# **International Journal of Real Estate Studies**

# **INTREST**

# The Role of Service Digitalisation in Realty Business during Pandemic from the Perspective of Real Estate Agency in Klang Valley, Malaysia

Nur Azaliah Abu Bakar1\*, Ariffikri Yaacob2

<sup>1</sup>Department of Advanced Informatics, Razak Faculty of Technology and Informatics, Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia
<sup>2</sup>Kaizen Realty Sdn Bhd, Petaling Jaya, Selangor, Malaysia

\*Corresponding author's email: azaliah@utm.my

Article history: Received: 10 August 2020 Received in revised form: 27 September 2020 Accepted: 4 October 2020 Published online: 11 November 2020

#### **Abstract**

COVID-19 has caused unprecedented disruption over the last few months, hitting the world with a vengeance in the middle of March. As COVID-19's effects are felt worldwide, the real estate industry is also affected by the rapid spread of coronavirus affecting global real estate investment as travel, face-to-face meetings and property viewing are restricted. Hence, this caused significant disruption in the business transaction of real estate agencies, including in Malaysia. Therefore, this paper aims to understand how Service Digitalisation solution able to sustain the real estate agency business during this pandemic. This study adopted a Business Model Innovation Model as the foundation. This study selected a case study of real estate agency in Klang Valley, Malaysia and a series of interview sessions were conducted with the principle and the agents. The data were then analysed based on a thematics analysis method. Finding reveals that there are five quick actions taken by this agency in digitalising their real estate services and management process in sustaining their business. These include the in-house development of real estate agency management system and websites, the utilisation of various social media application as a marketing platform, the development of own video content which is localised to Malaysian market segment, the usage of Search Engine Optimisation (SEO) and finally the series of digital competency and capability training given to their registered real estate agent in coping the business disruption, especially during MCO period. Significantly, COVID-19 has expedited this digitalisation process, and it is proven that only the quick adapter in this real estate business will be able to survive in this new norm. Therefore we strongly urged the realty business to quickly embrace the service digitalisation to the whole business operation to remain relevant and sustainable.

Keywords: Real estate, COVID-19, digitalisation, business disruption, sustainability

© 2020 Penerbit UTM Press. All rights reserved

#### ■1.0 INTRODUCTION

Over recent months, COVID-19 has triggered unparalleled chaos and hit the globe in mid-March 2020 in retaliation. Few economic sectors have been affected, mainly because of lock-in measures, including retail, travel, hospitality and leisure. Since the impact of COVID-19 is felt all over the world, the immobilisation industry is also affected. The rapid spread of coronavirus has affected the global investment in immobilisation in the short term because travel, personal meetings and property vision are limited. It is expected a total of 82 per cent real estate agents income will be affected this year and, 62 per cent of agents expect that the pandemic will affect their property markets for more than three months (IQI, 2020b).

As COVID-19 reports circulated, businesses started to examine how it would impact supply chain exposure, product releases, staff well-being, and market continuity. Many real estate companies are mindful of cost and workflow delays. Nevertheless, they do not understand that business models will compromise the sustainability of operations. The aim is to ensure that the business model is as robust to external changes as other companies. According to Panetta (2020), businesses need to take a systemic approach to improve the durability of their existing business models so that they will continue to work through COVID-19. At the same time, information managers need to play a crucial role in this cycle as emerging technology and capabilities affect any aspect of business models (Panetta, 2020).

Recently, the introduction of effective digitalisation technology is the profitability prerequisite of the real estate agency. Nonetheless, owing to the broad range of digitalisation solutions available, finding the optimal approach to such concerns is a significant concern. (Chigwenya & Wadzanai, 2020; Siedler et al., 2019). Digitalisation revolutionises the way industry works within manufacturing supply chains through the use of digital technology, extensive data sharing and predictive analysis. Digitalisation offers incremental economic growth as the countries at the most advanced stage of digitalisation derive 20 per cent more economic benefits than in the initial stage countries. Digitalisation has demonstrably impacted homelessness, quality of life development and residents' access to public services. Besides, digitalisation enables governments to operate more efficiently and transparently (Sabbagh et al., 2012).

Technological adoption alone is inadequate because digitalisation involves innovation of business models, such as the transformation from technology to advanced business models. The organisation often struggles to understand digitalisation's potential impact and benefits.

In reality, the digital transition has multiple hurdles. A study by Morakanyane et al. (2020) stated that digital transformation entails incorporating digital technologies to enable business model transitions involving whole enterprises, including organisational structures, personnel, internal and external users.

The COVID-19 pandemic is triggering a dramatic decline in demand, with more declining prices and dropping per capita wages for employees. Besides, unemployment will rise, which would further diminish the need. The real estate market would not shift, in the medium-term, as with other profitable and industrial markets, independently of the aforesaid macroeconomic variables. Therefore, in this paper, we want to highlight the idea that the real estate service digitalisation can salvage the existing business model facets, including information technology, strategies and market models, products and services, internal and external processes, organisational and corporate culture. This paper seeks to understand how Service Digitalisation initiative can sustain the Klang Valley real estate agency business during this COVID-19 pandemic. Ultimately, the synthesis generated is inventive real estate business model by service digitalisation. In doing so, we contribute by creating a platform that communicates and guides future work by connecting digitalisation, business process creativity, and industrial sustainability.

#### **■2.0 LITERATURE REVIEW**

#### 2.1 Real Estate Business Scenario during COVID-19

Real estate business is classified as an international business because the transaction can be locally (within the country) or internationally (across the country). One of Asia's well-known global real estate sales companies is Juwai IQI, headquartered in Shanghai and Hong Kong, operating in countries and regions like Southeast Asia, North Asia, Australia, New Zealand, the United Kingdom and Europe. According to the Global Coronavirus Agent Survey by Juwai IQI (IQI, 2020a) to the real estate agents from over 60 countries, they globally stated the COVID-19 pandemic had cut their 2020 earnings expectations. The survey found that 82 per cent of agents will see their earnings negatively affected this year, and 62 per cent of agents expect the effect of the pandemic on their real estate market would last longer than three months. Only 10 per cent of agents worldwide believe the results from the widespread of the virus will be limited to two months or less. Juwai IQI said, looking at the findings of the survey, the loss of earnings is a widespread problem present in all of the surveyed countries. Among those surveyed, Greek real estate agents have the worst outlook, with 95 per cent expecting the COVID-19 pandemic to reduce their earnings by 2020, and two-thirds predicted that they would gain slightly less.

In Singapore and Australia, 88 per cent and 84 per cent of agents expect less in 2020, respectively. The least pessimistic among Juwai IQI surveyed are Malaysian and Philippine agents, with 74 per cent of agents expected to earn less, 38 per cent expected to gain significantly less in 2020, and 33 per cent expected to gain a little less. This survey also showed that 22 per cent of Malaysian real estate agents plan to improve their international buyers' marketing investment. In comparison, 53 per cent feel that for over three months, the impact of COVID-19 will influence the market. Hence, 68 per cent of agents globally believe that the time to buy and sell is excellent or right, and only 9 per cent think it is bad or wrong to sell. Greece, Thailand, the Philippines, Canada and Malaysia are the countries with agents which are more destructive than the global sales pattern during the COVID-199 crisis (IQI, 2020a).

The survey also found that agents and negotiators are financially impaired in Malaysia, mainly because they are mostly contract agents with no basic pay. Although COVID-19 has had an overall effect on the markets, more real estate agents and developers are turning to market and launching their growth. Around 18 per cent of agents say that international buyers are one of their new strategies worldwide. Approximately 22 per cent of agents in Malaysia and Thailand said they would raise spending in international buyers' marketing (IQI, 2020a). Many real estate agents have already evaluated their data internally to inform their business decisions, and some have started sharing aggregated data with policymakers and researchers during the current crisis. Thus, we will investigate more on the Service Digitalisation for Business Model Innovation during COVID-19 in the next section.

#### 2.2 Service Digitalisation for Business Model Innovation

Digitalisation has been identified as one of the major trends changing society and business in the near and long term future (Tihinen et al., 2016). Digitalisation is referred to as a more fundamental change than just digitising existing processes or work products. A study by Parviainen et al. (2017) states that digitalisation or digital transformation refers to transitions in the use of digital technology in all areas of human society. Meanwhile, Henriette et al. (2015) view digitalisation as the adoption or increase in the use of digital or computer technology by an organisation, sector and nation. Therefore, we infer that digitalisation is the opportunity to transform current products or services into digital versions, providing advantages over tangible products.

A study by Siedler et al. (2019) highlights that digitalisation brings many benefits to the organisation's business, particularly in delivering their services. In addition to solving existing problems and challenges, digitalisation offers the opportunity to implement the latest technological solutions in existing projects. Examples involve internal management of systems, such as online business with suppliers and customers or product digitalisation. This also allows the company to generate innovative strategies for product or service creation that can improve industry competencies in the enterprise and thus reach new markets. This also allowed businesses to independently determine the available and investment-intensive solutions which are suitable and competitive for their unique problems.

Subsequently, Parida et al. (2019) proposed a new business model innovation aiming for industry sustainability through this digitalisation strategy. Figure 1 of the Business Model Innovation shows how the digitalisation can create three types of values, such as value creation, value capture and value delivery. As a result, it will bring sustainability benefits to the organisation. The following subsection describes each of the model components.

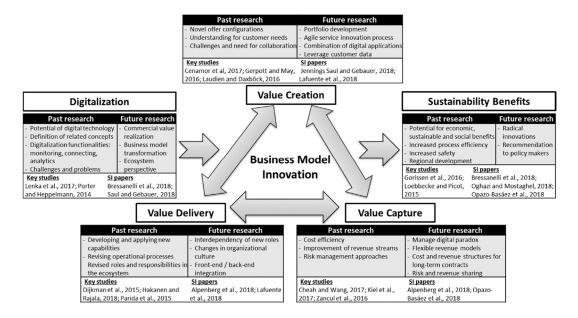


Figure 1 Business model innovation: Digitalisation for sustainable benefits (Parida et al., 2019)

#### 2.2.1 Digitalisation and Value Creation

The value-creation defines what the consumer is given. It applies to the product and service forms the organisation sells. Digitalisation can generate value for the consumer in several different ways through modern and often more specialised technologies. It gives a new viewpoint on generating business model interest with the use of inputs from multiple positions in the ecosystem.

#### 2.2.2 Digitalisation and Value Delivery

The value delivery explains the way practices and procedures are used to produce the value expected. It requires different distribution tools and skills, for example, and how value is delivered to the consumer varies dramatically in digitally activated market models. These adjustments may arise both within the organisation and within the company's external market environment.

#### 2.2.3 Digitalisation and Value Capture

Value capture is the third aspect of the business model. It deals with the revenue model and its financial viability, with a focus on potential revenue streams and the cost structure. Digitalisation can increase the value in a variety of ways, such as by lowering costs, increasing revenues or capturing new revenue streams. A useful risk management mechanism should be established to preserve the sustainability of the business model over time, where financial gains are more than associated with adverse consequences, such as high delivery costs.

#### 2.2.4 Digitalisation Enabling Business Model Innovation and Sustainable Industry

Digitalisation is a challenging undertaking. It needs an enduring dedication to the fully functional and stable enterprise. However, this commitment to digitisation and the proper implementation of the innovation business model can undoubtedly bring significant benefits to the threefold bottom line. The development of a sustainable industry is, therefore, the goal, and its sustainability depends on long-term environmental, ecological and social benefits. With this holistic view, more businesses are operating, and digitalisation is the secret of making this progress a reality. It is important to emphasise that the benefits can be achieved either utilising direct or indirect effects that are simultaneously generated.

## 2.3 The Influence of Service Digitalisation in the Real Estate Sector

The real estate sector has gone through a series of technology innovation. From the computerisation period in the early 1970s until now in 2020, the 4IR digitalisation period bursting with social media excitement, the industry participant in this field is always ready with the new technology. Findings from Veuger's (2017) study dictates that the Blockchain implementation provides safer and secure data sharing in real estate business transaction. This also applies to how this real estate transition can best be tracked, guided, and utilised in society at the international, national, and regional level. The importance of blockchain's future applications in real estate processes is reflected in more effective and efficient transactions, increased accountability, stronger investment foundations and new technologies for the mortgage market. This is supported by a study by Nijland and Veuger (2019) highlighted the different possibilities for integrating blockchain in the buying process of commercial real estate based on the diverse needs of the stakeholders involved.

#### ■3.0 METHODOLOGY

Digital transformation is a new phenomenon that is often misunderstood. Yin's (2017) case study approach was used to clarify digital transformation better, as case studies often look at complex and unrepeatable scenarios and gather evidence for new ideas. Nonetheless, the literature analysis has shown that there is not much research on digital transformation in the real estate sector as we have described it. Thus, most of the findings relied on a case study. Figure 2 shows the steps taken in this study.

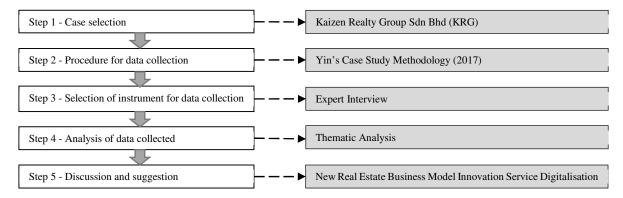


Figure 2 Research steps in this study

The study was conducted in one real estate agent company, Kaizen Realty Group Sdn Bhd (KRG) in Petaling Jaya, Selangor. The study scope is the whole Peninsular Malaysia, as KRG has a large number of Real Estate Agent (REA) and Real Estate Negotiator (REN) covering the entire states in Peninsular Malaysia. Semi-structured interviews were conducted with five (5) experts in the real estate industry, whereby four of them are the REN and REA. Even though the numbers of participants were small, they are very knowledgeable and experienced in this area. We can conclude that the evaluated model meet the research validity and reliability requirement. Table 1 shows a list of study participants.

Code Designation Years of Experience Years of Experience in Real Estate in Real Estate System R-1 Chief Executive Officer (CEO) / REA 15 5 5 Chief Operating Officer (COO) / REA R-2 15 R-3 Sales Manager/ REA 8 5 R-4 Team Leader/REN 5 2 7 7 R-5 Chief Technologist Officer (CTO)/ Technologist expert in property system development

Table 1 Study participants

Topics covered in the interviews are listed below, with the main focus of impact during and post COVID-19 pandemic.

- 1. What are the challenges facing the real state sector, specifically your agency?
- 2. Which business models are significantly affected?
- 3. Which technologies have potential in to be utilised in this area?
- 4. What is your business model sustainability strategy?

The obtained data were filtered and synthesised through contextual coding of multiple facets of digital transformation guided by Business Model Innovation: Digitalisation for Sustainable Benefits (Parida et al., 2019). Finally, the study applied the thematic analysis technique by Braun and Clarke (2006) to identify the code and theme to understand the utilisation of the digitalisation in their new business model sustainability strategy. Table 2 describes the phases involved in the Thematic Analysis.



Figure 3 Thematic analysis step (Braun & Clarke, 2006)

#### ■4.0 FINDINGS AND DISCUSSIONS

The findings from the interview are discussed in this section. Table 2 shows the analysis result based on thematic analysis phase mentioned.

 Table 2
 The analysis result based on thematic analysis phase

Phase 1	Phase 2	Phase 3 & 4	Phase 5	Phase 6
Notes from interview excerpt	System; Internal development; Website; Internal usage	Internal system development and website	Development of Real Estate Agency Management System	Represent in model  New Real Estate Business Model Innovation through Service Digitalisation
	Facebook; Instagram; Youtube; Marketing activity;	Social Media Digital Marketing	Social Media Application as Marketing Platform	
	Blog; Testimonials; Video; Information dissemination	Informative Local Content	Development of Local Market Segment Blog and Video Content	
	Search engine; Website; Google; Target market	Fast and first search result appears	Utilisation of Search Engine Optimisation (SEO)	
	Real estate agent; Staff; Digital competent; training	Digital training for all involved	Digital Competency and Capability Training	

Based on the results, we proposed the formulation steps of COVID-19 Business Model Resilience Strategy by KRG, followed by a discussion on the execution of service digitalisation initiative in their agency. It covers the overall service digitalisation lifecycle starting from strategy initiation, business identification, data extraction, application development and technology platform.

#### 4.1 The Formulation of COVID-19 Business Model Resilience Strategy

Every participant in this study believes that digital transformation will have a moderate to high impact on their company over the next five years. In line with the scenario planning approach proposed by Frank et al. (2019), KRG has taken this five-step approach to ensure the resilience of their real estate business model as described below.

#### Step 1: Define the current business model

The primary client base for the KRG company and its core needs will be established, followed by an expansion of this analysis to value ideas, capability and financial models. At this stage, the key questions addressed concern customers: Who are the main customers? What are we offering to meet their basic needs? To provide value proposals, which ecosystem partners are necessary? And for our core customers, what revenue models are we using? A series of discussions between the senior manager and the top management are held in KRG to gain insight into those questions.

#### Step 2: Identify uncertainties

Based on the results from the first phase, KRG brings together a diverse group of REN and REA from across the organisation using an online platform in recognising challenges that are most likely to affect the business. The goal is to identify existing and potential disruptions of known COVID-19 factors. For example, there is no longer an on-site house viewing due to Movement Control Orders (MCO). All the uncertainties are then gathered for further analysis.

#### Step 3: Assess the impact

KRG conducts a Business Impact Analysis (BIA) exercise to determine the criticality of business activities and related resource requirements, upon and after the business disruption, to ensure operational resistance and continuity. The BIA quantifies the impacts of failures on the provision of service, uncertainties in the condition of service and recovery time objectives (RTOs) and recovery point expectations (RPOs). These requirements for recovery are used to develop strategies, solutions and plans. This exercise was done by both CEO, COO and the CTO in KRG as it requires a full assessment from both business and IT solution.

#### Step 4: Design changes

KRG Top Management discussed what needs to be changed to address potential effects. They report possible solutions and review them later, as it is primarily on how the answers will make such improvements faster. When governments declare MCO, for example, all physical and corporate activities are immediately cancelled, which can have a direct effect on the real estate business. A strategy of change would focus on transforming the real estate business into e-commerce solutions. Strategic plans are essential for any company where fast responses and versatility make a big difference in advance.

## Step 5: Execute changes

In the end, KRG Top Management makes the final decisions. However, step 1 to 4 of scenario preparation should act as an essential guide for actions caused by both REN and REA. For this strategy, KRG took an agile approach and always ensures that business leaders are aware of the changes and finally receive approval from KRG Top Management. This leads to the unity of industry and IT and helps in quick production and performance.

#### 4.2 The New Real Estate Business Model Innovation through Service Digitalisation

Based on the analysis from the interview results, we proposed a new Real Estate Business Model Innovation through Service Digitalisation, which is adapted from Parida et al. (2019). This model illustrates the relations between digitalisation, creativity in the business process and the sustainability market from the viewpoint of the real estate industry. The model suggests that digitalisation, driven by a variety of digital technologies, enables innovation of the business model. This, in turn, leads to changes in value creation, value supply and value capture elements that will allow a sustainable industry to benefit. Figure 2 describes the model discussed.

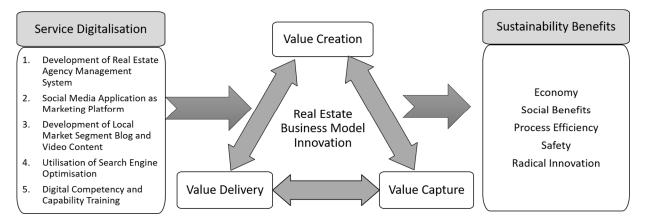


Figure 4 New real estate business model innovation through service digitalisation

The following section describes the KRG service digitalisation strategy.

#### 4.2.1 Development of Real Estate Agency Management System

KRG sees the potential to increase the productivity of its core processes through the use of modern technology, as they demand quick decision-making based on results. The implementation real estate agency management system will be beneficial to improve selling and create a new option of the real estate business operations in the future. Real Estate Agency Management System is the real estate listing platform that allows the REA and REN to apply, track, access and scan all the transactions. Nowadays, people have become smart enough to pre-research their buys online before making a purchase decision, and real estate is no different. Consumers begin online research for buying, selling, or renting properties. Real estate apps and websites allow buyers and sellers to make direct contact with each other (Fajar et al., 2020). Since 2018, KRG has developed its internal real estate agency management system intending to manage the listing and also monitoring the performance of REA and REN. As a small- and medium-sized enterprise (SME) in real estate industry, the internal development of real estate agency management system is a cost-saving strategy compared to purchase the on-the-shelf (OTS) real estate management system. To date, it has improved its service processes and able to collaborate better with organisational units and customers. Therefore, when COVID-19 hits the real estate business, KRG immediately able to forecast and readjust their business model strategy because most of their business information is in digital form.

#### 4.2.2 Social Media Application as Marketing Platform

Social Media play a significant role in real estate marketing nowadays. KRG targeted 99% of their REA, and REN will deploy social media application as a marketing platform over the next two years. Now, a vast number of agents see the ability of social media to enhance decision-making and forecasting. For example, Facebook and Instagram have created its influencer phenomenon, which can be utilised well by REA and REN too. This can be done by posting pictures of landmarks and favourite spots around town or even hosting any virtual open houses. KRG also emphasise on having an 'engage content', which means that REA and REN should respond to all comments and messages or initiate conversations by asking questions to the potential buyers. Most notably, to keep followers up-to-date with the latest real estate market data, provide them with useful lifestyle advice, provide the latest network alerts to create a long-term relationship with prospective buyers and sellers.

## 4.2.3 Development of Local Market Segment Blog and Video Content

Many people in the real estate space are not active, at a time when clients are looking for property insights. Now is the time when prospects want and need data to help them make informed decisions. Real estate agents need to be actively getting in front of potential clients and prospects as a resource with valuable property information. Hence, one of the digitalisation strategy in KRG is the creation of local market segment blog and video content. The video content is the most consumed content on social media marketing networks. It is the easiest way to the REA and REN to broadcast the information to the target audience while also sharing your brand and making a personal connection. With Facebook and Instagram new features, sharing video and blog post is seamlessly accessible nowadays, and it does not require any particular advanced technical skills.

#### **4.2.4** Utilisation of Search Engine Optimisation (SEO)

Optimisation activities rely mainly on competing in local SEOs in the real estate industry. To improve geographical relevance, local SEO strategies focus on regional content and sites. According to the National Association of Realtors (NAR, 2018), 44% of all buyers seek property listings online as the first stage of their real estate search. It is obscure to no one that websites with higher rankings are more likely to generate leads than those on with lower ones. KRG emphasises SEO strategy to boost its website (https://kaizenrealty.my/) ranking on search engines because potential buyers and sellers often use a search engine to locate an agent or search for listings. For example, Google provides results based on SEO, and websites with better performance and optimisation will have a chance to be on the first page. A medium-sized real estate business like KRG needs SEO to stand out from other websites and portals as well as contend with real estate giants in Malaysia like PropertyGuru, EdgeProp or iProperty.

#### 4.2.5 Digital Competency and Capability Training

The last challenge in implementing a digitalisation plan is the lack of human resources or knowledge to manage the digital project itself (Studer et al., 2019). In KRG itself, most REA and REN believe that the significant challenges of executing a strategic digitalisation plan are insufficient staff or lack of trained staff to implement the digital strategy. Therefore, as part of Continuous Professional Development (CPD), all REA and REN are encouraged to attend the relevant training offered by the board. Besides, KRG also conducted internal training for all the REA and REN registered with them. There are a variety of digital competency and capability training offered, ranging from desktop productivity tool, social media tools and also real estate management system. All agents are required to master these skills as this is proven as one of the ways to boost their sales during COVID-19 pandemic. To realise this strategy, an internal training team was set up, and training was given online and in physical sessions. As for online training, synchronous training slots are also available via an online platform such as Zoom and Google Hangout, as well as asynchronous training, whereby all training material and tutorials are deposited in the KRG real estate knowledge base platform.

# 4.3 The New KRG Real Estate Business Model versus the Impact of COVID-19

Malaysia, without a doubt, a very digital-centric country. There were 26.69 million internet users in Malaysia in January 2020, with a penetration rate of 83 per cent. Online activities with a great emphasis on smartphones are the main focus of Internet use. Social media also play an important role in Malaysia's daily lives. This is proven by 26.00 million social media users are reported in Malaysia until January 2020. Malaysia also has high number of mobile connections, as of January 2020, the total is 127% over the total population (Kemp, 2020).

The findings show a clear preference to deploy the service digitalisation and suggests that it must be done promptly. Therefore, for real estate business like KRG, the shift for the service digitalisation business model is the right move. They started with organisational changes whereby the company itself introduce a system to keep track of all business transaction and also the performance of their real estate agents. All agents are given the unique account, and all transaction must be recorded in this system for the agents to claim the sales commission. This eventually contributes to the value capture in the KRG business whereby the agency and the agent can easily understand the pattern of the customers based on the transaction capture. This is strongly supported in the study by Delion and Djankov (2020) that COVID-19 is an opportunity to digitise property transactions and make the business better.

The result of the study now provides evidence that digital marketing through social media is a must for a real estate agency to survive in COVID-19 era. KRG makes high use of social media digital marketing so that they maintain interaction with potential customers in a consistent way. Even if the property is still under renovation, the property is being posted on all social media sites, keeps the viewers updated about developments in the city, such as new schools, roads, highways, shopping malls. This is strongly supported by Abbas and Ali (2020), that stated the most crucial point is that the information presented in the content of the social media message is of high credibility and conforms to the product specifications to ensure the continued loyalty of consumers.

One of the things that some real industry player tend to left out in 'selling' their services is creating a local market segment blog and campaign. This result provides the first evidence that apart of social media engagement, the company also need to create customised news and offers based on local culture, or in the other word 'glocalisation'. As emphasised by Wisniewski and Brzezicka (2020), regional differences in operating conditions and unique manifestations of economic and social activity at the local level are the sources of glocalisation. Hence, this will establish a value creation in their business itself and gain more support from a wide range of local customer. This is what KRG did with their market segments whereby for every state, they appointed a dedicated team of real estate agents to manage the business. The top management from the central office will have a management meeting with these teams by a rotation basis.

This discussion demonstrates the importance of digital competency and capability training for the agents to ensure sustainable benefits is achieved. The new service digitalisation introduced in any real estate agency is a long term strategy. Therefore, every agents and staff must be digitally competent. For KRG, their internal digital technology training is the key. The agents not only being trained to understand the realty business, regulation and market, but they are also exposed to hands-on digital technology workshop. This is a big hit among them and distinguished them from the other real estate agents. However, according to Saull et al. (2020), digital change can only be facilitated, if all groups involved in real estate conveyancing work together

#### ■5.0 CONCLUSION

This paper outlines the first edition of the digital transformation paradigm, derived from the synthesis of the case study and current literature. The finding shows that the KRG has taken five rapid actions to digitise its real estate and management services and to maintain its business. Their core service digitalisation programs are divided into five categories namely; 1) the in-house development of real estate agency management system and websites, 2) the utilisation of various social media application as a marketing platform, 3) the development of own video content which is localised to Malaysian market segment, 4) the usage of Search Engine Optimisation (SEO) and finally 5) the series

of digital competency and capability training given to their registered real estate agent in coping the business disruption especially during MCO period.

This research further indicates that digitalisation is not about transforming traditional systems into digital copies but rethinking internal activities from new viewpoints that digital media unlocks. Within this paper, the concept of digital transition was explored in the context of case studies and by incorporating the methodology to address the change and benefit more from it. This model is currently is generic, however, and further research are required to add the details and get it closer to practice. We conclude that digitalisation is the crucial enabling problem for internal organisational performance, particularly after an unforeseen incident like COVID-19 occurred. Besides, the company's operating environment can be disrupted by digitalisation. Although digital transformation is a monumental concept, all these changes can be translated into success. The condition of each organisation is different, as the case study mentioned indicates. Hence, there is no magic bullet to counter digitalisation. In future, we plan to further evaluate and develop the model in additional case studies and modify or include details as needed in the model.

#### Acknowledgement

The authors would like to thank Kaizen Realty Group Sdn Bhd for the support to carry out this study. The research is financially supported by Universiti Teknologi Malaysia under Q.K130000.3556.06G26.

## References

Abbas, A. A., & Ali, R. H. A. (2020). Viral marketing and how to make a viral bomb in the digital space to invest the pandemic COVID-19. *International Journal of Multicultural and Multireligious Understanding*, 7(4), 323-336.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77-101.

Chigwenya, A., & Wadzanai, P. (2020). Towards smart cities: Digital content and urban governance in the City of Masvingo, Zimbabwe. *International Journal of Real Estate Studies*, 14(1), 91-101.

Delion, M. L., & Djankov, S. (2020). Covid-19: An opportunity to digitise property transactions. *LSE Business Review*. Retrieved from http://eprints.lse.ac.uk/105383/1/businessreview\_2020\_06\_16\_covid\_19\_an\_opportunity\_to\_digitise.pdf.

Fajar, A. N., Qomariyah, N. N., Albert., & Siregar, B. (2020). Implementation on Indonesian property real estate industry based on service oriented architecture. *IOP Conference Series: Materials Science and Engineering*, 725, 012100.

Frank, A. G., Mendes, G. H. S., Ayala, N. F., & Ghezzi, A. (2019). Servitization and Industry 4.0 convergence in the digital transformation of product firms: A business model innovation perspective. *Technological Forecasting and Social Change*, 141, 341-351.

Henriette, E., Feki, M., & Boughzala, I. (2015). The shape of digital transformation: A systematic literature review. MCIS 2015 Proceedings. Retrieved from https://aisel.aisnet.org/mcis2015/10/.

IQI, J. (2020a). Global coronavirus agent survey. Retrieved from http://downloads.juwai.com/pdf/coronavirus-global-agent-survey.pdf.

IQI, J. (2020b). Property survey and index Malaysia Q1 2020. Retrieved from http://downloads.juwai.com/pdf/Property-Survey-and-Index-Malaysia-Q1-2020.pdf. Kemp, S. (2020). Digital 2020: Malaysia. Retrieved from https://datareportal.com/reports/digital-2020-malaysia.

Morakanyane, R., O'Reilly, P., & McAvoy, J. (2020). Determining digital transformation success factors. In *Proceedings of the 53rd Hawaii International Conference on System Sciences* (pp. 4356-4365). Retrieved from https://scholarspace.manoa.hawaii.edu/handle/10125/63576.

National Association of Realtors (NAR). (2018). SEO fundamentals for real estate: What is SEO? [YouTube]. Retrieved from https://www.nar.realtor/videos/seo-fundamentals-for-real-estate-what-is-seo\_

Nijland, M., & Veuger, J. (2019). Influence of Blockchain in the real estate sector: In which stage of the buying process of commercial real estate can Blockchain provide added value for the stakeholders involved? *International Journal of Applied Science*, 2(2), 22-40.

Panetta, K. (2020, April 8). Create a resilient business model in the face of COVID-19. Retrieved on 8 August 2020 from https://www.gartner.com/smarterwithgartner/create-a-resilient-business-model-in-the-face-of-covid-19.

Parida, V., Sjödin, D., & Reim, W. (2019). Reviewing literature on digitalization, business model innovation, and sustainable industry: Past achievements and future promises. *Sustainability*, 11(2), 391.

Parviainen, P., Tihinen, M., Kääriäinen, J., & Teppola, S. (2017). Tackling the digitalization challenge: How to benefit from digitalization in practice. *International Journal of Information Systems and Project Management*, 5(1), 63-77.

Sabbagh, K., Friedrich, R., El-Darwiche, B., Singh, M., Ganediwalla, S., & Katz, R. (2012). Maximizing the impact of digitization. In S. Dutta & B. Bilbao-Osorio (Eds.), *The global information technology report* (pp. 121-133). Geneva: World Economic Forum and Insead.

Saull, A., Baum, A., & Braesemann, F. (2020). Can digital technologies speed up real estate transactions? *Journal of Property Investment & Finance*, 38(4), 349-361. Siedler, C., Sadaune, S., Zavareh, M. T., Eigner, M., Zink, K. J., & Aurich, J. C. (2019). Categorizing and selecting digitization technologies for their implementation

within different product lifecycle phases. *Procedia CIRP*, 79, 274-279.

Studer, C., Hellmuth, A., Michelberger, S., & Iseli, D. (2019). *Digitalisation Study on the Real Estate Sector in Switzerland*. Retrieved from https://www.ey.com/Publication/vwLUAssets/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland-april-2019/\$FILE/ey-digitalisation-study-on-the-real-estate-sector-in-switzerland

switzerland-april-2019.pdf.

Tihinen, M., Iivari, M., Ailisto, H., Komi, M., Kääriäinen, J., & Peltomaa, I. (2016, October). An exploratory method to clarify business potential in the context of Industrial Internet – A case study. Paper presented at the 17th Working Conference on Virtual Enterprises (PRO-VE), Porto, Portugal.

Veuger, J. (2017). Attention to disruption and Blockchain creates a viable real estate economy. Journal of US-China Public Administration, 14(5), 263-285.

Wisniewski, R., & Brzezicka, J. (2020). Translocality on the real estate market: A new extended approach. Land Use Policy, 97, 104731.

Yin, R. K. (2017). Case study research and applications: Design and methods (6th ed.). Thousand Oaks, CA: Sage.