

Smart Access: Building Access Company

Overview of SmartAccess

SmartAccess is a building security and access company that uses connected technology, information systems, IoT, and artificial intelligence to allow access to buildings. Information and intelligence are used to optimize performance, automate processes, such as heating and security, and achieve cost savings.

The smart building market value is expected to reach \$160 billion by 2026 and expected to grow at 15% yearly. Revenue is expected to reach \$34 billion. Furthermore, the growth of the market is being propelled by rising awareness about space utilization and the adoption of IoT-enabled building management systems.

The target audience for smart access building products are commercial building management companies, property management companies, developers, and surveillance companies, which want to keep pace with the rise of urbanization and growth of technology and ensure the security of their buildings.

SmartAccess Concept

SmartAccess aims to combine IoT, software, and AI with analytics to create a superior offering to facilitate smart access to buildings, factories, and warehouses for third parties and improve overall security. A smart building would be connected by technology, sharing information across systems to optimize performance and enhance efficiencies. Such a solution would offer real-time monitoring, internal networks (no IP exposure), data encryption, and centralized security policy management. It would offer an out-of-the-box solution, reducing time costs and offering high reliability.

Customer Benefits

- Improved experience: Physical safety and security, tenant/visitor comfort and satisfaction
- Efficient operations: Preventative and predictive maintenance, reduced operating costs
- Increased sustainability: Energy and water cost savings, decreased carbon footprint, optimized building space

Customer Pain Points

- Residents, employees, guests, and workers experience friction and a less-than-ideal experience when they are unable to access a building when they need to
- Tenants, operators, and owners want better security options
- Tenant preferences are constantly changing with technology advancement and the growth of IoT and AI-enabled products and services

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Current Alternatives

Many current solutions offer automated technology but not intelligent solutions where the technology based on sensor readings makes decisions, such as offering automated access, instead of humans.

Key Challenges and Risks

- Key challenges include efficient power supply and requirement of critical equipment, such as controllers, actuators, safety modules, and voltage regulators
- Risks include security breaches and the possibility of digital vandalism and cyberattacks with hackers accessing control systems

Competition

[Johnson Controls](#) offers a range of access control products to suit buildings and establishments of various sizes and types. The company provides comprehensive solutions for security needs, including biometric and electric access control hardware and integrated software. Their extensive solutions not only ensure that a security system is well equipped to safeguard assets but also capable of doing much more.

[Siemens](#) offers scalable and reliable access control systems to solve a variety of access challenges for corporate complexes, single buildings, and more. These offerings include SiPass, a powerful and integrated access control system, SIPOINT, a customized and comprehensive access control for high-security requirements, and Siveillance Identity, a self-service and web-based portal that offers access request management across multiple sites.

[Cisco](#) smart building solutions offers a suite of products to ensure and enhance the safety, security, and efficiency of the future of smart buildings. They prioritize sustainable operations, security (with advanced edge-to-cloud solutions) and create meaningful customer experiences through seamless wired and wireless digital experiences with Cisco DNA Spaces.

Opportunity Hypothesis

We believe that facilities and management companies will want to offer smart identity-based access capabilities to specific buildings they manage so that employees, residents, guests, or third parties can have a smooth, hassle-free access experience.

Your Assignment

Your task is to create a complete product development plan for SmartAccess. There are seven deliverables that focus primarily on the inbound product development and six deliverables that focus on the outbound product development. Complete and submit each deliverable as you progress throughout the program. In Week 20, you will get the opportunity to refine and elaborate on each deliverable as you compose your final presentation and product development plan. Northwestern Kellogg Professional Certificate in Product Management

Ceyone Jha – User Persona

Profile

Age: 22

Income: \$120K

Education: Bachelors in Computer Science

Experience: 1 yr. in software development

Company: Amazon

Location: Seattle, WA

Gender Identity: Male

Job: Software Engineer at Amazon

Marital Status: Single

Goals

1. Travel around the world whenever he has a chance
2. Start his own company in few years
3. Learn to play Saxophone

Challenges

- All the accommodations he found in downtown were mostly in older buildings with either a security guard/front desk person or keypad entry with multiple keys.
- He is struggling to get privacy as random strangers keep knocking on his door. He gets frustrated about how the person got entry.

Personality

Analytical, Problem-solver, low on patience for mundane/repetitive task, spirited, forgetful

Associations

IEEE, Reddit, Instagram, Karma band

Lifestyle

Ceyone lives in Seattle downtown, and wants to carry as little things on him as possible. He is all about technology, and likes using technology in his day to day life. He uses lime scooter to go places, digital wallets for payments, prefers a keyless car, and smart devices in his home that he can control from anywhere.

Jobs to be Done – Ceyone Jha

1. When I step closer to the door of my building/home, I want doors to open by itself, so I can go out without bulky keys
2. When there is any leak or smoke in my home, I want alerts on my phone, so I can call someone to secure my home and belongings
3. When I am home, I want a thermostat that remembers my preference, so I don't keep waking up in the night to adjust the temperature
4. When I want to know how much energy each appliance/device is using in real time, I want a web platform to view everything together, so I can optimize the energy consumption of my household
5. When I am away from home, I want my home monitored and send alerts for unusual activities, so I can feel at peace that my home and belongings are safe

High Value Opportunities(Ceyone Jha)

1. When I step closer to the door of my building/home, I want doors to open by itself, so I can go out without bulky keys
2. When there is any leak or smoke in my home, I want alerts on my phone, so I can call someone to secure my home and belongings
3. When I want to know how much energy each appliance/device is using, I want a web platform to view energy consumption of all the devices/systems in my house in one screen, so I can optimize the energy consumption of my household

Product Opportunity Brief

Exec summary: SmartAccess is an entire home/office in a pocket product. The product uses connected technology, information systems, IoT, and artificial intelligence to allow access to buildings. Information and artificial intelligence are used to optimize performance, automate processes, such as heating and security, and achieve cost savings.

Market size: Since the smart building market value is expected to reach \$160 billion by 2026 and expected to grow at 15% yearly, need for smartaccess is directly proportional to the growth in smart buildings. The Revenue for smart buildings is expected to reach \$34 billion thereby creating a huge market for smartaccess. Furthermore, the growth of the market is being propelled by rising awareness about space utilization and the adoption of IoT-enabled building management systems.

Target customer:

- Ceyone is a young 22-year-old IT professional starting at Amazon headquarters based out of Seattle. He lives in downtown, and wants to carry as little things on him as possible. He uses lime scooter to go places, digital wallets for payments, prefers a keyless car, and smart devices in his home that he can control from anywhere. He had strangers coming to his door in one of the apartments which surprised him about how the person got entry into the building.
- Maria is a 47 year old real estate manager at Prima group in Ashburn, Virginia. She takes train to work early morning to avoid the crowd. She is a medium size women with pleasant personality. She likes to plan everything in her day, week and year ahead. Chaotic places, unorganized offices/home, unexpected breakdowns of machines at home/work make her very anxious. Her objective is to reduce operations cost while enhancing building security. She is responsible for improving tenant satisfaction score from 4 to 4.5.

Product Opportunity Brief

Product concept:

- SmartAccess helps increase the efficiency in building operations by automating several tasks such as temperature and humidity control, smart lighting systems through IOT devices and connected systems. Automating several repetitive tasks by recognizing patterns assists facility manager to manage the facility smoothly saving on operational costs in the long run.
- SmartAccess can enhance building security by utilizing IoT devices such as cameras, motion sensors, occupancy counters, water leak detectors, fire detectors that send automated alerts to the respective departments about any potential threats without waiting for someone to take an action in-person.
- SmartAccess has an additional layer of security i.e., biometrics which can't be duplicated or hacked providing buildings with confidential information such as banks, public offices with best security feature they can have.
- SmartAccess enables users to manage their home from anywhere using connected systems without having to remember to turn off lights, stove, oven, heating, sprinkler or security system etc.

Business model: The smart building market value is expected to reach \$160 billion by 2026 and expected to grow at 15% yearly. Revenue is expected to reach \$34 billion.

- For a product like SMARTAccess, SAAS business model with a layer of transactions is optimum. Since the product is mostly software based with one aspect of supporting hardware and equipment, SAAS makes most sense. The customer will get a guarantee of seamless integration of the system when they buy hardware through our preferred partners. The customers will get a package price model for software plus supporting hardware. Thus there will be a layer of transaction business model involved along with SAAS.

Risks:

- There is a learning curve associated with using technology. When older buildings are overhauled, there might be resistance from technology averse users.
- Since everything will be on internal network, physical threats can be eliminated however cyber threats can be damaging to the company reputation
- The product needs highly skilled developers which is a huge investment before the product starts generating any income

MVP and User Story for Ceyone Jha

System Integration

E1: Automated control System of the building

1. As a user, I want the thermostat to adjust the temperature on its own depending upon the weather outside, so that I don't have to keep adjusting the temperature manually

2. As a user, I want the lights to turn on when I walk into an area and turn off when no one is in the area, so that I don't have to remember turning them off every time the room is empty saving on my electricity bill

3. As a user, I want the doors to unlock on their own for the authorized people, so that I don't have to be home always for my service providers such as cleaners/plumbers/electricians

E2: Data storage on cloud

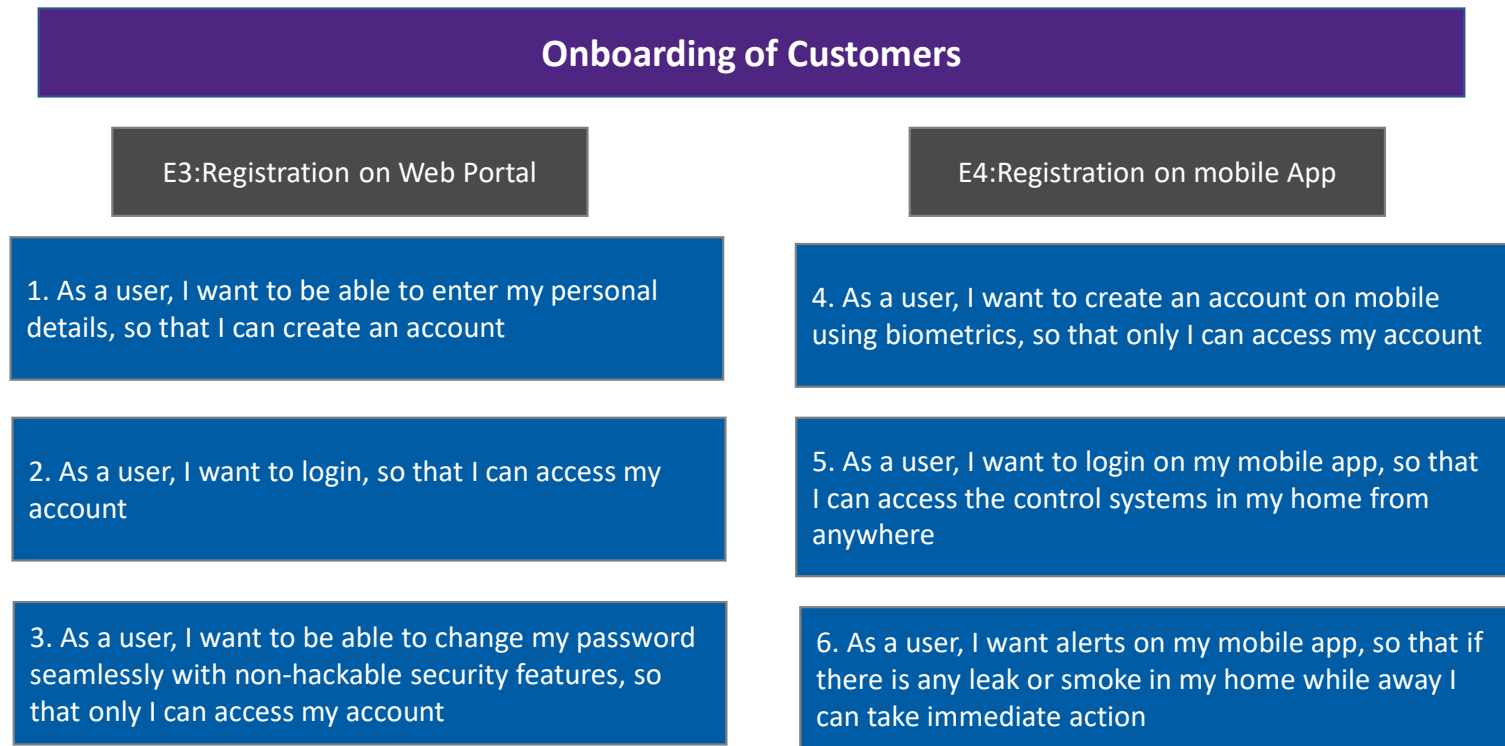
4. As a user, I want the thermostat to remember my preferences of temperature depending upon the climate outside, so that I can sleep through the night without worrying about being too cold or hot

5. As a user, I want the lighting fixtures to remember my preferences on intensity of light at different times of the day, so that I don't have to manually turn off the light when there is sunlight coming into the room and I don't need artificial light

6. As a user, I want an online log of entry/exit of authorized people from my apartment with time stamp while I am away, so that I exactly know who is at home in my absence and what time did they leave

Note – Hierarchy of the chart is Theme -> Epic -> User stories

MVP and User Story for Ceyone Jha

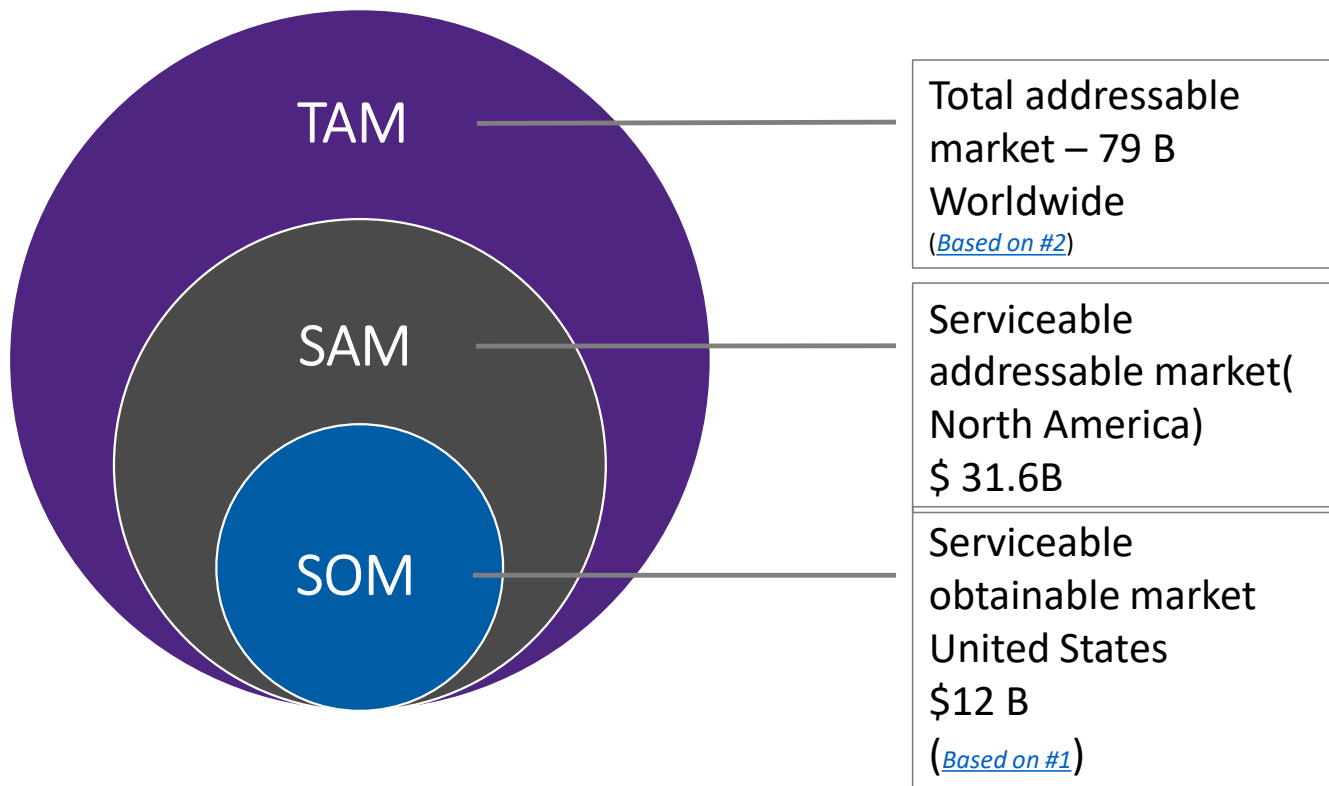


Note – Hierarchy of the chart is Theme -> Epic -> User stories

Type of MVP

- SmartAccess is an expensive product to build since it requires many expensive equipment, data storage on cloud, and a web/mobile interface which needs to be intuitive and user friendly. Firstly, I would recommend using a **crowdsourced** MVP to test the idea of having an integrated system with the control features to see how many users would be interested to buy. It is important to test an MVP before investing in building even a prototype for a product of such magnitude. Such products are cost and resource intensive.
- After getting a certain success rate I would go build a **single feature prototype** to provide users a glimpse of the functionality our product can provide. With single feature, we can test the most valuable need of the customers from the product and build on it based on customer feedback.

Market Sizing and Business Model



Business Model

The smart building market value is expected to reach \$160 billion by 2026 and expected to grow at 15% yearly. Revenue is expected to reach \$34 billion.

- For a product like SMARTAccess, SAAS business model with a layer of transactions is optimum. Since the product is mostly software based with one aspect of supporting hardware and equipment, SAAS makes most sense. The customer will get a guarantee of seamless integration of the system when they buy hardware through our preferred partners. The customers will get a package price model for software plus supporting hardware. Thus there will be a layer of transaction business model involved along with SAAS.

Market Sizing - Sources and Hypothesis

1. The global building access control security market is expected to secure a market value worth US \$11.89 billion in 2023. During the forecast period from 2023 to 2033, the market is likely to dispatch a CAGR of 14% while generating a value worth US\$ 44.2 billion. The increasing demand for smart buildings and infrastructure will be driving the demand for the building access control security market in the future.

Source: [Future Market Insights](#)

2. The global smart buildings market size stood at USD 72.6 billion in 2021 and is projected to grow at a CAGR of 10.9% to reach over USD 121.6 billion by the end of 2026. Various factors such as increased demand for energy-efficient systems due to increased energy consumption and costs, advancement in IoT and PoE solution, the increasing net zero, and regulatory changes are expected to drive the adoption of Smart buildings solutions and services

Source: [MARKETSANDMARKETS](#)

3. Revenue in the Smart Cities market is projected to reach US\$89.49bn in 2023. In global comparison, most revenue will be generated in the United States (US\$11.12bn in 2023)

Source: [Statista.com](#)

4. Number of ADT subscribers in US - 6.7M (Source: [Statista.com](#))

5. Market size of the security services in U.S - \$48.2B (Source: [Statista.com](#))

Defining the Five S's of Smartaccess

Strategy: Why this app exists in the first place

- Describe what the user gets out of using this app
 - Improved experience: Physical safety and security, tenant/visitor comfort and satisfaction
 - Efficient operations: Preventative and predictive maintenance, reduced operating costs
 - Increased sustainability: Energy and water cost savings, decreased carbon footprint, optimized building space
 - real-time monitoring, internal networks (no IP exposure), data encryption, and centralized security policy management
- Describe what the organization/company gets out of offering this app/service
 - Emerge as leader in smart integrated solution
 - Increase customer engagement and dependency
 - Growth in Revenue

Scope: The features and functions available within the app (e.g., what is in and out of scope)

- What actions can the user take in this app?
 - See the log of users entering/exiting the premise
 - Monitor the energy usage of all connected systems
 - Monitor the alerts from systems
 - Same app doesn't work in other geographic location – App is geographic/currency specific
- What actions can the user not take in this app that might have been a consideration for the product team?
 - Add automatic scheduling for maintenance through the app

Structure: The user flow or journey (e.g., how each screen connects to one another)

- What are the key activities users can do within this app?
 - How does user set up his profile?
 - What visualizations user wants to monitor usage/performance of systems?
 - How does customer set up payments?
 - How does customer monitors access points to the building?
- Consider one of those activities and list out the steps (e.g., press on the Libby app icon, select the search bar on the Homepage, and enter the name of the e-book you are looking for)
 - How does customer create a profile?
 - Open Smartaccess.com > click get username > fill personal details, payment details > Submit

Defining the Five S's of Smartaccess

Skeleton: The interface design (e.g., what you want the users to do), navigation design (e.g., where you want the user to go next), and information design (e.g., ideas you want to be communicated to the user)

- Consider the steps of the structure (e.g., user flow) you described above and list the key considerations and aspects for the three parts of the skeleton
 - Interface design – The website/app will have interactive graphics with hover over for detailed information. Most of the visuals will be drilldown, and clickable
 - Navigation design – There's a horizontal navigation bar at the top of the screen that stays consistent irrespective of what screen customer arrives at, enabling the user to move around the site seamlessly. The search bar helps find important information instantly
 - Information design – After the registration page the screen displays information depending upon the role of the user in the building (tenant/property manager/security/maintenance manager)

Surface: The visual and interactive elements on the screen

- Logo is clickable which takes user to the home screen. The search bar, and header has links that stays consistent throughout the site. All the visualizations will have date range to select and see the data

Wireframe SmartAccess

Landing Page

A Web Page

https://Smartaccess.com

Logo

Header Links

Who we are

Login

Username

Get Username

Password

Get Password

Login

Trouble logging in?

A Web Page

https://Smartaccess.com

Logo

Header Links

Entry/Exit Log

Name (job title)	Time in/Time Out	AccessCard #	Membership#
Giacomo Guilizzoni Founder & CEO	40	Peldi	☺
Marco Botton Tuttofare	38		☑
Mariah Maclochlan Better Half	41	Patata	☐
Valerie Liberty Head Chef	:)	Val	☑
Data Grid Docs			☐

A Web Page

https://Smartaccess.com

Logo

Header Links

Personal Details

First Name Middle Name Last Name

Street Address

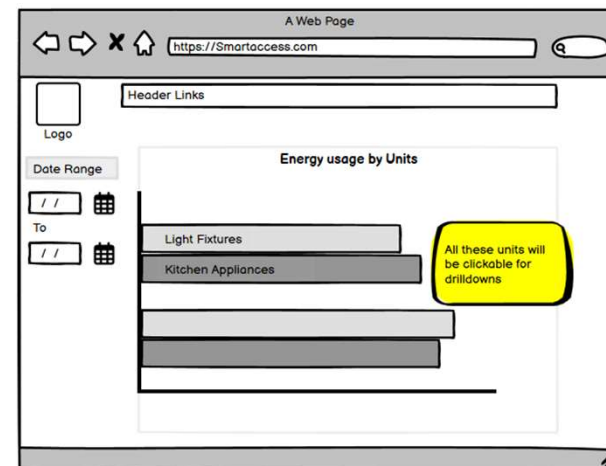
City State Country

Membership Number Membership Type

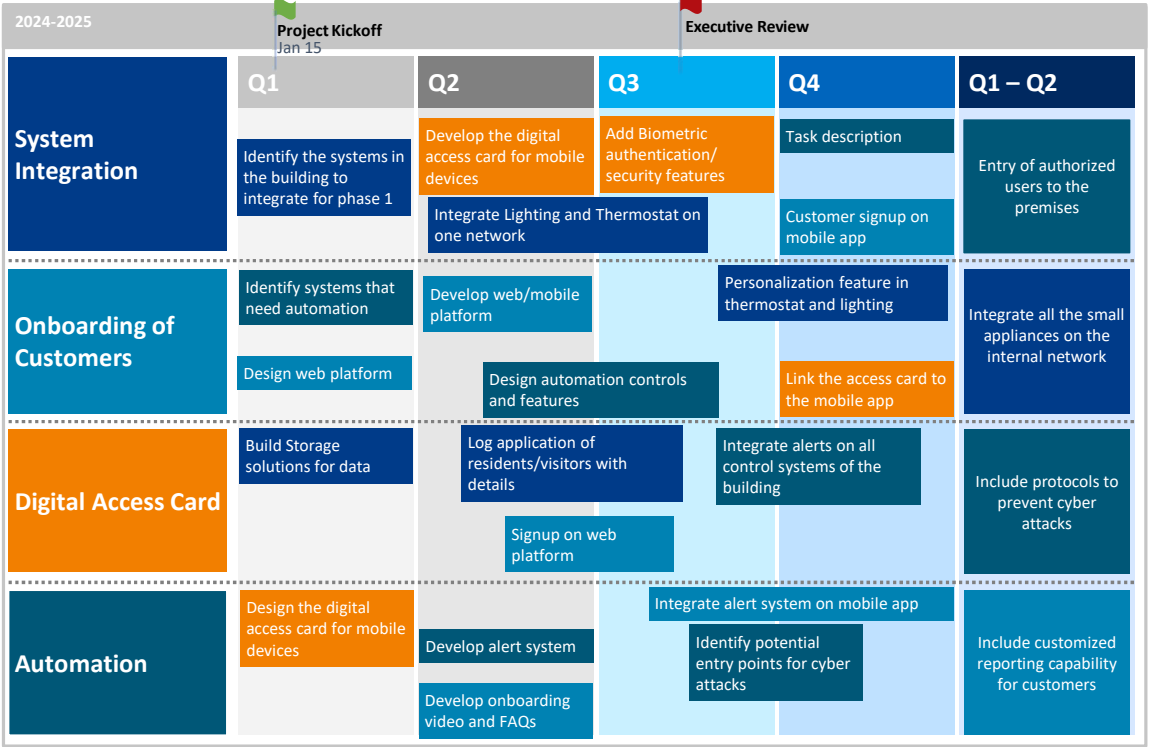
Payment Method Payment Type

Submit

The registration page will have multiple authentications inbuilt to set up the user



Product Roadmap: SmartAccess



Slide 15

PJ1

Each theme on the left has a color and the tasks are divided as per the color

Pritisha Jha, 11/7/2023

Positioning and Messaging - SmartAccess

For commercial building management companies, property management companies, developers, and surveillance companies, who want to have an out of the box solution for centralized security policy management with high reliability and operational efficiency, SmartAccess is the solution that not only manages access to buildings, but also optimizes performance, automate processes, and achieve cost savings for the building. Unlike Johnson controls, we don't offer just security control but an integrated solution for urban buildings.

Messaging pillar #1

- Feel Secure
 - Biometric security authentication of residents of the building
 - Strict security protocols for visitors
 - 24/7 surveillance of the building

Messaging pillar #2

- Digital Access
 - Contactless key cards
 - Security protocols and authentications on digital keys
 - Apple wallets compatible key cards for access

Messaging pillar #3

- Save Money
 - Monitor the usage and optimization of energy
 - Automate maintenance alerts
 - Use energy efficient appliances

SmartAccess – Elevator Pitch

Our clients say “Adoption of SmartAccess has dramatically improved the customer satisfaction rate from 3.5 to 4.2. We are perceived as environmentally friendly company offering world class experience to our tenants. – V.P, Altura real estate management company”

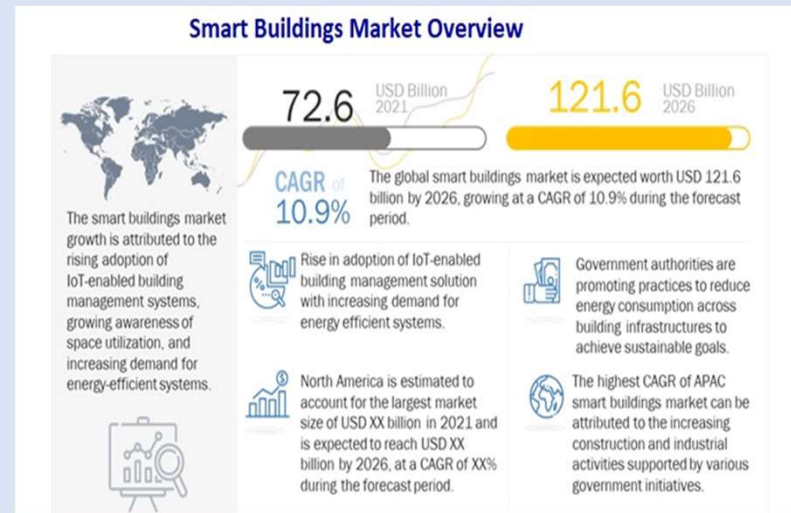
SmartAccess is the out of the box solution for smart buildings that care for its tenant's physical safety/security, comfort, and satisfaction. The SmartAccess program consists of an expertly curated, objective and holistic framework across four major criteria:

- Power and energy
- Life and property safety
- Connectivity
- Sustainability

The technology aims to combine IOT, software, and AI with analytics that creates an extraordinary offering to facilitate smart access to buildings for third parties and improve overall security.

A smart building would be connected by technology, enabling information exchange across systems to optimize performance and enhance efficiencies. Such a solution would offer real-time monitoring, internal networks (no IP exposure), and centralized security policy management.

According to a report by [MarketsandMarkets](#)



SmartAccess – Pathways for Growth

SmartAccess will have SAAS business model and will have tiers of subscription in the product. Smart Access will primarily focus on North American geographical market, and highly urbanized pockets of Europe.

For the growth, I would recommend deploying a combination of 2 strategies in the order listed below -

1. **Share of Wallet –**

- I. Leveraging existing customer base is very important for the sales growth of a SAAS product. Firstly, I would recommend targeting accounts enrolled only for security access management subscription and converting those into integrated solution subscription tier. Next target accounts with integrated solutions subscription for upgrade to premium subscription that offers all inclusive capabilities such as analytics/visualizations and personalization. We will primarily target large corporate commercial buildings that have multiple tenants seeking high customer satisfaction for upgrade to premium subscription. Revenue generated from premium subscription customers alone will generate high profit. We will begin with companies having real estate in tier 1 cities such as New York, San Francisco, Chicago, Boston, and Washington D.C. In the next round we will target companies with real estate in Seattle, Atlanta, Austin, and Philadelphia. In the subsequent rounds we will offer incentives to companies to upgrade subscription/convert their buildings in smaller cities to smart buildings.
- II. For conversions within subscriptions from existing customers we will closely monitor their usage patterns, needs and challenges to provide a customized solution in terms of access and pricing for their need. We will also incentivize conversions for existing customers. Taking such measures will help us capture all the business from the existing customer pool, and save on company's investment for increasing sales growth.

2. **Share of Market –** Under this strategy we will begin expanding to old school companies that have historic properties in highly urban locales, and are building new smart buildings in other areas. We will offer them free evals of their old buildings and discounted conversion plan into smart building if they signup subscription with us for their new buildings. Most of the big commercial real estate companies have high value property in New York and California area which are in the need of technological upgrades. This is going to be a layered offer which will limit competition for SmartAccess since converting an old building into a smart building is challenging, however SmartAccess has a plan already in place for such offerings. Next strategy for increasing market share will be to have exclusive partnerships with security camera companies such as Ring or Blink which will instantly give us access to end customer. It will provide free marketing for the company thereby putting us higher in list of consideration for building management companies. The company will start offering a consulting service for real estate companies to build efficient operations. This offer will be a segway for the sales team to enter at the right time and convert a potential lead into the Smart Access customer. For saturated markets, we will run campaign to attract competitor's customers. The campaign will provide free premium subscription for visualizations, and personalization for three months with any tier of subscription.

Growth Tactic - SmartAccess

- SmartAccess is a SAAS product. The first and foremost thing the marketing tactic needs to do for the business is to create awareness and visibility about the product. Then the marketing efforts should be directed around acquiring attention of potential customers so that they enter the funnel as leads. Next the targeted efforts need to be made for nurturing those leads to convert them as subscribed customers. As per the buyer persona, we are targeting middle aged gen x and millennials who are tech savvy. Most of the people matching our buyer persona will own multiple digital devices and will research every bit of information online before making any decisions.
- Considering the buyer persona in mind I will choose SEO, social media, and Blog to help create awareness and visibility about the product. White Papers/Blog are an essential part of the marketing tactic to establish trust and transparency for such a complicated interconnected system product. These tactics will also serve as touchpoints for leads to enter the funnel. Since our middle-aged Gen x lead prefer personalized communication, Email marketing will help deliver tailored content. Influencer marketing will help in the final stages of decision making when the customer will look for feedback or affirmations from industry leaders or customers.
 - SEO
 - Social Media
 - Email Marketing
 - Blog
 - White Paper
 - Influencer Marketing

Data Strategy and Testing Plan for SmartAccess

Data Strategy for SmartAccess is going to account for the growth plan and all the questions different divisions of SmartAccess will seek answers for in future. We cannot answer questions on data that we did not collect. At the same time we cannot collect all the data. Hence, I will begin with collecting all the questions we would like to answer that will support our growth plan.

- Based on the roadmap here's the data strategy that I will suggest –
 - a) PII data with demographic details will be collected for customers with contract value for each account.
 - b) Customer interaction with the interface will be logged in the data base to see what features are driving engagement and what features are bringing the customer satisfaction score low.
 - c) The marketing campaign cost data needs to be saved to see CAC, where we are losing the customer in the sales funnel.
 - d) Additionally, the sales calls and customer service call notes need to be saved to keep a tap on customer sentiment and difficulties.
 - e) All the interaction, marketing data and PII data will be saved on a cloud-based database.
- How will you use data in your business? Is there a strategy for data storage and retrieval?
 - I will use data to introduce personalization features and variations in the product line. Data will also be used to see what features are redundant and can be trimmed down. Data will be used to measure customer satisfaction. The access card ID will be stored on cloud in no SQL database so that retrieval and authentication will be faster. All other data will be stored in a SQL database and will be retrieved using SQL or cubes.
- Is this something you'll need to consider upfront with your engineering team?
 - Yes, the engineering team will need to build capabilities alongside to capture and store all the interactions with the product and important authentication IDS. Since it's a security and access product, there will need to be high data security protocols.
- Do you already know what data you'll want to collect or store and how you'll use it?
 - Yes, the data points listed is going to be collected and used for improving the product.
- Is there a flywheel effect or something you can use to build a competitive advantage over time? Is there something that can create a moat against any potential upstarts?
 - The interconnected system and personalization at the consumer level will build the competitive advantage for the product and the company.

Machine Learning and AI

1. Thoughts about where machine learning might fit into your product. This could be to improve the user experience, the operationalization of the product, the back-end experience, etc.

- Machine learning will be used to predict maintenance of the devices and systems connected on the internal network of SMARTAccess. Machine learning will predict the wear out time of devices depending upon the usage, and climatic conditions. For instance – Predicting and sending reminders to change air filters, predict wear and tear of electric fittings, predicting maintenance of thermostat based on usage and environmental factors. The machine learning model will help smooth operationalization of product which in turn will limit downtime of systems thus contributing to the positive user experience.

2. Once you have determined where machine learning might fit into your product from the options mentioned above, speak a bit about what type of machine learning model you might use, what benefit you'd get from it, and why that type of model would be most helpful.

- I would use a semi-supervised machine learning model for recommendation system. The recommendation system would gauge the usage of customers and recommend pre-set features early in the usage lifecycle. However, as the user matures in the system and starts using all the capabilities of the system the model will train on itself and provide recommendations based on where the user is in the maturity lifecycle. I would also recommend classification-based model to predict maintenance of the system which will reduce the downtime.

3. What is the ROI you would expect to get from this? What level of required effort would make it a worthwhile investment?

- If implemented right, the well-designed model will reduce the operations cost, minimize downtime of the system, and help gather customer usage patterns. All this will help establish SMARTACCESS a reliable and trustworthy brand with high customer satisfaction. This in turn will help the product have a competitive advantage in the industry. Having a dedicated data scientist and data engineer at the beginning/launch to set up and train the model is going to be a worthwhile investment. Upon product maturity the model will be trained already, thus return on investment is going to be huge.

Deliverables

Inbound deliverables

1. (Week 2) [Target persona](#): Conduct customer research and gather insights on customer pain points in order to develop a target persona for the end user of your product and the problem you are trying to solve
2. (Week 3) [Jobs to be done \(JTBD\)](#): Create a list of 5–10 jobs-to-be-done stories related to the target customer. Based on your identified JTBD, identify 3–4 high-value opportunities
3. (Week 3) [Product opportunity brief](#): Create a narrative that articulates why your product is worth investing in. Your product opportunity brief should include the following:
 - a. Executive summary
 - b. Market size
 - c. Target customer
 - d. Product concept
 - e. Business model
 - f. Risks
4. (Week 4) [Epics, themes, user stories](#), and [MVP](#): Identify four epics for your product and build out three key user stories for each epic. Define the MVP for your product
5. (Week 6) [Product opportunity](#) (TAM, SAM, SOM) and business model: Define and evaluate the product opportunity by completing a market sizing template for the total addressable market (TAM), serviceable addressable market (SAM), and serviceable obtainable market (SOM) for your product. Determine which business model would be the most efficient for your product and explain your choice
6. (Week 7) [Wireframe](#): Using a tool such as Balsamiq, Miro, or Figma, create a minimum of three screen wireframes for your product
7. (Week 9) [Product roadmap](#): Develop a high-level roadmap for your product using a roadmapping tool, such as Miro or Trello. Focus only on the near-term timeframe (0–12 months) and define the first three sprints

Outbound deliverables

1. (Week 11) [Value proposition and positioning statement](#): Determine the customer value proposition for your product. Describe the benefits you plan to offer and how you plan to differentiate your product from the competing alternatives. Also explain how you will position your product
2. (Week 12) [Product pitch](#): Create a sales pitch for your product to share with potential customers and stakeholders. In your sales pitch, define the customer problem, describe the key benefits you offer, and how you solve the customer problem
3. (Week 14) Customer and market development strategies: Define a [growth plan](#) for your product, including customer development and market development. Identify two customer adjacencies and two Northwestern Kellogg Professional Certificate in Product Management market adjacencies you would pursue
4. (Week 15) [Growth hacking strategies](#): Define the OMTM (One Metric That Matters) and two to three growth hacking strategies or tactics you would use for your product
5. (Week 17) [Experimentation and testing plan](#): Identify a business outcome you would like to achieve with your product. Once you have identified this outcome or goal, design an experiment and a testing plan for how you would test a hypothesis to improve your selected business outcome or goal
6. (Week 17) [Automation and ML opportunity](#): Explain how ML/AI methods will optimize your product offering. Determine which methods or applications of ML/AI would apply to your product and how it would enhance the offer to your customers. Explain how you plan to infuse ML and AI to improve the performance/effectiveness of your product

Submission by Pritisha Jha