



**Provident.**

## **CST3310 – Strategic Information Systems**

Case Study: Provident Real Estate

Pair B (3)

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## 0. Introduction

The scope of the report will include a brief overview of Provident Real Estate Company. Highlighting key findings and recommendations to improve existing real estate operations, ranging from Project Methodologies, CRM Systems optimization, Organisational Insights, Data Analytics, and additional systems belonging to Content Management, Property Management, Strategic Information Systems.

Executive summary aims to provide insights into how Provident Realty can leverage its MIS for strategic advantages, operational efficiency, and sustained growth in the competitive real estate market of Dubai, UAE.

## 0.1 Introduction of your consultancy start-up

We are a Business Solutions Group, a premier Management Information Systems consultancy Firm. Our MIS professionals use data-driven knowledge and cutting-edge technology to boost the capacity of businesses, assuring effective productivity, the formulation of strategic choices, and profitability over the long run.

## 0.2 Presentation of each group member profile

ID	Name	Sections	VARK	MBTI	Belbin
M00794367	Adrian, Morilla	Intro, 9,10,11,12	V	ENFP	Plant
M00848104	Awais, Ali	7,8	V	INTJ	TW

## 0.3 Description of the selected Case Study organisation

Established in 2008 and is one of the leading real estate agencies. Partnering with over different leading construction companies across the UAE such as, Emaar, Damac, Meraas, Sobha Realty.

Mr. Ahmed Mudassir is a Marketing Manager for Provident Real Estate. He shares valuable insights of the management team, the strategies of achieving business objectives, by trying to generate a lead within the marketing team. Provident also engages in diverse projects within the dynamic real estate market.

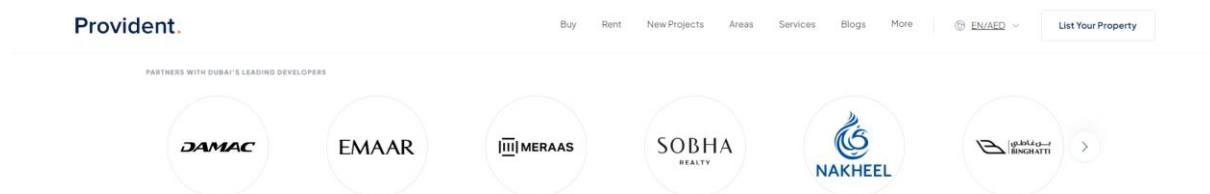
The company receives project directives from the management team situated in Business Bay. Two primary objectives guide their marketing initiatives: lead generation and brand identity establishment.

The case study outlines the strategic priorities for a real estate company in Dubai, stressing the importance of lead generation in a robust market with diverse projects. The company's collaboration with significant developers spotlights the demand for a nuanced understanding of properties and a tailored marketing strategy for each project. Their estimated revenue as per public source stands at \$22.3 Million (Source: <https://www.zoominfo.com/c/provident-estate/346604465>) & their employees are mostly based in Asia to Northern America and parts of Africa and EU. (Source: <https://www.zoominfo.com/pic/provident-estate/346604465?pageNum=2>)

As per shares in the real estate industry Emaar has the biggest share of Dubai's property market with around 30% of all home sales ahead of construction and acts as a proxy for the city's wider real estate sector. (Source: <https://www.bloomberg.com/news/articles/2023-08-31/russians-are-top-emaar-property-buyers-as-demand-for-dubai-homes-stays-strong>)

## 7. Globalisation Issues (marketplaces / infrastructure / workforce)

*"Globalisation can be thought of as a process (or set of processes) which embodies a transformation of the spatial organisation of social relations and transactions."* (David Held et al. 1999). To understand Provident Estate's globalisation status, we must acknowledge its involvement in international markets.



Source: <https://www.providentestate.com/>

Research indicates that Provident is solely focused on operations within Dubai. Its projects, such as those in DAMAC Hills, are located exclusively in this city. Additionally, its clientele and partnerships, including notable collaborations with Emaar, are all based in Dubai, United Arab Emirates. Provident's yearly property market report is also exclusively conducted for Dubai. With this in mind, we can conclude that Provident does not actively engage in globalisation. Provident must consider implementing strategies, evaluating the organisation's infrastructure maturity, and adapting its workforce to successfully enter global markets.

### 7.1 Reflection on the organisation's readiness for enter global markets.

Before venturing into international markets, Provident needs to prepare, select a market, plan, and implement said plan. Failure to devise a thorough strategy may lead to setbacks with competitors and missed opportunities for expansion abroad. Provident can apply the five strategies for entry into new foreign markets identified by Cunningham (1986), For instance;

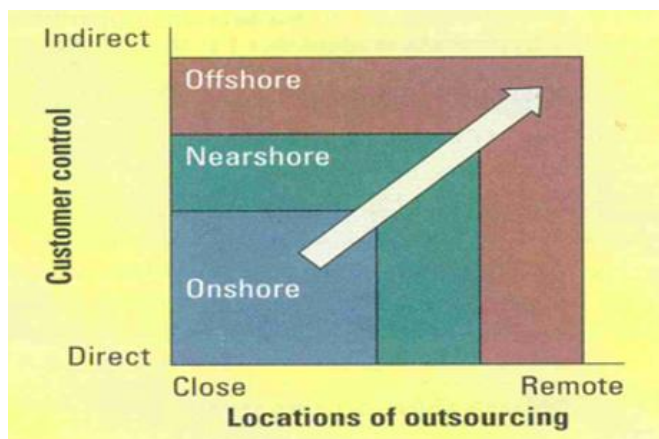
Low-price strategy: By providing competitive prices in comparison to local competitors, Provident may be able to swiftly acquire market share in new international markets by employing a low-price approach, such as penetration pricing.



Source: <https://ecampusontario.pressbooks.pub/globalmarketing/chapter/6-1-international-entry-modes/>

A good strategy for Provident Estate to grow globally while reducing risk and utilising local knowledge is to use a franchising model. By franchising their brand and business plan, they can collaborate with an established real estate firm in their target market with a thorough awareness of local laws, market dynamics, and consumer preferences. Provident Estate could increase its worldwide reach and make money through franchise fees and royalties, while franchisees would profit from the company's well-known brand, functional systems, and support.

## 7.2 Evaluation of the organisation's infrastructure maturity for globalisation



Source: Baltzan, P. and A. Phillips. 2018. Business Driven Information Systems. McGraw-Hill Education. 6th ed. ISBN 978-1260092929.

For Provident Estate, onshore outsourcing is the ideal choice. It offers prompt response times due to shared time zones, effective communication, and local knowledge which promotes language fluency. For example, in managing a high-value real estate transaction, an onshore team may quickly respond to buyer questions regarding legal paperwork, guaranteeing seamless transactions and maintaining client trust.

- Challenges and obstacles to global business systems

GLOBAL	SPECIFIC
Cultural particularism: Regionalism, nationalism, language differences	Standards: Different Electronic Data Interchange (EDI), e-mail, telecommunications standards
Social expectations: Brand-name expectations, work hours	Reliability: Phone networks not uniformly reliable
Political laws: Transborder data and privacy laws, commercial regulations	Speed: Different data transfer speeds, many slower than United States
	Personnel: Shortages of skilled consultants

Source: Laudon, J.P. and K.C. Laudon. 2017. Management Information Systems: Managing the Digital Firm. Pearson. ISBN 978-1292211756.

Provident may encounter many obstacles within the global business system. Firstly, when the agency grows globally, communication may be restricted by language barriers. It is important to guarantee precise translations of real estate listings and contracts. Second, culture differs between nations and influences how clients connect with them. Third, legal issues could arise across international borders, such as property laws and tax restrictions. Fourth, to customize its offerings to a distinct real estate market, Provident Estate must conduct in-depth market research. Lastly, inspecting exchange rates and currency variation is crucial for global commerce. To sum up, Provident Estate needs to make use of cross-cultural competency, local knowledge, and strategic planning to succeed internationally

## 7.3 Review of how the organisation's workforce would adapt to globalisation.



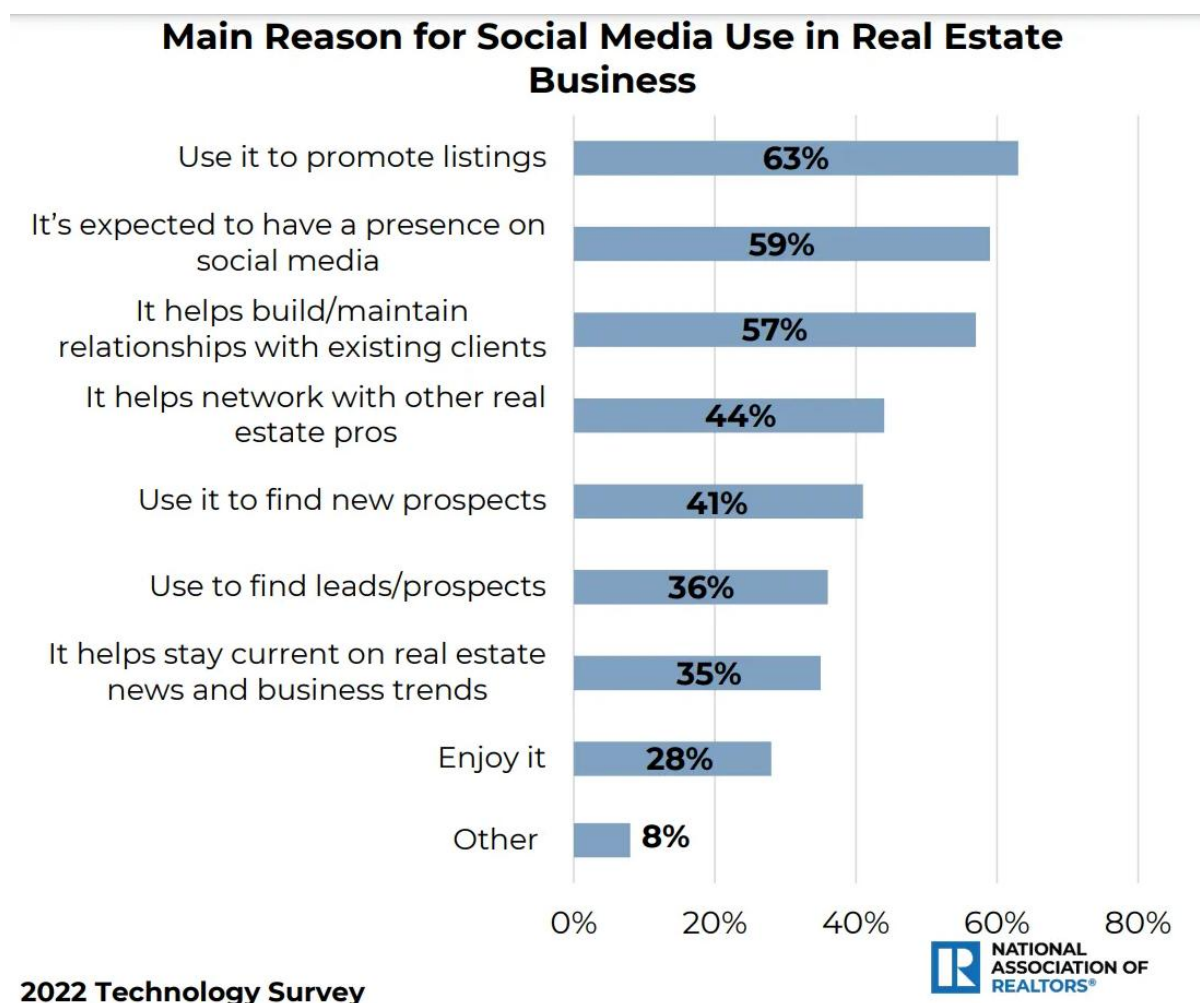
By applying a 5 rights framework to the workforce, The 5 RightS—shape, skills, size, site, and spend—gives Provident the foundation to convert company goals into a clear image of the future workforce that will be needed, which is the first step in strategic workforce planning for globalisation. For instance, Provident could base its choice of office sites abroad on things like cost-effectiveness, accessibility for clients, visible presence; brand recognition, and closeness to important residential and commercial districts.

Source: <https://www.kornferry.com/institute/the-right-workforce-today-and-tomorrow>



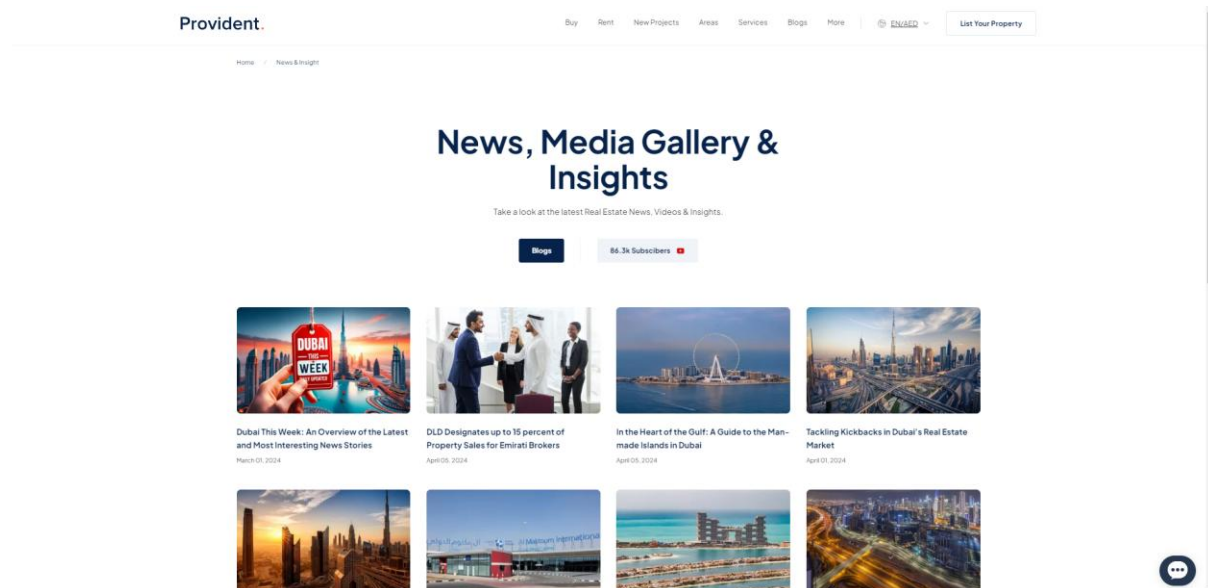
## 8. Networking Issues (Social Networks / Web 2.0 / IR 4.0)

Provident's presence in social media can help them prospect and generate leads with clients, promote listings, and establish brand awareness.



## 8.1 Review of the organisation's presence in social networks and media

Provident has a social media presence on platforms such as Facebook, Twitter, Instagram, YouTube, etc. The Provident website has an interesting social media campaign with a weekly blog post about the latest Real Estate news, videos, and insights.



To establish a social media presence, Provident must consider various key metrics. Such metrics support decision-making by revealing the success of their social media approach. I suggest Provident prioritize Awareness metrics. By using this metric, Provident can determine the number of individuals who have viewed the content. Reach is the unique number of individuals who viewed the content, whereas impressions are the total number of times it was displayed. These measurements offer insights into the exposure and visibility of Provident Estate against competitors.

Provident Estate's competitor Allsop & Allsop; a real estate firm based in Dubai has 133.4k total visits to their website in the last 3 months compared to Provident's 53.2k total visits, showing that Provident must optimize their social media strategy using metrics for brand awareness to beat the competition.

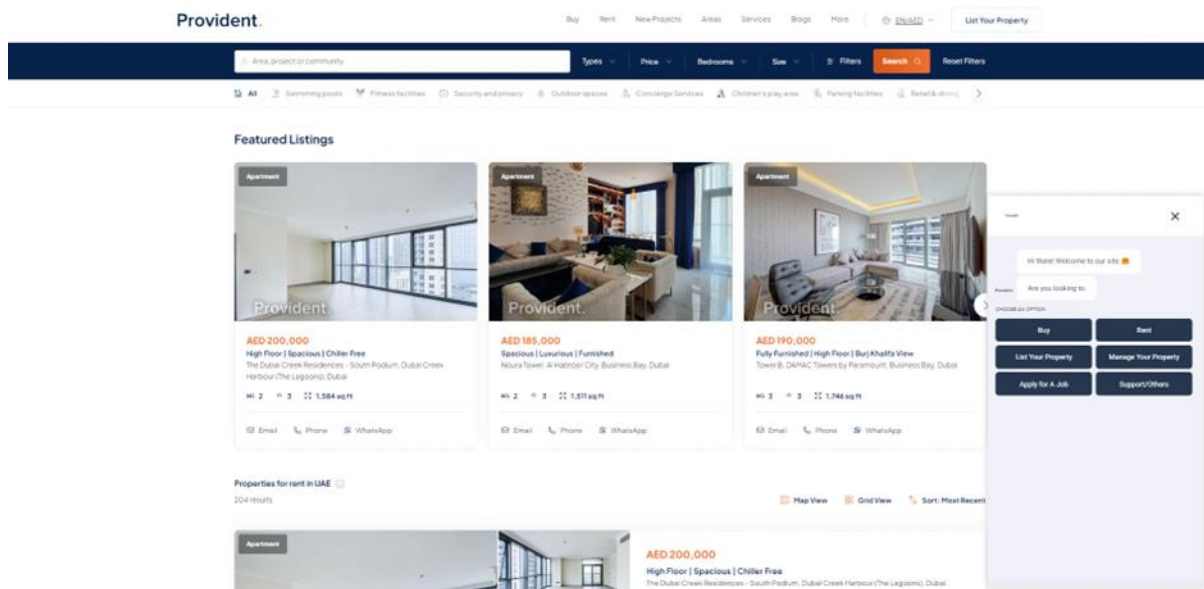


## 8.2 Review of the organisation's use of the Internet for business purposes

The most common ways an organization uses the Internet for business are:

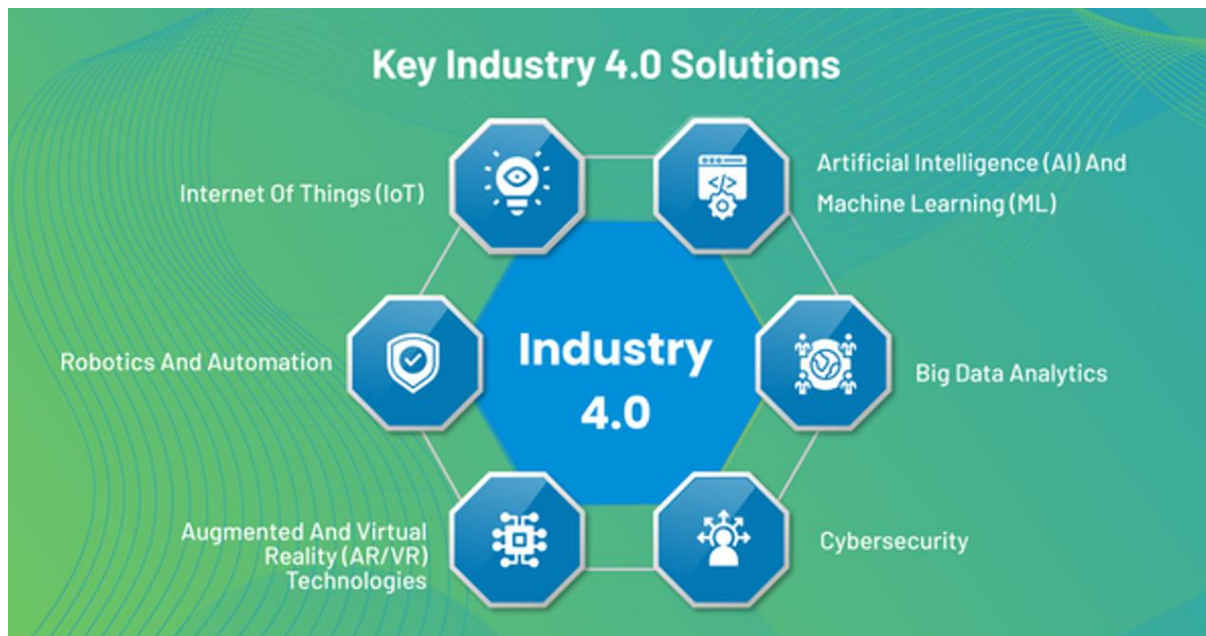
- Selling or buying products or services.
- Researching competitors.
- Monitoring and measuring customer interest.
- Finding new customers
- Promoting business.

Provident Estate uses the Internet for business in multiple ways, featuring a selection of real estate, such as townhouses, apartments, and villas up for sale or rental, on a user-friendly website. Online exploration of these listings is convenient for potential clients. Furthermore, Provident Estate puts a high priority on customer support by providing help via their website, email, and WhatsApp channels. They provide clients with access to a thorough 2023 Dubai Real Estate Sales & Trend Report to download to keep them updated. Notably, unique signature property listings with beginning prices above 5 million AED are available in their high-net-worth and private client division.



## 8.3 Review of the organisation's practices aligned towards IR 4.0

Provident Estate is transforming its real estate business by utilizing Industry 4.0 (IR 4.0) technology. This entails implementing blockchain for safe and effective transactions, utilizing VR/AR for immersive property tours and design visualization, utilizing AI and machine learning for predictive analytics to forecast market trends and investment opportunities, and deploying Robotic process automation (RPA) to automate repetitive tasks for increased productivity.



Provident can integrate social media data:

- To gain insight into customers, use social listening.
- Adapt marketing strategies by using social analytics.
- Use social data to improve CRM and provide individualised services.
- Give sales teams access to social media analytics to improve targeting.
- Keep an eye on social mentions and reviews to manage the brand's reputation.

## 9. Agile Approach to MIS

Agile project management emphasises taking an iterative approach by working with divided sprints and cycles.

This way, the work breakdown is turned into smaller sectors, accessible, manageable tasks, and user stories. Therefore, this would require gathering requirements, brief design and development of the project, complete testing, and constant adjusting throughout the project phase.

The different stages of Agile model:

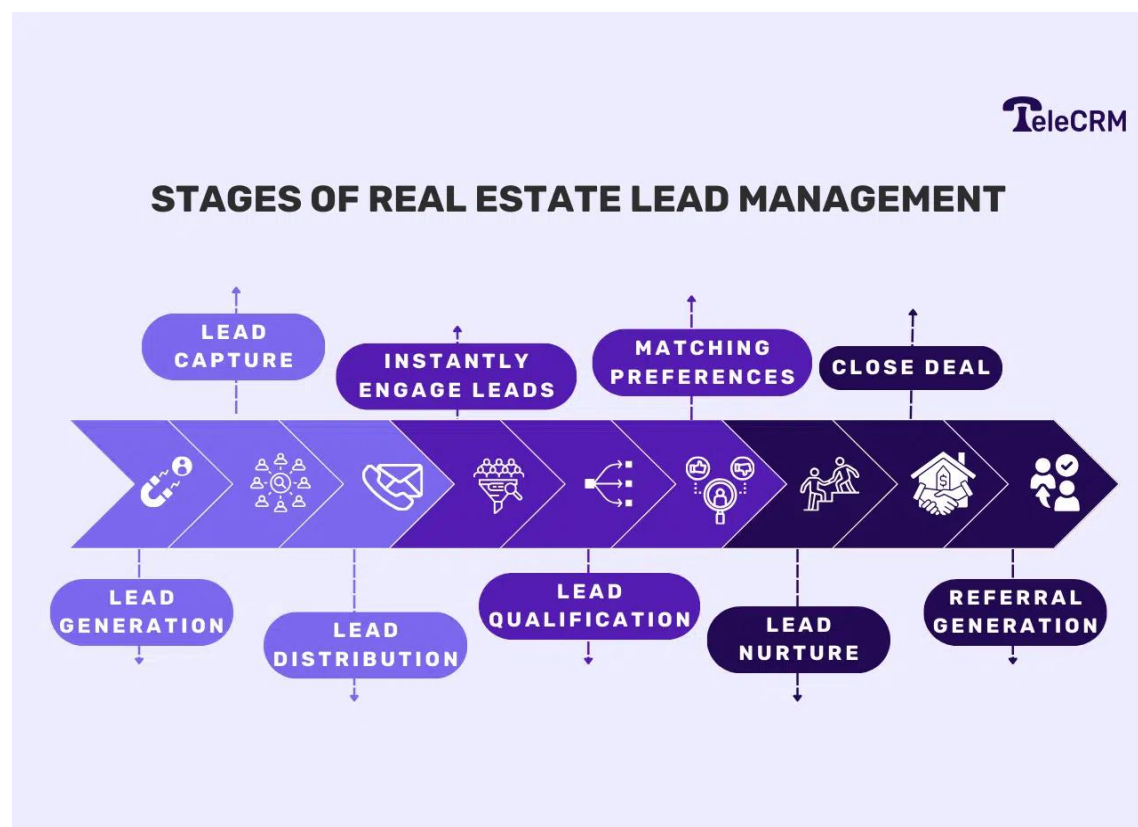
**Defining** - This is the beginning phase of the project, through which all the parties involved determine the requirements, goals, and vision.

**Designing** - This, therefore, requires creating interior layouts, sketches, and design for the real estate foundations.

**Testing** - This stage is the examination and assessment of properties during the course of development.

**Analysing** - The information on market trends, client feedback, project advancement, and financial performance must be gathered and analysed. Information is then utilised to set priorities for operations, make decisions based on data, and modify plans of action to accomplish providence's project objectives.

Provident defines the measures needed for creating customer leads. Accordingly, they design the projects through customer needs, and test accordingly. Lastly, they perform analysis of the project. Agile works in a way where you can review the progress and adjust accordingly to the plan (Noori, 2023), by creating and removing features from the project.



Kanban: Just like Lean principles, Kanban is used to optimise workflow through the process and set limitations on work in progress (WIP), which boosts productivity and eliminates inefficiencies.

Scrum: Agile project management and development framework, Scrum encourages openness, evaluation, and flexibility so departments can react swiftly according to shifting needs or objectives.

Stages of Real Estate Leads (Abdullah, 2023)








Provident Real Estates could develop a new project, but creating leads would be essential in securing clients and customer leads. Hence, they must adapt to a certain degree and frequent iterations within the project scope. Each phase will involve an inspection of the work that was produced and any required strategy adjustments such as introducing or eliminating functionality, implementing visual modifications (Noori, 2023). They may advance to their next sprint whenever the current phase is concluded. Once a phase is prepared for launch, this procedure is continued.

## **9.1 Overview of agile approaches in deployment of MIS**

The agile project approach gives the team a better understanding and visualisation of the project's performance through frequent meetings and sprint reviews.

Agile, decreases the work cycle needed to adjust and align to the market dynamics, and changes constantly. As a result, it is advantageous for Provident Real Estate because some projects they work on may involve a high degree of uncertainty, changes, and possibly increased risk (Noori, 2023).+

MIS helps to understand the strategic uses of technology in terms of Management. In our case, identifying the client requirements, property listings, managing agents to create lead opportunities and lastly managing a good relationship with the stakeholders.

Current sprint					
Current iOS version - April 4th					
	Owner	Status	Channel	Est. time	+
Implement completely different environm...		Done	Improvement	0.5 day	
Add support for deep linking in mobile app		Pending server	Feature	3 days	
Attachment scroller on main feed look...		Blocked	Bug	1 day	
Next versions					
	Owner	Status	Channel	Time est.	+
Sync unread/read tabs			Feature	1 day	
Push notifications pre-request screen		On hold	Improvement	1 day	
Add remote logging			Bug	Few hours	
Rewrite mentions component				0.5 day	

Source: <https://monday.com/blog/project-management/agile-project-management/>

Furthermore, Provident can focus on training employees with leads through comprehensive workshops on implementation of MIS with a clear focus on the objectives (UAGC Staff Member, 2023). Managers at provident require fast, reliable data in order to make rational choices, as to eliminate the challenges that may occur during the project stages.



## 9.2 Introduction of an operational plan for transforming current practices

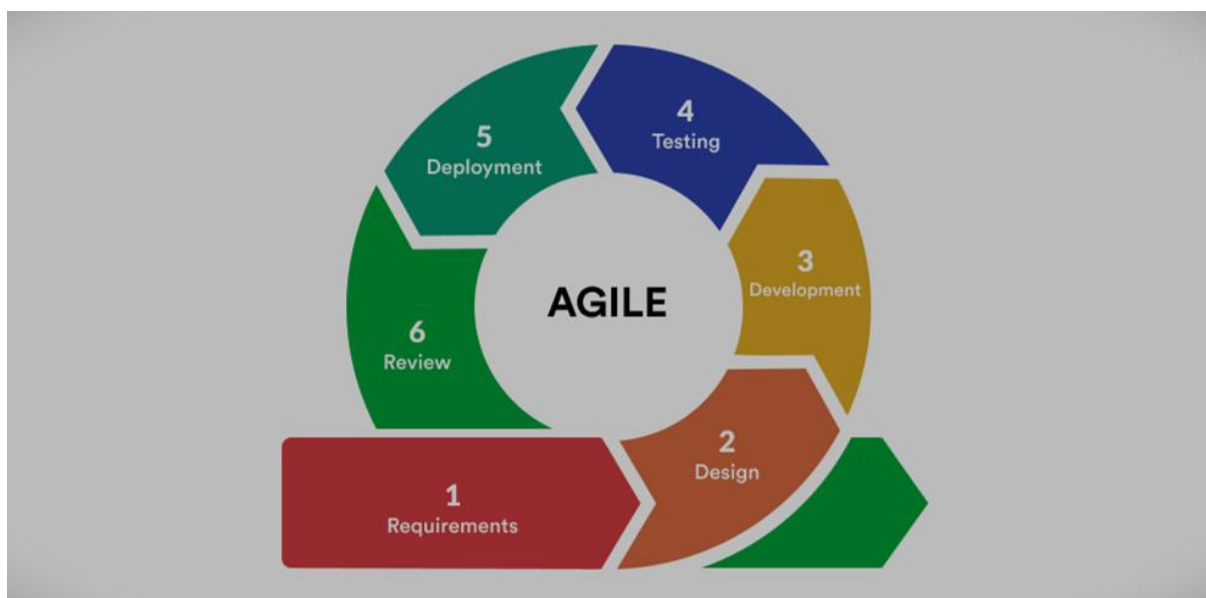
Currently, Provident manages its clients' real estate holdings, guaranteeing their financial security. They work to maximise profits and preserve goodwill between tenants and asset managers.

Providence needs to assess their Mission Statement & Vision.

With careful research the company would be able to visualise current practices thoroughly.

Provident must establish an operations strategy. It describes the actions and methodology. Additionally, It renders the procedure accessible so that the clients and staff may provide the same high-quality service.

A virtual assistant, who can handle duties like entry of information, social media interaction, appointment planning, and blog authoring, could be a reasonably priced first addition to client needs and customer leads. This arrangement saves expense by not requiring the virtual assistant to work full-time or receive benefits. But adopting technology has its drawbacks as well. Due to the lack of in-person management and face-to-face communication, managing a virtual administrative assistant is very different from managing an in-office assistant. There is plenty of potential for team growth with technological advances within Provident Real Estate.



Source: <https://www.keyrealestateresources.com/how-to-build-a-strategic-real-estate-agent-operations-plan/>

## 9.3 Description of measurable key performance indicators for the agile MIS approach

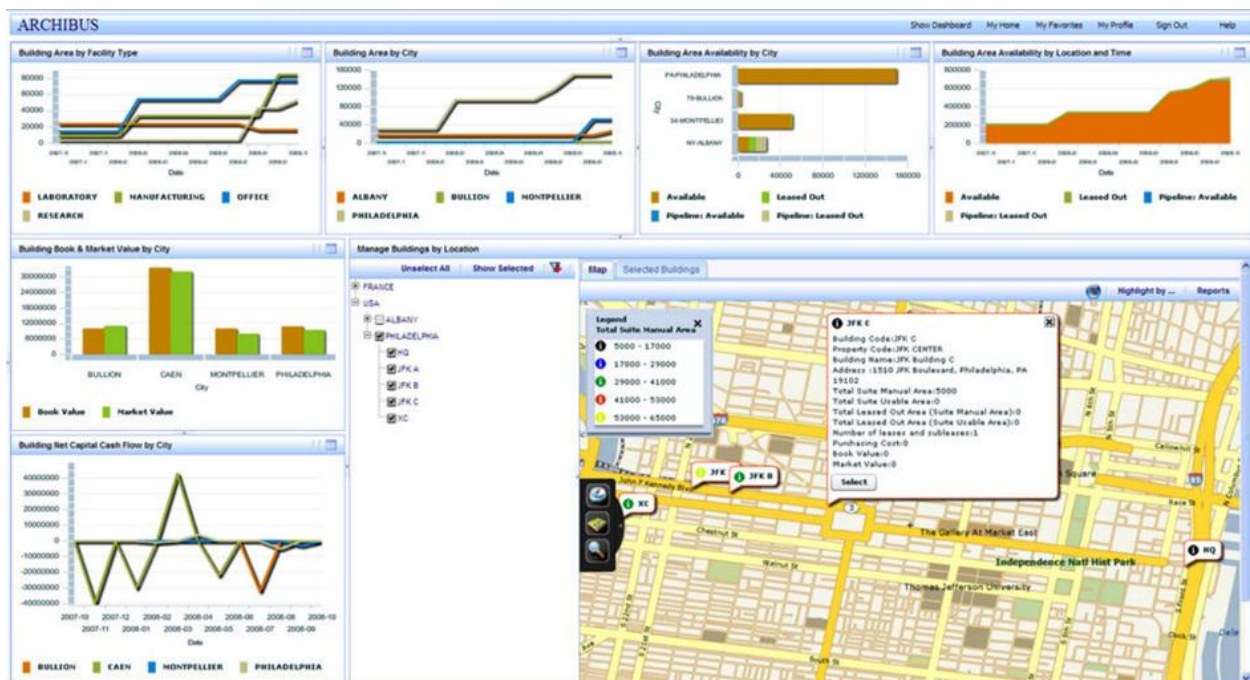
Key Performance Indicators (KPIs) serve as benchmarks that real estate managers use to track their progress in terms of time or money saved.

Managers use it to utilise various performance metrics to enhance operations and boost bottom lines across a range of industries (ARCHIBUS INC, n.d.).

The 'Client Satisfaction Score (CSAT), Defect Rate, Adaptability Index, Backlog Health, Employee Satisfaction, Cycle Time, Lead Time, Velocity, Cycle Time Distribution, and Business Value Delivered' are some of the measuring KPI Metrics associated with an Agile Management Information System (MIS).

These indicators evaluate the Agile MIS's effectiveness, agility, excellence, flexibility, and worthwhile delivery. The cycle time and Lead Time indicate sensitivity and speed, whereas Velocity gauges output. Quality is characterised by defect rate, and CSAT measures customer satisfaction. The Adaptability Index gauges how quickly one can adjust to changes while backtracking in prioritising a high-priority task.

Provident Agent's satisfaction shows teamwork and adherence to agile principles. Business Value delivers measurable, tangible consequences. Monitoring the KPIs enables Provident to analyse and adjust the success of the Agile MIS approach.



Source:

([https://www.fm-house.com/wp-content/uploads/2014/12/Key\\_Performance\\_Indicators1.pdf](https://www.fm-house.com/wp-content/uploads/2014/12/Key_Performance_Indicators1.pdf))

## **10. Impact of Information Systems on Society.**

Trust and Responsibilities: Provident has an overwhelming sense of service regarding their employees, clients, and the societies within which they operate. This entails abiding by the law, serving everyone equally, and taking into consideration whether their operations may affect society and the surroundings (Olumoye, 2013).

A vital component of Provident, but particularly in the industry, is credibility.

For Provident to establish and preserve this confidence, it must conduct itself with integrity, fairness, and transparency. Management Information systems present a significant problem in terms of privacy invasion since they can handle enormous volumes of data (Olumoye, 2013).

Provident must determine what information should be stored under their systems, therefore the establishment of accountability for information system outcomes, the establishment of standards to ensure system quality that safeguards client's safety and the safety of society, and the preservation of institutions and values deemed essential to an information society.

General Data Protection & Regulation: In terms of GDPR, Providence does not categorise under the law as Providence is situated in the middle east, However 'GDPR APPLIES' to any organisations that collect and gather data regardless of the location, it applies in cases where Providence could be gathering data and information of a European/United Kingdom Citizens regardless of their location.

## 10.1 Reflection on the ethical impact of the organisation's operations

Management Information technologies (MIS) have been profoundly impacted by the development of information technologies and the internet (Olumoye, 2013). This enabled managers worldwide for operations to be possible, improved productivity, efficiency and facilitated communication and decision-making.

Additionally, MIS have an impact on society by possibly lowering social barriers and improving information accessibility therefore they also raise moral questions about rights to privacy, property, as well as the quality of society. It is essential for Provident to comprehend these modifications to properly utilise the advantages of their management information systems.

Provident Managers in all departments need to be active in maintaining track on Provident's external operations because violations of this nature impact client's trust and their right to privacy.

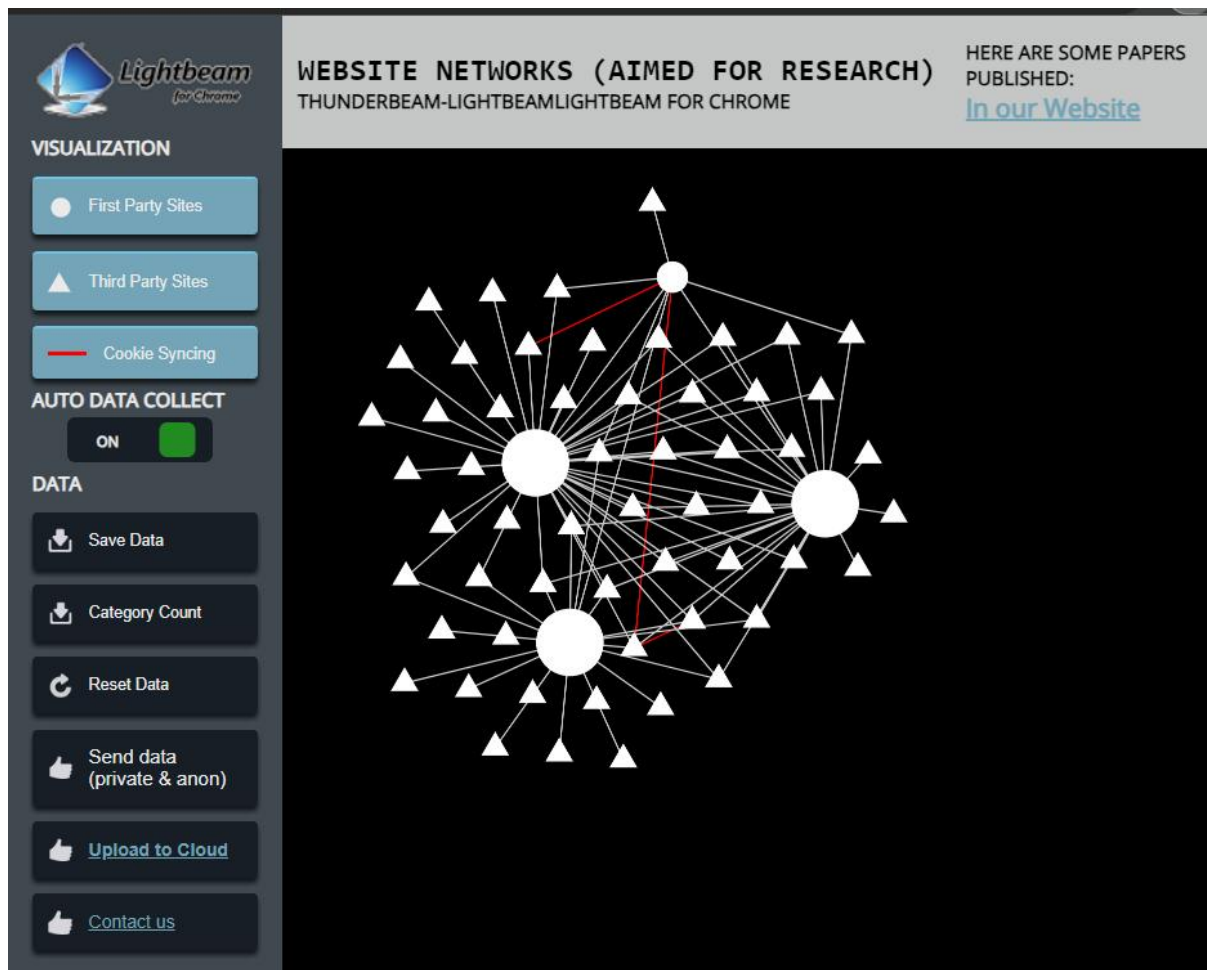
Depersonalisation, loss of privacy, and shifts in incentives cause numerous difficulties in the workplace. Reduced costs and improved goods and services are among the advantages. It is far less common knowledge that numerous middle-level managers and secretarial staff may lose their employment because of reorganising company procedures.

Competitor Analysis With Thunderbeam, by rival competitors in the industry may use third party services.

```
{
  "10004771.flis.doubleclick.net": {
    "hostname": "10004771.flis.doubleclick.net",
    "firstPartyHostnames": [
      "www.meraas.com"
    ],
    "firstParty": false,
    "thirdParties": []
  },
  "10463315.flis.doubleclick.net": {
    "hostname": "10463315.flis.doubleclick.net",
    "firstPartyHostnames": [
      "www.meraas.com"
    ],
    "firstParty": false,
    "thirdParties": []
  },
  "510001196.collect.igodigital.com": {
    "hostname": "510001196.collect.igodigital.com",
    "firstPartyHostnames": [
      "www.emaar.com",
      "properties.emaar.com"
    ],
    "firstParty": false,
    "thirdParties": []
  },
  "536001467.collect.igodigital.com": {
    "hostname": "536001467.collect.igodigital.com",
    "firstPartyHostnames": [
      "www.meraas.com"
    ],
    "firstParty": false,
    "thirdParties": []
  },
  "5966008.flis.doubleclick.net": {
    "hostname": "5966008.flis.doubleclick.net",
    "firstPartyHostnames": [
      "www.meraas.com"
    ],
    "firstParty": false,
```

The external services or resources that the website uses are known as third-party domains, whereas first-party domains are those that are directly under their control. As the host name appears on most of the analytics, third-party dependencies imply that Meraas employs a lot of

analytics. Initially, Third-party websites employ services or resources from other sources. For example, Numerous first-party hosts have connections to different domains. As an example, "properties.emaar.com" is listed as a first-party hostname on "www.emaar.com". This suggests that different departments within the same company or closely related businesses may share resources and services.



We can see that Providence uses AWS services as well as HOTJAR to access and collect customer behaviour on their website. While the other rival companies such as Emaar, Nakheel, Meeras, Dubai Properties. Etc,

## 10.2 Evaluation of the organisation's current practices towards privacy / security / safety

Providence makes use of: COPPA (Children Online Privacy Protection Act), CAN SPAM Act.

COPPA (Children Online Privacy Protection Act), is where the parents have control over the collection of personal information on their children under the age of 13 by virtue of the Children's Online Privacy Protection Act (COPPA). The COPPA Rule, which outlines what owners of websites and other online resources must do to safeguard children's security and confidentiality online, is enforced by the "Federal Trade Commission", which is the US government's consumer protection agency.

CAN SPAM Act - Providence provides recipients with the ability to request that promotional emails not be delivered to them, lays down regulations regarding promotional messages, and outlines serious consequences for breaking the law.

They also mention the policy about Personal identifiable information (PII) which is defined by UAE privacy law and information security as data that may be utilised independently or in conjunction with other data to identify, reach out to, or find a single individual, or to identify an individual within a context.

In terms of buying properties transferring ownership in legal cases could be a hassle, but in Providence Estates, conveyance agents help in assessing or over turning the ownership of the property from the buyers to the sellers, by collaborating with attorneys & legal entities to transfer titles and ownerships.

## Our Solutions

- ✓ Gifting
- ✓ Power of Attorney
- ✓ Legal Documents Translation
- ✓ Will (Property investment)
- ✓ Legal Eviction Notice
- ✓ Online POA Cancellation
- ✓ Document Attestation MOFA
- ✓ General Consulting for property transfer

This includes their solutions of Conveyancing. (Src: Provident Estate Profile)



## 10.3 Assessment of the organisation's credo in relation to CSR

Provident is steadfastly dedicated to achieving its corporate social responsibility goals (CFI, 2022), especially in charitable giving and being a part of the prestigious CR Hope Foundation is something that Provident Estate is extremely proud about, CR Hope is a nonprofit organisation that was established in Zanzibar in 2016 with the goal of helping children in the area who are impoverished and promoting recreational athletics and schooling.

Provident.

[www.providentestate.com](http://www.providentestate.com)

### We Make Smiles, Not Just Happy Homes.

Provident Estate takes immense pride in being a part of the esteemed CR Hope Foundation. A charity, non-profit initiative launched in Zanzibar in 2016, CR Hope is a foundation that provides support in the advancement of education, amateur sports and poverty relief for children of Zanzibar.

We believe in the cause because children are our future. They are our tomorrow and to support them and ensure a better future for them is our duty. At Provident, we strive to make the world a better place with each tomorrow.



(Provident Company Profile)

Since the next generation is the future, they support the cause. "They are our future; thus, it is our responsibility to help them and make sure they have a better one" as stated by the CEO of Provident Estates. At Provident, the mission is to improve every tomorrow and the world in the process. The charity supports youthful welfare, amateur athletics, and academic development in Zanzibar.

To conclude, Provident Estate has shown a significant commitment to corporate social responsibility (CSR), notably about philanthropic responsibility, as evidenced by its partnership with the CR Hope Foundation. This is in line with their CSR's overarching objectives regardless of which are aimed at ensuring that business practices are morally righteous and advantageous to society.

## **11. Intelligence and MIS (BI / AI / IE)**

The analytical power required to produce this thorough comprehension of the phenomena represented in the data, including the kind of integrated Management Information System that Integrated Information System was supposed to offer, skilfully supplied by BI systems. Nevertheless, the extent and calibre of the data marts or data warehouses that serve as its foundation might impact Business Intelligence (Rikhardsson and Yigitbasioglu, 2018).

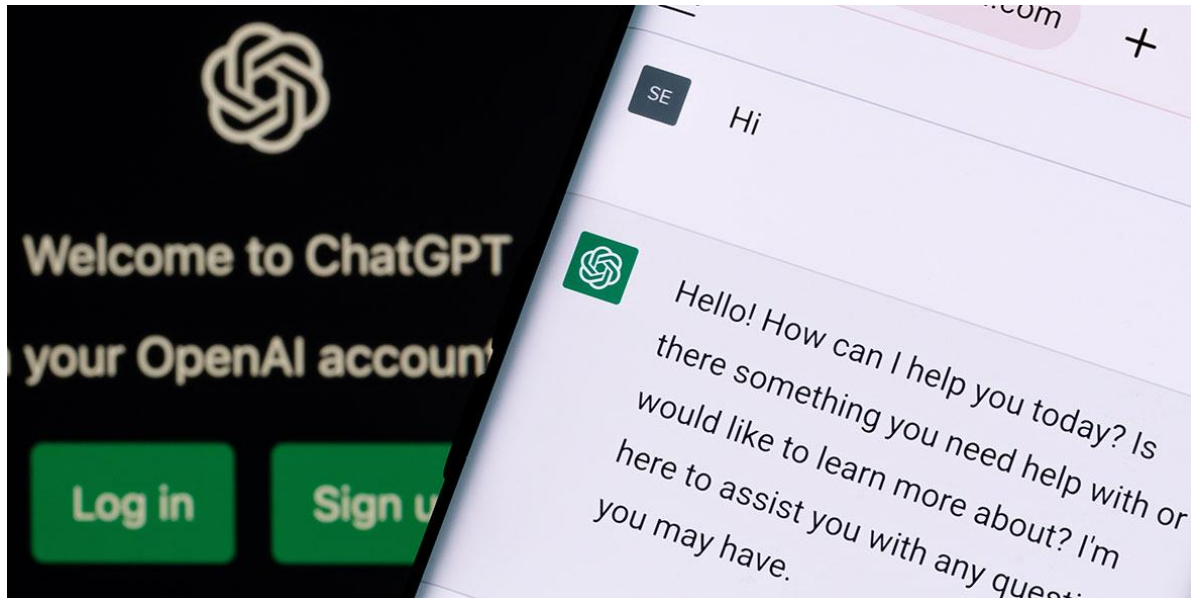
Integrating the Management Information System automates and streamlines the provision of management control information to Provident's managers at operational and strategic levels, leveraging Business Intelligence's unique analytical and combinatorial capabilities. They also contend that this integration improves the capacity to cooperatively watch on and assist with valued lead operations and organisational effectiveness (Hubspina, 2023).

Adopting AI in real estate administration does not indicate that Provident managers will no longer engage their roles in the business; instead, it may shift their involvement to a more deliberate level. The period that property managers would otherwise spend on repetitive chores, data analysis, and prediction-making is freed. AI frees them to focus on providing personalised service, handling challenging problems, and developing trusting bonds with their clients.



## 11.1 Evaluation of the organisation's maturity to integrate Business Intelligence

The advent of sophisticated artificial intelligence systems such as ChatGPT has allowed Provident Real Estate to greatly improve their online visibility.



ChatGPT (Src:<https://www.which.co.uk/news/article/what-is-chatgpt-and-is-it-safe-to-use-aF0Ba4j5xAmr>)

The development team has benefited most from this, as it has made it easier for them to find and fix specific mistakes in the code used to create websites. Furthermore, their design process has been expedited by the incorporation of artificial intelligence in design platforms like Canva, allowing them to finish assignments more quickly. With the enormous popularity of ChatGPT, Provident has been investigating moral uses for this technology to increase their productivity while utilising AI.

In fact, while conventional search engine providers like Google carefully phase out their operations, ChatGPT is already answering 80% of their requests. Their procedures have been further streamlined using MIS, which also gives them access to real-time data that is trustworthy for making strategically important choices in line with their objectives.

Provident Real Estate has become a data-driven company that can offer better customer service to its clients while also streamlining internal operations thanks to the combination of MIS and AI technologies like ChatGPT as mentioned in the interview with Mr Ahmed, Marketing Manager, Provident.

## **11.2 Assessment of any opportunities for application of Artificial Intelligence solutions**

Applying predictive analytics to the Provident real estate industry, with the use of real estate analytics, entails gathering, interpreting, and evaluating data from a variety of sources. This approach aims to extract useful data and patterns that can guide behaviours and choices related to investments.

For example, they may utilise real estate analytics to determine the current and potential worth of a property by considering its attributes, place, and its status in the current market.

They could also rank and contrast multiple features based on the preferences and criteria. Furthermore, they can use variations in supply and demand to determine when it is ideal to buy or sell real estate. Furthermore, by examining consumer behaviour, financial status, and rise in population, therefore identify the emerging markets and opportunities (LinkedIn et al., 2024).

In addition, the drawbacks of implementing AI for Provident is that while gathering and utilising data, ethical and legal considerations such as protecting the security and privacy of information sources and clients as well as adhering to regulatory requirements should be considered. Finally, data must be updated often to account for market dynamics and developments.

## **11.3 Assessment of the organisation's capacity to exploit Intelligent Environments**

The addition of Intelligent Environments (IEs) may greatly improve the security services that Provident Real Estate offers. Stakeholders' safety comes first and foremost. Clients or their tenants may live in a safer environment with improved security features like alarm systems, smart locks, and CCTV systems (Vigderman and Turner, 2024).

Systems with intelligent security would have advanced access control features. Additionally, smart security systems can help with property management and maintenance (Vigderman and Turner, 2024).

They can keep an eye on the condition of different systems and notify property management of any problems that require attention. Through the integration of these cutting-edge security technologies, Provident Real Estate can improve their total service offering by giving their tenants a safer community and more secure living environment. Utilising Intelligent Environments can greatly enhance the services offered.

These systems could range from IOT devices that can integrate within a connection from a central control device. Safety plays a key role for investors to ease their mind of property damages, assurance, and long-term development goals for the properties.

## 12. Conclusions

To summarise this report, the User stories and more achievable tasks are created from the work breakdown. This includes gathering requirements, creating a brief design, developing the project, thoroughly testing it, and making improvements as needed during the project.. Provident concentrates on providing thorough workshops on the implementation of Management Information Systems (MIS) to staff members.

To make logical decisions and address obstacles during project phases, managers need access to quick, accurate data. Crucial choices about how to store information in their systems are faced by Provident in Section 10. To protect clients and society, these decisions must be made about establishing accountability for information system outcomes, maintaining the institutions and values that are fundamental to an information society, and guaranteeing system quality.

AI earns the trust of their clients by automating routinely operating duties, data analysis, and forecasts. Provident Real Estate, who is now data-driven, uses ChatGPT and Management Information Systems (MIS) to improve customer service and optimise internal operations

## **12.1 Summary of main suggestions for the organisation**

### **Key Suggestion for Section 7**

I suggest Provident Estate to enter global markets with a clear plan, that focuses on preparing the workforce and consider franchising the company abroad.

### **Key Suggestion for Section 8**

Social media data can be implemented with Provident's CRM to not only improve customer service by tracking and responding to clients but also establish brand awareness due by targeting the ideal client on Facebook, Instagram, etc with engaging content that shows the most iconic property listings.

### **Key Suggestion for Section 9**

A cost-effective solution is to introduce a virtual assistant to help with data entry, social media engagement, appointment scheduling, and blog writing. However, because there isn't any face-to-face interaction, supervising a virtual assistant is very different from supervising an in-office assistant. Provident Real Estate's technological innovations present several opportunities for team expansion.

### **Key Suggestion for Section 10**

To preserve client privacy and trust, Provident management from all departments need to keep a close eye on external activities. Provident Estate has a noteworthy dedication to corporate social responsibility (CSR), especially through its involvement in charitable endeavours such as its collaboration with the CR Hope Foundation. Ethical and socially responsible company practices are given priority in their CSR goals.

### **Key Suggestion for Section 11**

To take market dynamics into account, regular data updates are necessary. These AI systems might be anything from Internet of Things gadgets that are incorporated into CCUs. It is vital to ensure safety. Nevertheless, there are difficulties in putting AI into practice.

## **12.2 Identification of main constraints in applying proposed plans**

### **Key Suggestion for Section 7**

Entering a global market ill-prepared may lead to unforeseen financial risks such as expenses on international taxes, talent acquisition or market research. Training the workforce for globalisation requires significant investment, it takes resources and time to educate employees on international markets. Challenges arise in coordinating and communicating with a franchise of Provident due to language barriers and different time zones.

### **Key Suggestion for Section 8**

The data collected to be implemented with the CRM must be handled carefully to ensure compliance with data protection laws and avert a security breach. Social media data can be unreliable due to spam accounts, incomplete profiles, etc. and this can lead to inaccuracies and miscalculations when implementing with the CRM of Provident.

### **Key drawback for Section 9**

As Mr. Ahmad stated, certain staff members might be concerned about digitization and consider virtual assistants as an imminent risk to their employment.

### **Key drawback for Section 10**

Profit-driven decisions may occasionally clash with the prioritisation of moral and socially conscious behaviour. Provident has to strike a balance between advancing its brand through CSR initiatives and preserving its financial stability.

### **Key drawback for Section 11**

It is more complex than theoretical models to implement AI in practical situations and the conflicting act includes dealing with scaling issues, unexpected operating barriers, and technology restrictions. A Legal and Ethical Perspective: AI choices have an effect on people and society; hence they need to be carefully considered from an ethical and legal standpoint. Achieving a Balance, managing innovation while abiding to ethical standards, such as maintaining confidentiality and transparency.

## **12.3 Reflection on lessons learnt for the members of the start-up.**

In this report my pair member and I had learned that there is an extensive process in creating lead generation amongst the real estate industry, with such competition within the industry it takes an analytical point of view to foresee all the strategies that such organisation must decide to prove efficiency in the market. Along with that, project management optimises a key role in decision making for each business and product objectives. The revolution of implementing Artificial Intelligence in other aspects of the business operations.

## **Appendix A – Interview questions**

N/A – this was included in the Group Reports.

## Appendix B – Individual reflection

### Member 1 – M00794367 Adrian Jackson, MORILLA

#### Topic 7 – Globalisation Issues (marketplaces / infrastructure / workforce)

Here, we examine the important facets of Management Information Systems (MIS). These technologies help managers make decisions within organisations by giving them access to crucial data. MIS produces reports, visualises data, and gets ready for data analysis. Additionally, it makes information extraction possible for non-technical users with interactive dashboards, graphs, and charts. We also explore cost-cutting tactics, worldwide expansion, and the economic drivers of global work. Entering foreign markets requires developing strategic planning, operationalizing commercialization initiatives, and conceptualising and embracing new markets. Apple is one company that uses suppliers from throughout the world to design its products even though it is based in the US. Lastly, we discuss corporate global strategy, which is an important phase of company growth.

#### Topic 8 – Networking Issues (Social Networks / Web 2.0 / IR 4.0)

In this topic I learned various ways to understand the impact of social media presence for an organisation. The social media analytics helps the business to engage, communicate & reach their customers. In this way, it's a good practice to undermine where the targeted customer users are operating, and the platforms that they use. In this topic I used BrandMentions to analyse the engagements and performed a sentimental analysis to identify ratings and mentions of various social media platforms.

#### Topic 9 – Agile Approach to MIS

Iterative approaches are promoted by agile project management, which divides work into manageable chunks and cycles called sprints. Compiling requirements, quick design and development, thorough testing, and ongoing modifications during the project's duration are all part of this technique.

In order to effectively accomplish the tasks at hand, the Agile approach consists of the following stages: defining, which determines project requirements and goals; designing, which creates arrangements and concepts for real estate foundations; testing, which examines properties during development; and analysing, which gathers market trends, customer input, and monetary performance data to set focus and modify plans. Kaizen: Similar to Lean concepts, Kaizen maximises work flow throughout the process and places restrictions on work-in-progress (WIP), which increases output and gets rid of redundancies.



### Topic 10 – Impact of Information Systems on Society (ethics / privacy / security / CSR)

For Provident, trust and accountability are fundamental principles that shape their relationships with staff members, customers, and the communities they serve. This dedication means following the law, treating everyone equally, and taking into account the effects on society and the environment. Especially in the sector, where integrity, justice, and openness are required in all activities, credibility is a fundamental value of Provident. However, because Management Information Systems handle enormous volumes of data, their extensive capabilities present problems with respect to privacy violations.

In addition to creating accountability for system outcomes and putting rules in place to guarantee data security and public safety, providers need to carefully choose what information to store in their systems. Provident is subject to regulation by the General Data Protection Regulation (GDPR) even though it is located in the Middle East and collects data from European or United Kingdom citizens, regardless of the location.

### Topic 11 – Intelligence and MIS (BI / AI / IE)

In this topic I recognised that organisations rely heavily on Management Information Systems (MIS). They gather information from a variety of sources and convert it into crucial facts for making decisions. To visualise data, generate reports, and get ready for data analysis, Providence, for scenario, employs MIS. Non-technical users can create interactive dashboards, graphs, and charts, as well as extract data using this technology. When every aspect is considered, MIS supports effective operations by offering actionable insights and enabling knowledgeable decisions within the company.

The real estate sector depends heavily on a thorough grasp of data phenomena, which is made possible by integrated Management Information solutions and strengthened by Business Intelligence (BI) solutions. But these technologies' efficacy is closely tied to the size and calibre of the underlying data marts and data warehouses. Through the use of business intelligence tools, management information systems integration improves and automates the distribution of management control information to Provident's managers at both the operational and strategic levels. This connection improves organisational efficiency while also facilitating cooperative monitoring of critical activities. Though they are shifting to a more strategic level, managers' functions are still crucial. Managers may refocus on delivering individualised services by giving AI control over repetitive operations, data analysis, and prediction-making.

## **Member 2 – M00848104 Awais, ALI**

### Topic 7 – Globalisation Issues (marketplaces / infrastructure / workforce)

For this topic, I understood the five strategies proposed by Cunningham (1986) for entry into new foreign markets. The challenges and obstacles to global business systems such as language barriers. The 5 rights framework is utilised to keep in mind goals for the future of the workforce

### Topic 8 – Networking Issues (Social Networks / Web 2.0 / IR 4.0)

For this topic, I looked into how incorporating a social media presence is an important aspect in establishing brand awareness. The current state of the internet is web 2.0 and applications such as Facebook, Tiktok, X (Twitter) allow users to interact with the web page instead of just viewing it. Provident uses the internet for business purposes by selling and buying services online, such as property listings.

Provident utilizes IR 4.0 by hosting immersive property tours using Augmented reality; the client can have a 3d view of the property using their phone camera. Social media data can be leveraged to improve client relationships. During our weekly GOALs, we used a web analytics software called “Similarweb” to understand how much traffic the website of our organisation gets, we compared them to the competitors to understand the engagement rates. For another weekly GOAL, we performed hashtag analysis and sentimental analysis on our organisation using a website called “Brandmentions”.

### Topic 9 – Agile Approach to MIS

For this topic, we looked into agile project management by dividing the work into chunks and cycles called sprint. This technique involves compiling requirements, rapid design and development, thorough testing, and continuous modifications throughout the project's duration.

To effectively accomplish tasks, the Agile approach consists of stages such as defining project requirements and goals, designing real estate arrangements and concepts, testing properties during development, and analysing market trends, customer input, and financial performance data to adjust plans.

Additionally, Kaizen optimises workflow by limiting work-in-progress (WIP), leading to elimination of repositions and efficiency in output.

### Topic 10 – Impact of Information Systems on Society (ethics / privacy / security / CSR)

For this topic, we understood that in their interactions with staff, clients, and communities, Provident prioritizes credibility, trust, and responsibility. Their top priorities are societal impact, equitable treatment, and legal compliance. But privacy is an issue because of the vast possibilities of management information systems.

Although Provident is not immediately impacted by GDPR, it recognizes that it should be considered when gathering data on individuals of the United Kingdom or Europe, wherever they may be.

During our weekly GOALS, we researched on our organisation's ethics and privacy policy to figure out what kind of personal information do they collect from their clients, they adhere to the local laws on data protection such as incorporation of the COPPA rule

#### Topic 11 – Intelligence and MIS (BI / AI / IE)

For this topic, we looked into how Management Information Systems (MIS) are critical to an organization's ability to collect data and transform it into insights that can be used to make decisions. Through interactive dashboards and data extraction, Providence uses MIS to visualize data, create reports, and assist with data analysis.

Well-informed decision-making and productive operations are supported by effective MIS implementation. In the real estate industry, artificial intelligence (AI) can automate tedious operations so managers can concentrate on key duties and tailored services. Integrated MIS and business intelligence (BI) solutions improve data interpretation.

For our weekly GOALS, we took a dive into Business Intelligence by predicting a dataset. We had to figure out what kind of distribution it could be such as exponential, linear, etc. and calculate the R Square value and Equation.

## Appendix C – Further evidence

N/a

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