the business ecosystem incorporated in the Santara digital platform as KB. By utilizing digital technology that can be accessed by SMEs, potential new business activities are formed that can lead to an increase in the economies of scale for the SME business. By incorporating SMEs in the available digital platforms, SMEs can be widely recognized by various parties, for example the establishment of new business relationship networks between SMEs who are stock issuers collaborating in terms of business supply chains with each other. On the other hand, the business relations network between the issuing SMEs and investors is increasing.

Discussions

In this study we refer to knowledge management theory in the knowledge sharing and dissemination phase and the knowledge management tools used (Dalkir, 2005). According to the results of research observations that have been carried out, the researcher provides a conceptual model that describes the process of sharing and disseminating knowledge that occurs between Santara as KB and SMEs as recipients of knowledge shown in Figure 3. The conceptual model focuses on the activities and devices used to support the process of digital transformation of small & medium enterprises. Based on the conceptual model, we call this process an increase in digital literacy for small & medium enterprises.

Figure 3: Improving SME Digital Literacy through the process of sharing and disseminating knowledge; *Source:* Author's elaboration

As a knowledge broker (KB), the internal characteristics (strategic vision, human resource expertise, technology access, business network and credibility) of Santara as KB and the types of knowledge (communication & technology collaboration and network technology) shared form activities that drive the transformation process. digital for SMEs so that they can gain access to finance through technology, use of digital platforms, knowledge of digital marketing and use of social media as well as Webinar facilities (Zoom, Instagram TV, YouTube Channel) to introduce their business. The key characteristics possessed by knowledge intermediaries (KB) are then distributed through the knowledge sharing and dissemination phase, in communication & technology collaboration activities as well as network technology support owned by Santara as knowledge intermediary (KB) which will ultimately have an impact on increasing digital literacy for businesses small & medium.

Basically, most small & medium businesses have adopted digital technology but are still classified in the basic online business category that utilizes digital devices such as computers or cellphones with standard networking sites and limited information. Through the process of sharing and disseminating knowledge, the collaboration that occurs has an impact on increasing the adoption of digital technology for small & medium-sized businesses to become businesses with the categories of online medium-sized businesses and advanced online businesses where businesses are directly involved in integrated social networks and have advanced connectivity through digital technology platforms.

Implications

Theoretical implication

The findings were obtained by following the proposed conceptual model (Figure 1), which allows us to answer the formulated research questions. The results of the observations confirm that ECF as a knowledge broker (KB) by utilizing company-owned resources to drive digital transformation in SMEs, and by utilizing digital technology to mediate interactions between previously unconnected parties such as mediating meetings of SMEs actors who need funds to expand the business with investors who will invest to get returns on investment returns. This interaction increases digital literacy for SMEs and enhances the process of sharing and disseminating knowledge between organizations. Furthermore, the researchers found that Santara as KB supports the improvement of the economies of scale of the SME business by utilizing a series of partnerships with external actors-such as Point of Sales technology system companies such as MOKA POS, PT. Central Securities Depository, Indonesian SME Community, Ministry of Cooperatives and Small & Medium Enterprises (SMEs). These results are consistent with Jang *et al* (2015) and Crupi *et al* (2020) who examined the role of knowledge intermediaries in the process of sharing knowledge and digital transformation.

Practical implication

The Impliaction of Increasing Digital Adoption for SMEs

In the previous section, the researcher carried out an in-depth exploration of the cases in each object of the unit of analysis under study to find empirical evidence. After obtaining a complete description of each case, the researcher conducted an analysis between the cases that became the object of the study. The results of the observations are shown in table 2.

Table 2: The level of digital adoption and activity by SMEs

No.	Literacy Dimensions	SMEs			Findings
		(A)	(B)	(C)	
1	Access Financial Technology	....	....	....	A, B and C gain access to Financial Technology through the Santara (KB) crowdfunding platform. Examples of implementation: Financial information, online stock offering, electronic share listing & dividend distribution via virtual account.
2	Utilization of the Digital Platform	....	....	...	A and B are predominantly utilizing digital platforms in business operations (Website, Social Media, Youtube, Messaging Applications, Point of Sales & e-commerce) both to interact with customers and investors. C utilizes several digital platforms (Social Media, Messaging Applications, Point of Sales & e-commerce), but does not yet have a Website to interact with customers and investors. A, B and C are members of the Santara digital platform (KB): a website & smartphone application platform to interact with investors.
3	Digital Marketing Activities	....	....	...	A and B carry out Digital Marketing activities through digital platforms (Website, Youtube, Social Media, & e-Commerce) in terms of product sales. C carries out digital marketing activities through (Social Media & e-commerce) in terms of product sales. A, B and C carry out digital marketing activities in terms of selling shares through the Santara digital platform (KB).
4	Social Media Activity	....	....	...	A and B are dominant in doing activities on social media (Instagram, Facebook & Youtube) C conducts activities on social media (Instagram & Facebook) A, B and C are published through social media (Instagram, Facebook, Twitter and Youtube) owned by Santara (KB).
5	Business Relations	....	....	...	A and B are digitally connected with business relations through the Website, e-mail & ChatRoom. C connects with business relations through chat rooms. A, B and C are connected to business relations through the Santara digital platform (KB)

Catatan: 1) A: *NutriShe*, B: *LibraCorp*, C: *Gemilang PetShop*. 2) •: Offline business, ••: Basic online business, •••: Medium online business, ••••: Advanced online business.

In conducting a case analysis, to indicate the findings from the results of observations made by researchers, the categories of digital adoption levels are used to achieve digital transformation through the process of sharing and disseminating knowledge between knowledge intermediaries and SMEs. The categories of digital adoption levels in this study refer to Deloitte Access Economics (2015) as follows:

- i. Offline level: No broadband access, no computer or smartphone and no website.
- ii. Basic online levels: There is broadband access, owning a digital device such as a computer or smartphone and a static online presence.
- iii. Intermediate online level: directly involved in social networks, through a combination of integrated networking sites with social media, live chat or customer threads in a networking site.
- iv. Advanced online level: has advanced connectivity, integrated social networking and e-commerce business capabilities.

In the digital adoption rate table, the shaded areas in color represent the level of technology adoption with the highest level category in digital transformation in SMEs. Meanwhile, the unshaded area is the level of digital adoption in the middle level category.

Access Financial Technology

Company A, B and C, supported by Santara as KB, gained access to financial technology with the level of adoption of advanced technology. SMEs are getting a digital transformation boost in activities to obtain new funding through digital platforms. KB provides

assistance to SMEs to take advantage of digital technology to find investors to invest. The digital platforms provided are in the form of websites and smartphone application platforms.

In this finding, SMEs can access registration independently through a digital platform available in crowdfunding services with the aim of obtaining funding from investors to expand the business scale. In order to achieve final access, namely being registered in the crowdfunding service ecosystem, Santara will first be selected as KB and will further receive assistance to obtain full funds by investors.

Utilization of the Digital Platform

Company A and B are predominantly utilizing digital platforms in business operations such as websites, social media, YouTube, messaging & e-commerce applications. Meanwhile, Company C has not utilized a digital platform in the form of a website in business operations to connect with customers and investors. A, B and C have joined the Santara digital platform as KB through a process of sharing and disseminating knowledge.

Before joining the crowdfunding service ecosystem, Company A, B and C have utilized several digital platforms in terms of business operations such as product sales. With the knowledge sharing and dissemination process that occurs between Santara (KB) and SMEs actors, the use of digital platforms provides new activities, namely in terms of finding new funding support needs to grow by utilizing network technology.

Digital Marketing Activities

Company A and B carry out digital marketing activities through digital platforms such as websites, social media, YouTube & e-commerce in terms of product sales. Company C carries out digital marketing activities through social media & e-commerce without having an official company website in terms of product sales.

Company A, B and C carry out digital marketing activities in terms of selling shares through communication and technology collaboration with Santara as a knowledge intermediary. This activity is in the form of introducing business profiles with the aim of gaining investor interest in investing which is published through digital channels such as websites, social media, YouTube, messaging applications & virtual meeting applications (Zoom). In this activity, there is communication collaboration such as interactive discussions via live streaming on digital platforms so that SMEs can connect effectively and efficiently with investors. The impact of this communication and technology collaboration activity is that it can be an alternative in managing products and selling company shares together, this is due to the spread of information to the general public from the use of digital technology.

Social Media Activity

Company A and B are predominantly engaged in social media activities through the digital platforms Instagram, Facebook & YouTube. Company C conducts activities on social media Instagram & Facebook. Company A, B and C are published on social media Instagram, Facebook, Twitter & YouTube which are owned and managed by Santara as KB.

The findings obtained from the observations in each case are the existence of communication and technology collaboration to utilize digital technology managed by Santara as KB to support digital transformation in SMEs in terms of selling shares and attracting investors to invest. The activities carried out were in the form of creating video content for company profiles, publishing content related to SMEs through social media managed by Santara.

Business Relations

Company A and B are digitally connected with business relations through the Website, e-mail & chat rooms. Company C connects with business relations through chat rooms. Company A, B and C are connected to business relations through the Santara digital platform as KB.

Company A built a network of business relations with investors through collaborative communication with Santara as a knowledge intermediary (KB) to be better known by investors. In company B, a new business relationship has been established with other publishing SMEs that are suppliers of products for company B, where the collaboration begins with the dissemination of information published in the same digital platform for fundraising services owned by Santara (KB). Company C joined the Santara crowdfunding digital platform, starting with information obtained by the Santara Team through its business partner, MOKA POS, a Point of Sale (POS) service provider for company C's business information.

The findings from cases that occur in business relationship network activities are the level of use of digital technology in building business relationship networks. The results of observations made by researchers are the formation of new business relationships resulting from communication collaboration and utilization of network technology through the process of sharing and disseminating knowledge. The business relationship that is built is the linkage of investors in business operational activities, especially in terms of funding for SMEs.

Conclusions

Our study investigated the role of ECF as a knowledge broker (KB) in the digital transformation process of small & medium enterprises (SMEs). We start with a review of the relevant literature on knowledge management (Dalkir, 2005) and digital transformation (Bouee & Schaible, 2015). We focus on the practice of sharing and disseminating knowledge to direct SMEs to adopt digital technology. As a result, we saw ECF as KB that contributed to driving digital transformation in SMEs.

By utilizing digital technology (such as social media, instant messaging applications) used by SMEs, KB continues to assist businesses in adopting digital technology effectively for business activities such as digital marketing and marketing communications with potential customers. By utilizing this technology, through the process of sharing and disseminating digital technology knowledge, digital literacy can be increased for SMEs.

With the results of the research that has been carried out, the findings of researchers contribute to the knowledge management literature and explain the role of knowledge intermediaries in the process of sharing and disseminating knowledge related to the digital transformation process in small & medium enterprises.

Limitation and Future Research Directions

In this study, we are aware that there are still weaknesses and limitations during the research process. There are limitations to the research. First, it lies in the limited number of crowdfunding service providers in Indonesia because it is a new business model in the financial services sector and a relatively inhomogeneous geographic distribution. The second is the focus of the study, because it only considers the perspectives of crowdfunding service providers and the small number of samples of SMEs studied.

It is hoped that further research will be able to analyze perceptions from the SME's side about digital transformation practices to strengthen and expand the findings previously researched. For example, observing several SME businesses that have collaborated with crowdfunding service providers.

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Appendix 1: *List of research questions*

Questions for Santara as KB:

1. How can Santara support digital transformation in small & medium enterprises so as to increase digital literacy in their business processes?
2. With regards to knowledge management, especially in the process of sharing and disseminating knowledge, which are the main sources of knowledge aimed at supporting SMEs in utilizing digital technology? How are the media selected?
3. What is Santara's role in the exchange of knowledge with the share issuing SMEs?
4. How will the digitization process impact the organization both internally to Santara and ECF-supported SMEs?
5. How does the exchange of knowledge take place from Santara to financed SMEs?
6. How is this knowledge captured for SMEs? What is the implementation like?
7. Is there an incentive mechanism that motivates Santara to continue collaborating with SMEs by utilizing digital technology?
8. Is there any feedback from SMEs to Santara which is a potential source of new knowledge in improving the digitization process in business operations?
9. What resources does Santara have?
10. As a knowledge intermediary, does Santara collaborate with other parties to support digital literacy that leads to the digital transformation of SMEs?

Questions for SMEs actors:

1. Why do you want to join the Santara platform?
2. To what extent does Santara provide support for your SME business?
3. Do you think the ECF platform supports your SME business to gain further access to the use of digital technology?
4. How did you receive knowledge from Santara regarding the benefits of digitalization in business?
5. In the process of sharing and disseminating knowledge, what media does Santara use to support digital literacy in SMEs? (e.g. Videoconferencing, Discussion Forum, Chat Rooms, Web Server, Blockchain, Aggregator)
6. Is the media able to support your business? What are the benefits?