

#### http://ejournal.seaninstitute.or.id/index.php/Ekonomi Jurnal Ekonomi, Volume 12, No 02, 2023 ISSN: 2301-6280 (print) ISSN: 2721-9879 (online)



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# STARTUP COMPANIES IN POST PANDEMIC ERA: PROSPECT AND PREPARATION FOR EXPONENTIAL GROWTH

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ARTICLEINFO	ABSTRACT
Keywords: Startup, Sustainability, ERP Systems	The Covid 19 pandemic had a negative impact on the world economy. Many companies that had previously been established were forced to close their business or carry out a radical transformation of their entire work process or business model. The pandemic has also changed the way of living, working, and doing business, and these are predicted to continue into the post-pandemic era. While many companies struggle to adapt to the new standard era, startups have emerged as agile players in the market, primarily due to their innovative spirit. Startup companies are key players in the Industry 4.0 business landscape, contributing to economic development by creating jobs and inducing competition. The following challenges are to find which startup fields will be predicted to have more prospects for growth in the post-pandemic era and how startup companies must prepare to have excellent readiness to maintain their sustainability. Reflecting on several startup companies, either those that have just launched or those that already have high valuations, failures, and mismanagement, can cause a decrease in the company's valuation, thereby reducing investor interest. Based on the above research questions, this research is conducted by a systematic literature review of peer-reviewed papers published during and after the pandemic on startup fields. In conclusion, for this research, startup companies that focus on digital solutions, either producing goods or delivering services, are predicted to have the best position in the market. Startup companies are also encouraged to implement ERP systems, as centralized systems allow companies to access information from various departments to improve efficiency and ensure consistent working processes and practices.
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#### 1. INTRODUCTION

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Startup companies, called startups, have become a new business model phenomenon during the last decade. Startups promote digital entrepreneurship spirit and are an agile business model to compete in Industry 4.0 [1]. While traditional companies operate according to the traditional business model, startups develop innovative models and act in conditions of extreme uncertainties. Startup companies operate with a simple structure and bureaucracy with fewer team members than traditional companies, where the focus of the company is to improve business, not to improve the organization structurally [2].

The startup company form is expected to survive and even encourage economic growth in the wave of economic recession due to the prolonged pandemic. Innovative products and services are the key to the sustainability of the startup business, followed by innovative work processes and ecosystem growth in line with the company's development [3] [4][5].

In this research paper, the literature review section will discuss the role of startups in today's industry, startup fields that have a great chance of success, the failures of startup companies, and the importance of implementing ERP in the company's operational system.

#### 2. METHOD

The research method used in this research is systematic literature research, in which researchers conduct reviews of scientific articles published during and after the pandemic era. Researchers will carry out systematic searches using relevant databases and keywords with a focus on startups and post-pandemic growth. Next, the researcher will select articles according to the established inclusion and exclusion criteria, such as relevance to the research topic, quality of research methodology, and reliability



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of sources. The data obtained from the selected articles will then be analyzed comprehensively to identify trends, findings, and recommendations related to the startup sector and post-pandemic growth perspectives.

#### 3. RESULT AND DISCUSSION

#### **Startup Companies**

Startup companies are currently considered one of the key players in the Industry 4.0 business landscape, because these type of companies creates jobs, thus essential to improve national economy. Startup companies also contribute to economic development by encouraging innovation and inducing competition. In the pre-pandemic era, the startup business was able to contribute 15% of aggregate job creation, so it was dubbed the engine of economic growth [6].

However, not all companies that use the latest technology can be given the startup title. A startup company is defined as a temporary company designed to develop a measurable business model, generally engaged in technological innovation, has a limited operational area and has a limited number of employees [7][8]. In contrast to traditional companies, startup business is a temporary business, has the goal of creating a unique business model, aims to carry out the process of industrialization or reproduction of products/services, and has a measurable valuation that can be clearly calculated in each stage of its life cycle [9].

The development stage of a startup company is divided into several stages: seed, early, growth, expansion. In the seed phase, the focus is on sharpening the idea, building a business model and raising funds for growth. In the early stage, products/services have been launched to the market, and innovations continue to be explored to improve goods/services. In the growth stage, the business model has been refined, the market share has been expected to increase, and more investors have invested. At the expansion stage, the company is considered mature, it is necessary to consider strategic alliances to increase the reach of goods/services to a wider market, or exercising exit strategy [10].

Startup company said to has an excellent exit strategy if it is successfully acquired or merged by a larger company, and gets a return on the funds it has invested with multiple times of profit [7]. To acquire maximum profit, startup owners need to increase the valuation of their company, exponentially. In the process of exponential growth, startups generally rely on funds from investors to increase the number of customers and profit margins, so that the desired growth will occur. But this process is a process full of uncertainties. In terms of startup business, it must be remembered that this type of company is designed to explore new areas, unpredictable market conditions & customers appetite, with various uncertain business variables [11].

The next question is what startup fields would have excellent prospects in the future. There has not been a research paper found that specifically explains which startup fields will be successful, but in general it says that ideas must be unique and have never existed before, these ideas are managed and conveyed properly so that competitors cannot replicate the products or services provided [12]. During the pandemic, people have changed their lifestyle, preferring online solutions, reducing physical encounters with other people. It is predicted that this lifestyle will not change much after the pandemic. However, this does not apply to some types of businesses, for example education or restaurants. According to a survey, 30% of restaurant owners in the USA say their business has returned to pre-covid levels, while 25% say business has surpassed pre-Covid levels [13]. In the world of education, various campuses and schools have returned to offline education [14], or implemented hybrid learning if there is an increase in Covid 19 cases [15]. Currently, offline education is prioritized because not all students have internet access or reliable gadget, some teachers said that the pupil had difficulty staying focused during class and the lack of social interaction is mentioned as the of stress, depression and anxiety [16].

Several non academic research paper articles mention several fields that may have opportunities to develop in startups in general in the form of digital solutions, such as goods/services through digital ecosystem [17], online reselling, online teaching/tutoring [18], dropshipping, online services, home based catering, virtual assistants [19]. But then it's the founder's job, how to develop startup ideas properly, according to market needs and maintain their existence throughout their life stages.

Research shows that there is a high failure rate, which is 90%, in the startup company development process [20]. Some of the reasons for the failure of startup companies are lack of funds for company development (34%), lack of customer interest in the products/services offered (28%), lack of investor support (16%), miscalculation of costs and financial planning (16%), lack of quality, creativity, cooperation and experience from the team (14 %) [21]



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Other research stated that the failures and setbacks of several startup companies are caused, among other things, by inefficient operations, unpredicted rise of operational cost, out of date systems, inefficient and ineffective human resources related operation, lack of innovation, and these conditiona could lead to negative impact on the quality of the products or services produced, so that the integrated enterprises system, is the answer for streamlining business processes and unlocking further growth [22].

#### **Enterprise Resources Planning**

In the past, traditional companies had independent systems managed by each function or department. These systems are generally not well integrated, or only partially, so that information about real conditions becomes ambiguous and inaccurate. Difficult to access, data transparency and various problems that may arise will prevent decision-making parties from obtaining information, from carrying out operational controls and from carrying out adequate and timely management of the company [23] [24].

Enterprise Resource Planning (ERP) is a modular system that its functions is to integrate all functional areas of the company's business processes. Enterprise Resource Planning software will standardize, simplify, automate and integrate company business processes such as finance, human resources, procurement, distribution, sales and other departments. Typically, an ERP system has the following characteristics: an integrated system, operates providing data in real time, has a single database that supports all units and conditions, has the same display between work unit modules [25]. Enterprise Resource Planning provides efficient use of all resources in enterprises that produce both products and services. Nowadays Cloud ERP systems, systems that make it easier to access company data, are the new trends in the ERP industry, allowing all data of the company to be accessed at any time from anywhere [26].

In large companies, ERP implementation took an enormous amount of time, complicated process, very expensive, and in some cases has a low success rate [27]. The more complex the company's operations, the more complex the software that must be generated in the ERP system. The fear of failure has made the company then choose to use an ERP vendor that has already been established, but furthermore this has led to a vendor lock condition, where the company will be very dependent on the vendor.

In SME companies, where the company's operations are still simple, if implemented from the start, the costs incurred will be cheaper, because the company still has a low level of complexity. Companies can also take advantage of Open Source ERP, which can be done independently, and does not cause vendor locks. When a company grows and requires a more complex Enterprise Resource Planning system, upgrades can be done easily, because all work units are connected in an integrated system [27].

From implementation of Enterprise Resource Planning on startup company in Indonesia, researcher found that ERP systems help organizations in managing overall business processes efficiently, producing databases and reporting tools that can be used in the decision making process. Enterprise Resource Planning system can also boost employees' performance since completing each task can be done more easily and quickly [28].

Enterprise Resource Planning systems are often perceived as not an urgency matter in the process of building startups, they are even considered a waste of funds and time. However, considering that startup companies are designed and expected to be companies with high valuations, with plans for internationalization, and expected to be agile companies in times of uncertainty, there is a system that can integrate all processes and operations within the company. is an urgency for management [29][30][5][31]. The implementation of the Enterprise Resource Planning system is also an added value for prospective and existing investors, because they can carry out monitoring by utilizing data transparency presented from the Enterprise Resource Planning System processing results [32][23].

#### 4. CONCLUSION

Startup companies nowadays are recognized as catalysts or engines of growth because they can promote innovative thinking, create jobs, stimulate the economy, and attract foreign investment. Unfortunately, not all startups stay in their prime for a long time, with most of them failing to sustain, either because of poorly managed costs or inability to obtain financing, investing in a broad market instead of finding their niche with a selected market, or lack of market research so that they missed potential customer needs.

From the literature review in this research, there has not been a research paper that explains explicitly which startup fields will succeed, but generally says that ideas must be unique and have never existed before; these ideas are well managed and conveyed so that competitors cannot replicate the product or the services provided.



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**Jurnal Ekonomi, Volume 12, No 02, 2023** ISSN: 2301-6280 (print) ISSN: 2721-9879 (online)



However, several media articles stated that startup companies that focus on digital solutions, either producing goods or delivering services, are predicted to have the best position in the market as long as the products and services offered are unique, not easy to imitate, and preferably have never been offered previously. The idea regarding this product or service must also be adapted to market conditions and provide solutions to problems that have existed so far or problems that have not received a solution. These products and services must be packaged and offered attractively in a presentation.

Startup companies are also encouraged to implement Enterprise Resource Planning systems, as the centralized systems allow companies to access information from various departments to improve efficiency and ensure consistent quality working processes and practices. Implementing Enterprise Resource Planning is a matter of survival to allow the company to excel in a competitive market. Nevertheless, the process must consider the versatile nature of a startup's business models, plans, and strategies as they slowly find their niche in the market. Enterprise Resource Planning system implementation would be the company' added value for prospective and existing investors because it can carry out control or monitoring functions easily.

Further studies on this topic should discuss fields related to the prospects of startup companies in specific locations, for example, in developing countries such as Indonesia. Reflecting on the success of several Indonesian startup companies, such as Gojek, Tokopedia, Bukalapak, and Shopee, it is hoped that more excellent startup companies join this country's business landscape.

Simulation in the Enterprise Resource Planning system, even patenting a generic function for every startup company, regardless of line of business, will help startup companies and SMEs to start their business and, in an enormous scope, contribute to the country's economic growth.

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## **Jurnal Ekonomi, Volume 12, No 02, 2023** ISSN: 2301-6280 (print) ISSN: 2721-9879 (online)



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