

# Adoption of Enabling E-Commerce Technologies for Indonean SMEs

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**Abstract** – E-commerce is classified as Business-to-Business (B2B), Business-to-Consumer (B2C) and Consumer-to-Consumer (C2C) based on the available relation between potential buyers and sectors. The three significant classifications have developed significantly in tandem with the advancement of technology. However, B2B seems to report significant growth than the remaining two classifications. In this paper, a review of e-commerce (B2B marketplace e-commerce) has been done with reference to Indonesian SMEs. This study found that Indonesian Small and Medium-sized Enterprises (SMEs) were not proficient in using B2B e-commerce to its full potential. The following recommendations to the government and nonprofits in Indonesia that might be helpful to small and medium enterprises have been detailed in this paper: (a) Trainings and educational programs associated with the implementation of e-commerce include the creation of company websites, participation in B2B e-commerce, and the employment of e-media in connecting with prospective buyers or overseas traders. Trainings and educational programs that b) teach participants how to connect successfully (through electronic media) with overseas business partners and prospective purchasers are also common.

**Keywords** – Business-To-Business (B2B), Business-To-Consumer (B2C), Consumer-To-Consumer (C2C), Small and Medium-Sized Enterprises (SMEs).

## I. INTRODUCTION

The majority of wholesale purchasers use search engines (such as Google) to find products, while a smaller percentage (around 34 percent) turn to B2B marketplaces. Marketplaces have a significant influence on the growth of online sales, which are increasing by 10% to 15% yearly. The income generated by B2B ecommerce marketplaces is increasing at a fast pace from year to year. Marketplaces will account for 40% of all online sales by 2020, as forecasted by the Ecommerce Foundation and Nyenrode Business University in 2015 [1]. For example, Alibaba, the biggest B2B marketplace, sees over 800 million users each year. 43 percent of China's e-commerce sales come through the service. In addition, the corporate market is experiencing two major trends: globalization and digitization. Incorporating both of these developments, marketplaces allow for a modernization of the sales process while also redefining how suppliers and consumers engage. More than half of all B2B transactions is now conducted online, according to the magazine Forbes. As a consequence, it is clear that today's businesses must offer their items online in order to obtain the greatest outcomes.

Manufacturers and merchants may make their goods and services available to consumers on B2C marketplaces. These types of markets often feature both web-based and mobile-based versions. Amazon and Overstock are two examples of B2C marketplaces. Marketplaces allowing companies to trade with other businesses are known as B2B-marketplaces (Business to Business). As much information as possible about a product or service's characteristics and benefits should be made available to potential business customers through B2B marketplaces. Alibaba, Made-in-China, and Tradalaxy are just a few examples of B2B ecommerce platforms [2]. In the B2B market, information quality and data integrity are critical. B2B buyers, on average, consult at least six sources of information before making a purchase. In spite of the similarities between the B2B and B2C e-commerce markets, there are still a few variances.

In B2C, consumers choose items based on their desirability, status, and brand recognition, whereas B2B consumers choose products based on their potential profitability and their company needs.

B2B and B2C markets have a few key differences as shown in **Table 1** below:

**Table 1.** Key Differences Between B2B And B2C

Key difference	Details
<b>Order volumes</b>	Business-to-business (B2B) ecommerce marketplaces provide items in big numbers to companies, while business-to-consumer (B2C) ecommerce marketplaces supply goods to consumers according to their needs.
<b>Products categories</b>	Unlike in the B2B sector, where firms focus on certain items and have a defined client base, in the B2C marketplace, firms concentrate on a wide range of consumer products.
<b>Pricing</b>	Compared to the B2B marketplace, pricing in the B2C marketplace is far more consistent for all clients.
<b>Payments &amp; order cycle</b>	Consumers in the B2C sector are more likely to pay with a credit card, while business clients prefer to pay with a credit card.
<b>Customer relations</b>	For businesses in the B2B sector, the focus is on establishing long-term relationships with clients rather than acquiring new consumers.
<b>Checkout process</b>	While the checkout process in a B2B marketplace may be rather involved due to numerous orders, specific payment options, and delivery methods, sellers in B2C marketplaces want a straightforward checkout procedure in order to give their consumers with a hassle-free experience.

B2B ecommerce markets have grown more popular, but companies are worried about the cost and time required to develop a B2B marketplace. They see long-term system integration projects and bespoke development as the norm. " However, in the last several years, marketplace technology has become more advanced. Existing marketplace software makes it possible to build your own marketplaces without having to develop all of the technology from the ground up from scratch. Third-party firms who have competence in both technology and the marketplace control the websites. Because of the high cost of finding the right buyer or seller and the importance placed by buyers and sellers on pricing and availability, the B2B marketplace is well-suited to niche markets. Today, e-commerce is divided into three categories depending on the kind of interaction between the seller and the buyer: enterprises selling to other enterprises, consumers selling to consumers, and enterprises selling to consumers. Small and Medium-sized Enterprises (SMEs) have collaborated and took part in B2B marketplace websites, according to a study of users of worldwide B2B marketplace websites. Despite the issues, the author has not discovered any study results related to Indonesian SMEs' usage of B2B marketplaces. We should investigate what obstacles Indonesian SMEs encounter while trying to participate in the worldwide B2B e-commerce.

Among this study, we examine the state of electronic commerce (namely, Business-to-Business (B2B) online marketplace e-commerce) for SMEs. Based on the results of this research, it seems that Indonesian SMEs are not making the most of business-to-business (B2B) online commerce. The remaining part of this paper has been organized as follows: Section II provides a background analysis of the research. Section III focuses on an analysis of the related literature and search results. Section IV discusses the main results and analyses the problem in the study. Section V provides recommendations, which Section VI draws conclusions and provides future research directions of the research.

## II. BACKGROUND ANALYSIS

E-commerce has grown rapidly since then. E-commerce is now categorized as B2C, B2B, and C2C depending on the relationship between the buyer and seller. These three have grown enormously in tandem with the expansion of the Internet. B2B e-commerce, nonetheless, is quick-growing of the three. According to Biantara in [3] (although nations, including Indonesia, have been utilizing the concept of e-commerce, but a number of challenges still prevail), the revenues of B2B e-commerce reached approximately \$4 trillion by 2011. As a result, it may be more difficult to take advantage of the opportunities. This is one of the concepts for web-centric B2B procurement described by Mantena and Saha in [4] as a third-party marketplace. With the high cost of finding the buyer or seller and the importance of pricing and availability, the B2B market is well-suited for marketplaces that are fragmented (on either the buyer or seller side).

Third-party firms who have competence in both technology and the marketplace control the websites. SMEs may take advantage of B2B e-worldwide commerce's reach by joining these marketplaces. In addition, most websites include free memberships that may In Indonesia, it seems that SMEs are aware of the B2B market as well as the merits they present. Majority of Indonesian SMEs have collaborated and invested efforts in establishing the B2B marketplace websites, according to a study of users of worldwide B2B marketplace websites. Indonesian SMEs outnumber Chinese SMEs on a marketplace platform. However, despite the fact that the World Trade Organization reports that e-commerce is beneficial for Indonesian businesses, an examination of the enterprise profiles, websites, export statistics, and products listed from

2009 indicate that Indonesian SMEs have had minimal success using transactional marketplace e-commerce in the process of marketing their products internationally. We should investigate what obstacles Indonesian small and medium-sized businesses encounter while trying to participate in the worldwide B2B e-commerce. What can be done to help small and medium-sized businesses grow?

Despite the issues, the author has not discovered any study results related to Indonesian SMEs' usage of B2B marketplaces. In this sense, the purpose of this study is to make a contribution. (1)

Identifying the relevant research questions and problems; (2) Performing literature analysis regarding the use of e-commerce in SMEs; (3) Researching the global B2B websites. As per survey results of Metin and Sarihan in [5] regarding the usage of websites for marketing, Kurniawan and Suhaimi in [6] make significant suggestions for Indonesian SMEs, including government agencies and enterprises for this research.

### III. RELATED LITERATURE AND RESEARCH RESULTS

#### *E-Commerce Marketing Communications and B2B Marketplace E-Commerce*

Unprecedented events are taking place in Indonesia. It's a new middle class that's emerging, and digital technology has made it easier to establish a company. One SME for every five Indonesians now exists in the nation, with a total of 62 million SMEs. There are 61.5 million micro-enterprises in this country. Growth of small enterprises is critical for the future prosperity of the nation. Strategic expansion plans are lacking in many early-stage small businesses. There is a pressing need to design a plan to enable more SMEs grow and succeed. Recently, digital transformation has taken center stage. Micro-enterprises, on the other hand, are often unable to develop even with the support of digital technology. Is there anything that helps certain SMEs to grow into well-known brands? There are many methods of web-centric B2B procurement within e-commerce business, e.g., buy-side procurement processes, B2B exchanges, third-party marketplace and private marketplaces. A company termed a market-maker or an infomediary is responsible for creating these markets since they have both technology and topic competence. There are two types of third-party marketplaces: horizontal and vertical. It is common for horizontal markets to bring together consumers and sellers from a wide range of sectors. This kind of marketplace brings together consumers and sellers in a certain sector and across different functions.

Using a third-party marketplace is a good option for marketplaces that are highly fragmented, where finding the buyer or seller is too costly, or when pricing and availability are the primary considerations. By decreasing the price of the goods for customers and reducing search expenses for both buyers and sellers, third-party marketplaces provide value to both buyers and sellers. Therefore, reduced product prices for customers, low search costs for sellers and buyers, and high quality of service are all elements that: (1) Contribute to the strategies and activities to form a connection with consumers and promote purchases; (2) Address the competitive placement of businesses and industries; (3) Seek to establish unique, significantly differentiated services and goods, which are produced by a single trusted firm by establishing unmatched attribute sets. Online communication and marketing tactics may be used to help many phases of the purchasing process.

#### *Evidences from Developing Countries*

The benefits of e-commerce in **Table 2** below have long been recognized in developing nations. Some studies have been done to examine the issues and employment electronic commerce in developing nations. Yean and Yi in [7] research indicate that SMEs are familiar with the advantages of electronic commerce. For networked entrepreneurial activity in China's Yiwu city, the Internet is a key player. According to Amato and Graham in [8], silk manufacturers with websites are able to broaden their geographic reach due to the advent of the internet. However, businesses continue to rely heavily on sales to middlemen who are located far away. E-performance commerce's is heavily influenced by social behavior and country culture, according to Tolstoy, Nordman, and Vu in [9]. In spite of the fact that Saudi Arabia is home to one of the world's largest and rapidly-growing IT markets in the Arab region, a minor portion of its commercial companies are embracing the ideology of e-commerce adoption. Different factors have been identified as contributing to the current state of affairs, including a deficiency of e-commerce professionals and a reluctance to alter the way things are done. According to a larger research, rural communities in developing nations' usage of Information and Communication Technology (ICT) is still in its infancy, with many residents lacking basic technological skills.

**Table 2.** Benefits of E-Commerce in SMEs

Benefits	Descriptions
<b>High productivity, cost saving and effective inventory management</b>	Information and communication technologies that support electronic commerce applications, or electronic commerce technologies, may considerably boost production when applied to organizations. Electronic technology may simplify processes and save expenses, particularly when employed in B2B transactions. Automating recurring processes like shipping, invoicing, customer service, and stock management will have an immediate impact. While Internet solutions have mostly been developed for distribution channel management, supply chain management has historically remained to be conducted via existing EDI systems. Prices on the internet are probably going to drop, making it more appealing to new entrants and smaller companies that can't afford EDI for supply chain management.

<b>Applicable in a diversified business segment with high product standardization and customization</b>	Internet-based applications are applicable to a wide variety of industries and businesses since they are not limited to a single stage in the company value chain. Impacts on product design (shortening the design process and resulting to a greater degree of product customization and standardization of cparts) as well as manufacturing and logistics have been seen among early users of electronic commerce technology in the United States (lower inventory costs, lower supply costs, faster production,)
<b>Enhances production re-location and product specification</b>	The convenience of online trading has increased the likelihood of factory relocation. The optimum circumstances for manufacturing may be found in areas with low labor costs and a low cost of living, while the product requirements can be established wherever the firm does its design and development work. Organizations formerly separated along distribution and supply chains may now communicate with one another thanks to e-commerce software. Adaptive effects may prove to be a significant efficiency booster for online trade. These arise when businesses purposefully employ e-commerce technology to innovate new goods, implement novel business procedures, and alter their relationships in the marketplace (with clients, vendors, middlemen, and rivals). Firms may join, retain, or strengthen their position throughout the value chain of their respective industries via the proactive use of e-commerce.
<b>Improved strategic applications and competitive advantage</b>	Gaining these dynamic advantages is highly dependent on how well companies implement electronic commerce strategies throughout their operations. The corporate value chain would benefit greatly from the integration of e-commerce technology at every stage. The manufacturing sector is one example where more speed and adaptability are needed due to the increased number of products and shorter product cycles. The capacity to implement advanced information connections, forecasting skills, and management systems is crucial to success in this setting, even more so than price competition. Company effectiveness in the marketplace is determined less by the efficiency with which it oversees the assembly process and more by the efficiency with which it oversees the overall logistics and organization of its business (from inventories to duration to marketplace)
<b>Enhanced customer service</b>	Those who took part in the survey said that the introduction of e-commerce technology improved customer service. In particular, businesses who adopted e-commerce saw gains in the areas of streamlined information sharing, quicker consumer payments, strengthened relationships with trading partners, and accelerated time to market for new items. The majority also thought it had a favorable effect on enhancing staff knowledge, decreasing operational expenses, and raising revenue. The second set of numbers are from the Australian Bureau of Statistics's Business Longitudinal Survey. With this poll, we hoped to have a better understanding of what aspects of business life are most important to success. Employment and income growth were shown to be statistically positively related to the degree to which SMEs used computers and the Internet. For small enterprises, these findings had an even greater impact.

#### *Adoption of B2B Marketplace E-commerce*

Despite the fact that more than 40 million Indonesians have access to the Internet, only a few studies have looked at how SMEs are using e-commerce. Considering e-commerce readiness, the country is still lagging behind the rest of the world due to a paucity of IT infrastructures. E-commerce is significant to Indonesia, despite the country's socioeconomic challenges. Study of approximately 41 SMEs in Malang showed that electronic commerce is becoming increasingly significant to different business sectors. The adoption of electronic commerce in Pujani showed that (1) the important of electronic commerce websites are based by their systems quality, data attributes and data quality; (2) the dimension of customer satisfaction with e-commerce website is majorly based on the maturity and usability of SMEs in another research. Khatun and Miah in [10] provide a B2C e-commerce model for SMEs, which integrate phases of development: a product catalogue, a firm profile, and a way to get in touch; an order form and a way to monitor orders; an online payment method, and an online customer care option. It's clear from all of the literature studies that: (1) e-commerce is critical for small and medium-sized businesses in developing nations; (2) a number of issues relating to technology, culture, people's skills and knowledge have impeded e-commerce implementation; and (3) websites, which meet the required standards should be established gradually.

#### IV. RESULTS AND PROBLEMS ANALYSIS

There are a large number of medium, small and micro -sized businesses in Indonesia. Nearly 97.24 percent of Indonesia's workforce is employed by SMEs, accounting for 99.99 percent of all businesses. At current prices, the SME sector contributes 57.94% of Indonesia's GDP and exports 16% of the country's total non-oil exports. SMEs play a fundamental duty in the economy of each country. The assets of SMEs are limited to approximately Rp 10 billion (without buildings or land) and approximately Rp 50 billion annually, as per the Law No. 20 of 2008 concerning SMEs and micro businesses. This data indicates that most of the companies in Indonesia are SMEs, which require to the promoted and improved through diversifying accessibility to finances as well as policies, which provide priorities for SMEs entrepreneurs as expressly stated by the central government in its long-term plan stage II (2010 to 2014). To maintain its competitiveness and long-term viability, the SME sector's existence should be given top priority. As a result, it is imperative that measures be made to strengthen the economic role of SMEs, such as the implementation of appropriate corporate governance principles and accounting standards.

Small and Medium-Sized Enterprises (SMEs) have their own accounting standards, e.g., Financial Accounting Standards for Enterprises without Public Accountability, released by the Indonesian Institute of Accounting (SAK ETAP). The adoption of SAK ETAP presently become an accounting remedy to aid in the sustainability of SMEs despite the fact that many major enterprises should adopt IFRS standard following its commencement in the fiscal year 2012. This decision and rationale need to be extended to the protocols of effective corporate governance that are just applicable to large-scale organizational frameworks. Capital market data indicate that SMEs have a significant capacity but just 9 enterprises went public between 2004 and 2011. Annual financial reports from Bapepam-LK show that even small- and medium-sized business owners have not given enough attention to public disclosure of information. According to Chigudu [11], the majority of SMEs continue to run their business using traditional methods while still adhering to the standards of Good Corporate Governance (GCG).

SMEs, on the other hand, may not be able to bear the weight of implementing excellent corporate governance norms and laws. Government, SMEs and academics are encouraged to identify and solve challenges in the adoption of solid corporate administration within SMEs under these significant challenging situations. Due to effective SMEs governance, SMEs may get more capital from financial institutions and investors. For the most part, small and medium-sized firms (SMEs) may accept the broad notion of corporate governance, just as big corporations do. SMEs may use NCG (2006) governance ideas to their own operations. Investors' faith in small businesses may be bolstered if these ideas are put into practice via meticulous record-keeping and open disclosure.

#### *Indonesian SMEs in Corporate Website and Marketplace Website*

Indonesian SMEs engaging in B2B websites and how they use them in three transnational B2B websites, when two are globally-known electronic commerce marketplaces, and are the focus of the preliminary studies. A.com, G.com and C.com are fictitious domain names used to protect their identities. The websites of Indonesian SMEs are then analyzed. **Table 3** shows a portion of the survey findings, as well as some subsequent commentary.

**Table 3.** Survey Results of Websites of Indonesian SMEs

Marketplace websites	Data of Indonesian firms active in websites
<b>G.com</b>	There are generally more than 1500 firms; 650 for handicrafts; 941 for textiles and garments; 153 for jewelry; 153 for art and antique; 52 for leather product; 1342 for interior décor and furniture;
<b>C.com</b>	There are generally 3155 Indonesian firms and 2510 Chinese 577 agricultural; 183 apparels; 144 business services; 214 for chemical; 114 for computer software and hardware; 281 for energy; 37 for fashion; 483 for food and beverage; 493 for furniture; 383 for craft and gifts; 79 for luggage; 154 for textile; 54 for shoes and accessories; 40 for SMEs providing clothes and other fashion products.
<b>A.com</b>	There are generally 5,697 Indonesian firms and 59,731 Chinese 2449 manufacturing; 1093 OEM (Original Equipment Manufacturing); 681 Buyers' Label Provided; 629 Designing Service Provided; 2131 Trader firm; 1879 Wholesaler/Distributors; 896 Agent; 746; Others 70 Associate firms; 34 SMEs for fashion products

Many Indonesian businesses, especially Small and Medium-sized Enterprises (SME), participate in worldwide B2B e-commerce platforms, as shown in **Table 3**. The number of Indonesian businesses in C.com is much more than the number of businesses in China. Businesses of different types have shown a willingness to participate in global e-commerce, as seen in the table above:

SMEs firm profiles in Indonesia are faced by the following challenges, according to the author's judgment. In many cases, the profile is not well-thought out; (a) it is short; (b) it is incomplete; (c) it is written in bad English; (d) the presentation is sloppy; and (e) the substance is not well-considered; (e) its profiles are generally unimpressive; (f) its items do not indicate they business variation; (g) various profiles do not provide enterprise website links that might be



considered as the firm that do not have websites. E-marketplace websites have a number of issues when it comes to product data: (a) SMEs often don't prepare their product information well; it's incomplete, lacks attractive images, and is presented in poor English, making the information difficult to understand; (b) Numerous product prices are unappealing; (c) Some SME posts the same images for multiple products; (d) E-marketplace websites often ask for the URLs of small businesses' websites.

However, after a thorough examination of their websites, the following issues were found: (a) Majority of the enterprise websites are scripted in Indonesian language and information included in them have inadequate English; (b) There are a number of issues with the menu/organization and accessibility, as well as a number of missing webpages or inactive pages and dead/invalid URLs on the website. (c) There are most unappealing websites out there; (d) Many items are accessible, but there is no sufficient search engine; (e) Descriptions of products are inadequate, and no video (or other media) material is included; and (f) there are unclear pictures, photographs with significantly tiny dimensions so that information is unclear; (g) Customers from other countries require more precise information, such as FOB price and minimum order quantity. (g) The sites do not provide this data.

### Problems Analysis

We may deduce from the early findings of our study that Indonesian SMEs have been making good use of global B2B marketplace e-commerce websites in their quest for worldwide market access for their goods. In C.com, Indonesian businesses outnumber those from China by a wide margin. According to the World Trade Organization [12], China accounted for 34% of all global garment exports in 2009, whilst Indonesia only accounted for 1.9 percent of overall exports. This suggests that Indonesian SMEs have had little success utilizing B2B e-commerce to advertise their goods overseas. Some of the issues that Indonesian SMEs have faced while utilizing B2B marketplace e-commerce websites may be stated as follows: Companies who don't take their website-building seriously are not attracting customers to inquire about their offerings. It is important for companies and products to be properly prepared before being posted on B2B marketplace websites, so that forms generated by websites are filled out with the relevant data to attract potential customers.

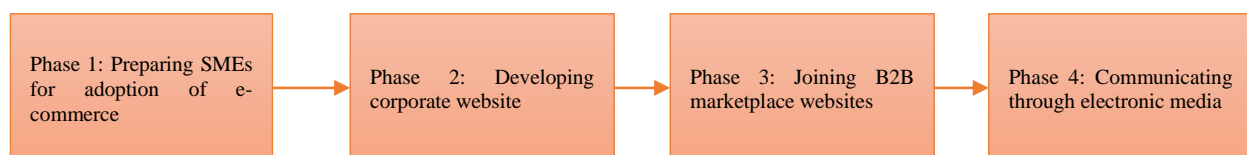
It is also important for companies to be adequately prepared in terms of their seriousness and preparedness for taking part in B2B marketplace electronic commerce websites. So, if items listed on B2B marketplaces or corporate websites pique the attention of buyers, they will engage in extensive communication with small and medium-sized enterprises (SMEs) to learn more about product specifications, quality assurance, packaging, shipping, and other factors. The ability to effectively answer and persuade prospective customers via the use of textual communication is thus critical. We may deduce that many Indonesian small and medium-sized enterprises (SMEs) lack acceptable written communication skills based on the fact that their English proficiency is poor and the content of their websites as well as their business profiles and product information. Despite the fact that they are interested in the goods, prospective purchasers will be hindered by this.

## V. RECOMMENDATIONS

According to literature reviews, pre-surveys and concerns identified, two sets of suggestions are proposed by the author for Indonesian SMEs as well as the governments or organizations or institutions designed to promote SMEs.

### Recommendations for Indonesian SMEs

**Fig 1** depicts the recommended phases for efficiently using worldwide B2B marketplace sites so that SMEs may advertise their goods internationally, and the details of every level is provided below.



**Fig 1.** Phases Of Using B2B Marketplace Websites

### Prepare SMEs for E-Commerce Adoption

E-commerce has a favorable effect on business development in underdeveloped countries. People are joining this movement in hopes of reducing transaction costs by removing intermediaries and opening up global supply chains using internet and communication technology. Business process engineering or enterprise value chain adoption efforts e.g., Continuous Replenishment (CR), Quick Retailing (QR), and Just in Time (JIT) are just a few of the many benefits ascribed to e-commerce. These vary from the trivial to the revolutionary. ICT-enabled e-commerce has the potential to develop the market and improve information sharing and transactional efficiency, according to studies on its electronic business value. SMEs in developing nation face challenges, and their adoption and benefits obtained from e-commerce varies significantly. When trying to implement e-commerce in developing nations, firms encounter many challenges, including

the scarcity of reliable and timely delivery systems for physical goods, a lack of qualified staffing and a lack of communications architecture to support and develop websites, and a lack of competency needed to utilize the web.

Academics have just recently been aware of the usage of e-commerce by these corporations. E-commerce implementation in underdeveloped countries has received less attention. The adoption of e-commerce by SMEs has lagged behind that of larger corporations, according to Bighrissen [13]. If small firms do not adopt e-commerce, they risk missing out on an important market sector. SMEs may be able to gain a competitive advantage by embracing electronic commerce, according to a study. In developing countries, there is a lack of business readiness to oversee and regulate e-commerce, because of the trust required to conduct e-commerce. Before implementing e-commerce efforts, businesses in developing nations need have a firm grasp on the intricacies of the web's different features, which range from static content to dynamic transaction capture with security and personalisation requirements.

As a result of contextual variations (both environmental and organizational) between these two socio-economic segments, it is vital to comprehend how companies in developing nations may overcome e-commerce preparatory difficulties and realize the advantages of e-commerce. Researchers have shown that businesses in developing nations have to be both externally and internally prepared for the adoption of e-commerce. The concept of e-readiness is described as a SME's ability to accept, use, and profit from e-commerce. Companies' internal (organizational) preparation has a significant impact on how quickly emerging countries embrace e-commerce. The presence of technical and financial resources, the motivation of top management to embrace the idea of electronic commerce, e-commerce Technological Infrastructure (eCTI), firm's compatibility to e-commerce as well as values and culture, constitute internal e-commerce readiness. There may have a significant influence on the institutionalization of e-commerce in impoverished countries after the first acceptance of e-commerce due to external factors (such as whether or not business stakeholders permit e-conduct of businesses).

As per the arguments above, the adoption of e-commerce in developing nations requires a certain level of business maturity. Research into how e-readiness components and the adoption of different e-commerce applications in developing nations are connected is a prevailing concern in the field. E-commerce It is possible to employ B2B marketplace websites as marketing tools, and in case the market plan is effective, the services of the website could be utilized in expediting transactions. Resultantly, B2B marketplace e-commerce websites shall be of little use if SMEs are unable to sell their products internationally. As a first step toward global product marketing, SME organizations should be reinforced to enable B2B e-commerce over the Internet. This is because SME companies presently have products ready to be marketed abroad. The effort to strengthen the organization includes the development of English language skills, knowledge of the Internet habits of international buyers, and the preparation of staff/divisions to handle product questions, provide e-consultancy, and communicate with clients using various key tools. If necessary, establishing a department for information technology; imparting export management training to employees; and so on.

#### *Develop Corporate Website*

Constructing a website is referred to as web development. It is possible to create everything from a simple static HTML website to complex internet applications, social networking services, and electronic enterprises. Just a number of the more common tasks, which go under the realm of web development integrate web content production, web design, client liaison, web engineering, web server/networking, client/server-side scripting and electronic commerce development. The developers of websites utilize the term "Web development" to define the non-design concepts of developing a corporate website, e.g., coding and writing markup. The adoption of Content Management Systems (CMS) that can be operated by anybody with just a basic knowledge of technology helps simplify web development.

Hundreds of Web developers may be part of large firms' web development teams, which use tried-and-true methods like Agile methodology. A small firm may just need one full-time or contract developer, e.g., data system technician or graphic designers. Web development and design might not fall within the purview of a single department in all situations. Web developers fall into three broad categories: full-stack, back-end, and front-end. Front-end developers are tasked with ensuring user's experience, whereas back-end developers handle the servers. One of history's most commonly used technologies has evolved considerably since [14] invented the World Wide Web at CERN. Before joining and taking part in B2B marketplace electronic commerce websites, SMEs need to first establish their websites. By using corporate websites as an instrument of marketing, online adverts may be expanded. Customers should be able to identify the domain name from a distance. A company's website may be readily found on the Internet with the help of search engine optimization. Following the steps outlined here are: The site should be registered with as many search engines as possible, and the description should contain keywords that people are likely to use as search terms.

Small and Medium-sized Enterprises (SMEs) may utilize pre-made templates and patterns when developing their websites. Use the templates to design the menus and fill in the content for each one. To effectively market and sell SMEs and the products they produce on corporate websites, a number of conditions must be met:

(a) Small and medium-sized businesses (SMEs) should begin building their websites from the perspective of prospective customers. It's critical that customers who are looking at small company websites get the sense that they are "visiting" showrooms and that the businesses in question are knowledgeable and know their industry through and out. There must be a high degree of use or usefulness in the webpages.

(b) The webpages must be authored entirely in English or in a language that is at least bi-lingual (English or Indonesian). An error-free English (Indonesian or English, if the websites are bi-lingual) is required for all website content.

(c) An SME's website must demonstrate its trustworthiness. Credibility of a website is mostly determined by its visual appearance, its information structure and organization, and the content it contains. Data architecture (28.5%), data focus (25.1%), corporate motivation (15.5%), and data usefulness (14.4%) are the most important criteria in the reliability of B2C websites, according to polls. Prior to populating websites with content, small and medium-sized businesses (SMEs) need to obtain extensive data (including multimodal ones) and develop the textual material.

(d) It is important for prospective buyers to feel that they can conveniently get in touch with the small and medium-sized businesses when exploring their websites or afterwards. Emailing, phone, fax numbers and real-time texting, including geography and full address of SMEs, with GPS and mapping coordinates if appropriate, should be included in the contact details offered.

These services are necessary for your B2B marketplace to be successful: Restricted access to the site for free members SMEs may utilize this service to find out whether their products are attractive to customers all around the globe. A free B2B marketplace membership may be upgraded to a premium or even a gold level by SMEs who get enquiries from potential customers. As part of the process of creating a profile, members are required to fill out the form, which has been generated by websites; (a) post product lines; (b) provide input on how best to categorize items. The administration of small and medium-sized enterprises (SMEs) may also benefit from additional services, such as the manufacturing of business cards. Small and medium-sized businesses (SMEs) must first become members of B2B market websites before they may participate in the B2B market. The following are the first two responsibilities or steps you should follow as a new member:

The first step is to fill out the enterprise profile form. All the data needed to introduce the enterprise to its potential consumers is contained in the form, which was designed by experts, including the business type, address, category of products, company name, manufacturing capacity, accreditations, financial profiles, brand logo, specific descriptions or data, and URL of the corporate website. Small companies need to fill out the form properly and underline important aspects of their firm in order to impress potential purchasers. The second step is to include the product on the corporate website. At the top are the broadest categories (agricultural, clothing and energy), followed by more specific subcategories, and so on and so forth. The most critical classification is at the bottom.

The user selects from a list of categories at the top of the page, and then a form for that item displays for them to fill out. It is clear that the dataset presented for each product (for example, belt) is distinct and has to be kept separate from that provided for other classes of products (e.g., tractors). The user must fill out these fields, in the act of completing product forms. For small firms, here are some pointers: (a) There are standard forms (created by experts) on B2B marketplace websites that allow users to include critical data for their products; hence, SMEs must fill out the form completely. In (b), SMEs must use error-free and eloquent grammatical English when filling out the product description; (c) SMEs need to upload clear and high-quality pictures, which show quality and uniqueness of the corporate products; (d) SMEs should focus on the product information so it is considered interesting and valuable from the perspective of potential buyers; (b)

### *Communicate Through Electronic Media*

In China, consumer contact approaches for communicating in purchase materials have been documented based on surveys: Only 27 percent of the time is spent on the phone or in person, 45 percent of the time on paper (mail or messenger), and 95 percent of the time on fax. This implies that the majority of client contacts are still conducted through manual methods. On the other hand, when a company receives a material request through computer, the following approaches are used: 45% through email and 35% via the customer's own website. Purchasing things by email is thus the preferred method of communication. In order to effectively communicate with prospective customers through different electronic communication approaches e.g., electronic documents, email, and instant messaging, it is essential that the company's profile and items listed on SME websites and B2B marketplace attract potential customers. However, in the early phases of discussion, the author's experience dealing with numerous overseas prospective customers suggests that email is best.

Email will be the primary method of contacting prospective customers who have questions about a product. Email and electronic document and data interchange (including photos) are used for the majority of subsequent conversations. As a result, we'll provide some suggestions for improving communication through email and document/data sharing. Inquiries about product FOB (Freight on Board) at particular ports, specific ingredients, and delivery timeframe are typical in the initial business email from prospective customers. Reading the email attentively, listening to the demands of prospective customers, and finding out what motivates them to inquire about items is recommended before replying to the email. It's best to react carefully to these inquiries, clarifying what you understand and asking for clarification. Detailed product information (highlighting its distinctiveness and quality) might be distributed (potentially by sending pictures or leaflets). The business email needs to be written in a way that is clear and concise. Additionally, the email must be organized and clear. It is also necessary to demonstrate the capabilities and expertise of SMEs. For example, a variety of alternatives should be made available to customers when it comes to delivery time (by sea, expeditions or by air).

As long as the first response was positive, potential buyers may continue to inquire about the products of interest directly and indirectly (e.g., corporate website pictures, which defines the origin of product materials, how they are



manufactured and tested for quality assurance, how they are customized and packaged and how they are delivered to the port by freight forwarders and export docs). Research and calculations may be required to answer these questions, and more data might be retrieved to provide an accurate response. In addition to pricing, quality, service, manufacturing capacity, timely delivery, quality assurance, great communication, comfort level, and specific customisation are all important factors to consider when choosing a product. As a result, prospective customers will do thorough research before making a purchase choice since they will be acquiring big amounts of items.

SMEs need to assist prospective customers in their research during this period of marketing communication, which is mostly conducted through electronic media. The employees of SMEs must be able to communicate well in English in order to do so. It is essential that SME employees have the following skills in order to participate in electronic communication: (a) they must develop their communication and English writing skills; (b) they should have diversified product knowledge, including knowledge of the production process and the materials used, as well as knowledge of packaging, shipping, and export/import. In case the communication process has been effective, the potential consumers may visit the SMEs to possibly verify various things and, if necessary, to begin the process of making a purchase. Rather than being a part of electronic commerce, these operations now fall under the conventional business sector.

#### *Recommendations for Associations or Governments*

Keeping agency costs low has been a major component in the emergence of effective corporate governance in the last decade or so. Consequently, the subjects of these research are more often than not large, publicly traded corporations, rather than the more modest, privately held businesses. Le and Nguyen [15] performed surveys on strong corporate governance in SMEs in Indonesia. In light of the NCG guidelines and the Dubai SMEs regulators, this research provides an approach to evaluate the foundations of Indonesian SMEs corporate governance. Research on corporate governance now focuses mostly on how it is applied in Large Enterprises (LEs). The agency problem arises as a result of a conflict of interest between shareholders and management. As with LEs, the ownership and administration of a company are clearly separated.

Separation is proposed as a possible solution to the problem of agency in the debate. As SMEs shift to Legal Entities (LEs), the necessity to minimize agency issues increases. SMEs' performance in Ghana was researched by Abubakari, Ofori, Boateng, N'Da, and Hinson [16], who identified the connection between SMEs' performance and corporate government adoption. They also stated that there it is believed that small and medium-sized businesses do not face the agency problem, hence no special preparations are required. SMEs, on the other hand, have only one owner and a few employees who serve as manager-owners. SMEs and limited liability entities both have several owners and managers. SMEs do not have to report their financial information as often as major firms because of the absence of public financing and capital marketplaces. The entity's employees and owners are not concerned with profit maximization, agency concerns or an increment in the stock prices. Because of this, the problem of agencies is less likely to be resolved by establishing a specific corporate governance regulation.

Corporate governance implementation is a global problem, according to Singh [17], who point out that even SMEs should deal with it. The major principles of effective governance systems, not the complexity of the system, should be the basis for public business rules. People who started out in a small firm and are now on the cusp of becoming giant companies can benefit from applying good corporate governance principles. In order to grow, small and medium-sized enterprises (SMEs) need more money and technology. Many SME's also need assistance in developing a business plan, a strategy for growth, and industry-specific best practices. The need for managers and the split of ownership and control that goes along with it increases as SMEs grow. These development conditions require the adoption of governance mechanisms by companies.

In the search for new sources of funding, investors and financial institutions are more willing to consider small enterprises that can show their own initiative in the implementation of a corporate governance framework. There is greater confidence among investors and creditors in small businesses when the prerequisites for proper bookkeeping and accounting are satisfied as well as for the disclosures of data. SMEs will be more focused on efficiency when "the supervisory and advisory" is outside. SMEs would have an easier time obtaining bank loans if they have good corporate governance. This study was conducted by the International Finance Corporation (IFC) along with Dubai SME in 2011 in the UAE. This study has come out with guidelines for corporate governance within the SMEs sector. The incorporation status of smaller businesses, for example, prevents them from being altered in the same manner as bigger organizations. In addition to ensuring that family-owned or family-controlled small enterprises comply to the concept of equity, the issue of family governance must be brought to public attention.

Corporate governance code was originally designed for small and medium-sized businesses in Dubai SMS, in 2011. Most poor countries, including Indonesia, have reached an essential turning point in the process of adapting to climate change. SMEs in Australia have been largely ignored in the process of developing a code of corporate governance by the country's regulatory authorities, financial markets, and academic institutions. Developing comparable surveys in other countries might benefit greatly from the data collected in the 2011 Dubai SME survey. There aren't many studies in Indonesia looking at how small and medium-sized businesses (SMEs) may benefit from excellent corporate governance. By working with the Partnership Unit of PT. TASPEN, [18] conducted research on 54 small and medium-sized businesses

(SMEs). Do the CHECK analysis for each respondent. According to the findings, although GCG had made progress in terms of implementation, it lacked accountability and transparency in its governance structures.

Surabaya's family-owned wood production firm was researched by authors in [19], who undertook interviews and fieldwork in the area. The family company is not described by authors in [20] on the scale of SMEs or large corporations, but authors in [21] collect different samples in small-scale and micro-scale groupings (no classification for the medium-sized businesses). The way small and medium-sized firms control themselves still needs to be studied further. The research by Bae [22] shows that more than 90% of Indonesia's companies are SMEs. Rural regions are home to the majority of SMEs, notably MIEs, which are dominated by self-employment operations that do not employ paid staff. ' MIEs have long been known for their low productivity, poor product quality, and exclusive emphasis on serving a small, regional market. Lacking in technological innovation, this group Nearly every one of these firms is barely making ends meet. However, the majority of individuals do not seem to have any long-term issues. Many MIEs firms may be forced to shut down or undergo an exceedingly difficult upgrade as imports become more liberalized and technology develops. This kind of firm, on the other hand, might be seen as a precursor to more advanced entrepreneurial endeavors.

There are a large number of SME in all sectors, with agriculture accounting for almost all of them. Instead, the majority of Indonesian SMEs are involved in agriculture; the remainder are engaged in commerce, hospitality, and the hotel and restaurant industry, while the rest are in manufacturing. It is not uncommon to see industrial businesses like furniture and textiles in this industry. Manufacturing equipment, production tools, and automotive components is a small but substantial portion of all small and medium-sized enterprises. In many cases, this is accomplished via the use of contractual systems. SMEs in Indonesia are aware of the availability and benefits of B2B electronic commerce and have utilized B2B marketplace websites to some level, according to the results of the research.

## VI. CONCLUSION AND FUTURE RESEARCH

A large number of Indonesian Small and Medium-Sized Enterprises (SMEs) have learned about the benefits of B2B marketplace electronic commerce and have joined in. Unfortunately, most SMEs have not been adopting the right tactics when it comes to leveraging the internet to become worldwide. Indonesian SMEs must make certain steps to improve themselves so that they are effective in adopting e-commerce to go worldwide. To assist in growth of SMEs, the government and trade organizations might provide workshops and consultations. We have made some suggestions for how small and medium-sized businesses should prepare to participate in the global B2B e-commerce sector. Because they are based on early research, the suggestions may need to be tweaked. According to a research, Indonesian SMEs are not capable of utilizing B2B e-commerce to its completeness. Indonesian SMEs could benefit from the following proposals to government and non-profit organizations: (a) The establishment of corporate websites, participation in B2B marketplace electronic commerce, and the employment of e-media in the process of communicating with potential buyers or foreign traders are all examples of trainings and educational programs linked to the adoption of e-commerce. b) conduct education and training programs on how to effectively communicate (by use of electronic media) with foreign traders and potential buyers are also examples of trainings and educational programs. A study of SMEs should be done in the future to get information directly from them. Analysis and suggestions that are more comprehensive are then possible.

### Data Availability

No data was used to support this study.

### Conflicts of Interests

The author(s) declare(s) that they have no conflicts of interest.

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There are no competing interests

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