



The Young
Consultant

Plenti

12th December 2024

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Team Introduction

Meet the team!

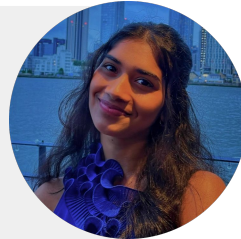
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The Problem

The Situation, Triggers, and Questions proposed by Plenti.

Plenti offers highly intuitive robotic interior systems whilst prioritising affordability, sustainability and style.

Plenti is looking to develop a sustainability strategy and collect data on critical segments like student accommodation and studio apartments- key areas for future growth.

1. Customer segmentation

UK customer base?
Who is their target consumer to allow them to elevate the strongest presence?



2. Market size estimation

How large is the target market in the UK?



3. Market entry strategy

How could Plenti reach their UK target customers?
How can Plenti implement sustainable practice?
What would be the pricing strategy, operational model and regulation?



Problem Definition: STQ

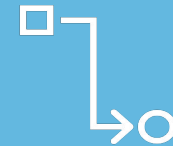
Summary of pricing sensitivity challenges and triggers for data and sustainability improvements

In Summer 2024, The Young Consultant (TYC) partnered with Plenti Space to assess pricing sensitivity for their residential space optimization solutions. While promising, the findings revealed gaps in data quality, limited market focus, and issues with survey clarity. Additionally, Plenti is looking to develop a sustainability strategy, though no formal plan currently exists, making this a key area for future growth.



Situation

Several factors necessitated a need for improvement. The collected data lacked accuracy and depth, particularly around pricing models. The study's focus on traditional residential markets overlooked critical segments like student accommodation and studio apartments. Additionally, unclear survey design led to inconsistent responses, further emphasizing the need for refinement in both data collection and methodology.



Trigger

How can Plenti improve its pricing sensitivity analysis while simultaneously developing a comprehensive sustainability strategy that aligns with market trends and tenant demands?



Question

Summary

From Midway presentation:



Key markets

Young professionals and young couples with short-term renting as target market.



Pricing Strategy

£5,000- £20,000 for systems
£150/yr for support.

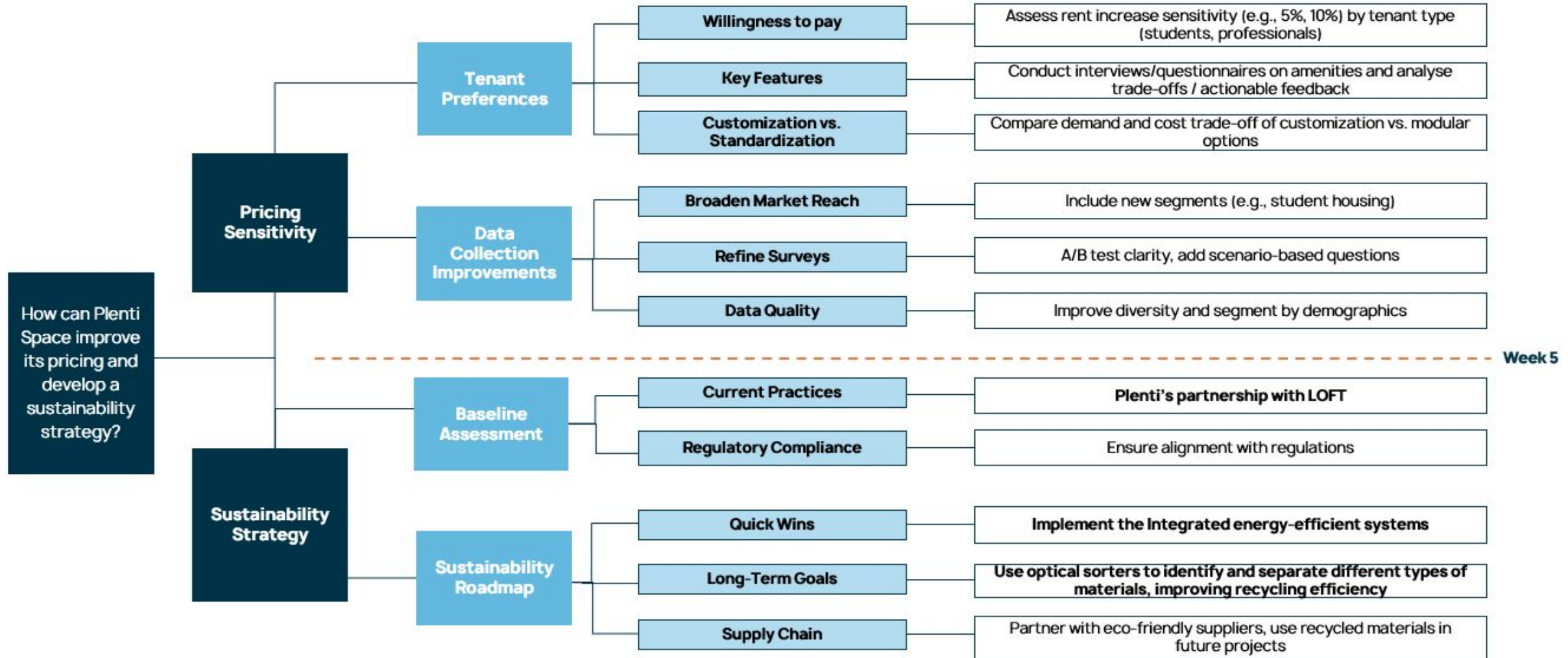


Branding

“Maximise space, minimise costs” as USP and there’s a **high demand** and **limited competition** in the market.

Key conclusion: There is a sizeable market in the UK to enter: with a rise in Purpose-Built Student Accommodation, non-traditional living arrangements and eco-conscious living. “Maximise space, minimise costs” would be an effective USP, to capture the high demand and outperform competitors.

New Issue Tree



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Sustainability Baseline Assessment

Sustainability Assessment Questionnaire

Current practice: **Environmental Impact Reduction**

E.g. How does Plenti Space currently measure its carbon emissions?

Plenti Feedback: The main environmental impact comes from the carbon footprint of transporting equipment to customers. Additionally, sourcing engines and materials from Asian countries adds to the carbon footprint.

Current practice: **Material Sourcing**

E.g. What types of materials are used in the manufacturing process?

Plenti Feedback :
Materials: Aluminium, MDF
Key Point: Exploring alternative eco-friendly materials offers a way to reduce environmental impact.
Action Plan: Research case studies like those from IKEA to demonstrate cost-effective approaches.

Current practice: **Energy Usage**

E.g. What sources of energy are used in the manufacturing and installation processes?

Plenti Feedback: There is currently no formal plan in place.

Current practice: **Waste Management**

E.g. What types of waste are generated in the manufacturing, packaging, and installation processes?

Plenti Feedback :
Key Point: Plenti has mentioned they are not familiar with the regulatory requirements in this market.
Action Plan: Develop an overview of waste regulations across various regions, including the UK and APAC countries.

Sustainability Baseline Assessment

Knowledge and New Initiatives

System Durability and Maintenance

E.g. What is the expected lifespan of Plenti's products (e.g., modular walls, robotic parts)?

Plenti Feedback:
The modular systems have a 25-year lifespan and come with a 10-year warranty.

Energy Efficiency Initiatives

E.g. Has Plenti Space explored or implemented energy efficiency improvements in the design and operation of its products?

Plenti Feedback :
There is currently no formal plan in place to mitigate the costs in the long term.

Innovative Material Choices

E.g. Are there any new materials, technologies, or processes being explored to enhance recyclability or reduce the product's environmental impact?

Plenti Feedback:
Sustainable material options are available, but the costs are prohibitively high.

Sustainability Baseline Assessment

Sustainability Goals and Measurement

Sustainability Goals

E.g. What are Plenti's main sustainability goals for the next 1-3 years? For the next 5-10 years?

Plenti Feedback:

There is currently no formal plan in place.

Measuring Progress

E.g. How does Plenti track progress toward these sustainability goals? (E.g., metrics, reporting frequency)

Plenti Feedback :

Since Plenti is a newly established startup, certification is not currently their top priority. However, they mentioned that they have an industrial consultant working on this certification.

Sustainability Certifications

E.g. Is Plenti Space pursuing or interested in any sustainability certifications?

Sustainability Baseline Assessment

Challenges and Motivations

Challenges to Sustainability

E.g. What are the biggest challenges Plenti Space faces in implementing sustainable practices?

- Plenti Feedback :
- Conservative multifunctional furniture market.
 - Cost-sensitive customers regarding green certifications.
 - Greenwashing concerns
 - Difficulty finding local suppliers for sustainable materials.

Company Vision and Motivation

E.g. How does sustainability align with Plenti Space's overall mission and values?

Plenti Feedback :
Deliver the same quality to customers while using fewer resources.

Opportunities and Future Plans

Quick Wins and Improvements

E.g. Are there any immediate sustainability improvements you think Plenti could make with minimal cost or effort?

Plenti feedback:
Identify local suppliers to reduce the environmental impact of long-distance transportation. Present case studies from similar industries to explore future partnerships. Summarise waste management regulations in target markets, including the UK and APAC.

Future opportunities

E.g. Looking ahead, are there any emerging trends or technologies in sustainability that Plenti Space is considering?

Plenti Feedback:
Future expansion markets include APAC members such as Australia, Singapore, and Dubai.

Sustainability Baseline Assessment

Local Sourcing Strategy

Identifying regional suppliers for materials like aluminium and MDF to reduce transportation emissions and environmental impact, while improving supply chain efficiency.



Waste Management Regulation

Create a detailed guide on waste and recycling regulations in key markets like the UK and APAC, helping Plenti comply with local laws and explore innovative waste management strategies to reduce environmental impact.



Exploring Partnerships

Research case studies from companies like IKEA to identify potential collaboration opportunities that align with Plenti's goals.



APAC Expansion Opportunities

Focus on entering high-growth markets such as Australia, Singapore, and Dubai by tailoring strategies to regional demands and regulatory requirements.



Sustainability deliverables



Supplier recommendations

Identifying local suppliers to effectively reduce the environmental impact associate with long-distance transportation.



Future partnerships

Case studies from similar industries to explore potential future partnership options.



Quick and Big wins

A list of 'quick wins' for immediate implementation and a set of longer-term goals



Identification of external expertise

Summary of waste management regulations in target materials, including the UK and APAC countries.

Sustainability insights

Long Term Goals

1. **Optical sorters:** Use light-based technology to identify and separate different types of materials. Plenti Space can optimise their recycling operations, reduce costs, and enhance their overall sustainability efforts.
2. **BurCell® System-** waste processing system. While this system is designed for municipal waste, similar principles could be applied to Plenti-Space's operations to maximise material recovery and recycling efficiency.

Short Term Goals

1. Source supplies from **local vendors to reduce transportation emissions**. Factors to be considered for supplier selection: their working style, supply chain practices, and pricing variations. However, the primary focus should be on ensuring **a streamlined supply chain and competitive pricing**.
2. **Integrated energy-efficient systems:** Companies like **Ansell Lighting** could be a valuable partnership opportunity, as lighting accounts for 15% of domestic and 40% of commercial energy use. Energy-efficient lighting reduces consumption, cuts costs, and lowers emissions.

Key conclusion: Optical, light-based sorting technology and supplies from local vendors can support both short term and long term goals.

Sustainability insights

Case studies

Vilniaus Baldai AB

- Lithuanian supplier that transforms production wood waste into enough **renewable energy** such as solar panels, wind turbines and water-power to fully power its factories.
- **Recommendation:** Exploring waste-to-energy technologies can inspire Plenti Space to create sustainable products or processes using recycled materials, adopt eco-friendly designs, and optimize manufacturing to reduce waste and maximize resource efficiency.

Herman Miller

- The iconic furniture brand, has committed to sustainability by using **100% renewable energy** in their facilities and adopting circular manufacturing practices. This greener approach eliminates unnecessary steps in production.
- **Recommendation:** Plenti could integrate similar practices, such as using renewable energy.

Woods Furniture

- A leading Australian manufacturer of educational furniture partnered with **EmTech** to incorporate the sustainable **material Enviro Hide**, made from recycled leather products, and is durable, lightweight, and long-lasting. This partnership demonstrates a commitment to **sustainability and innovation**,
- **Recommendation:** This partnership could be a model for Plenti Space, allowing them to differentiate from competitors and increase product value.

Suppliers

IKEA- Case Study For Materials

'People & Planet Positive'

- **IKEA** has committed themselves to starting to **phase out plastics in consumer-facing packing by 2028** and replacing it with renewable and recyclable materials like paper packaging. This aligns with their "**People & Planet Positive**" **strategy**, which is focused on reducing environmental impact and building that sustainable brand reputation most major companies are after.
- This effort allows for them to explore innovative materials like mycelium which can help to reduce carbon emissions by up to 90% compared to the traditional plastic which is already being used.

Positives

- **Positives:** Cost Savings Through Recycling.
- Using fiber-based materials such as cardboard are not only cheaper to source in bulk but are also easily and widely recyclable which helps to reduce the waste management costs and minimise lifecycle cost of packaging incl. disposal fees compared to the plastic.
- Operational Efficiency- Using simple packaging materials such as cardboard. IKEA can simplify its logistics and reduce the complexity of managing a range of diverse materials.
- **Recommendation:** Plenti could see similar benefits by using fewer, more sustainable material types for packaging.

Challenges

- **Challenges:** Upfront Investment
- IKEA has invested heavily in R&D to develop and test new long-term butch can be initially expensive.
- **Recommendation:** Plenti needs to weigh the costs of developing and sourcing innovative materials against long-term savings. They could consider collaborating with other startups or material engineering firms to find innovative, cost-effective solutions.
- Durability Concerns- Sustainable packaging is cost-effective long-term, but must meet durability standards. IKEA uses robust cardboard for shipping security.
- **Recommendation:** Plenti could transitioning to fiber-based or other cost-effective materials for packing, to help ensure they meet durability and cost requirements.

Sustainability insights



Waste management regulation- UK & APAC countries



UK

- **Waste Regulations 2011:** Sets the duty of care for businesses, requiring them to store and dispose of waste safely.
- **Waste Hierarchy:** Prioritises prevention, re-use, and recycling, with disposal being the last option.
- **Packaging and WEEE Regulations:** Business must handle packaging and electronic waste responsibly.
- **Landfill Tax:** Businesses are taxed for sending waste to landfills- incentivises recycling and waste reduction.
- **Recommendations:** With Smart Walls being modular, it is crucial that we make sure that waste from the manufacturing process are recycled effectively, however this may come with an additional operational cost.

Singapore

- **The Waste Management and Recycling Act:** businesses need to reduce waste generation and promote recycling.
- **Zero Waste Masterplan:** Targets reducing waste sent to landfills and recycling 70% of waste by 2030.
- **Extended Producer Responsibility (EPR):** Companies are responsible for the entire lifecycle of their products, including their end-of-life disposal
- **Recommendations:** Following these regulations would require very careful and effective material sourcing, as well as waste management, especially if the Smart Walls being produced will involve materials with high environmental impact.

Sustainability insights



Waste management regulation- UK & APAC countries



Dubai

- **Dubai Integrated Waste Management Master Plan:** Aiming to divert 100% of waste to landfills by 2030.
- **Dubai Municipality:** They regulate waste management, requiring businesses to follow strict disposal and recycling practices.
- **Waste-to-Energy Initiatives:** Dubai is investing in energy recovery from waste to reduce landfill usage.
- **Recommendations:** These regulations encourage for the adoption of energy-efficient and recyclable materials. Waste reduction is key. Using sustainable materials within the Smart Walls will help to align the company with Dubai's environmental goals also helping their appeal to the local clients.

Australia

- **National Waste Policy:** Increasing resource recovery, reducing landfill, and promoting the circular economy.
- **State Regulations:** Each state enforces its own recycling and landfill diversion targets.
- **Product Stewardship:** Like Singapore, Australia is implementing systems to hold producers accountable for the lifecycle of its products.
- **Recommendations:** Plenti Space should understand state-specific waste management and recycling regulations. Incorporating recycled materials into Smart Walls and having a clear end-of-life recycling plan will be beneficial. Adhering to local regulations will help prevent fines and delays in Smart Wall deliveries and installations.

Key conclusion: Plenti Space should follow waste management and recycling regulations in the UK, Singapore, Dubai, and Australia to ensure compliance, reduce environmental impact, and avoid fines and delays.

MDF Suppliers

Local suppliers	Price range	Minimum Order Quantity (MOQ)	Import/ Export considerations	Impact on Plenti	Types of clients they serve
Alexander Cleghorn LTD 	Specific pricing is unavailable publicly- quote needed.	Price range would be dependent on the type of MDF board. Handle orders ranging from 1 piece to a 1,000,000 units. Supplies the required Laminated MDF boards.	Primarily based in the UK helps to minimise import issues. 25,000 in-stock panels/boards help to reduce lead times when it comes to local deliveries.	• Positive: Flexible MOQs and large inventory enable tailored solutions for Plenti's smart walls project. Being UK-based supports faster delivery and easier access to the manufacturing process, especially with a strong rapport. • Negative: Customising MDF boards might lead to higher costs for small quantities of laminated boards.	- Furniture Manufacturers - Educational Institutions - Contract Furniture Providers - Custom Manufacturers
MDF Direct (Veneered MDF) 	£15 - £50 per sheet – but dependent on size and the finish	DF Direct has a flexible MOQ, catering to both small and large orders. This allows Plenti to scale confidently, knowing they have a supportive manufacturer for their growth journey.	Entirely UK-based with cut to size options which makes it ideal for domestic projects such as the Smart Walls Project which Plenti Space are known for.	• Positive: High customisation and a wide range of finishes- Plenti can achieve their desired look, build uniqueness, and establish rapport with developers, adding a USP. • Negative: Some MDF Direct options may lack premium laminates needed for unique or high-end smart wall designs, could lead to additional costs.	- Furniture Manufacturers - Interior Designers - Construction and Building Contractors
PanelCo 	Specific pricing is unavailable publicly- quote needed for the details the client are looking for	They have a flexible MOQ, as they serve both residential as well as commercial clients	As they are a UK focused company this allows for distribution to be fast and efficient with even next-day delivery options for many of their products.	• Positive: PanelCo's next-day delivery ensures Plenti Space can meet tight deadlines, reducing downtime and enhancing efficiency for fast-paced development projects. • Negative: PanelCo's middle-tier price and quality may not align with high-end luxury or cost-sensitive budget projects, potentially leading to missed opportunities in the market.	- Furniture Manufacturers - Interior Designers and Architects - Builders and Contractors - DIY Enthusiasts - Retailers and Distributors

Aluminium Suppliers

Local suppliers	Price range	Minimum Order Quantity (MOQ)	Import/ Export considerations	Impact on Plenti
GSM Aluminium LTD 	Not stated publicly- a quote is necessary for exact figure	No MOQ stated- a quote is necessary for exact figure. However, this means there is a possibility that the MOQ is flexible to Plenti's needs.	GSM have global operations however they mainly focus on the UK market- simplifies logistics for Plenti as well as reduce delivery times.	• Positive: GSM's thorough inspections ensure reliable and durable aluminum for Plenti Space's smart walls. • Negative: Customisation for different developers may cause delays, risking project disruptions and strained relationships.
Aluminium Online 	£1-£10- depending on the type of aluminum required	Flexible, they can cater for small orders and bulk supply	They are UK based, allowing for fast delivery across the UK, minimizing import/ export delays.	• Positive: Supports small and bulk orders, allowing Plenti Space to scale without excess inventory and waste management issues. • Negative: Smaller orders may have higher costs, straining budgets compared to bulk pricing.
Gooding Aluminium 	Vary on the customisation and specifications required	Usually tailored to project. Small batch options available but Plenti may have to incur a higher cost for those smaller quantities	Primarily UK based, allowing for fast delivery across the UK, minimizing import/ export delays.	• Positive: Gooding's bespoke panel designs help Plenti Space create unique, innovative wall systems. • Negative: Bespoke designs may increase material costs and strain budgets

Sustainable Supply Chain Management

IKEA- Case Study For Sustainability Within The Supply Chain

Supply chain

- IKEA's sustainability **spans across all the stages of its supply chain** from inbound logistics, operations and production, and outbound logistics.
- **IWAY Standards**- a set of principles that all suppliers must adhere to, which cover environmental, social and ethical guidelines. This is to ensure that sustainability is ingrained at all levels of production.
- **Recommendations**: Plenti can set sustainability standards for MDF and aluminum suppliers.
- **Resource Efficiency**- eco-friendly raw materials (e.g., sustainably sourced wood) and optimise manufacturing processes to reduce waste, energy consumption, and emissions.

Positives

- **Cost Reduction**- Sustainable raw materials and optimising production- reduces waste and improves manufacturing efficiency.
- **Recommendations**: Plenti could adopt sustainable and recyclable materials such as recycled steels or mycelium-based panels for the Smart Walls.
- **The IWAY standard**- ensures IKEA's suppliers follow strict sustainability practices. This improves quality control and fosters long-term partnerships.
- **Energy & Waste Savings**- Reducing energy and water usage in production- significant cost savings.
- **Recommendations** : Plenti could use alternative energy sources and more efficient machinery.

Negatives

- **Supplier Compliance**- Constant monitoring and enforcing sustainability standards across all tiers of the supply chain can be very resource-intensive and challenging for IKEA, especially in developing regions.
- Could pose a challenge if a supplier were to lack the infrastructure, or willingness to adopt sustainable practices it could lead to high amounts of resistance.
- However, by implementing collaborative strategies, or robust tracking systems, Plenti Space can address these challenges while being able to foster resilient and sustainable supply chain

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Previous Survey (96 Responses Recorded)

Analysis of Previous Survey: Renter Only (74 responses)

Age	Location (top three)	Average Rent	Prefer smart walls	Premium For Smart Walls (Same Size Space)	Premium For Smart Walls (Smaller Space)
34 years	London: 36% NW: 15% East Midlands: 13.6%	1,668	74%	3%	0.57%

Room Type Statistics: Renter Only

1-Bedroom	2-bedroom	3-bedroom	3+ bedroom	Room	Studio
16%	7%	23%	9.5%	12%	31%

Previous Survey (96 Responses Recorded)

Analysis of Previous Survey: Ownership only (22 responses)

Age	Location (top three)	Average Price	Prefer smart walls	Premium For Smart Walls (Same Size Space)	Premium For Smart Walls (Smaller Space)
38 years	London: 41% West Midlands: 18% East Midlands: 13.6%	536,682	50%	5%	-6.5%

Room Type Statistics: Owner Only

1-Bedroom	2-bedroom	3-bedroom	3+ bedroom	Room	Studio
22%	22%	17%	17%	0%	21%

New Changes and Previous survey issues

Key changes

- Ensuring more questions have 'Yes / No' responses for a faster survey
- Embedded Video Link- no longer a separate page
- Removing the ambiguous 'Maybe' option.
- Section added on the understanding of the consumer and value of the product.



Plenti is a UK-based startup transforming how we use space in our homes. We have developed Smart Walls – robotic walls that can be moved with a button turn small apartments into versatile living spaces, making them more comfortable and functional. Imagine a small flat that feels like a spacious one, with rooms that seamlessly reconfigure to suit your needs. That's the magic of Plenti.

Your voice matters. We are committed to creating the best possible product for urban dwellers like you. Take our quick 3-minute survey to share your needs and preferences for living spaces. Your insights are crucial in shaping the future of Plenti and, ultimately, the future of urban living.

Win a £100 Amazon voucher and be a part of the solution. Help us create a more affordable, sustainable, and comfortable living experience for everyone in the city. Privacy guaranteed. All responses are anonymous.

Do you know what a smart wall is? See Smart Walls in Action: Watching our "Plenti Walls" in action will turn you into a fan! Take a few seconds to enjoy the video before starting your survey.

<https://vimeo.com/848082251?share=copy>

Let's build better urban living together!

Current Survey Questions

Current understanding

Have you ever seen/used smart walls before?

How much would you estimate the cost (£) of smart walls (like those in the video) would be?

What are the main reasons you would prefer a room with Plenti Walls over a regular room, if any?

New q's based on previous data feedback

Value of Smart Walls

Do you consider Smart Walls a 'nice to have' or a luxury item in a home?

Would you prefer to live in a space of the same size with Smart Walls if the rent increased?

Would you prefer to live in a space of the same size with Smart Walls if the cost increased?

Would you prefer to live in a space of a smaller size with Smart Walls if the rent increased?

Would you prefer to live in a space of a smaller size with Smart Walls if the cost increased?

How much additional monetary value, if any do you feel Smart Walls add to your living space?

These have been reworded to ensure clarity for the respondent, focusing on how sensitive people are to price changes and the implementation of smart walls in their space.

Final q's

Do you feel you now have a better understanding of Smart Walls?

Do you see yourself buying Smart Walls for your home?

New q's based on previous data feedback

Summary

Midway Presentation



Market trend analysis



Identification of tenant preferences



Data collection improvements

Final Presentation



Identification of local suppliers



Regulatory compliance



Waste management



Further data collection improvements and data analysis