

# CHAPTER I

## INTRODUCTION

### 1.1 Background

The current digital era has been a pivotal moment for many parties among the Indonesian society. Digitalization has revolutionized and significantly impacted our processes ranging from how we communicate, how we shop, how we exercise and how we do business. Many established industries worldwide are also majorly impacted by the shift in technology as the accelerated growth of information and communication has pushed many conventional businesses to adopt an internet-based business concept (JLL, 2018). This trend of shifting to an online based business encourages the establishment of new businesses, more commonly referred to as “startups”, that capitalize on technological opportunities. As we speak, technology continues to open doors for entrepreneurs to give birth to various digital startups in Indonesia that focus on delivering creative and innovative solutions to everyday problems (Nugraha & Wahyuhastuti, 2017).

Due to the global pandemic of COVID-19, Indonesia has been experiencing various stages of lockdowns which caused the number of Internet users across the nation to skyrocket as many have turned to the Internet for solutions to their new and sudden challenges. Despite the raging pandemic taking its toll on various industries within the country, a study shows that Indonesia is still expected to remain as the biggest Internet economy in Southeast Asia, according to the Economy SEA 2020 report by Google, Temasek and Bain & Company. In addition,

a growing number of business startups have also emerged from the shadows to take advantage of the vastly growing digital era and the battleground for online e-commerce platforms is only becoming bloodier. Utilization of technology and innovation allows startup companies to accelerate in growth with ease, which attracts millions of potential customers. Additionally, a startup business can also be further categorized based on the sector or industry they operate in; some of the biggest startups operate in more mature sectors such as travel, media, e-commerce, fashion, food and transport. For instance, according to the *dailysocial report 2018*, some of the more prevalent startup business models in Indonesia are as follows:

1. ***e-commerce*** : Online marketplace like Tokopedia and Shopee
2. ***Fintech*** : Companies like Bibit and Dana that offer financial services delivery which includes e-wallet, peer-to-peer lending, investment management, etc.
3. ***Healthtech*** : Medical technology that offers online consultations as well as medicine purchases - Halodoc is a notable example
4. ***Edtech*** : Offers both formal and informal educational solutions ranging from online courses to access to teacher databases for private tutoring. (E.g. Bensmart, Ruangguru, Zenius).
5. ***Proptech*** : Provides digital services within the property and real estate markets. (E.g. Rumah.com, Travelio, Rumah123, 99.co, Lamudi).

Out of the types of startup companies listed above, the term “Proptech” might not be as popular as the rest. Property, real estate and construction are important sectors in every economy across the globe. Not only do they employ a substantial amount of the workforce, but they also require significant proportions

of capital. Thus, it is safe to say that the property, real estate and construction industry is one of the largest and central assets to the world economy - however, it remains a traditionally slow-moving industry given its leisurely pace in technology adaptation (Saul, et al., 2020).

Previously, buyers relied on real estate agents and brokers to guide them during the tiresome and often costly process of property and market information search. Basically, the role of real estate agents and brokers existed due to the perceived information scarcity by potential buyers. However, the rise of technology has revolutionized and digitized many of the cumbersome processes of property transactions making it much more cost and time efficient (Barwick & Wong, 2019).

Before the substantial presence of the Internet and property portals, the only avenue to gain information on properties was through a real estate agent. Nowadays, through a simple mouse click, customers can access vast property related information that were exclusive to agents back in the days. Around fifteen years ago, only a small portion of home buyers (8%) found their dream home through online searches themselves - now, that number has drastically increased to 44% (Zeller, 2017, p.13).

Many customers keen on purchasing property have resorted to online platforms to seek information, consult with real estate agents, conduct virtual tours of the property and even closing the deal. Within the property portal sphere itself, there definitely still is online traffic incoming towards actual property purchases as according to Marine Novita, Rumah.com's country manager, in the third quarter of 2020, property searches through Rumah.com's portal around the West Java area

showed a skyrocketing increase of 88.8% from the previous quarter. Annually, the total increase of property searches within the West Java region increased by 239% - indicating that despite the dreadful situation caused by the pandemic, the trend of looking up properties online seems to remain promising (PT. AllProperty Media, 2020).

Even so, compared to other markets, Proptech in Indonesia seems to be poorly researched and could be considered as a fairly new market. According to an article by Indonesian capital firm, East Ventures (2019), while the technological landscape in Indonesia, especially when it comes to Proptech is still at its nascent stage - the geniuses and innovators of the country are thinking fast and seizing the opportunity to change the game. Some of the early players that grew big in Indonesia's Proptech environment were property portal services such as Rumah.com, Rumah123, Lamudi, and Travelio which provided generic services like property listings for sale or rent and is based on a brokerage model. These property portals have been around for a while and have earned substantial brand recognition among the Indonesian community.

As an example, Rumah.com is a notable company in Indonesia that has made its mark within the nation's property industry. Along with Rumah123.com, Rumahdijual.com and 99.co - Rumah.com, which is owned by PropertyGuru Group are considered to be the top property portals in Indonesia where the battle of market share between the three remains to be very tight. In addition, based on Umbelina's (2019) finding, it is difficult to exactly pinpoint the actual leader between the top three property players in Indonesia. Rumah.com, Rumah123.com and Rumahdijual.com all raked in about 2.5 million visitors per month back in 2019,

the difference in traffic estimation is too close indicating the fierce competition between these market leaders.

However, Rumah.com seems to be slightly ahead of the game as they do provide several services that differentiates them from its competitors indicated by the fact that they secure about 49 percent of the market share (PT. AllProperty Media, 2020). In 2020, Rumah.com still had over 400,000 property listings for sale and rent across the nation, with over 17 million pages of listings that were accessed by over 5.5 million property investors and buyers. In fact, the upward trend of property searches through Rumah.com continues to prevail (especially for property listings around the Jabodetabek areas) despite the non-conducive environment caused by the pandemic (PT. AllProperty Media, 2020).

Despite being considered to be one of the pioneers of online portals in Indonesia, Rumah.com's services are limited to simply providing property and real estate agent listings throughout the country which makes it fall in the genre of "Property Portals" within the Proptech sector. However, as of recently, Rumah.com, alongside being a property portal, started offering online virtual tours to help customers get a better sense of their property of interest during the pandemic, a feature which most of its competitors have not yet acquired. In addition, they also have a directory of real estate agents for potential buyers, as well as a mortgage or household loan credit calculator also known as "KPR" (Kredit Kepemilikan Rumah) to simulate payments. This is a great addition to its portfolio of services offered, however, in order to keep up with the increasingly competitive Proptech market, Rumah.com should consider broadening up their portfolio of

services offered even more in order to remain as one of the top market leaders within the Proptech industry.

Interestingly, despite Rumah.com being one of the market leaders as well as being one of the most innovative property portals in Indonesia, the fact is that the systems that they have provided are still unable to fully provide all the information that a potential home buyer needs. There are several features offered by Rumah.com that could be improved upon, additionally, some competitors seem to offer a more sophisticated feature compared to what Rumah.com has in its pockets. It seems that other smaller competitors of Rumah.com are beginning to catch up in terms of becoming more innovative, thus posing a threat for Rumah.com. Based on an initial survey conducted prior to the start of this study, several respondents noted that there are a few additional services that they wished were available on Rumah.com's platforms, what is worrisome is that a few of Rumah.com's competitors are already offering some of these additional services. To name a few some of these services include: Architect and contractor references, loan management options directly from selected banks and more virtual tour options. Below is a table comparing the features offered among the five Indonesian property portals (Table 1.1):

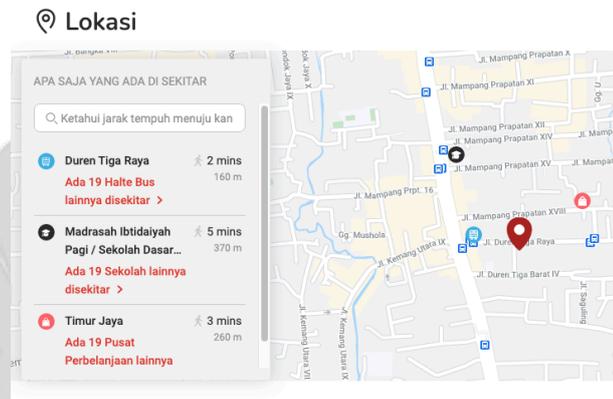
**Table 1.1** *Feature Comparison Among Property Portals*

<b>Feature</b>	<b>Rumah.com</b>	<b>Rumah123.com</b>	<b>Lamudi.co.id</b>	<b>Rumahdijual.com</b>	<b>99.co</b>
<i>Advanced search (price, property type, rooms)</i>	Yes	Yes	Yes	Yes	Yes
<i>Search feature based on developer name</i>	Yes	Yes	Yes	No	No
<i>Ability to sort results</i>	Yes	Yes	No	No	Yes
<i>Information on latest or featured properties</i>	Yes	Yes	Yes	Yes	Yes
<i>Virtual tour feature</i>	Some	Some	No	No	No
<i>Provide KPR information</i>	Some	Some	Yes	Some	Yes
<i>Photo galleries of properties</i>	Yes	Yes	Yes	Yes	Yes
<i>Contact information for each listing</i>	Yes	Yes	Yes	Yes	Yes
<i>Blog or news</i>	Yes	Yes	Yes	No	Yes
<i>Include testimonials</i>	No	No	No	No	No
<i>Information on market value per listing</i>	Some	No	Yes	No	No
<i>Information on surrounding neighborhood</i>	Some	No	Yes	No	Some
<i>Available as an App</i>	Yes	Yes	Yes	No	Yes

Source: *Data compiled*

An interesting observation is that based on the features offered, Rumah123.com and Lamudi.co.id are two of the closest competitors for Rumah.com and 99.co follows closely behind. All of these websites offer almost the same exact features, the only key winner for Rumah.com is that it offers some virtual tour options for a specific few listings. In comparison, Travelio, which is a much smaller property portal platform owned by a property agency, offers a virtual tour for almost every single unit or house listed on its platform. During a time like this where social interaction is heavily limited and monitored, Rumah.com needs to consider alternatives to further satisfy its customers by providing additional virtual tour options for even more listings in order to compete with new and more innovative property portals like Travelio. Additionally, Lamudi.co.id offers a much

more detailed version of the *Information on surrounding neighborhood* feature by providing a rating of the neighborhood as seen on the comparison below (Figure 1.1):



**Figure 1.1** *Rumah.com's Surrounding Neighborhood Feature*

Source: *Rumah.com* (2020)

As seen on the figures above, Rumah.com's feature is a simple Google Maps attachment where potential customers could scroll through to see what amenities and facilities are available near their property of interest. Not much information regarding what the surrounding area is like has been disclosed. Customers who are interested in a particular property through Rumah.com could have simply gone ahead to Google Maps to collect this information themselves.

However, Lamudi, one of Rumah.com's top competitors, offers a more detailed insight on the condition of the neighborhood itself by rating the commute, the quality of the neighborhood itself, as well as any facilities nearby. Lamudi allows for a more detailed understanding of the quality of the surrounding area for a particular property listing by giving them a numerical rating from 1 to 5 stars which can be seen in the figure (Figure 1.2) below:

#### PENILAIAN LINGKUNGAN

**4.14/5** Penilaian area keseluruhan:  
Berdasarkan penilaian 9

Berikan penilaian pada area ini

#### LINGKUNGAN

Lingkungan Sekitar	★★★★☆
Jalan	★★★★☆
Keamanan	★★★★☆
Kebersihan	★★★★☆

#### KOMUTER

Transportasi umum	★★★★☆
Parkir	★★★★☆
Konektivitas	★★★★☆
Lalu lintas	★★★★☆

#### TEMPAT-TEMPAT PENTING

Sekolah	★★★★☆
Restoran	★★★★☆
Rumah Sakit	★★★★☆
Pasar	★★★★☆

**Figure 1.2** Lamudi's Surrounding Neighborhood Feature

Source: *Lamudi.co.id* (2020)

On top of that, when compared to its competitors - Rumah.com only offers a simple KPR calculator to simulate just how much the monthly payments are estimated to be depending on how much down payment you put down, whereas 99.co and Lamudi offers a much more detailed version by offering bank specific KPR Calculators. 99.co even offers KPR applications for banks that they have partnered with, this is a feature that Rumah.com is still lacking.

Moreover, an additional problem that Rumah.com is facing is that in recent years, due to the rise in entrepreneurship, many new portals and startup companies like Yuktsay.com, Olx.com and other property portal websites owned by property agencies (Raywhite.co.id, KRProperty.id, etc) have blossomed with the goal of solving local Indonesian problems, but with a twist. This fact only further increases the competition for Rumah.com despite some of them not being direct competitors but they still just might redirect traffic away from Rumah.com. That being said, Rumah.com could definitely learn a thing or two from these companies to further improve its services. Some of these notable companies are:

- *Mamikos* : An online portal and application that is centered on the boarding house market (Rumah Kost) by providing listings of rumah kosts available, as well as providing rumah kost management services like billing and booking.
- *CrowdDana* : An online equity crowdfunding platform which is a fusion between Fintech and PropTech that allows investors with minimal capitals to link up with property developers (e.g. Crowdfunding for boarding houses a.k.a. Rumah Kost).
- *CoHive* : Previously known as EV Hive, backed by the capital firm East Ventures, is one of Indonesia's largest co-working space (both online and offline) providers. CoHive has also expanded its services by offering CoLiving and CoRetail in addition to its co-working space business.
- *Arsitag* : An online service marketplace that connects users with professionals based on their home project needs ranging from architects, interior designers and even contractors. Arsitag now has a network of 650 architects and interior designers nationwide.

Unlike its predecessors who were more focused on sharing property listings, the companies listed above are not based on “sharing”, rather they transform the property industry by connecting customers with suppliers or producers in new ways. Various PropTech startup companies have been revealing themselves to be a whole different animal than their predecessors. CoHive, CrowdDana, Mamikos, YukStay and Arsitag are revolutionizing the property industry by bringing in something different to the table through their unique approach in solving modern property related problems. However, unlike traditional e-commerce companies

such as Tokopedia and Shopee, the traffic for non-property portal platforms is much more miniscule. Property portals like Rumah.com, 99.co, Rumah123, and Lamudi attract most of the traffic whereas other forms of Proptech like CoHive and Arsitag lag behind as seen on the table below (Table 1.2):

**Table 1.2 Most Popular Property Websites**

Website Name	Status	Est. Monthly Visitors*
99.co	Property portal (selling and renting)	1,446,930
Mamikos.com	Online co-living (room only, rumah kost) directory	1,131,390
Rumah.com	Property portal (selling and renting)	324,270
Rumah123.com	Property portal (selling and renting)	246,810
Lamudi.co.id	Property portal (selling and renting)	228,900
Rumahdijual.com	Property portal (selling and renting)	151,170
Arsitag.com	Online home project service directory (architects, contractors, etc)	110,610
Cohive.space	Online co-working space provider	38, 580
Travelio.com	Property agency website (selling and renting)	30,450
Yukstay.com	Online co-living (room only, in apartments) directory	13,140
Crowddana.id	Property crowdfunding website	8,190

*\*The numbers indicated are an approximation and are only up to date to seven months ago (as of February 2021).*

Source: Data compiled from: <https://www.siteworthtraffic.com/>, 2021

About half of the websites listed on Table 1.2 are property portals which contribute most of the online traffic. However, 99.co and Mamikos seem to dominate the online market share attracting over a million unique users each month to its platform which indicates yet another problem for Rumah.com. This data alone shows that there is a high demand for shorter term property leases, especially in the form of “rumah kost” as seen from the high traffic going in towards Mamikos. Now in comparison to other property portal websites, unfortunately, Rumah.com lost the first-place spot to 99.co by a quite significant amount while Rumah123.com and

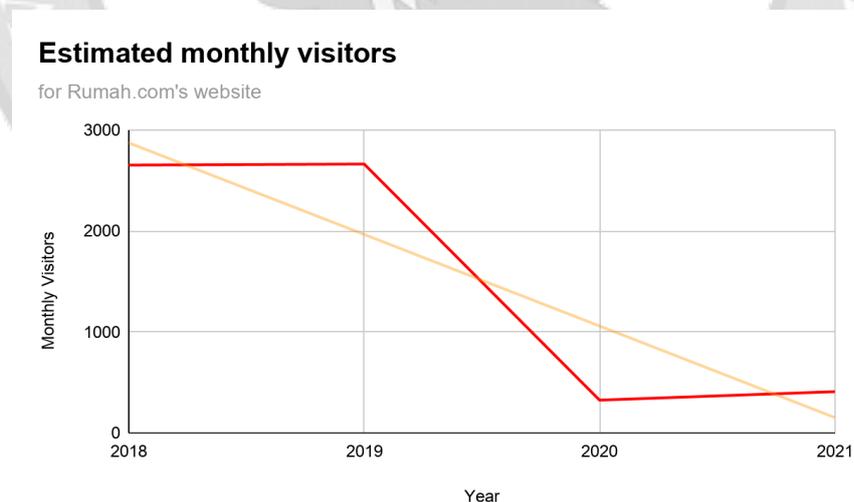
Lamudi.co.id follow not that far behind from Rumah.com and that actively demonstrates that Rumah.com is not the number one go to property portal in Indonesia.

The more recent problem faced by Rumah.com is the significant drop in monthly website traffic. One possible cause for such an occurrence is the fact that the entire property industry is experiencing a major lack of interest or intention of customers to buy or rent properties due to the pandemic. As a stakeholder within the property industry, Rumah.com is unfavorably affected by the entire phenomenon. The adverse impact of the COVID-19 pandemic has weakened the community's purchasing power towards property purchases which in turn cause a domino effect seen in the drop of prices in property (especially secondhand houses) which also reflects why the property industry is declining. Furthermore, data from the Manulife Investment Management indicates that the government has decided to provide a stimulus to support some of Indonesia's struggling sectors and to no surprise, the property sector is one of them (2020). The advent of the COVID-19 pandemic has created damaging effects on various businesses across the globe, and the property industry has taken a pretty severe beating due to its volatile nature.

From 2018 through 2019, Rumah.com experienced an explosion of an additional ten thousand monthly visitors going from 2,653,000 in December of 2018 to 2,663,000 users in the early 2019, which seemed to be the peak year for Rumah.com (Umbelina, 2019). Admittedly, ever since then, there has been a significant drop of monthly visitors compared to 2019. Umbelina (2019) recorded that Rumah.com attracted a monthly visitor of over 2 million people back in 2019 but now the number sits at a mere 324,270 people which shows a massive plummet

as seen on the chart (Figure 1.3) below. The significant drop in online traffic for Rumah.com is mostly caused by the global spread of the pandemic.

Based on the chart below, the orange trend line indicates a downward trend. On the bright side however, the number of estimated monthly visitors for 2021 seems to be slightly on the rise and the expectation is that the trend would continue upwards as the year goes by. The problem is, there is a substantial gap in incoming monthly visitors from the years prior to 2020. Admittedly, Rumah.com has a long way to go in order to get back to where they stood back in the year of 2019 where they raked in over 2 million unique visitors per month. That said, the goal for Rumah.com for the year of 2021 is to at least remain stagnant in terms of monthly visitors and by breaking through the downward trend. Should the number of monthly visitors go up this year, the likelihood for customers to initiate a property purchase for Rumah.com should also climb up.



**Figure 1.3** *Estimated Website Monthly Visitors*

Source: *Indonesia property portals ranking by traffic in June 2019, Umbelina (2019)*

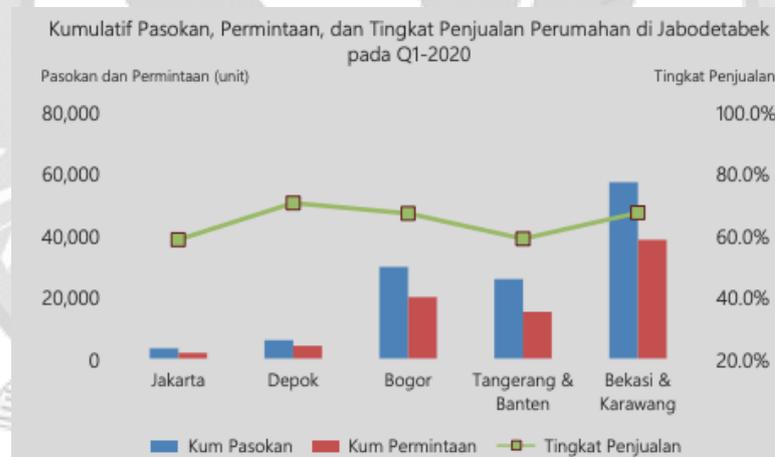
As of the end of 2019, Indonesia's property market showed a promising sentiment as 2020 was expected to be a revival year for the sector. The issuance of various property related policies fostered a sense of optimism from property industry stakeholders within the country - this includes property developers and sellers, loan providing banks and other related parties. However, this optimism was quickly shut down as soon as the first case of COVID-19 broke out in Indonesia in early March of 2020.

As mentioned on the "*Ringkasan Pasar Properti di Indonesia di Tengah Pandemi COVID-19*" report by Coldwell Banker Commercial (2020), indications of the impact of the pandemic are reflected in the decline of the property supply index within the first quarter of 2020 whereas usually, the trend should be moving upward. In the beginning of the pandemic spread, the positive sentiment continued as the performance of both the commercial and residential property market remained conducive as the government had originally prepared and issued a number of policies to maintain market performance. Unfortunately, those preparations were no match for the spread of the COVID-19 virus as the property market experienced a slowdown in almost all parts of Indonesia in which the sector is now left to face the triple whammy of low total demand, occupancy rate and absorption rate for most of the property sector, moreover, the fact that many expatriates have been forced to leave Indonesia to go back to their respective home countries only further exacerbates the dwindling demand for local properties.

The report by Coldwell Banker Commercial (2020) also further outlines the impact of the pandemic on each of the sub-sectors of the property industry discussed below. For the purpose of this study looking at what is relevant to Rumah.com, the

intent is to discuss only a specific sector of the property industry, namely the housing sub-sector which specifically refer to residential housing and apartments:

**Housing market :** Land availability and its proximity to Jakarta have stimulated housing development in Bekasi-Karawang (46.6%), Bogor (24.3%) and Tangerang (21.2%) areas, as well some in Depok and Jakarta (p.6). Middle to lower segment housing within the Tangerang-Banten region was highest in demand. Additionally, many real estate agents and buyers utilized technology to collect information and conduct virtual viewings. This market is shown to the most resilient out of the rest and continues to grow even in the midst of the pandemic. Below (Figure 1.4) is a chart summarizing the housing supply, demand and sales within the Jabodetabek area for the first quarter of 2021:

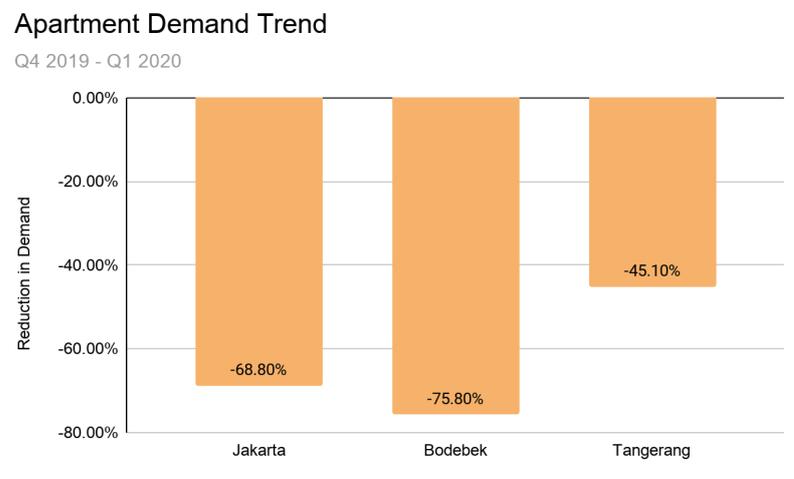


**Figure 1.4** *Housing Market Trend Summary*

Source: *Ringkasan Pasar Properti di Indonesia di Tengah Pandemi COVID-19, Coldwell Banker Commercial (2020)*

**Apartment market :** Sales for apartment units in the Jabodetabek area fell between 45.1% to 75.8% (p. 4). The pandemic also adversely affected construction progress as many projects have been postponed due to stricter safety guidelines imposed by

the government as well as constraints on importing building materials. Currently, buyers are exhibiting a “wait and see” behavior indicating that property investment is not their top priority at the moment. However, developers are continuing their construction of mid-level apartment projects mostly within the Bogor, Depok and Bekasi areas. The figure below (Figure 1.5) illustrates the significant plummet in demand the apartment market experienced during the COVID-19 pandemic:



**Figure 1.5** Apartment Demand Trends

Source: *Ringkasan Pasar Properti di Indonesia di Tengah Pandemi COVID-19, Coldwell Banker Commercial (2020)*

Clearly, the revival of the property industry has been restrained by the spread of COVID-19. However, the future might not seem so bleak as Petriella (2020) indicated that during the third quarter of 2020, housing prices have risen by 0.5% and the supply index has also shown an increasing trend, which indicates a slow but forward moving recovery of the industry. Additionally, there is a growing trend of reliance on online platforms and social media utilization by property developers and agents alike which marks the new rise of the Proptech era that Rumah.com should capitalize on.

The nosedive in the general market demands for properties caused by the COVID-19 pandemic is beyond Rumah.com's control. But surely, there are certain other factors that affect the likelihood for potential customers to utilize Rumah.com to conduct property related transactions (be it buying, renting, selling, or simply looking out for co-working and co-living solutions) instead of going the traditional route of simply consulting a realtor.

In order to understand the customer and attract their business, like every other online business, even a Proptech company like Rumah.com needs to put themselves in their customers' shoes to get an insight from their perspective. Generally, customers have a set of expectations from the goods or services that they have purchased. Thus, a customer oriented company should be able to meet said expectations and provide quality services in accordance to the customers' wants and will eventually generate a higher purchase intention.

Based on an initial survey conducted to examine the factors that affect a customer's purchase intention through Rumah.com, there are three key variables in common among the survey results. The top three keywords mentioned happened to be "Convenience", "Image" (Brand Image) and "Trust" which will be the three variables used in this study tested against the dependent variable of customer's *purchase intention*. The rest of the variables mentioned were not considered as a variable for this particular study because they were mentioned less than 5 times with most of key words only being mentioned once throughout the survey, thus, it is safe to assume that these other variables are not a significant factor for the initial survey respondents.

According to Kwek, et al. quoted in Djan and Adawiyyah's (2020) journal, there is a significant relationship between *convenience* and intention to purchase online. *Convenience* has been widely regarded as a staple variable with great influence on the customer's decision-making process, having a considerable role in determining customer's purchase behavior, decision making and overall satisfaction. In this research, the term *convenience* is referring to the ease of use as well as comfortability in accessing online marketplace platforms. Based on the results of the initial survey, the word *convenience* refers to things such as: ease of use of the website and app, ability to compare various listings at the same time, ability to do it yourself, access to instant information that could be accessed anytime and anywhere as well as the platforms being straightforward and user friendly.

In conjunction, *brand image* also plays a significant role in determining a customer's *purchase intention*. Brand image plays a role in developing a company's reputation and how it is currently perceived in the market. Additionally, it provides a guideline for customers to seek out information regarding the status of the brand and could in turn foster a sense of trust between the customer and the business (Citra & Santoso, 2016). Kotler and Keller (2016) argued that each product and service sold in the market has developed its own brand in the eyes of the customers which has been deliberately created through strategic marketing in order to differentiate them from competitors. In the occasion where the brand image gets tarnished, the likelihood where customers avoid purchasing from said company would be high and costly. The initial survey conveyed that respondents show a sense of trust towards Rumah.com given its reputation (or brand image) and the fact that it has

been around for a long time. Thus, it seems that there is a strong relationship between *brand image* and *trust*.

Furthermore, the element of *trust* is also quintessential as it has long been one of the central determinants in a customer's decision to purchase. One of the main reasons as to why customers are reluctant to make purchases online is due to the lack of trust towards online platforms (Kim et al., 2017) but the issue is, most Proptech platforms, including Rumah.com are strictly online. By reducing uncertainty, Rumah.com should be able to build a strong buyer-seller relationship with its customer base and thus further build the company's credibility in the eyes of the public - especially when it comes to property transactions that are known to have a volatile characteristic and one that requires large amounts of capital. Rumah.com thus needs to adopt various security measures designed to foster a sense of security on its service infrastructure.

The perception of *trust* can be built upon along with a positive *brand image* and *convenience* as long as the company and its services are able to remain in accordance with the customer's expectations. Overall, in order to understand the customer's purchase intention, Rumah.com needs to consider several key variables like *convenience*, *brand image*, and *trust*. But the question is, how exactly does each of these variables affect Rumah.com's customer *purchase intention*?

## 1.2 Formulation of The Problem

The Internet sector has advanced significantly in unimaginable ways this year alone - the pandemic has caused some business sectors to cease to exist but it has done wonders for e-commerce, putting it in a stronger position than ever. There are few businesses who are able to escape the digital transformation, and the property industry is not one of them. In Indonesia alone, the Proptech phenomenon is still in its infancy, however, several companies have capitalized on this opportunity and could be considered as the market leader within the Proptech genre. Rumah.com is one of those few companies that would fall under the “Proptech” umbrella.

Understandably, the use of property portals like Rumah.com is much less casual when compared to other forms of e-commerce shopping as Rumah.com allows for less impulsive behavior given it is a higher investment than simply purchasing clothing through other e-commerce platforms like Shopee. As mentioned in the previous section, the online traffic for Rumah.com has plummeted significantly mainly due to the pandemic which has lessened the bargaining power of potential home buyers, and in turn, reducing the rate of property purchases within the country. Reiterating the points made previously, there is a reduction in demand of customers to buy or rent properties through Rumah.com mainly due to the overall lack of interest and customer intention the entire property industry is experiencing. There is not much that Rumah.com could do to alleviate the impact of the pandemic on the property industry as a whole, however, Rumah.com could definitely create incentives for the customers in order to stimulate the demand for property products.

Over and above that, it was revealed that despite Rumah.com being one of the top contenders of property portals in Indonesia with roughly 49% market share - 99.co is still taking the lead as they are raking in almost five times more the amount of online traffic to its websites than Rumah.com is able to attract. That said, Rumah.com is clearly not able to dominate the market share just yet. Looking more into Rumah.com and its services offered, it seems that there is also still a gap that could be closed. Their system is not yet able to fully provide all the information that a potential home buyer might need - especially revealed in the initial survey that some respondents noted that they would like to see some additional features on Rumah.com's platforms to make their buying experience much more enjoyable and efficient.

What's more is that due to the continuous advancements in technology, various PropTech startups have emerged and are posing as competition for Rumah.com albeit not directly head to head. Still, these newcomers offer much more creative and innovative solutions to the local property related problems thus, putting Rumah.com at some risk of losing potential customers to competitors. Rumah.com should then consider the factors of *convenience*, *brand image* and *trust* to secure its position as one of the market leaders and potentially grow to secure an even larger portion of the market.

From this, it is safe to deduce that online property portals like Rumah.com do play a unique role to further improve the property market by offering ease of access of information and convenience for its customers looking to purchase or rent properties. However, there are a plethora of additional PropTech services outside of the property portal bracket that aim to further simplify and improve the customer's

home buying or renting experience. Even though those other services are not a direct competitor to Rumah.com, they still pose a threat.

Taking into the facts mentioned above, the fundamental research aim of the study is to explore the factors that would affect the likelihood for potential customers to make a property transaction through Rumah.com's platforms. More specifically, looking from a customer's point of view, to study how *convenience*, *brand image* as well as *trust* affect a potential customer's *purchase intention* through Rumah.com rather than going the completely traditional route of simply going through a property broker to close the deal. Therefore, this research aims to satisfy the following research questions by finding out:

1. Does *convenience* have a positive influence on *purchase intention*?
2. Does *brand image* have a positive influence on *purchase intention*?
3. Does *trust* have a positive influence on *purchase intention*?

### **1.3 Objectives of the Study**

In accordance with the subject matter that has been described in the problem formulation above, the objectives of this study are to investigate the factors affecting customer's *purchase intention* through Rumah.com by examining the following research objectives:

RO1 : To study the relationship between *convenience* and customer's *purchase intention*

RO2 : To study the relationship between *brand image* and customer's *purchase intention*

RO3 : To study the relationship between *trust* and customer's *purchase intention*

#### 1.4 Significance of the Study

The value of the results of this study is expected to provide benefits towards any parties who have interest on the topics raised from this research, which can be seen from several aspects as follows:

1. Theoretical Benefits :

This study aims to contribute further to the knowledge of Proptech in Indonesia as well as its potential implications on the property market. Additionally, any findings on this research is expected to be able to add insight and knowledge for future researchers to be used as reference material in the field of marketing, with an accent on the relationship between *convenience, brand image, trust, and purchase intention*.

2. Practical Benefits :

It is hoped that this research can provide valuable input, recommendations and additional reference for Rumah.com in order to further improve its customer's home buying or renting experience. This research will also help Rumah.com identify the factors that prevent customers from purchasing through its platforms and try to minimize its effects while at the same time trying to emphasize any positive factors or variables to capture a bigger audience traffic for its website, thus, hopefully further improving customer's purchase intention through Rumah.com. Additionally, this research aims to help the stakeholders of Rumah.com platforms in improving its range of services offered by taking a glance at the factors that influence customer's purchase intention through

Rumah.com (namely *convenience*, *brand image* and *trust*) and thus hopefully will help to provide additional solutions to counter the problems mentioned in this study.

## **1.5 Organization of the Paper**

Overall, this study is divided into five chapters with the following systematic writing:

### **CHAPTER I. INTRODUCTION**

This chapter consists of the introduction to the research, including the background, formulation of the problem, objectives of the study, as well as the significance of the study.

### **CHAPTER II. LITERATURE REVIEW**

This chapter focuses on the theoretical insights required to study the variables necessary to conduct this research. Impactful findings from previous research would be compiled in order to serve as the theoretical basis of this study. Theories include the Technology Acceptance Model (TAM) that serves as the theoretical framework to further provide insights on customer's behavior within the e-commerce sphere, to be specific, in the online property market.

### **CHAPTER III. RESEARCH METHODOLOGY**

This chapter focuses on describing the research design and all of the steps involved. Among them are as follows; problem identification, determination of research objectives, research variables to be studied, conceptualization of the research model, data collecting methods, hypothesis testing, as well as analysis methods.

### **CHAPTER IV. RESEARCH FINDINGS AND ANALYSIS**

This chapter, being the main focus of the research, contains the results of data collection and its significance. This chapter also outlines the analysis, discussions and implementation derived from the results of the research and will be used to test against the hypothesis stated in previous chapters.

### **CHAPTER V. CONCLUSIONS**

This final chapter consists of research conclusions, managerial implications, research limitations and suggestions that can be considered for future research.