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Market segmentation in occupancy analytics and space management business-to-business marketing

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ABSTRACT:

Customers tend to purchase products and services that offer superior value for money. In order to meet customer needs and offer competitive value, segmentation is very important to be considered in an inventive way for successful and sustainable business. Segmentation plays a key role in business-to-business and business-to-consumer markets.

This research analyses two success case companies on their occupancy analytics and space management offerings from the perspective of market segmentation and business-to-business marketing by the use of secondary data.

The study covers Buyer Behaviour, Market Segmentation and Information Technology (IT) network development in Business to Business (B2B). The focus is on analysing potential customer purchasing decisions in B2B to form sales strategies to meet respective segment needs. It also classifies precise industry within a market for customized marketing, sales and services according to the needs. The study findings are presented after data analysis with the model derived from literature together with the key theories.

The empirical section of the study is analysing two success case companies. The secondary data of the case companies was used then qualitative deductive content analysis was carried out. To reach its conclusions, the study utilized the traditional research whereby data was analysed to find what it reveals about research questions and linking it to the known theories.

The success case companies offer occupancy analytics solutions to different kinds of organizations including hospitals, office spaces and warehouses. Among other things, they make different sensors with emphasis of wired technology by one company (XY Sense) and wireless technology by the other (Haltian). The companies demonstrate application of B2B principles including effective segmentation of their customers based on needs, technology, characteristics and decision making power. Moreover, they have used different ways to make their products and more appealing to their customers by personalizing the products, use unique technology and partnering with others including competitors for a win-win situation. They have also prioritized privacy and security of their customers which has been an area of concern for many users.

The findings from this study emphasize the importance of market segmentation, value positioning, privacy & security consideration in this era of advancing technology and dynamics in occupancy analytics and space management.

KEYWORDS: Market Research, Domestic Market, Business to Business Marketing, IT Network Services, Customer Attraction and Retention

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1 Introduction

This chapter provides understanding of key elements of real-time IT networks, space management IT services and customer segments. The introduction chapter involves comprehensive overview of the thesis topic. First, research background is described, followed by the research approach and research questions are stated. Finally, thesis structure is introduced for the readers.

Thesis study focuses on case companies Haltian and XY Sense. The Haltian is an Information Technology Company dealing with innovation, engineering and the Internet of Things (IoT). Haltian overall target concept is real-time IT networks that integrate occupancy monitoring, analytics and space management. XY Sense is occupancy intelligence platform that offers live occupancy data, rich analytics and AI-powered sensors for corporate real estate teams with prioritized customer privacy.

The desirable solution is to define the market segments and value required by customers. The research targets on the business-to-business market where research study is qualitative study, data is gathered through secondary data from Haltian and XY Sense companies. Segmentation analysis assists in customer segments categorization within the market based to target suitable customer segments served by occupancy analytics and space management IT services.

Real-time IT networks services aim to support the prevention of issues before they escalate and ensure systems are optimized and up to date for reliable performance. IT Services refer to the technical expertise application to support organizations manage, create, optimize and access information. These services include technical support, data management, IT security, software development, cloud services and network security. The goal of IT services is to provide technical solutions to protect information security, increase efficiency, reduce costs and provide competitive advantage.

Customer Segmentation refers to customers organization strategy that groups them based on shared preferences, characteristics and behaviours, with the aim to deliver applicable experiences to targeted segment.

Occupancy management and monitoring supports businesses optimization for the use of their office spaces to ensure every square foot provides company's success. Occupancy management provide real-time data insights that enable better decision making. Occupancy management and analytics is more than tracking office occupancy, it demands monitoring space utilization, enhance energy efficiency and ensures employees have better workspaces to maximize productivity, where businesses guarantee complying with safety regulations, cost reduction, maximize productivity, enhance space allocation as well as support employee's well-being.

1.1 Research Background

Marketing segments can be formed using various methods including based on either qualitatively inferred solutions or quantitative studies of individual and business consumers. Depending on various situations, this can from time to time make primarily use organization's existing customer classifications or make completely different classifications (Dibb & Simkin, 2008).

Possibility for new business opportunities may be explored by administrators from re-evaluating ways in defining their market segments. According to McDonald and Dunbar, "it then moves on to identifying the appropriate objectives and strategies for these segments and how segmentation fits into the marketing plan" (McDonald & Dunbar, 2012: page 22). "Segmentation is a creative and iterative process, the purpose of which is to satisfy customer needs more closely" and deliver sustainable competitive advantage for the company (McDonald & Dunbar, 2012: page 22). It is defined by the customers' needs, not the company's and should be revisited periodically. The process is as applicable to business-to-business markets as it is to business-to-consumer markets.

Both these markets consist of customers looking for the proposition that best meets their needs at a reasonable price which may relatively be lower as compared to value being offered. Segmentation plays role in identification of other potential opportunities for products, services and markets. This can be achieved through investigation of value proposition (need) per segment. Segmentation is considered to be the foundation for effective marketing plan hence for a successful business. The importance of segmentation to any business should not be underrated (McDonald & Dunbar, 2012).

Effective segmentation promotes resource maximization and easier management of diverse customers as emphasized by marketing experts who defined market segmentation as the cornerstone of modern marketing. Segmentation enhances effective and better-targeted marketing programs. It has been noted that successful organizations stress on their value positions over their competitors. The resulting target segment strategy brings clarity to the organization's decision making and resource utilization. For cost effective business running, market segmentation helps to identify segments and hence prioritize a feasible target (i.e. segments that attract the most sales and market attention) for it is quite impractical to meet the needs of all segments by a single organization (Dibb & Simkin, 2008).

It shows that the forces driving organizations and customers interests and inspiration to co-develop customer needs change over time, thus redefining the target and scope of solving and creating failure risks. Customers present problems, organizations respond based on customer feasibility specific solution and future solutions in a wide market. Then organizations aim to standardize successful solutions across markets. Customers prefer close relationship and unique solutions, so they can share development costs with competitors and expose organizations to competition to avoid lock-in effects. However, changes are not necessarily deliberate, and market dynamics may be difficult to predict (Ford, Gadde, Håkansson, & Snehota, 2003).

1.2 Research Questions

The thesis is guided by the following research questions:

What are the customer segments served by occupancy analytics and space management IT services?

What are the value propositions offered by case companies?

1.3 Objective

The aim of this research was to analyse two success case companies on their occupancy analytics and space management offerings from the perspective of market segmentation and business-to-business marketing by the use of secondary data.

2 Literature review

This section focuses on literature review and is divided into three subsections namely market segmentation, technology developments in B2B services in the IT and occupancy analytics & space management.

2.1 Market Segmentation

Conducting effective segmentation, organizations can identify their customers' characteristics as well as products needs and buying behaviour (Dibb & Simkin, 2008). Such understanding includes customers' perceptions of competing products, decision making, purchasing criteria, influences and the role of others. All organizations must have better understanding of customers, is the first step towards customer satisfaction. Organizations are more likely to retain customers when satisfying them. Though in reality, understanding customers and delivering customers' needs is not always easy. Building solid foundations on understanding customers, organizations have an advantage in the segmentation stakes to develop effective marketing.

According to Dibb and Simkin (2008) different literature reveal information on understanding customers as reported by Bamossy et al. (2006), Blackwell and Engel (2005) for consumer markets and Hutt and Speh (2006) and Ford (2001) for business markets (Solomon, Bamossy, Askegaard, & Hogg, 2006) (Blackwell, Miniard, & Engel, 2005) (Hutt & Speh, 2006). They have put the emphasis on characteristics and profile of the targeted consumers, product purchasing behaviour according to perceived value (Key Customer Values-KVCs) from customers' attitude on the product to decision making. The decision-making process and factors that influence these buying decision processes are as seen in Figure 1 (Dibb & Simkin, 2008).

Buying process for business involve "need recognition, development of product and supplier specifications, search for products and suppliers, evaluation of products relative

to specifications, selection and ordering of suitable products, and post-purchase evaluation of product and supplier performance" (Dibb & Simkin, 2008: page 58). Business-to-business model and consumer model principles are similar however influencing factors tend to differ which is an important part to be considered. Buying of products and services by industrial organizations may be done to support manufacture of other goods or services required. For example, Cadbury buy cocoa powder and sugar to produce chocolate and software for administrative purposes. This is done by organizations operating as resellers that buy goods to sell to other customers e.g. Wal-Mart and Gap. They add value to product without changing products' nature for instance "wraparound". Institutional markets such as hospitals, charities and educational establishments purchase products and services to support their core activities (Dibb & Simkin, 2008).

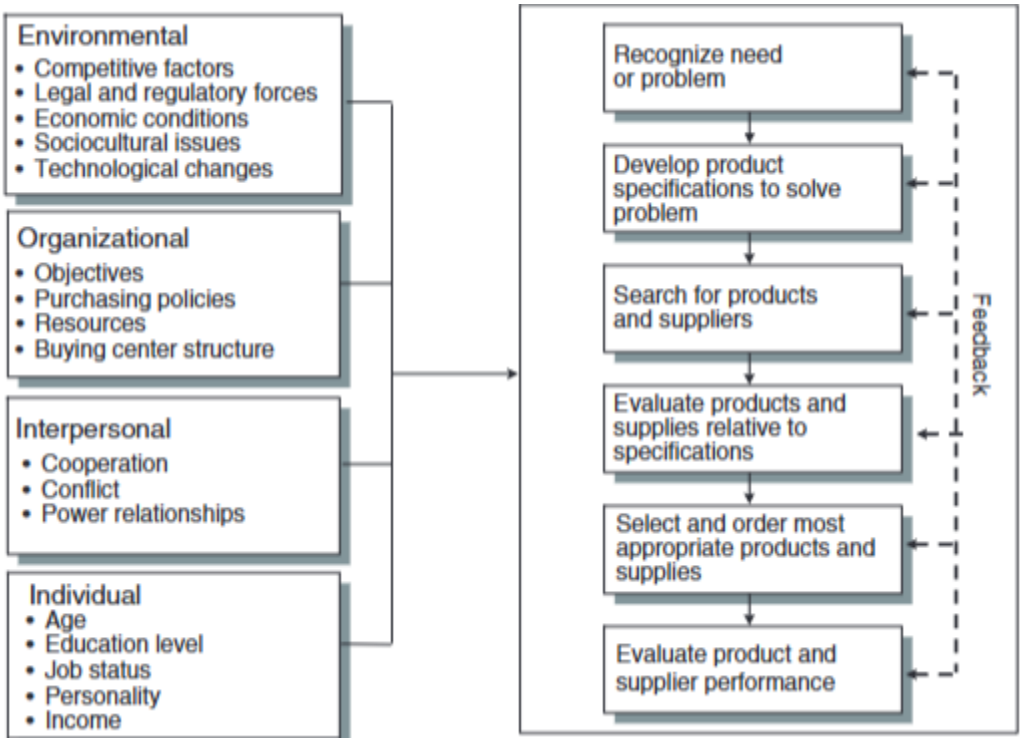

Figure 1. Business-to-Business Buying Decision Process (Source: Dibb & Simkin, 2008)

It is necessary to understand that despite similarities, business-to-business markets and consumer markets vary in many ways which in turn affect buying decisions making process. In consumer markets, when a need is recognized the buying process takes place

for instance, regular reference update matching recent publication for a library or manufacturers replacing worn parts on production machinery. Business-to-business buying process typically requires establishing detailed product requirements and specifications to satisfy the need. In this stage, according to Dibb & Simkin (2008), there are more formality in the business buying process than in consumer markets. Also, “most organizations have established policies and procedures that must be followed” (Dibb & Simkin, 2008: page 61).

To have effective marketing strategies, organizations must be capable to answer key customer related questions. They need to know the needs of each customer type or group in the product or service they require. According to Dibb and Simkin (2008), organizations must know the nature of buying process and understand the factors influencing the buying process. Only customer-oriented organizations can provide insights of business customer behaviour. These insights provide important foundations in conducting market segmentation. However, such knowledge is not only for market segmentation, but for customer retention and customer satisfaction. The Dibb/Simkin buying concept illustrated in Figure 2 is a tool for organizing customers information that organizations utilize for segmentation. This tool ensures the “must know” aspects regarding business customers are identified and presented in a cleared summary format. The “must know” aspects involve customer needs (KCVs), buying centre, buying process and buying influencing factors.

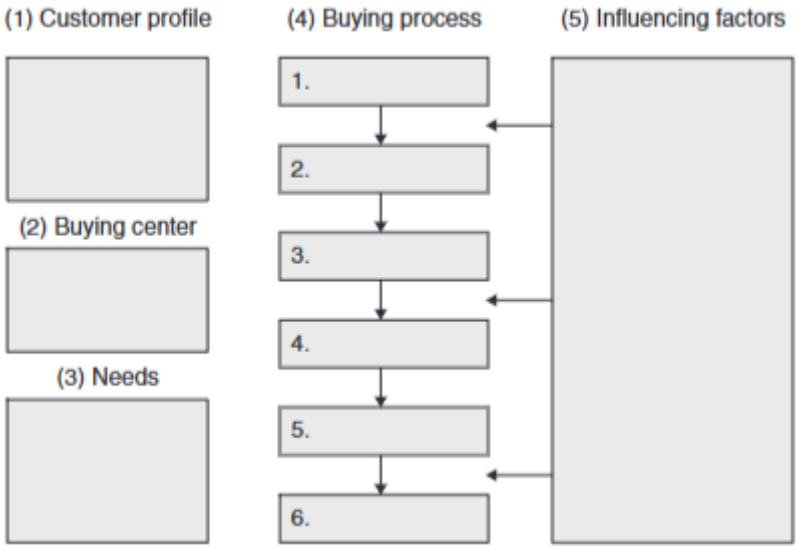

Figure 2. Buying Proforma (Source: Dibb & Simkin, 2008)

Organizations using the proforma for market segmentation (Figure 2), provides an idea whether existing segments make sense in terms of customer needs and buying patterns. The proforma must be completed for each customer segment by developing Key Customer Values (KCVs), the buying centre, the buying process, and buying influencing factors. All organizations must strive for excellence in understanding customers (Dibb & Simkin, 2008).

In their book, McDonald and Dunbar (2012) reported that market segmentation was suggested to be replaced by one-to-one marketing for customer relationship management (CRM) and relationship marketing . They emphasized on the importance of segmentation for a successful and cost effective marketing "trying to build a home without engineering measures or an architect's plan" (Mcdonald & Dunbar, 2012: page 9). This further accentuates on segmentation as a building block for successful business to business marketing.

The fact that a market is composed of varying segments, acknowledging that all customers are not alike, and that the market is comprising of groups or segments. Having recognised this fact, that people are different in the need for goods and services, with the aid of market segmentation, customers (or potential customers) are divided into

different groups, or segments, within which consumers are similar in their market characteristics. In business-to-business markets, customers are often segmented by means of business classification and therefore all businesses in the same sector (for example, financial services) have the same needs and are likely to answer to the same proposition. This method might be ignoring any/all the following: Those various divisions and departments that are behind is business description may all have different uses for the product or service that the market provides. The needs of, for example, advertising and promotion departments are probably consistent across businesses. Even in one division of a company there might well be different uses of the product or service the market provide which in turn might be subject to different specifications. (McDonald & Dunbar, 2012) Segmenting across business classification lines presumes that all companies within a classification hire the same people with the same values. Obviously, businesses don't purchase; it's their employees you must sell to! (McDonald & Dunbar, 2012: page 12).

Demographics are not a segment by themselves, as they don't define the job a segment needs to do, but they are a critical player in the task of segmentation. This prior knowledge of customers can be employed to describe the profiling characteristics of customers belonging to corresponding segments. Put another way, demographics lets us know who is in each segment which in turn will let you know how to reach them.

To some companies, this case of "having to get with what customers already knew" is ages old. According to McDonald and Dunbar (2012), a "classic' example being the introduction of New Coke' by The Coca Cola Company in 1985 to replace 'Coke' with the message that it was giving "better taste" of the product. 'New Coke' failed to satisfy their customer base, in particular the emotional relationship they had with the original brand, and the Coca Cola Company eventually succumbed to customer demand and reintroduced 'Coke' as 'Coke Classic' soon after their introduction of a replacement. The key point is that all-powerful multinationals can also get a taste of what they deserve if they forget the power of the customer. (This is not so strange, however, since customers

segment and do not categorize themselves, being interested in propositions that serve their needs by providing the benefits they seek and at a price they perceive as superior value for money.) If businesses are to control the potential in their markets the emphasis in segmentation projects should be on customers and their needs.

Several organisations stumble across slight modifications in their various markets rendering the product virtually outdated. In consumer product industries, there are many companies which are just coming to realise that their product management categories have permitted their key customers to take the lead, and they are now changing backwards to focus on marketing activity around key customer groupings rather than individual products. Geographical set up segmentation models are far from reality of international markets. Standard segmentation systems from third party organisations in the industry generally, if ever, contain the information an individual company needs to create a substantial competitive edge. Even if the market benefit from the advantages they bring today, their competitors can purchase them tomorrow and quickly close in on them. Overall, the companies buying these schemes have been deprived of a vision of the market.

In fact, the most significant barrier to successfully adopting a segmented approach to marketing can be the company itself and the amount of resistance against such a fundamental organisational shift (McDonald & Dunbar, 2012). Investing time in early identification of problems, and design and testing of proposals for winning the hearts and minds of those in authority will be an investment more than justified. In many cases it is often about getting them involved in the project, preferably as part of the wider team, but at least involving them or seeking their opinion and keeping them up to date.

It is better to understand the markets and monitor overall market performance (McDonald & Dunbar, 2012). The modification of market intelligence for internal reporting will inevitably result in misinformation. Never depend on the opinions of the sales and marketing staff to define markets and establish customer requirements. It is

necessary to invest in market research to give reliable segmentation and strategy as well as developing services and products.

According to McDonald & Dunbar (2012), an understanding of the various market segments is useful for designing offers but it is not necessary to code all customers to correct segment at the beginning. When uncertain, show them that new versions can be of a different offer and thus place themselves. Equally, prepare to accept that within a large corporation a proportion of buyers may fit into alternative market segments, but the variance will be on one or maybe two buying criteria not all the buying criteria.

It is important to first define the current and future markets organization and their relationship to customer segments with similar needs. These are affected by the organization's objectives and asset base. Data on the markets will be gathered including the market size and growth with projections for the future (McDonald & Dunbar, 2012). According to the authors, after defining the market, it is important to understand what value customers are looking for. This value can be easiest seen as the added value from the product or service, however, it can also include the level of value the customer perceives in the other elements of the total offer such as support services like maintenance or information. Moreover, understand competitor value positioning' is about working out how well the organization – and its competitors – are currently delivering the value their customers want. Once more, it involves forecasting the future and predicting how competitors may get better, also obviously something the organization needs to plan for in reacting. These three processes as summarized in Figure 3 provide an assessment of the relative attractiveness of different markets, and within each, the relative attractiveness of different segments (McDonald & Wilson, 2011). It is necessary for organizations to understand that, without proper market definition and proper market segmentation, marketing will never succeed in strategy-making.

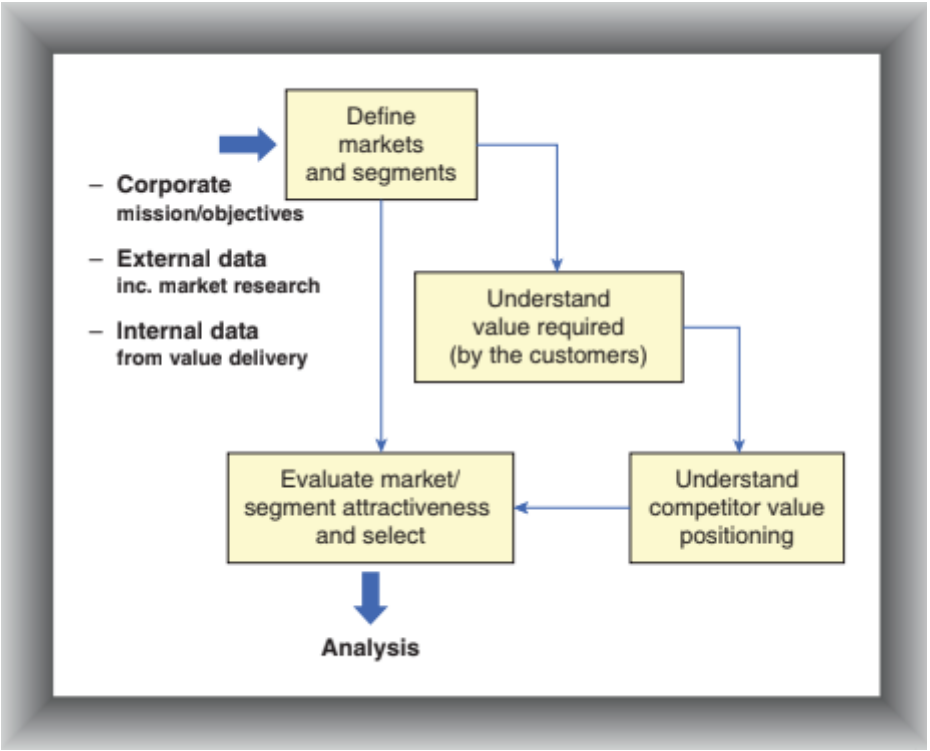

Figure 3. Define markets and segments, and understand value (Source: McDonald & Wilson, 2011)

2.2 Technology developments in B2B services in the IT

In addition to understanding the customers and their segmentation it is also important to understand technology development and ecosystem in B2B services in the IT for successful marketing. This is specifically important because there is continuous technology advancement which may affect the marketing strategies and make up of a company as a whole. As Sadia Soltani, 2021 emphasized on the consideration of three perspectives namely multidimensional, beyond a dyad and service dominant (S-D) logic perspectives for successful and long lasting B2B markets. He also stressed that ”collected data from non-digital objects are used for optimizing, predicting and controlling systems” (Soltani, 2021: page147)

In business, different organizations tend to work together and compete through a relationship called IoT ecosystem (Soltani, 2021). Value co-creation through engagement is the key role in B2B among the participants (Soltani, 2021) as shown in the Figure 4. Value co creation in B2B has also been emphasized by Ferreira, Veiga, Fernandes and Kraus (2022) with customer involvement in the process however timing and mode of involvement may pose a challenge to the supplier. They have reported that co creation can be done using different approaches such as case study approach which involves value creation from acquired knowledge, personalized initiatives to add value or relationship enhancement approach coupled with strategic accounting management. In addition, they pointed out that sustainability is important to consider in value co-creation as well as strategic marketing especially in health industries (Ferreira, Veiga, Fernandes, & Kraus, 2022).

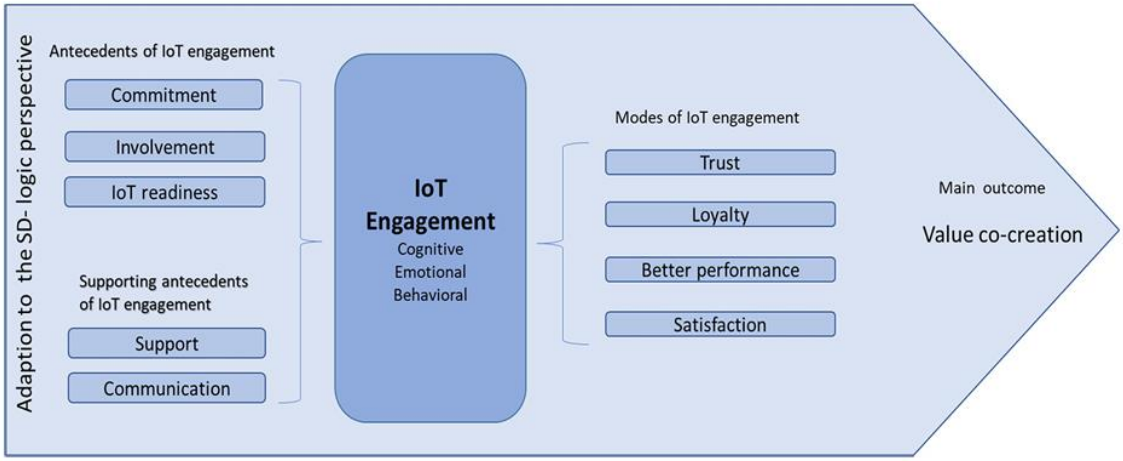

Figure 4. IoT engagement conceptual framework (Source: Soltani, 2021)

According to Sadia Soltani, (2021); technology readiness is grouped into positive (optimism, innovativeness) and negative (discomfort and insecurity) which would affect engagement positively or negatively respectively. Unclear roles of the actors is the main setback in IoT ecosystem (Soltani, 2021).

In a digital hospital integration of different sophisticated machines, mobile devices and intelligent information system is required to make it work at the same time maintaining

patients' privacy, safety and user friendliness (Gomes, Iivari, Ahokangas, Isotalo, & Niemelä, 2017).

As it was described earlier that insecurity is one of the things that may affect engagement of actors in the IoT ecosystem, exploration on the possible ways to overcome this especially in the healthcare system has been done. Gomes et al (2017) have explained the impact of innovative technologies into business transformation and that investment in security offers the viable gain. Secure mobile device management (MDM) and IoT device management that overcome previously identified threats are part and parcel of this transformation depending on the technology used, environment and organization itself. They further pointed out that although it is important to overcome security setbacks per layer of the IoT, endpoint should be the main key focus in management, monitoring and data safety. There may be built-in security for different devices however IoT-MDM is also needed including in platform-driven security, location specific micro operators which may/may not be from other suppliers (Gomes, Iivari, Ahokangas, Isotalo, & Niemelä, 2017).

Gomes et al (2017) also reported on different business models and understanding them enables actors to maximize monetization by different stakeholders in the digital economy. There are main four business model layers in ICT (Figure 5) namely connection, content, context and commerce business models in order of ascent and the lower layers act as backbone of the higher layers. B2B business model is in the fourth layer (commerce) which focuses on transaction between the consumer and provider. Other business model layers focus are as follows: Connection business model-connection services; content business model-information content; context business model-data (Gomes, Iivari, Ahokangas, Isotalo, & Niemelä, 2017).

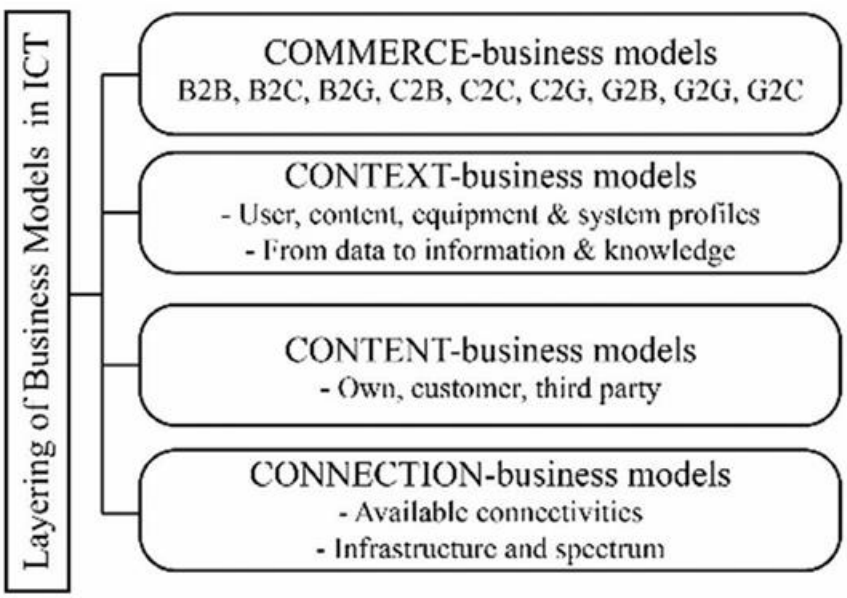

Figure 5. The layered 4C ICT business models archetypes (Source: Gomes, Iivari, Ahokangas, Isotalo, & Niemelä, 2017)

The use of mixed source business model approach is more common with different approaches depending on the nature of the business and closure/open status of the core and extension i.e. Proprietary (Closed core, closed extension); open source (open core, open extensions); open core (open core, closed extension) and open extensions (closed core, open extensions). An example of practical use of the mixed model is as follows; secure device manufacturer/provider if uses a proprietary approach provides own device and own IoT-MDM platform if open extension approach it will be own device but outsourced IoT-MDM service (Gomes, Iivari, Ahokangas, Isotalo, & Niemelä, 2017). Understanding of these approaches enables users like digital hospitals to choose what really meets their needs considering functionability, feasibility and security needed.

Radical innovation as summarized by Ferreira et al (2022) in which focus is on providing new theoretical lens from imagining experiments rather than finding solutions to problems. This is based on why the customers are interested in their product so as to improve customer satisfaction that matches continuous technological advancement. This is associated with the use of social media to reach out to customers by salespeople and meet their expectations including technology and performance. Despite these

opportunities, there are expected challenges for instance different cultural backgrounds may affect relationship building among different actors in the business world which may lead to favours or discrimination (guanxi) and different value perceptions between the salesperson and customers (Ferreira, Veiga, Fernandes, & Kraus, 2022).

Coopetition is one of the strategies used in value creation whereby competitors work together despite competition among themselves and create a win-win situation for both parties (Monticelli, Verschoore, & Garrido, 2023). They further described that coopetition may be deliberate (both parties agree on terms knowingly) or as emergent (unplanned competition or cooperation in cooperative or competitive environment respectively) and both can be influenced by external regulator including the government. In this technological advancement era, this can be done by technology transfer/sharing in various areas like service networks between the sides to add value in the highly regulated industries. This has also improved bargaining power among parties to reduce running cost.

Big data as introduced in 1999 and postulated to reach 35ZB (Zetabytes) in 2020 (Gupta, Gaurav, & Kumar Panigrahi, 2023). They explained on the big data on its development, characteristics, technology tools, applications, privacy and security as summarized in Figure 6. The development involved five eras, to mention a few: during era 1 sanitation, germ theory and vaccination were practiced based on the available evidence; in era 4 there was use of digital technologies and robotic technology and in era 5 there is high speed data transmission by smart devices with the use of Artificial Intelligence (AI). Application of the B2B based healthcare data is grouped into three namely clinical, no-clinical and logistics applications respectively. The clinical data assists in monitoring patient's wellbeing, non-clinical application involves improving ways of life whereas logistics application focuses on data transfer and processing. These processes however are not without risks, the data might be accessed by unauthorized personnel imitating the authorized personnel and maneuvered to the interest of the attacker despite the different levels of protection including authentication, access control and encryption. In

addition, they also explained on the complexity of the healthcare data which involves different collection points, different professionals with variable accessibility of the data accordingly and different methods of storage and processing.

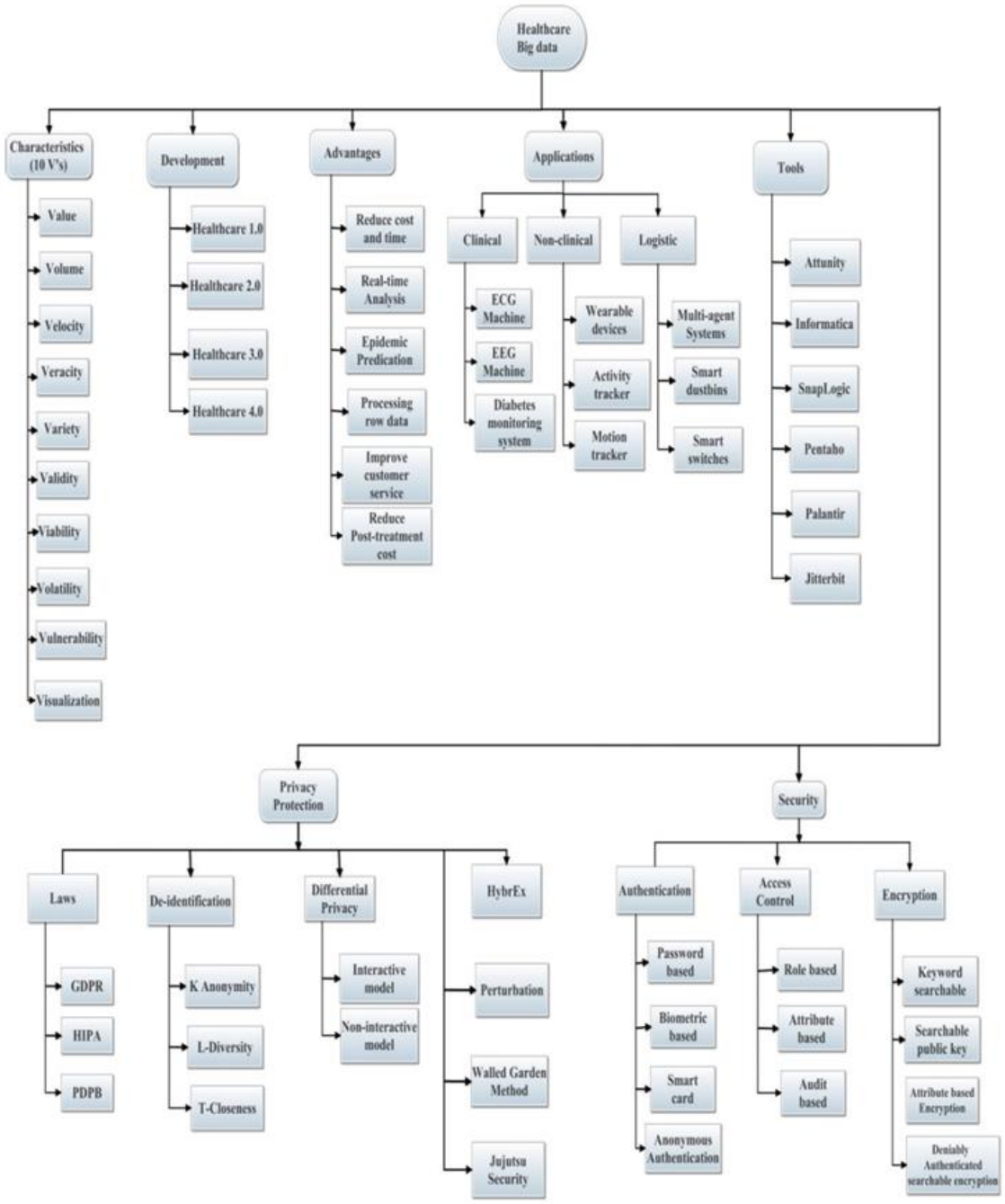

Figure 6. The outline of big data (Source: Gupta, Gaurav, & Kumar Panigrahi, 2023)

As it was previously mentioned, AI was introduced in era 5 but it was basically developed based on prior technologies. ”AI is the computer’s ability to perform tasks that resemble human thinking ability” (Leone, Schiavone, Appio, & Chiao, 2021: page 850). AI is beneficial at different levels among stakeholders by using the refined data from customers according to the use as it seen in the COVID-19 pandemic, there is reduction of human error hence improved patient care in health sector (Leone, Schiavone, Appio, & Chiao, 2021). They explored AI application in hospitals & health systems as well as social service organizations. They explained that their case company used four types of AI (mainly mechanical and analytical intelligence together with predictive analytics models) in value creation whereby patient hospital stay and re-admission rates were reduced and it allowed wholistic patient management outside the hospital (Figure 7). Leone et al (2021) further explained on value co-creation by their case company as evidenced by research and development (R&D) approach as well as customer-centric approach from early stages of different solutions used by the case company. In addition to responsive and perceptive means, the company makes use of intuitive and empathetic AI to meet variable needs among the actors including behavioural health. Through the use of AI, there is also added advantage of flexibility,, transmissibility, reproducibility and with infinite data storage. Leone et al (2021) emphasized on understanding the market, proper data and information acquisition, extraction of knowledge and beneficial to all stakeholders including the end users and interorganizational relationship.

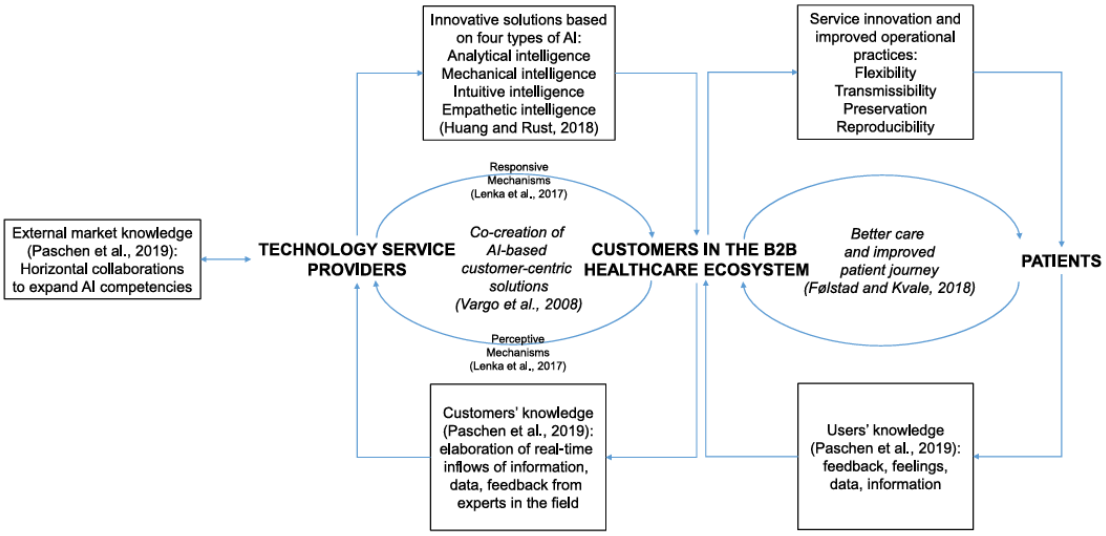

Figure 7. Integrative framework connecting value co-creation and improved patient journey (Source: Leone, Schiavone, Appio, & Chiao, 2021)

With advancing technology there is increased use of smart services in different areas. Smart services involves use of "equipping physical objects with unique identification and communication technology" (Heinz, Luchner, Benz, & Fassnacht, 2023: page 2). They developed taxonomy for B2B smart services which included seven dimensions with respective characteristics as seen in Table 1. The goal of this taxonomy was to contribute to the smart service innovation literature and common language among different stakeholders including researchers and smart service providers. The taxonomy can also help smart service providers expand their services and hence retain and possibly attract more customers (Heinz, Luchner, Benz, & Fassnacht, 2023).

Table 1. Taxonomy of B2B Smart Services (Source: Heinz, Luchner, Benz, & Fassnacht, 2023)

Dimension	Characteristics				E/N
Innovation Type	Incremental Improvements (58)	Added Functionality (34)	Radical New Offering (8)		**E**
Smart Service Outcome	Transparency (83)	Optimization (51)	Remote Control (13)	Autonomy (16)	**N**
Service Provider	Smart Product Manufacturer (54)	Retrofit Supplier (35)	Smart Product Operator (17)	External Partner (8)	**N**
Target User	Smart Product User (71)	Smart Product Provider (21)	External Actor (11)		**N**
Analytic Capabilities	Descriptive (25)	Diagnostic (38)	Predictive (15)	Prescriptive (12)	**E**
Acting Features	Physical (16)	Digital (7)	Process Triggering (10)	None (67)	**N**
Information Provision	Push (20)	Pull (75)	None (14)		**N**

Key: Dimension is exclusive (E), with a single applicable characteristic
Dimension is non-exclusive (N), with the potential for multiple characteristics to apply

2.3 Occupancy analytics and space management

Buildings tend to consume a lot of energy across the globe which in turn is affected by occupant behaviour of buildings. Moreover, the occupant behaviour can be used for energy simulation and prediction for office buildings as reported by Liang et al (2016). They studied different occupant characteristics at different conditions and times during the weekdays and weekend by comparing real occupancy data and predicted occupancy schedule based on probability decision tree and concluded that using occupancy data occupancy schedule of buildings can be used by different stakeholders in building domain, marketing, transportation and energy (Liang, Hong, & Shen, 2016).

Smart buildings has been defined by Alsafery et al (2024) as ”intelligent buildings that use technology to optimize energy efficiency, cost savings, operational performance, and occupant comfort and safety” (Alsafery, Rana, & Perera, 2024: page 1) and are increasing

worldwide hence its potential markets (Alsafery, Rana, & Perera, 2024). There are different sensors for different applications in areas and provide information on energy consumption or detect danger with accuracy of up to as high as 99.79%. The sensors can be placed anywhere be it a building or a device after thorough consideration of various factors which may affect their optimal functionality as well as the customer needs. Edge building in Amsterdam makes use of sensors for environment monitoring such that settings adjustments are made accordingly which in turn makes it comfortable for its users. When advanced analytics capabilities are coupled with IoT different purposes can be achieved including occupant localization enhancement, space utilization and optimization as demonstrated in Figure 8 (Alsafery, Rana, & Perera, 2024).

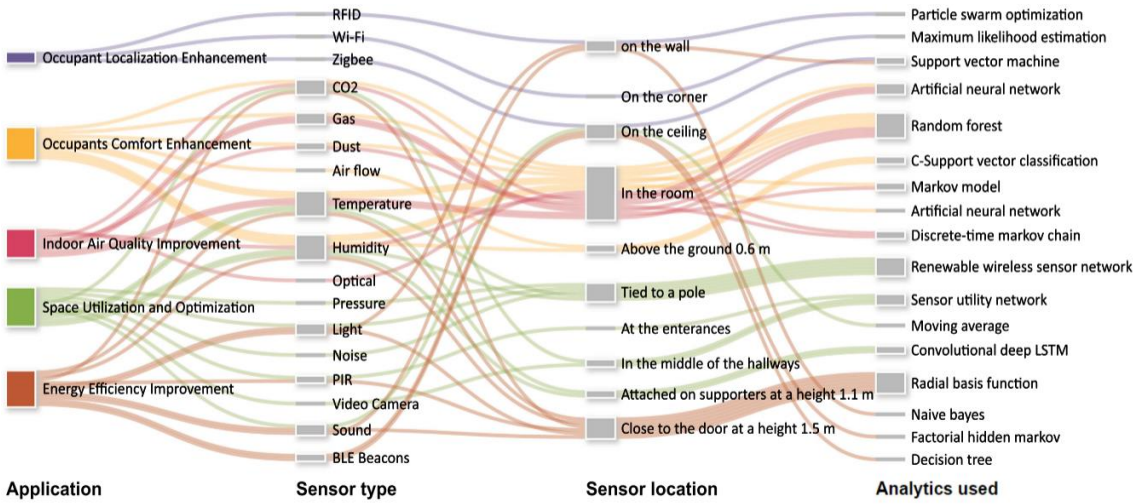

Figure 8. Smart building objectives achieved by IoT technology combined with advanced analytics capabilities (Source: Alsafery, Rana, & Perera, 2024)

Technical challenges identified by Alsafery et al (2024) includes building heterogenous data sources, how to deal with data uncertainty, privacy and security and sensor types selection. In human interaction, the challenges are such as information sharing two parties, complex activities recognition, difficult interpretation of data due to noise or missing data and space utilization at respective time while data used during the building designing phase may not be representative of what is currently needed. These challenges may be areas of focus for further researches or act as potential business opportunity if they are overcome (Alsafery, Rana, & Perera, 2024).

With rising smart building in different areas and amount of data collected it has been raised that there is importance of massive computation of different aspects of data (Saha, Florita, Henze, & Sarkar, 2019). They further explained that this can be achieved by different models of different capabilities in big data analytics. Table 2 below shows algorithms classes of models and the relative comparison based on time to deploy, data requirement, data pre-processing, flexibility, robustness to different test cases and number of existing applications. In addition, they also recommended offering of efficient methods of data storage and retrieval (Saha, Florita, Henze, & Sarkar, 2019) .

Table 2. Algorithms: classes of models and the relative comparison (Source: Saha, Florita, Henze, & Sarkar, 2019)

Model class	Data requirement	Time/Cost to deploy	Data pre-processing	Model flexibility (easy to adopt in different applications)	Robustness (to variations in testing conditions)	Existing applications
Statistical and classical learning methods	Low-Medium	Low	Medium	Medium	High	Some
Kernel based methods	Medium	Medium	Medium-High	Low-Medium	Medium	Many
Probabilistic Graphical Modelling (PGM)	Medium	Medium-High	Medium	Medium	High	Many
Neural Networks (NN)	High	Medium-High	Low-Medium	High	Medium	Several
Data mining and Clustering	Medium	Medium	Low	Medium-High	Low-Medium	Many

It has been reported that meeting portfolios were prepared based on peak demand assumptions and booking data which in reality overrated the actual occupancy (Baru, et al., 2026). Baru et al (2026) did a study with the aim of developing and test evidence based framework for optimal meeting room capacity and configuration by using minute-by-minute occupancy sensors. The study resulted into a framework that can be used by corporate real estate teams to set clear targets, validate redesign decisions in case of ambiguity as well as measure adjustments between space and failure risk. This study went further than utilization reporting to actionable plan for meeting room redesign and governance hence connecting occupancy analytics and portfolio design (Baru, et al., 2026).

Discrepancy between actual occupancy and design with remote working practices especially after COVID-19 limit facility management (FM) strategies based on historic records and static occupancy values (Pellegrini, 2022). The research demonstrated that for effective, competent FM and improvement of existing building use, real time monitoring and analysis play important roles. This was achieved by defining Decision Support System (DSS) based on a dashboard data and optimization scenarios from three defined indicators and proposed approach tested on a pilot study for optimal space management and cleaning services. The analysis of current status (pilot) revealed about 25% occupancy of available time by 51% of users while one of the scenarios revealed average usage time can be increased by 54% and number of users by 37% in the whole building hence signifying likelihood of optimizing both space usage and cleaning services. This method is applicable in related space use and adaptability according to the need changes throughout building lifespan (Pellegrini, 2022).

3 Methodology

This chapter gives details on the research method, justification of the company selection, data sources, how data was collected, data analysis framework used, reliability & validity, ethical considerations and limitations of the study.

To answer the research questions 'What are the customer segments served by occupancy analytics and space management IT services?' and 'What are the value propositions offered by case companies?' Two success case companies that deal with occupancy analytics and space management IT services were selected.

3.1 Research method

Case study method was used in this study whereby qualitative exploration of the selected case companies (Haltian and XY Sense) publicly available secondary data was done. This involved explorations of the website documents, YouTube videos as well as LinkedIn pages including posts.

3.2 Case Selection Rationale

The Haltian and XY Sense companies were selected because they deal with what I wanted to explore, that is their involvement with occupancy analytics and space management. In addition, they have rich publicly shared materials revealing clear B2B and enterprise market orientation that can be analysed to answer our research questions.

3.3 Data sources

The Haltian and XY Sense companies haves official websites, YouTube channels and LinkedIn company pages. These were used as secondary data sources for our analysis.

Table 3. Data sources per case company

Company	**Secondary data**	**Source**
Haltian	Company profile	(Haltian, 2026a) (Haltian, 2026b) (Haltian, 2026c) (Haltian, 2026k)
	Services/Products offered	(Haltian, 2026d) (Haltian, 2026e) (Haltian, 2026f) (Haltian, 2026g)
	Customer Testimonials (four whereby 3 were articles, 1 video)	(Haltian, 2026p) (Haltian, 2023) (Haltian, 2026q) (Haltian, 2026r)
	Company Posts (More than 5)	(Haltian, 2026s)
	Company articles 3	(Haltian, 2026p) (Haltian, 2026q) (Haltian, 2026r)
XY Sense	Company profile	(XY Sense, 2026a) (XY Sense, 2026b) (XY Sense, 2026c) (XY Sense, 2026d)
	Services/Products offered	(XY Sense, 2026d) (XY Sense, 2026e) (XY Sense, 2026f)
	Customer Testimonials (four whereby 2 were articles, 2 from customer quotes)	(XY Sense, 2023a) (XY Sense, 2023b) (XY Sense, 2026p)
	Company Posts (More than 5)	(XY Sense, 2026g)
	Company articles 2	(XY Sense, 2023a) (XY Sense, 2023b)

3.4 Data collection procedure

I explored the official website, YouTube channel and LinkedIn company page repeatedly and consistently based on the analysis framework and extracted information on each company profile, the type of customers they target/serve, strategy used to add value, deliver products and communicate with their customers. Confidential documents were not accessed in this study.

3.5 Analysis Framework

This was based on the prior knowledge on B2B market segmentation and marketing strategy. From the literature (Albrecht, Green, & Hoffman, 2023), it is known that market can be categorized using different methods based on firmographics, technographics, needs-based segmentation, value-based segmentation, and behavioural segmentation. They clarify the segments as follows: 'Firmographics involves grouping of B2B customers based on shared company attributes', 'Technographic segmentation is based on the various hardware and software technologies used by B2B customers', 'Needs-based segmentation is the concept that a marketer should focus limited resources on those customers that need the product and have the ability to purchase it', 'Value-based segmentation (sometimes called tiering or profitability segmentation) groups customers according to the potential value they may bring to a business', 'Behavioural segmentation considers the behaviour of customers toward a company's products or services' Albrecht, Green, & Hoffman, 2023: page 166-168). Who makes decision in the procurement process also affects segmentation.

From this knowledge, I used firmographic segmentation, technographic segmentation, needs-based segmentation and decision maker segmentation as the analysis framework in the respective company material exploration accordingly.

On the other hand, in marketing strategies it was inferred on the companies' value proposition, respective company communication message delivered to customers, customer testimonials on the services/products offered to them as well as contents of the publicly available materials and how the companies reach their customers.

I used qualitative deductive content analysis of the publicly available materials of the respective companies whereby the materials were examined through the predefined theoretical background and pattern interpretation was done using B2B market segmentation framework and B2B marketing and positioning framework as mentioned above.

3.6 Reliability and validity

In this study, the data was systematically checked, constantly monitored and interpretation confirmed with the use of analytical frameworks for both companies throughout the data collection process and confirmation made from the multiple secondary data sources i.e. company website, LinkedIn page and you tube video materials. I ensured research questions could be addressed by the method, choice of companies with publicly available data that could meet our objective. In addition, data collection and analysis were performed in conjunction and correlated with theory. This was done in order to ensure reliability and validity of the study was achieved.

3.7 Ethical consideration

In this study, no confidential information was accessed, only publicly available secondary data was used. As a result of this, no breach of confidentiality was done.

4 Results

This chapter is divided into three parts; the first part describes on the Haltian's company including profile, market segmentation and B2B marketing; the second part gives in depth analysis findings of the XY Sense with the focus on profile, market segmentation and B2B marketing; The third part gives the comparison of the two success case companies.

4.1 Haltian Company

4.1.1 Profile

Haltian is a technology based (IoT) company found in September 2012 in Oulu, Finland. It has evolved in various stages from its launch to the present. It begun as product development and house design company; later extended its market offering IoT to real estates and then as a global IoT house. It has also partnered with different companies (like Microsoft Places, Spica, IBM Tririga and Cisco Spaces) globally for smart building solutions etc. The company has 51 to 200 employees, 95 associated members under five board of Directors with Kai-Petteri Purhonen as a chairman (Haltian, 2026a) (Haltian, 2026b) (Haltian, 2026c).

The main targets for Haltian's company include complex organizations like hospitals, logistics, warehouses and office spaces with its comprehensive IoT and product creation services (both software and hardware). To name a few, services offered include product/service design, software development, IoT sensors, camera design and smart office (Haltian, 2026k).

The services involve IoT-enabled occupancy analytics and space management solutions. They make wireless sensors which detect occupancy of a space and the data is recorded or can be monitored in real time which allows to answer questions like what space is

being used the most?; what are the peak hours?; what space is used the least?. In occupancy analytics depending on the respective space type/use like phonebooth, hospitals, offices etc it allows accurate decision making based on data obtained from the use of sensors (Haltian, 2026d) . In addition, space allocation for maximal production and reduced running cost like energy consumption. Moreover, they allow to see if employers are in the right workspace with good condition (air sensors) (Haltian, 2026e) hence growing satisfaction, efficiency and higher productivity for investors. They also make use of easy to install camera free sensors hence ensuring security among users. It has been made clear in their communication to their prospect customers for instance 'The complete solution - One-stop-shop to reliable occupancy data, return of investment and great employee experience'.

The following figures (Figure 9 a-c) show how this can be done with schematic drawing on the left and real life picture on the right in different situations or work spaces.

Figure 9a. Demonstration of Sensor placement in meeting rooms (Source: Haltian, 2026d)

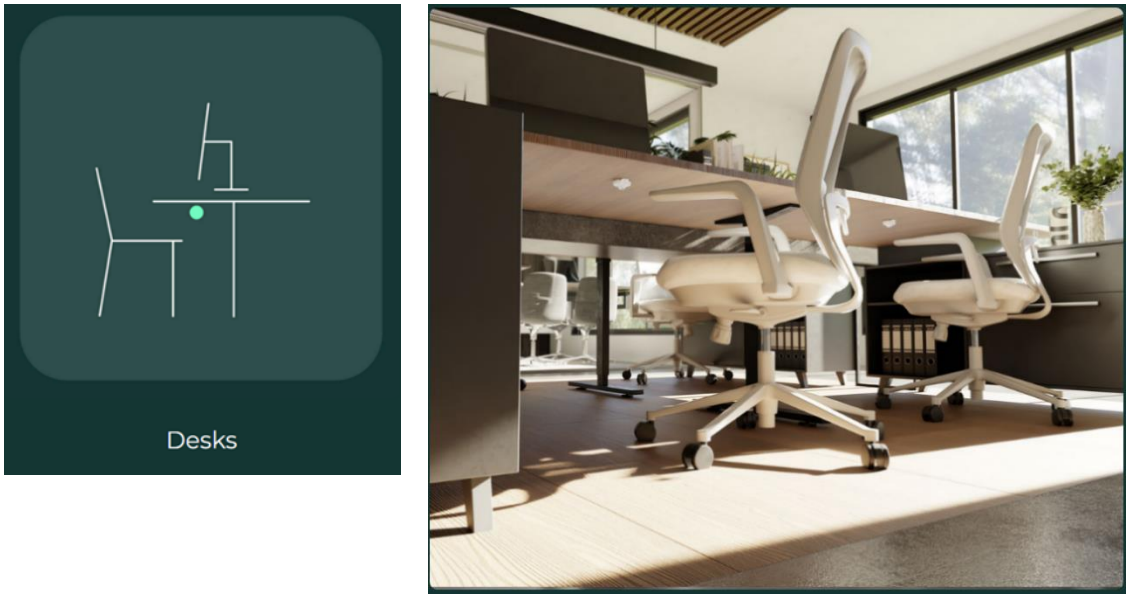

Figure 10b. Demonstration of Sensor placement in desk areas (Source: Haltian, 2026d)

Figure 11c. Demonstration of Sensor placement in phone booths (Source: Haltian, 2026d)

In addition to that, Haltian produces indoor air quality sensor for any indoor spaces like library (see Figure 10). Its installation is wireless and allows healthier environment and improved productivity with real time monitoring capabilities. It involves tracking down the temperature, carbon dioxide levels, humidity, Total Volatile Organic Compounds (TVOC) levels, barometric pressure and connectivity Wirepas Mesh. These sensors have been accredited with WELL Building Standard licensing which safeguards people's well-

being through different features including thermal comfort, sound, air, water, nourishment, light, movement, materials, mind and community with a compulsory occupants' accessibility of the data for timely action (WELL, 2026).

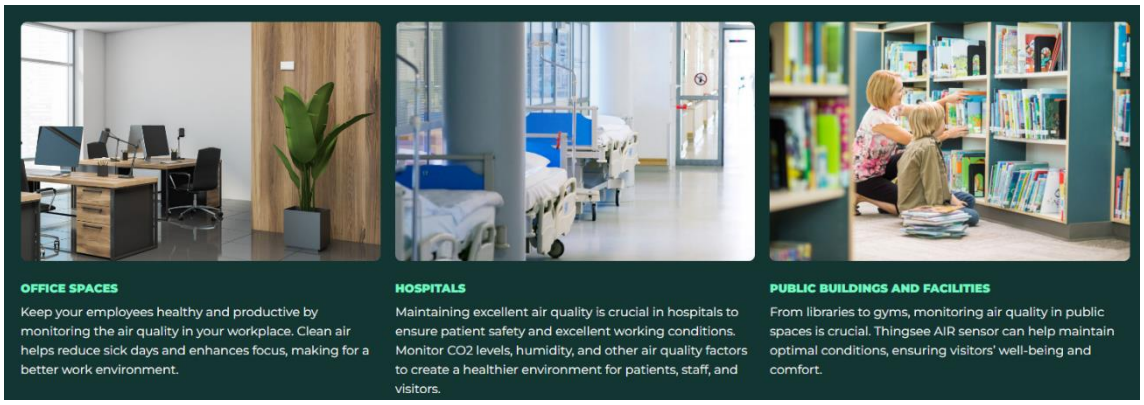

Figure 12. Use of air sensor in different spaces (Source: Haltian, 2026e)

For larger areas like commercial buildings, industrial facilities and public spaces there is multipurpose environment sensor as shown in Figure 11 (Haltian, 2026f) or environment rugged sensor device for severe outdoor conditions. These sensors measure temperature, humidity, ambient light, barometric pressure, magnet switch, machine usage, door and window monitoring orientation as well as movement. They have long battery life which can be longer with power cover accessory (up to 10 years). Among other things, environment sensors enable industries to comply with strict environmental regulations through continuous real time monitoring. This also allows optimal environment for different activities and early problem detection and prompt action in case of any abnormality.

Figure 13. Environment sensor (Source: Haltian, 2026f)

Another service by the Haltian company is Real-time Location System (RTLS) through The Haltian Inventory Tracking Solution (HITS) which enables users to cut down initial cost on installation and it can be upgraded accordingly (Haltian, 2026g) (Haltian, 2023). In the long run, this technology allows real-time visibility of properties hence improved productivity and timely response to dynamic, fast-paced environments. The uses are as shown in Figure 12.

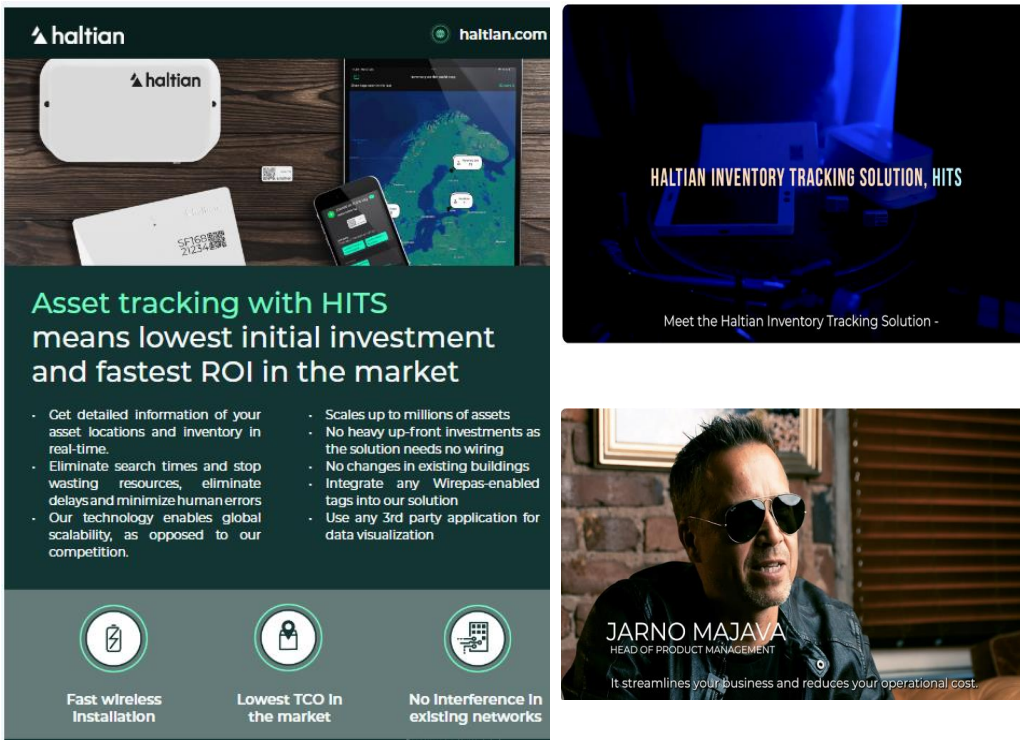

Figure 14. Outline of HITS and its use (Source: Haltian, 2026g; Haltian, 2023)

4.1.2 Market segmentation findings

The Haltian Company groups its customers in different ways as it was inferred from the publicly available materials. These include needs-based segmentation, technographic segmentation, decision maker segmentation and firmographic segmentation.

4.1.2.1 Needs-based segmentation

Haltian's materials suggest segmentation of markets in accordance with customer needs and for instance workplace optimization for higher productivity, employee wellbeing and reduced running costs. This is evidenced by the consistent use of the words like 'Maximise the value of your spaces' (Haltian, 2025a), 'transforming workspaces', 'space efficiency and healthy workplaces', 'Looking to optimize your space without sacrificing privacy?' and 'solution'. In addition, Haltian also considers those who want to change their ideas into reality by showing that it has right expertise and ready to make it happen as evidenced by the use of words like 'Extend your product creation team', 'The journey from idea to mass production', ' Supercharge your product development with us!' and 'Custom IoT solutions specified for your needs'. Some of the words are as shown in Figure 13.

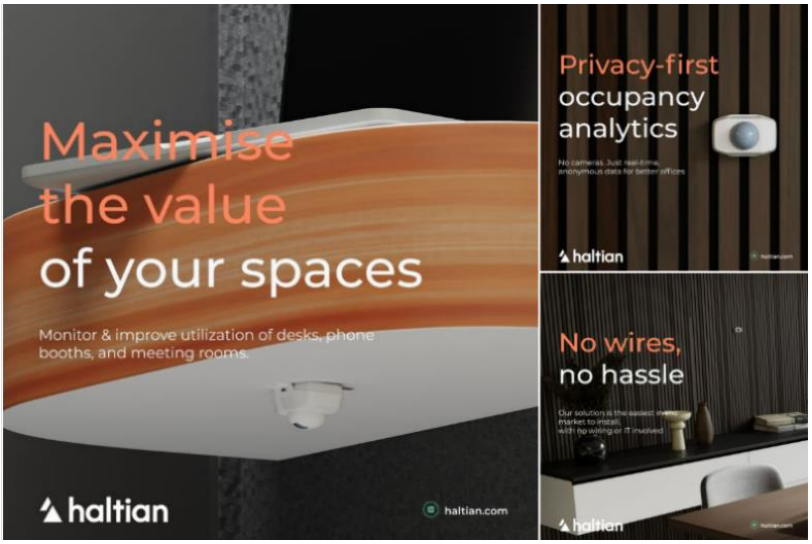

Figure 15. Evidence of customer needs segmentation (Source: Haltian, 2025a)

This emphasizes that the Haltian company offers solution to businesses that require assistance in optimal workplace utilization while considering the privacy of the users and those in of product creation.

Need based segmentation is segmentation in which customers are categorized according to common challenges. This is a relevant way of categorizing the customers in B2B marketing whereby the needs are usually multidimensional.

4.1.2.2 Technographic segmentation

After the review of secondary data of the Haltian company, it was noted that there is use of wireless mesh technology in its devices with easy data monitoring, remote maintenance & updates and comprehensive IoT device management capabilities. Words like 'We Use Wirepas Mesh' were used. The structure of wirepas mesh (Haltian, 2026h) and evidence of wireless technology use (Haltian, 2025b) are seen in Figures 14 and 15 respectively.

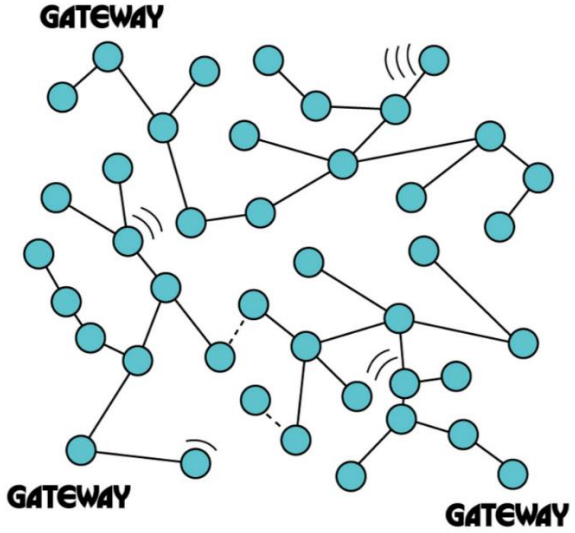

Figure 16. Wirepas structure (Source: Haltian, 2026h)

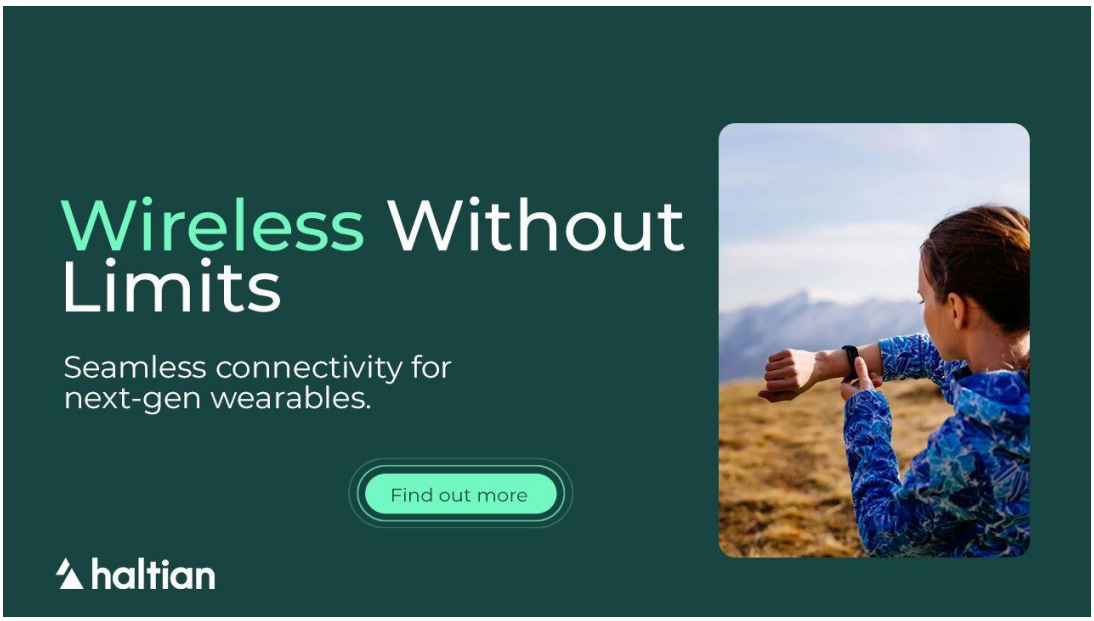

Figure 17. Evidence of wireless technology use by the Haltian Company (Source: Haltian, 2025b)

Emphasis on the personal privacy also observed through using Passive InfraRed (PIR) technology (Haltian, 2026i) which perceives motion and occupancy (Figure 16) without capturing personally identifiable information unlike cameras which would identify individuals. Moreover, there is no individual tracking system used. On the other hand, data security is safeguarded by allowing only authorized personnel through data encryption, access control and regular security audits for any possible breach. This can

be evidenced by Haltian company sharing their security measures document ‘the Haltian Thingsee Security White Paper’ the use of words like ‘Privacy first’.

Figure 18. Passive InfraRed (PIR) technology (Source: Haltian, 2026i)

From the above observations, it can be concluded that the company targets establishments with advanced technological application, established ecosystem and interconnected devices use rather than smaller ones.

This is segmentation of customers according to technology level as it was done by our case company, it is one of relevant marketing strategy in B2B.

4.1.2.3 Decision maker segmentation

In addition to the above segmentation methods, it was observed that Haltian company also categorizes its customers according to decision making power and it targets the decision makers. This has been seen across its publicly available materials for instance by the use of words like ‘improve decision-making’. Figure 17 shows more evidences of communication targeting the decision makers (Haltian, 2026j) (Haltian, 2021) (Haltian, 2025b).

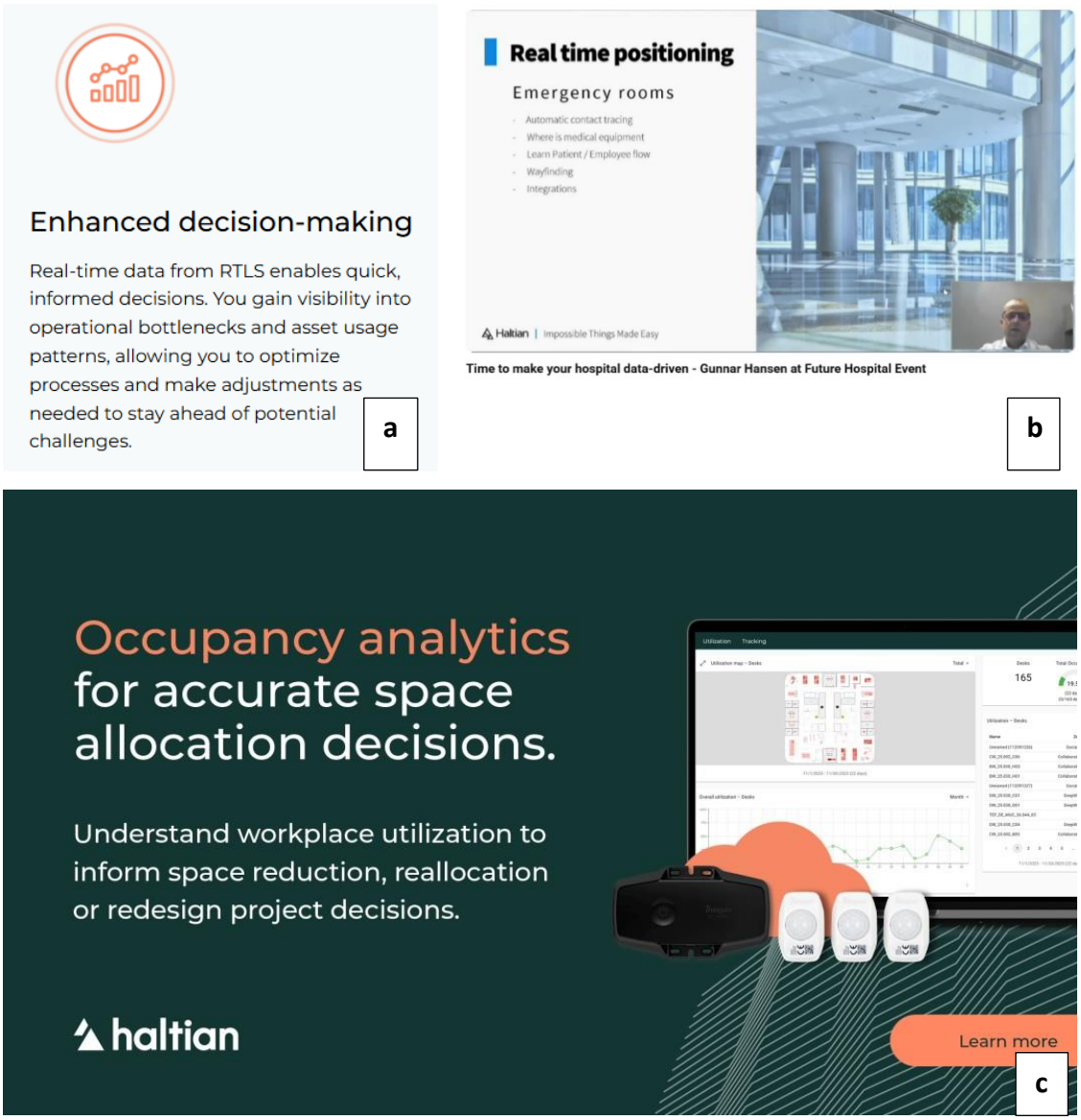

Figure 19. Evidence of decision makers as targets of Haltian company (Source: a. Haltian, 2026j; b. Haltian, 2021; c. Haltian, 2025b)

Segmentation of customers according to decision making power in B2B is very practical because decision makers can have greater influence in purchasing a product or service being offered. However, it is important to be aware that decision making involves different levels and stakeholders hence they have to be considered from the early product development. This has been put into action by our case study.

4.1.2.4 Firmographic segmentation

Moreover, the Haltian company has considered 'firmographic' characteristics of customers in its market segmentation. This can be inferred from the use of language that emphasizes on characteristics of customers (organizations) for instance if an organization that requires space optimization service from Haltian, among the questions they ask is the number of workstations (Haltian, 2026k) as seen in Figure 18 below. This represents the size of the firm as a characteristic feature for its relevant solution. It also offers individualized approach of the service.

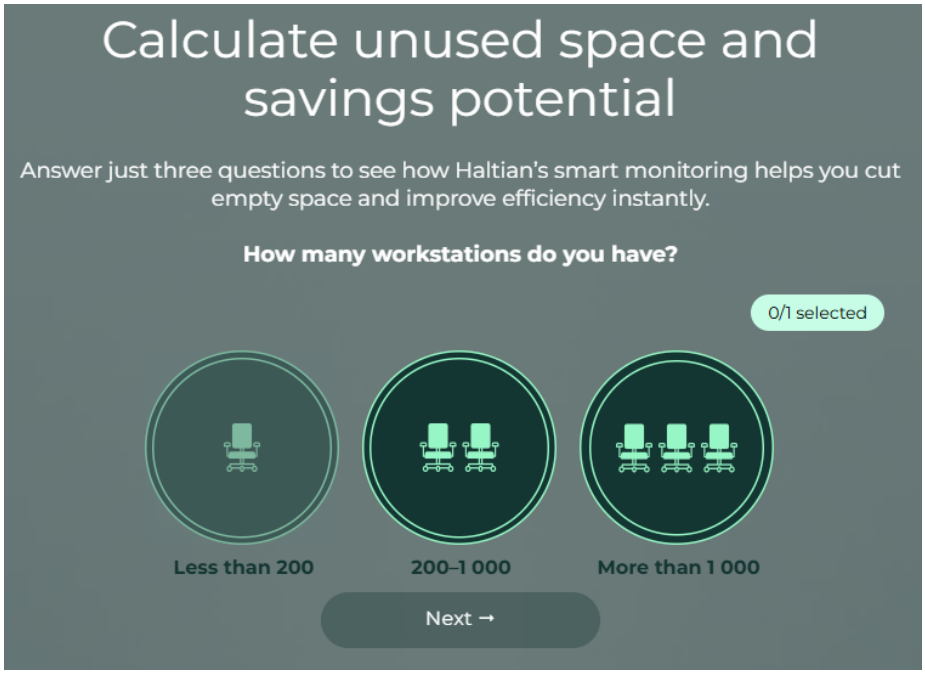

Figure 20. Evidence of customer segmentation according to size by Haltian (Source: Haltian, 2026k)

Individualized service provision enhances customer satisfaction through provision of relevant service or products to respective customers. This has been selectively thought through by Haltian company and it has made it successful so far.

4.1.3 B2B marketing findings

The Haltian company has used different B2B marketing strategies, this section will explain on some of them and give evidence from the publicly available materials. The focus will be on value proposition, messaging style, proof mechanisms, content and go to market strategy.

4.1.3.1 Value proposition

From the secondary data, it was observed that the Haltian company has added value in comparison to competitors by different ways.

An example of this can be seen in its HITS technology advantages over others (Haltian, 2026l) as summarized in Figure 19 whereby there is wireless technology, massive scale applicability, different usage, accuracy, easy installation and cost effective to the customers. Moreover, Haltian technology are scalable hence one does not need to worry about impact of its growth if using Haltian technology. This means that, if a company grows beyond the initially installed technology it can always upgrade to higher technology as needed without worrying about starting completely afresh with a new technology. IoT Mesh technology used by Haltian is of special value including self-healing capability in case of connectivity error (this is a great quality for customers and is cost effective) interconnectivity of the devices at any time and decentralized network. One does not have to worry about connectivity failure and despite connectivity among the devices, faulty in one device does not cause the connected device to misbehave as they use decentralized network. This technology allows continuous data collection/monitoring hence less likely for missing data that would negatively affect the data analytics solutions.

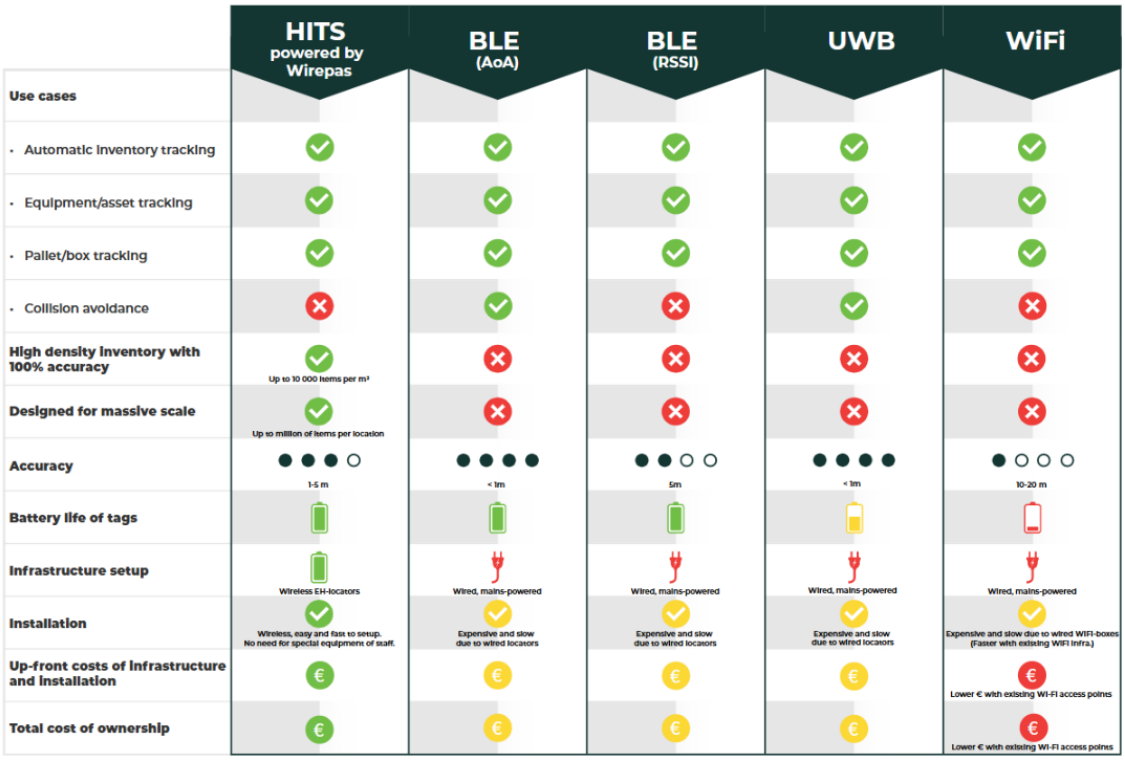

Figure 21. HITS technology used with technical advantage in comparison to competitors (Source: Haltian, 2026l)

Apart from technology used, the Haltian produces unique products with desired designs characterized by small devices with long battery life. This allows for easy transportation, installation of the occupancy sensors and reliable efficiency in that there is ensured continuous real time monitoring and data collection (no expected power or connectivity cut off as it is tailored to individual use). This ensures reliable information for decision making purposes (Haltian, 2026k).

Partnering with other complementing companies for better service or value creation to products with win-win situation is another strategy that Haltian company uses. To name a few, it has partnership with IBM, Wirepas, Microsoft and Spica (Haltian, 2026c). As it was discussed earlier that, one of the ways of value creation is partnering with others for better products with win-win creation.

The Haltian company has also acquired different recognition licensing for its services to ensure its services and products meet globally acceptable standards. This allows it to maintain their pool of customers and attracting more customers who will value, accept and trust their products even more. This can be seen by Haltian being licensed by WELL (Haltian, 2026k) which is achieved after validation process using specific criteria, features considered by WELL Building Standard licensing are air, water, nourishment, light, movement, thermal comfort, sound, materials, mind and community with a compulsory occupants' accessibility of the data for timely action for the wellbeing of the users (WELL, 2026).

The Haltian company has ensured individualized product creation which is important in value creation. Moreover, they have included quality assurance of the product in product creation steps in which products are tested to ensure they are of good quality, safe for use and that they work as intended before official release to the market (Haltian, 2026m).

In summary, The Haltian company has considered multiple factors to enhance its value position against its competitors and has provided various publicly accessible materials including different factors to consider when choosing particular products or services.

4.1.3.2 Communication style

From observation of the publicly available secondary data, it was observed that the Haltian uses different communication styles to deliver its services to prospective customers. These includes use of simple, clear language for anyone to read and understand; their posts are attractive, short and some are associated with simple symbols or illustrations. The YouTube videos have clear tittles for easy sorting and selection by potential customers that would add respective topic information to clear any related customer doubt (Haltian, 2026n). Illustrated, attractive and short posts

attract the readers to finding out more about the products and value being created by the company for awareness and possible purchase (Haltian, 2025b) (Haltian, 2024).

This communication method facilitates fast-tracking the decision making process as the potential customer are easily convinced and can easily trust what they understands unlike use of complicated language (Haltian, 2026k) (Haltian, 2026o). The evidence of this can be seen in Figures 20 & 21 below.

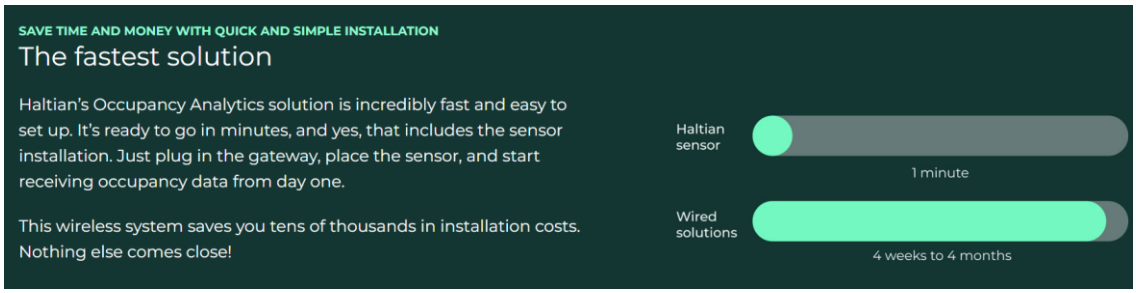

Figure 22. Simple and clear language use (Source: Haltian, 2026k)

Figure 23. Use of symbols for easy understanding (Source: (Haltian, 2026o)

4.1.3.3 Customer perception of value

The Haltian has made publicly available testimonials from satisfied customers in either writing or video, written articles on successful projects and provided demonstration videos of different products. These testimonials support the real value of the products as claimed by the company that that they offer what they claim or advertise. It makes it easier for those who never used their products to believe in their service and hence the likelihood of them purchasing the products/services.

Through the use of Haltian smart office and digital twin technology Sofigate was able to enhance flexibility at its office. The company needed a modern multifunctional hybrid workspace. “We wanted the office to be modern, flexible, and driven by real office usage data—not assumptions—about how people work,” Ulla -Sofigate’s Office Lead. Through the use of Haltian’s digital twin technology (a real-time, virtual representation of the office) the office was transformed. The employees can see available area of interest at real time at the office display through digital twin app and book the area accordingly. Outcome of this was rewarding to the team; the employees are given power to choose workspace for a particular day and the leaders make data driven decisions as testified by Ulla Somerma-Sofigate’s office lead “Think about your organization’s culture, what is the reason to come to the office, and how you want the office to support your employees. With hybrid work being the norm, finding the right tools can help ease the transition’’. The digital twin is displayed at different office areas as seen in Figure 22 a for easy accessibility among the workers (Haltian, 2026p). The digital twin appears as seen in Figure 22 b showing status of occupancy of the desks and meeting rooms at particular time as to whether the spaces are free, in-use or reserved (Haltian, 2026p).

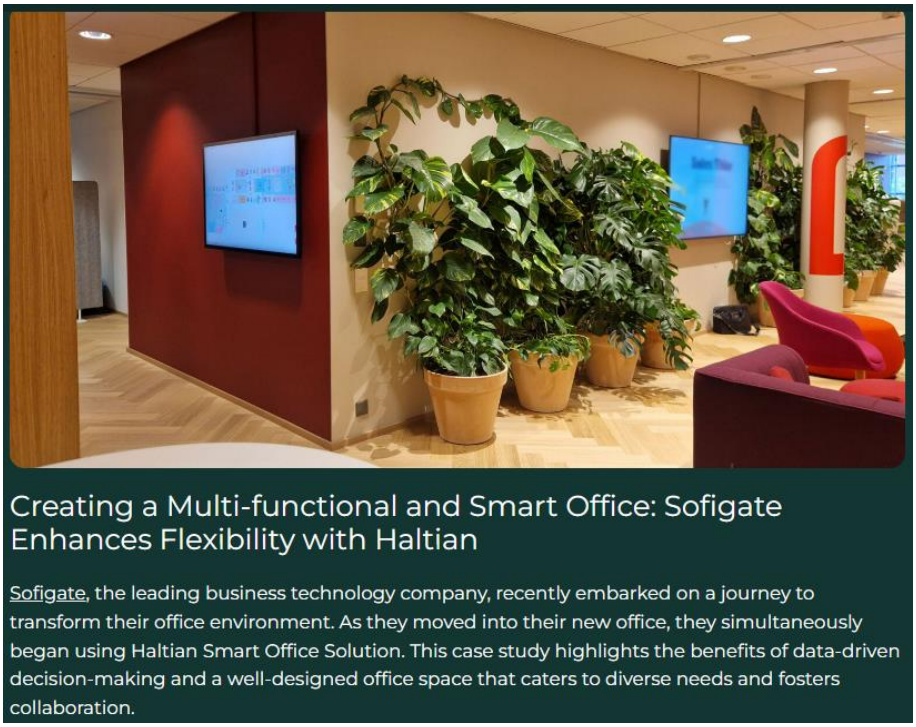

Figure 24a. Display of digital twin at different Sofigate office areas (Source: Haltian, 2026p)

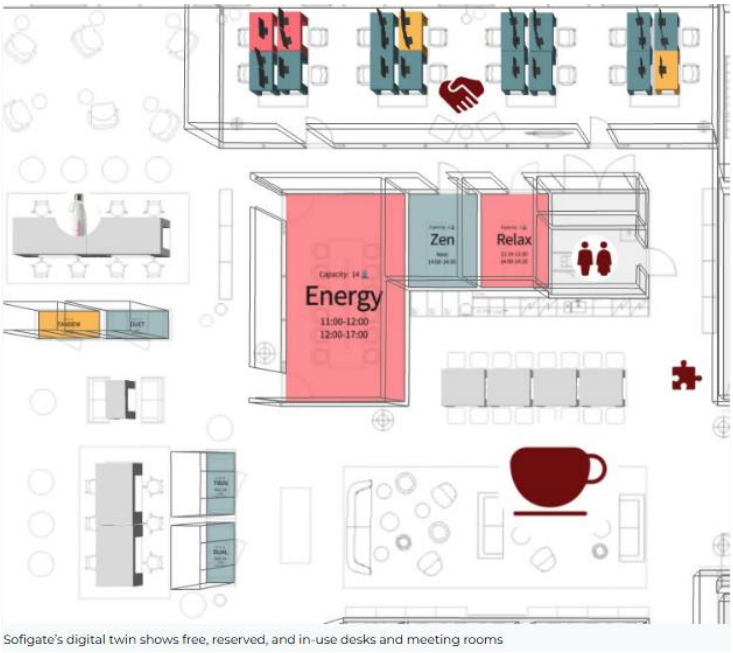

Figure 25b. Structure of Sofigate's digital twin showing status of occupancy of the desks and meeting rooms at particular time (Source: Haltian, 2026p)

In empathic building, as far as hospital systems are concerned the Haltian has made a difference with its technology incorporated in building for efficiency, cost effectiveness and customer satisfaction at large. This was evidenced by video interview of the Milton

Keynes University Hospital staff who testified in favour of the Haltian service. Claire Orchard who is the head of digital innovation of the hospital stated that they have been looking for occupancy tracking solutions for both equipment and staff coupled with empathic building and testified that Haltian was the first company they found. She added that the solutions assist in increased staff's time with the patients rather than wasting time to look for equipment/supplies or other staff which was further emphasized by a senior sister of ward 25, Jade Lloyd (Haltian, 2023).

They also faced a communication problem due to noise when talking to each other across the ward on different matters and the system dramatically reduced noise level which was clarified by Pamela Moyo, a senior sister in the cancer ward. Cato Heimvik, head of IT added that the system is accessible and can be modified by adding different modules with time according to the needs (adaptable). The head of digital innovation also emphasized on the technology compatibility with other systems they had without the need to disrupt previously installations which was demonstrated before final installation (Haltian, 2023).

The system also allowed them to make decisions based on real occupancy data in the cancer ward so as to enhance working environment/spaces for optimized cancer patients care. Moreover, it allowed them to make realistic plans for space usage and equipment purchase according to the needs by using data and discussing with the immediate users (Haltian, 2023).

Other testimonials include that of optimized space use as well as product development by Spica and Firstbeat respectively. Spica, a workplace software company needed accurate real-time information on meeting room and desk occupancy for their customers' informed decision making with regard to occupancy and visitor data. The Haltian offered their occupancy and air sensors in a way that exceeded their expectation in terms of easy installation and configuration with remote support to their

teams. The sensors coupled with automation assists in smart cleaning as well (Haltian, 2026q).

Tim Streather, Managing Director of Spica is satisfied with the Haltian individualized service and reports 'Haltian has integrated cellular connectivity as a key element in their solution which helps us to focus on our own solution and most importantly on our customers, while the Haltian team is there to help with the IoT data. The accuracy of their sensor data, fast cellular deployments, and wireless range of sensors for occupancy and air are all contributing factors in choosing Haltian as a partner. Their support and delivery capacity are excellent. Even during challenging times recently with the shortage of electronic components globally, we didn't miss any customer launches' (Haltian, 2026q). He also emphasized on the continued partnership with the Haltian company 'Using Haltian sensors has had a positive impact on the way we operate. We value our partnership with Haltian, and the fact we have rolled out over 38 000 Thingsee sensors in over 30 sites in the past 2 years is testament to our joint success. I look forward to strengthening our partnership in the years ahead' (Haltian, 2026q).

Firstbeat is a physiology based coaching platform for sports and wellness solutions. It worked with Haltian to develop Bodyguard 3 sensor device which monitors Heart Rate Variability (HRV) as well as stress levels and recovery when coupled with Firstbeat Life. The Haltian was selected due to its convincingly presentation of its high quality products as conveyed by Jakub Parak, Firstbeat Senior Research Engineer and Project Manager 'We immediately got the feeling the people we met knew what they were doing. They were able to present their expertise through their references and were the best in the market for what we were looking for' (Haltian, 2026r). He further illuminated on the successful partnership with Haltian as a result of good communication with the company 'We were looking for a long-term, reliable hardware partner for this project that had a lot of experience in consumer products. The best thing about working with Haltian was our communication. I would recommend Haltian as a product development partner for anyone looking for a skilled hardware team' (Haltian, 2026r).

4.1.3.4 Content and Go to market strategy

From the review of secondary data of the Haltian company, it was noted that the company has presented different services offered with the focus on IoT solutions including occupancy management and monitoring, smart facility management, equipment tracking and asset inventory; it also deals with product creation from customers ideas. They have also included success stories from customers, different webinars and instruction videos on some of the products. In addition, they have included their contact details for whoever wants to reach out to them.

They have showcased their products in their website homepage whereby one may get further details as desired, LinkedIn page and YouTube channel. Everyone has access to get details of the Haltian products by just a click and if one needs further information can easily get in touch with them. They have included words like 'Improve space utilization and fuel the workplace experience with our IoT solutions' (Haltian, 2026k). The Haltian LinkedIn posts also focus in solutions being offered for instance by the use of the words like 'Your building is full of data you are not using; The gap is costing you. Real-time workplace intelligence shows what access cards and surveys never can' (Haltian, 2026s). This allows those with reflected problems seek help from them and as shown earlier they are likely to be selected due to the value they create. Moreover, Haltian YouTube page with video groups and titles reflecting on the respective contents for easy navigation for instance 'Empathic Building digital twin for smart offices' in the group named 'Empathic Building' which demonstrate the details on empathic building details by the company (Haltian, 2026t).

4.2 XY Sense company

4.2.1 Profile

XY Sense is occupancy intelligence platform for corporate real estate teams which was found in 2016 with its headquarters located in Melbourne, Victoria (Australia) and other offices in the US, UK, and India. Its initial goal was to give information on the office usage however it later became a global workplace intelligence platform offering live occupancy data, rich analytics and AI-powered sensors with prioritized customer privacy. It has 11-50 employees and 56 associate members with Alex Birch as co-founder and CEO (XY Sense, 2026a) (XY Sense, 2026b) (XY Sense, 2026c).

The company targets real estate managers with the aim of reduced estate costs, supercharge work experience (including hybrid workplace), delivering building sustainability (using the air sensors) and futureproof of the workspace strategy (XY Sense, 2026d).

Its main services include to optimize workplaces, occupancy analytics for better planning and management among different organizations across the globe especially after the COVID -19 pandemic during which the remote and social distancing were the main practices. This involves offering products like sensors (area sensor for area occupancy and utilization in open areas, meeting space & social spaces; entry sensor for accurately & anonymously count people entering and exiting spaces; presence sensor for sensing presence in pods and phone booths, smaller rooms & movable furniture; air quality sensors for sensing air quality in different work spaces with the focus on particulate matter e.g. dust, Carbon Dioxide, Volatile Organic Compounds (VOCs like cleaners), Humidity, Temperature & Noise; and insights platform with different integrations capability, high privacy & security features and hardware compliance with different third party platforms (XY Sense, 2026d) (XY Sense, 2026e) . These have been demonstrated in Figures 23 & 24 (XY Sense, 2026f) .

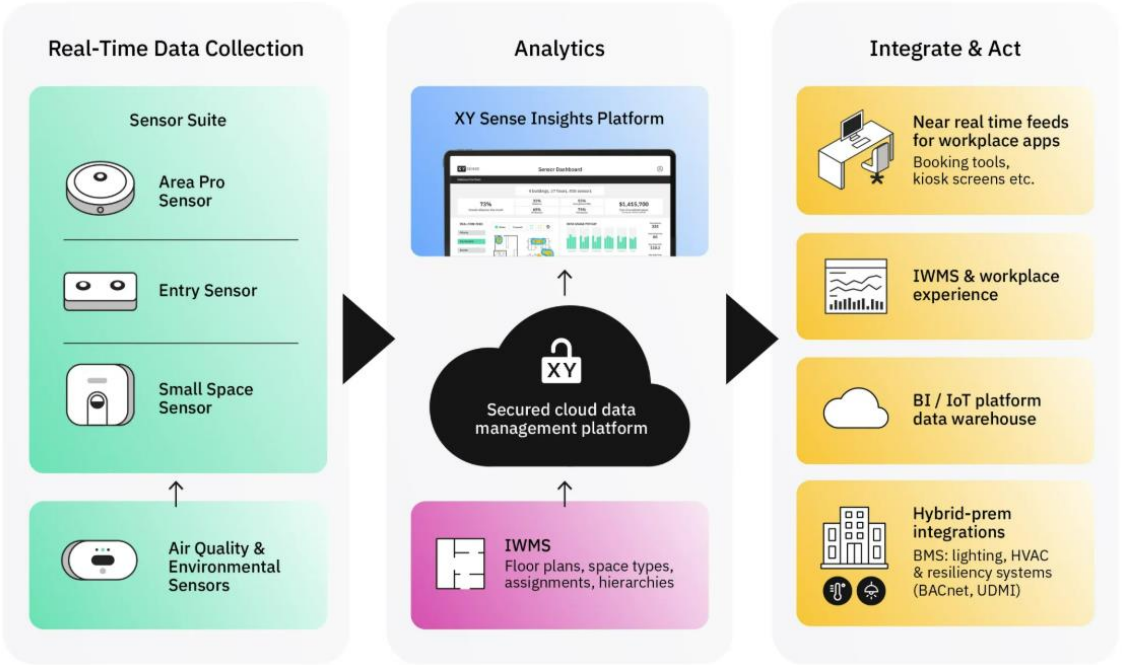

Figure 26. XY Sense products, solutions and their usage (Source: XY Sense, 2026f)

Insight platform of the XY Sense allows users to access live occupancy data from different spaces for data driven decisions.

Figure 27. Single image from insight platform historical replays (Source: XY Sense, 2026f)

4.2.2 Market segmentation findings

From the publicly available data of XY Sense resources, it can be concluded that XY Sense company has grouped its market into needs-based segmentation, technographic segmentation, decision maker segmentation and firmographic segmentation as described in this chapter.

4.2.2.1 Needs-based segmentation

As seen in their materials, XY Sense groups its customers based on their needs as evidenced by the use of words like ‘Every workplace and team is unique and so are their space needs’, ‘designing workplaces that stand the test of time’ (XY Sense, 2026g) (XY Sense, 2021) . This is demonstrated by the Figures 25 & 26.

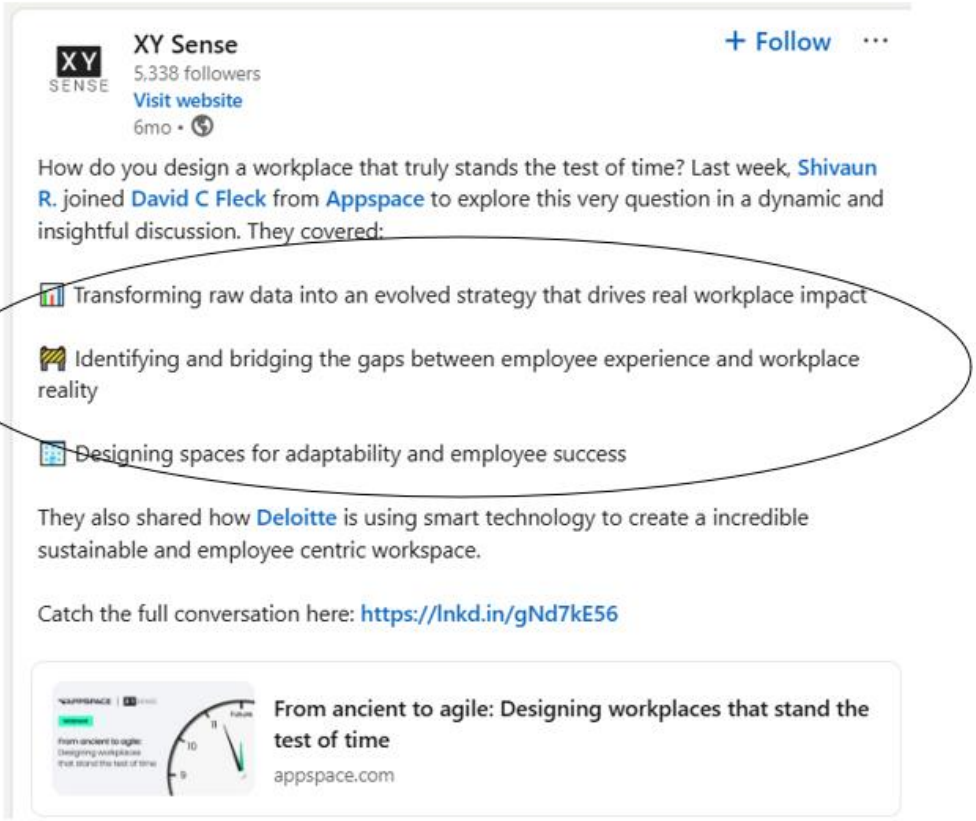

Figure 28. Some of the words that signify needs based segmentation (encircled) of the markets by XY Sense (Source: XY Sense, 2026g)

Figure 29. Some of the words that signify needs based segmentation of the markets by XY Sense (Source: XY Sense, 2021)

The XY Sense highlights offering services to customers according to their needs including hybrid workplace usage. This segmentation of markets according to the needs is a good way to go and relevant in B2B marketing.

4.2.2.2 Technographic segmentation

As a result of revisiting the XY Sense materials, it was observed that XY sense categorizes its customers according to technology requirement for instance, those in need of sensors for small places like phone booths may use wireless (PIR) technology but for larger workplaces Senselink™ install method which involves ceiling mounting allowing multiple sensors to be 'daisy-chained' sharing power and data from a single source (XY Sense, 2026h). In addition there is use of Presence Gateway for wireless (via LoRaWan) interaction of multiple Sense Presence sensors say in a single floor (XY Sense, 2026i). Figures 27 and 28 below show the structure of Senselink and wireless technology.

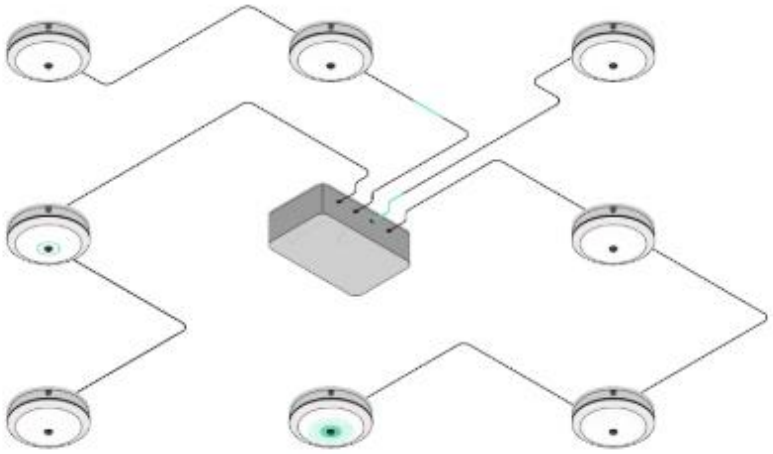

Figure 27. Structure of the Senselink (Source: (XY Sense, 2026h)

Figure 30. Wireless technology in presence sensor and gateway use (Source: XY Sense, 2026i)

This allows XY Sense apply relevant technology for its corresponding customers and enhances cost effectiveness for either part which is typical for B2B marketing.

4.2.2.3 Decision maker segmentation

It was observed there was use of the words like 'Say goodbye to basic people counts and hello to actionable workplace analytics and data-driven decisions!', '..to make important decisions', 'Workplace leaders are making high-stakes decisions based on data,…' from analysis of the XY sense materials in their pages (XY Sense, 2026g) (XY Sense, 2021).

This language signifies decision makers are being targeted by XY Sense company to use their services hence there is decision maker segmentation at the company.

This market segmentation according to decision making power is useful in B2B marketing because if main decision makers find the product meet their expectations can easily influence their fellow decision makers to purchase the respective service.

4.2.2.4 Firmographic segmentation

From the publicly available XY Sense materials, it was noted that the company considers customers of different characteristics from small confined workspaces to large ones and different locations and roles. This can be observed in the products and services being offered to customers from different sensors and integration capabilities with other platforms (XY Sense, 2026d). In addition, they are ready to work with different individuals or organizations of variable professions as demonstrated in the language used like 'No matter your role, team, level or location, everyone at XY Sense is given autonomy and the opportunity to make their mark' (XY Sense, 2026j).

This segmentation is called firmographic segmentation whereby the markets are grouped according to their characteristics. This method is also useful in B2B marketing for capturing a wider range of customers.

4.2.3 B2B marketing findings

4.2.3.1 Value proposition

XY Sense materials reveal addition of value to their services through different ways. This includes incorporation of air quality insights together with real-time occupancy data which gives overview of the occupancy of the workspace as well as conduciveness of the working environment (XY Sense, 2026e). This allows optimal space usage coupled with enhanced wellbeing of the space users. This integration information can be seen in the data as demonstrated in Figure 29 below.

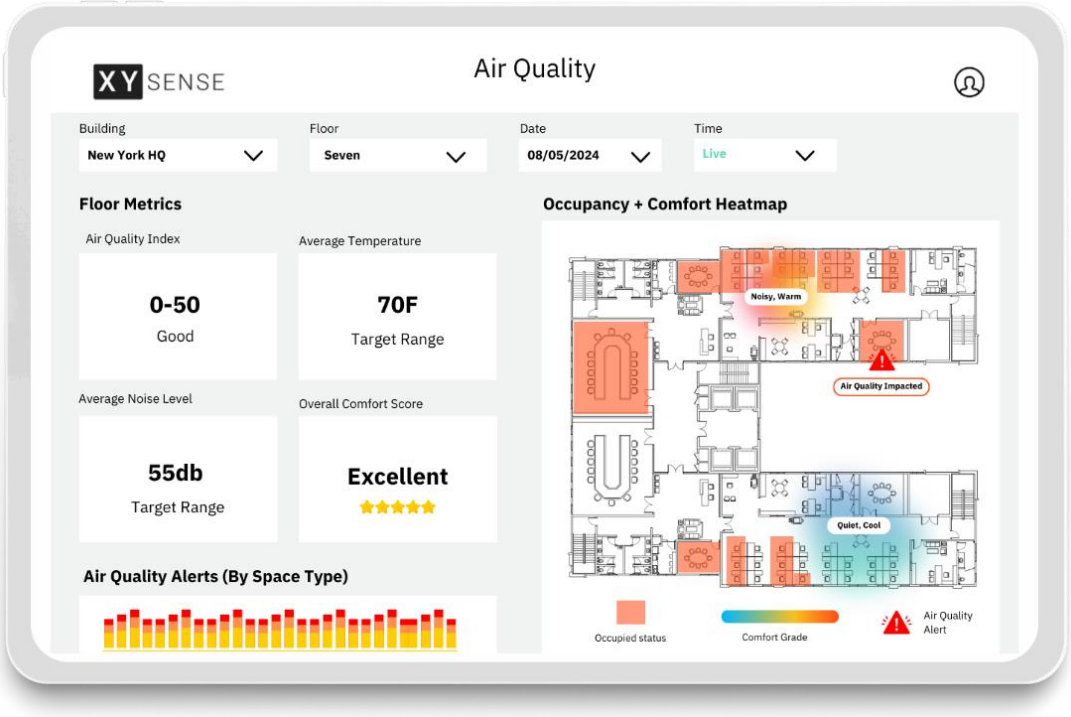

Figure 31. Air quality integration with occupancy insight (Source: XY Sense, 2026e)

In addition, XY Sense Occupancy Application Programming Interface (API) can easily integrate with real time occupancy sensor data in different related applications. The API works in 3 ways including Live Occupancy GraphQL API (for information on floors, locations, and spaces), Live Occupancy Webhooks (allows set up event-style callbacks for occupancy changes instead of polling), Analytics API (gives aggregated historical occupancy data in series like 1min, 5min etc for various uses) (XY Sense, 2026k).

XY Sense also uses both wireless and wired (Senselink™) technologies for its products depending on the customers demand and infrastructure. The Senselink™ installation which involves ceiling mounting allows about 80% cost reduction (installation, switch and maintenance) unlike traditional Power over Ethernet (PoE) installation which is more expensive in terms of installation, switches and maintenance. They also have pin point positional accuracy, real time data and specialized workplace analytics as summarized in Figure 30 below (XY Sense, 2026h). The wired sensors are said to be more reliable than battery powered sensors due to various reasons such as continuity of data capturing and accuracy.

	XY SENSE	Other Sensors
Long Sensor Range / Coverage Tested Coverage Range	**—1000 sqft** **95m2**	—500 sqft 46m2
Pin point positional accuracy Accurate to 1ft	✓	✗
Real time data Updates <1 min / Live views	**~ 2 secs**	~ 5–8 min delays
Specialized workplace analytics platform + API for live integrations Actionable insights	✓	✓
Senselink™ "Daisy Chain" installations Cost-effective, environmentally friendly installs	✓	80% More cabling + managed switches + toxic battery waste
Lower total cost of ownership 50% Fewer sensors required for whole floor coverage	✓	✗

Figure 32. Different additional values of XY sensors (Source: XY Sense, 2026h)

Moreover, the XY sensors have wide-ranging capabilities as compared to other occupancy sensors. The XY sensors can monitor occupancy, fixed desk utilization, real time space booking management, measure social distancing and target cleaning based on use while other sensors have lesser capabilities (XY Sense, 2026l) as seen in Figure 31.

	Monitor Occupancy	Monitor fixed desk utilization	Whole-of-space utilization	Real time space booking management	Measure social distancing (historical)	Monitor real time social distancing	Target cleaning based on use
XY SENSE	✓	✓	✓	✓	✓	✓	✓
Surveys	Manual	Manual	✗	✗	✗	✗	✗
Badge Systems	✓	✗	✗	✗	✗	✗	✗
Lighting Sensors	✓	✗	✗	✗	✗	✗	✗
WiFi & Bluetooth	✓	✓	✗	✗	✗	✗	✗
CCTV/ Security Cameras	✓	✓	✓	✓	✓	✗	✓
Under desk / Passive Infrared Sensors	✓	✓	✗	✓	✗	✗	✓
Thermal Sensors	✓	✓	✓	✓	✗	✗	✓
Ultra-wide Band / RFID	✓	✓	✓	✗	✗	✗	✗
People Counters	✓	✗	✗	✗	✗	✗	✗

Figure 33. Comprehensive capability of the XY sensors compared to other sensors (Source: XY Sense, 2026l)

Privacy and security have been thoughtfully considered in XY Sense products through 100% anonymity, no identifiable information stored, data processing done at the edge of the sensor itself no external transfer. They are produced to comply with customer security and protection protocols and comply with relevant regulatory compliance codes in a variety of major markets around the world. In addition, XY Sense makes use of AI powered position stitching (XY Sense, 2026m).

To add value to its products, XY Sense has also made it possible to integrate with other platforms for better performance. XY Sense can integrate with different kinds of Integrated Workplace Management System (IWMS), Business Intelligence (BI) tools and desk booking without any problem. These can be offered as SaaS (Software-as-a-Service) to the respective customers with real-time space occupancy and utilization data feeds (XY Sense, 2026n).

4.2.3.2 Communication style

Review of XY Sense publicly available materials has shown that the company uses different communication styles to reach out to their potential customers. They make use of a number of demonstrations for instance real time perception of the occupancy by sensors using animations for easy understanding of applicability of the sensors in real life situations including alerts for any situation that needs attention ((XY Sense, 2026g) (XY Sense, 2026o) as seen in Figure 32.

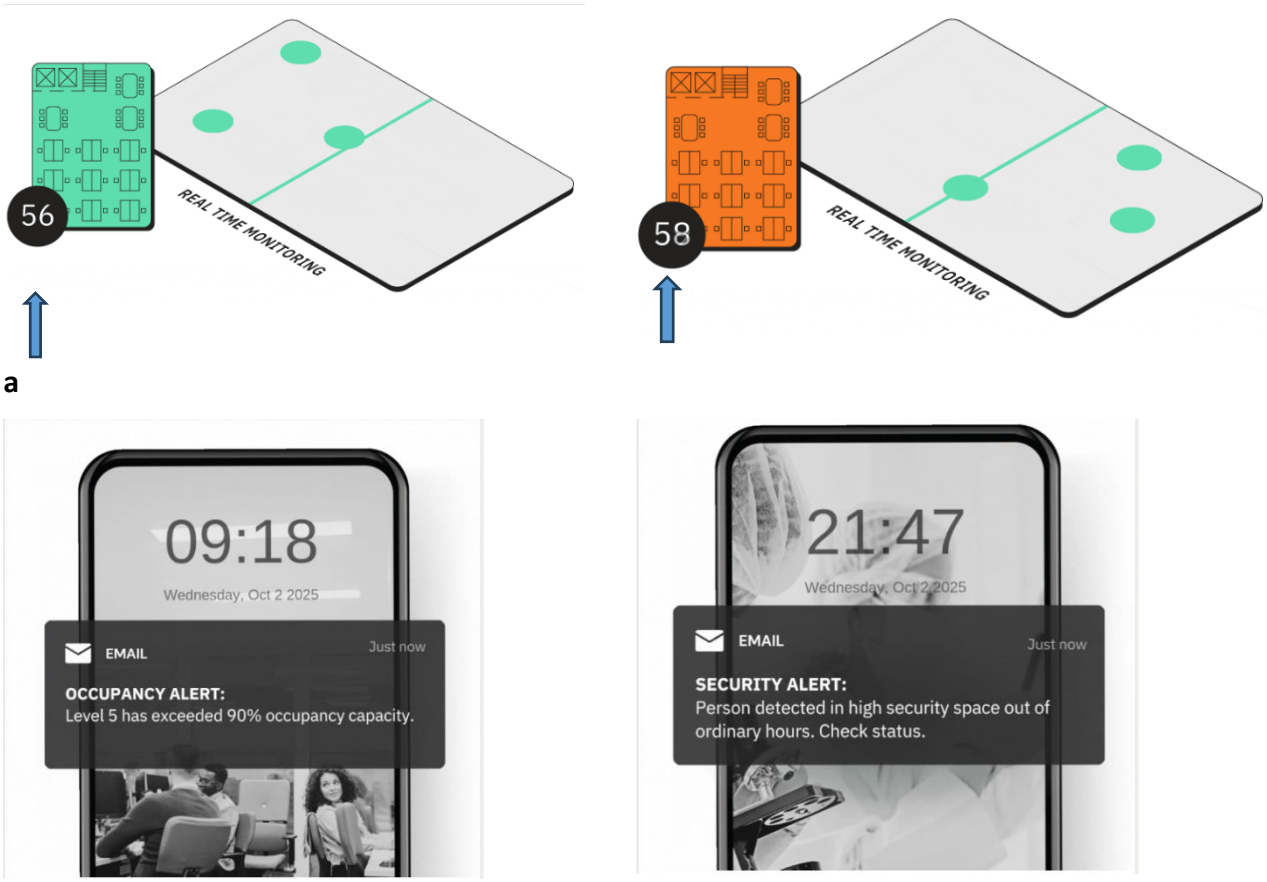

Figure 34. Real time monitoring animations at different times (a) on real time occupancy visualization of the dashboard (Source: XY Sense, 2026o) and (b) on alerts for identified problems detected by the sensor at different times (Source: XY Sense, 2026g).

In addition, there is use of simple, clear language. This can be exemplified in their posts through the use of words like 'from ancient to agile: Designing workplaces that stand the

test of time' (XY Sense, 2026g). This language is attractive and irresistible to anyone in need of designing workplace and is very clear increasing the likelihood of the potential customers purchasing the service.

Symbols, real life images and videos have also been used. For instance, the use of a word 'transparency' in its communication and a symbol of something that allows you to see through or beyond it signifying they are open and honest to those they work with. Another example includes use of the word 'team' related with drawings of different hands put together suggesting that they share their wins as clarified in the associated text (XY Sense, 2026j). The videos have clear titles reflecting contents for easy customer navigation, understanding and possible purchase of the service for instance in a video titled 'Introducing XY Sense Presence (Wireless Sensor)' , there is demonstration of the XY sensor possible use and why one should chose XY sensor and not other sensors (XY Sense, 2024).

This communication technique enhances understanding and real life reflection of how they can use sensors according to their environment which in turn increases the chances of the potential customers to actually purchase the sensors.

4.2.3.3 Customer perception of value

XY Sense has made available summary of customers they served including a number of customers, average yearly detection and some of the customers they served. They have also included testimonials from their satisfied customers and successful projects.

From its publicly available data, it was noted that XY Sense has optimized more than 59,000 office spaces, offers support in 30 countries across the world, accurate and reliable data and more than 200 billion annual occupancy detection. In addition it has partnered with different enterprises including PIC, Deloitte, APPSPACE and universities like MONASH University (XY Sense, 2026p).

For a company that has been there for just a decade, above data reflects that the customers really value and accept what XY Sense offers. This is a promising advancement for future growth and development as well for XY Sense

From an Article on how XY Sense helped US healthcare company boost employee productivity; it was noted the goal was achieved through real time XY Sense utilization data integration to their booking platform for easier location of available meeting place. Prior to this, the company leaders got a lot of complaints on difficulty of getting a meeting place timely and they wasted a lot of time before the meeting actually started. They then initiated booking system however it was not efficient due to the fact that some people booked places they never used while others used places they never booked, this made it difficult to tell if the booked room was actually in use at specified time. However, after XY Sense offered their solution, they saved more time i.e. 2.5 minutes of time per employee per day estimated to be 72 person-years in productivity gains across its 13,000 person organization contributing at least $9.36M productivity improvement. They made use of real time utilization data which was integrated into booking platform and displayed occupancy status in team members' computers and in-lobby screens (XY Sense, 2023a).

In addition, among other solutions XY Sense helped its client to make data driven decision on purchasing equipment which saved $ 130,000 as a result. The company approached XY Sense to assist in cost effective purchasing of equipment (workstations) for growing team of their organization in the Sales and Client Services . The XY Sense analysed workstations occupancy and use in the building and figured out that >100 workstations were infrequently or never used in other departments. From this finding, it was advised to get rid of dead spaces, change the settings and relocate the team to the enhanced ideal work environment for team members and $ 130,000 unnecessary purchase was avoided (XY Sense, 2023b).

There are many other testimonials from XY Sense satisfied customers, a few of them include that from Joel Oldridge, Executive General Manager-Workplace Experience at Xero who testifies how XY Sense real time insights allowed them to make informed space decisions 'We couldn't roll XY Sense's solution out across our global portfolio fast enough. We're now getting the actionable, real-time insights we need to make informed space decisions with confidence in a rapidly changing environment' (XY Sense, 2026p).

Ken Wu from Intuit also explains how XY Sense helped their company in their meeting booking whereby before XY Sense, they had 50% of booked rooms that were not actually never used but XY Sense no-show report led to dramatic improvement 'Before we had XY Sense, we had a situation where team members would book recurring meetings, say a meeting on a Thursday afternoon for the next three months. And then the meeting was no longer needed or it became a video call. And we had a situation where about 50% of the time a room was booked, it wasn't being used. All the rooms were showing as unavailable and teams were frustrated but we knew there was actually supply. Integrating XY Sense no-show reporting helps us understand who has booked a room but has not utilized it and allows us to trigger gentle reminders to teams. As a result, we've seen our ghost-booking rate drop by about 30%' (XY Sense, 2026p).

General Manager of Strategy and Customer at Mirva, Paul Edwards also explained how helpful XY Sensors and analytic platforms have been to their company 'XY Sense's leading sensor and workplace analytics platform has been critical to enabling us to understand how teams are using the space, identify and solve issues they're experiencing, better serve business objectives, and ultimately help encourage employees back into the office' (XY Sense, 2026p).

4.2.3.4 Content and go to market

The publicly available materials of the XY Sense revealed much focus on the service being offered by the company like different sensors and their demos, solutions they offer including utilization monitoring, hybrid occupancy planning, reduce real estate costs, portfolio optimization, smart facilities management with the use of AI. They have also talked about their partners and possibility of partnering with those who wish to and importantly they have included their contacts, profile, how they started as well as their mission. Testimonials on their successful projects as well as from their satisfied customers were also included.

They have presented this information in their company website (XY Sense, 2026d), YouTube channel (XY Sense, 2026c) and LinkedIn pages which may be accessed by anyone interested. Moreover, they sponsor and showcase different activities (XY Sense, 2026g). This allows them to reach their potential customers who can relate to what they offer, trust their services and later on possibly convince them purchase the services.

4.3 Comparison of two success companies (Haltian Company and XY Sense Company)

This section summarizes the similarities and differences of the case companies.

4.3.1 Similarities

Table 4. Similarities between Haltian Company and XY Sense Company

Area	**Similarity**
Target	Both companies target complex organizations like offices, real estate organizations, health organizations as well as individuals.
Services	Both companies offer occupancy analytics and space management related solutions with the focus of optimal workspace usage. In this they assist those in need of optimizing their space usage. In addition they assist in ensuring healthy environment through the use of air quality sensors.
Market segmentation	Both companies use similar segmentation methods considering needs, technology, decision making power and demographics characteristics of the customers although some of the targets might be quite different.
Value position	They have both added value to their products to broaden their markets. This has been achieved through ways like having special company technology that make them stand out compared to their competitors.
Privacy and security	Privacy has been given priority by both companies. This has been highly considered in products and services being offered by both companies.
Partnership	Partnering with others is another common feature whereby the Haltian partners with spica, IBM, Microsoft etc and XY Sense partners with Microsoft, Serraview, Hubstar etc
Scalability	Both companies have scalability capability providing room for growth for their customers

Area	Similarity
Content and go to market	Both companies have made their materials accessible to anyone in need through official websites, YouTube channels, LinkedIn and they have made it clear through welcoming messages for anyone in need to reach them.
	They have also enriched their materials with solutions they offer, how their products work through different articles, videos, demos, activities participated and satisfied customer stories/testimonials.
Coverage	Although they have local offices in different countries, their targets include the whole world. They can offer their solutions anywhere in the world.

4.3.2 Differences

Table 5. Differences between Haltian Company and XY Sense Company

Area	Haltian Company	XY Sense Company
Company age	Older company, launched in 2012	Newer company, launched in 2016
Company size	Larger company with 51-200 employees and 95 associated members	Smaller company with 11-50 employees and 56 associated members
Coverage	More complex organizations like industries and Community at large for instance libraries	Less community component, mostly organizations
Technology	Exclusively wireless (HITS) with long life batteries and self-healing capability, dynamic	Preferably wired technology through the use of Senselink

Area	Haltian Company	XY Sense Company
	routing of their networks and decentralized	
	There is emphasis of IoT use in which there is interaction between different objects through different sensors	Emphasis of AI use in which there is simulation of human intelligence in its functions
Go to market	It has a wider range of products other than occupancy management and monitoring These incudes : smart facility management, equipment tracking and asset inventory; product creation from customers ideas	The main focus is occupancy management and monitoring
Content	Balance between stories from satisfied customers and articles	Articles are more than stories from satisfied customers

From the above observations on similarities and differences it can be concluded that, more or less similar B2B principles are used to make the case companies successful however the differences are what make each company unique and use of value propositions to make either company stand out from others.

5 Discussions and Conclusions

This chapter concentrates on the findings summary, comparison to the literature in B2B marketing, current situation and conclusions of the findings.

5.1 Findings summary

In answering the research questions 'What are the customer segments served by occupancy analytics and space management IT services?' and ' What are the value propositions offered by case companies?' the findings of the study can summarized as follows:

There are different customer segmentation in B2B, however customer segments as found in this study include needs-based segmentation, technographic segmentation, decision maker segmentation and firmographic segmentation. The needs-based segmentation categorises customers based on their challenges hence in need of solutions to their challenges as evidenced by consistent use of language with the focus on space optimization and data analytics. Technographic segmentation is when customers are categorized by technology level, in this study it was exemplified by comparison of different products with their respective technology (wireless vs wired), why one should choose a certain technology over the other and emphasis on upgradability capability of the sensor. Decision maker segmentation categorizes customers according to their decision making power and the two companies target the decision makers as seen in their consistent emphasis of how applicable the products/services are in informed decision making. Firmographic segmentation on the other hand categorizes customers based on the characteristics of customers (organizations) and this was seen on the emphasis of characteristics of customer organizations being served. All in all, it could not be emphasized more that customer segmentation plays a big role in B2B including occupancy analytics and space management IT services.

Value proposition as found in this study was stressed by case companies such that each company used different methods to enhance its value against competitors for great success. For instance this was achieved through the use of unique technology, partnering with others (value co-creation), use of communication style that enabled fast tracking of decision making process by potential customers, they took time to understand what value is to their customers and ensured they met that as well as sharing success stories of their satisfied customers.

5.2 Discussions

From the findings of the two case company review it was noted that both companies targeted different organizations mostly those with complex structures and in need of optimal space use. This is relevant consideration due to the fact that there are different dynamics in business including B2B marketing especially after the Covid 19 pandemic. People would like to maximize their productivity including through reduced running costs without compromising the services. This has been achieved through monitoring by using different occupancy sensors. In addition, use of air/environmental sensors has allowed the users to work in healthy environment allowing them to become more efficient. Although the companies had different primary goals, they started where they were and adopted to the market accordingly.

Moreover, the use of different market segmentation methods by both success case companies has made them successful due to the market broadening. As it seen early on this study, the companies have used different market segmentation including needs, segmentation, firmographic segmentation, decision making power segmentation as well as technographic segmentation. This allows them to reach different customers at different level hence enhances profitability of the company although targeting too many levels might affect the quality services being offered as one has to consider many different specifications.

Personalized (need based) segmentation is valuable and it is easier to maintain customers. The importance of segmentation has been stressed by different authors in different aspects and considered as key element for effective marketing (McDonald & Dunbar, 2012) as well as modern marketing (Dibb & Simkin, 2008) and the impact of proper segmentation. The companies have been successful due to the fact that they have made use of this segmentation strategy.

Literature emphasizes on understanding value needed by different customers and how to make use of them (McDonald & Dunbar, 2012). The Haltian and XY Sense have demonstrated understanding of their markets as seen from their publicly available materials. For instance the repeated use of words that reflet optimized space use, make data based decisions etc. This is an important consideration to remain in the industry.

Not knowing what is considered to be value to your customers it is difficult to get them consider or buy your products. One of the things that keep the case study companies is that they took time to study what value is to their customers and offered them even beyond their expectations. It should also be remembered that it varies from customer to customer and it may also change over time.

As it was seen in the literature that privacy and security including in big data have been looked at in different eye and that investment in security adds potential gain to the suppliers (Gomes, Iivari, Ahokangas, Isotalo, & Niemelä, 2017). The Haltian and XY Sense have considerately measured this and made sure that all of their products observed privacy and security of their customers and they have stressed it in their publicly available materials to attract their customers. This has ensured compliance by their users for instance, the workers have been ensured that their privacy is not intruded in any way hence they are free and comply with regulations accordingly.

Moreover, value co creation using different methods has been looked at in the literature which may involve different parties in the business ecosystem for instance competitors

may work together in value co creation and have a win-win situation for either parties (Monticelli, Verschoore, & Garrido, 2023). This has been observed in the case companies as they have demonstrated that they partner with different companies to attain a certain goal which in common is to have a better product whereby both parties win.

In this era, there is easy global interaction on anything including business. The Haltian and XY Sense have made use of this and made their materials accessible for anyone through websites, YouTube channels and LinkedIn pages. This is beneficial especially for the global market as anyone anywhere can access the service despite the absence of physical office of the company in a respective area. In B2B this is one of the success points as seen in the case companies.

The Haltian and XY Sense companies have clearly communicated what their companies are all about, the services being offered and how their customers can reach out to them for anything including clarification or partnering. This approach is useful in marketing including B2B marketing as the prospective customers might not reach out if they feel the service might not be of any use to them.

Ability to grow with the market is another selling point in B2B marketing. Business may start small but grows with time, scalability capability is a vital consideration when choosing a product or service being offered. This has been proved by the case companies offering products and services with scalability capability. This gives their customers confidence in their products because they are given room to grow without dramatic changes of their initially acquired products.

In addition, the two companies have made their products unique as compared to their competitors. Use of The Haltian Inventory Tracking Solution (HITS) has special advantage in that it allows fast & cheaper initial installation, less total cost of ownership, no interference to the existing networks, can be upgraded and can use any third party application for data visualization. On the other hand, the XY Sense emphasizes on the

wired technology over wireless technology which cuts down cabling cost by 80%, delivers continuous, real-time occupancy data.

5.3 Conclusions

The Haltian company sustaining the business for more than 10 years and still being one of the top shows that it is really committed in making B2B a success. This has been achieved through combination of different B2B marketing strategies from market segmentation, value position like the use of HITS, diversity of products and services and showcasing their success.

Moreover, the XY Sense has been in business for almost a decade. It has also attained its success through the application of different B2B marketing strategies including effective customer segmentation, use of its both wired technology through its unique 'Senselink' and wireless technology.

It can be concluded they both have a lot in common including targets, services being offered, market segmentation, value positioning, privacy & security consideration, partnering with others, scalability capability, material sharing and their contents and most of all they can offer their services and products all across the globe which is applicable in current dynamics in occupancy analytics and space management requirements with advancing technology.

5.4 Study limitations

The use of the secondary data may be limiting because only what the companies are ready to share publicly was obtained, no internal strategy captured. In addition, the findings might not be generalizable to other B2B companies.

6 Recommendation

This section offers recommendations based on the analysis findings of this study and they are categorized into three parts which are: Recommendation to companies of similar industry, recommendation to the Haltian Company and recommendation to XY Sense company.

6.1 Recommendation to Case companies

Haltian Company is recommended to incorporate AI to its products and services matching with current technological advancement. This will fasten its growth by attracting more customers due to added value, make its work easier and as a result will improve its income.

More inclusion of detailed success stories including the customers' perspective by XY Sense. Customer testimonials are very short just few statements on what XY Sense has done for them however if elaborated further and possibly in videos or real life images may increase trust of their prospective customers and hence convince them to purchase their products.

6.2 Recommendation to companies of similar industry

The companies with similar goals as the success company cases are advised to be flexible and open to new opportunities as they arise. This will allow them to grow with the market and be successful in whatever they aspire to do.

Effective segmentation cannot be emphasized more than it already has. In order to reach the right customers, the companies are supposed to consider this very carefully from the very beginning.

The companies should take time to dig deep as what value really means to their prospective customers and work from there to add advantage over the competitive companies. This will allow them to be selected over their competitors. It is important to include evolution over time as well in this aspect and include future predictions for the needs as well as competitors improvement. This may also include value co creation with customers and partners.

Clear communication of what the company is and what it offers is among the things to consider for a successful B2B. The company should be ready to grow with customers and with time.

Innovation and creativity are also important to be put into action to make a company stand out against the competitors.

6.3 Area for future research

More researches in occupancy analytics and space management with AI incorporation. In this AI era whereby AI is incorporated in almost everything and rapid changes, occupancy analytics and space management will benefit from researches that incorporate AI and assist in future situation prediction.

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