Experiment Canvas: High-Tech Kiosk MVP

VALIDATING OUR RISKIEST ASSUMPTIONS & NEXT STEPS

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EXPERIMENT CANVAS: FAST FOOD KIOSK MVP

ASSUMPTIONS

Section	Assumption	Experiment	Metrics	Criteria for Success
Riskiest Assumption	**Fast food customers want an electronic method of ordering.**	**MVP Kiosk Placement:** Place the MVP kiosk in a high-traffic fast food restaurant (with permission). Have staff encourage customers to use it during peak hours.	* Percentage of customers who use the kiosk vs. traditional counter* * Customer satisfaction surveys (for kiosk users) * Net Promoter Score (NPS) from kiosk users	* 25% or more of customers choose the kiosk over the counter during peak hours.* * Positive sentiment in customer satisfaction surveys, indicating a preference for the kiosk. * NPS of 30 or higher (indicating "promoters" of the kiosk)
Second Riskiest	**The kiosks will make the lines move more quickly.**	**Time Study:** During peak hours, measure the average time for customers to: 1) Order and pay at the kiosk, 2) Order and pay at the traditional counter. Compare the two to see if the kiosk is significantly faster.	* Average order time at kiosk* * Average order time at counter * Customer wait time in line	* Average order time at the kiosk is at least 20% faster than the counter. * Customers report shorter perceived wait times when using the kiosk.

Section	Assumption	Experiment	Metrics	Criteria for Success
Third Riskiest	**The kiosks will save money for the companies eventually.**	**Cost Analysis:** Track: 1) The labor costs associated with staff taking orders at the counter during the experiment. 2) The estimated labor cost if those staff were re-assigned to other tasks. 3) The cost of maintaining and operating the kiosks.	* Labor costs for counter staff * Estimated labor savings with re-assignment * Kiosk maintenance/operation costs * Projected long-term savings	* Demonstrated potential for at least 10% reduction in labor costs through re-assignment of staff and/or increased order volume (allowing the restaurant to handle more customers with the same staffing). * Kiosk maintenance/operation costs that are less than or equal to the estimated labor savings. * A projected ROI timeline for the kiosks of 2-3 years.

IMPORTANT CONSIDERATIONS:

- **MVP Refinement:** Even if the experiment is successful, the low-quality MVP should be improved based on user feedback and observed issues before further rollout.
- **Partner Restaurant:** Choose a partner restaurant that is open to innovation and understands the experimental nature of the project.
- **Experiment Duration:** Plan for a multi-week experiment to capture data from various time periods and customer demographics.

IMPORTANT VARIABLES AND METRICS FOR EACH OF THE ASSUMPTIONS IN OUR EXPERIMENT:

ASSUMPTION A: FAST FOOD CUSTOMERS WANT AN ELECTRONIC METHOD OF ORDERING.

- **Key Variable:** Customer adoption rate. This measures the percentage of customers who choose to use the kiosk over the traditional counter.
- **Metrics:**
    - Percentage of customers who use the kiosk vs. traditional counter.
    - Customer satisfaction surveys (specifically for kiosk users).
    - Net Promoter Score (NPS) from kiosk users.

ASSUMPTION C: THE KIOSKS WILL MAKE THE LINES MOVE MORE QUICKLY.

- **Key Variables:** Order processing time, perceived wait time. These gauge efficiency from both the business's perspective and the customer's experience.
- **Metrics:**
    - Average order time at the kiosk.
    - Average order time at the counter.
    - Customer wait time in line.

ASSUMPTION B: THE KIOSKS WILL SAVE MONEY FOR THE COMPANIES EVENTUALLY.

- **Key Variable:** Cost-effectiveness. This assesses the long-term financial impact of the kiosks on the business.
- **Metrics:**
    - Labor costs for counter staff.
    - Estimated labor savings with re-assignment.
    - Kiosk maintenance/operation costs.
    - Projected long-term savings.
- By tracking these variables and metrics, we'll gain a comprehensive understanding of the kiosks' impact on customer behavior, operational efficiency, and financial outcomes, ultimately helping us determine their viability in the fast-food industry.

Metrics used in the experiment are a mix of quantitative and qualitative:

- **Quantitative:**
    - Percentage of customers using the kiosk
    - Average order time at kiosk and counter
    - Customer wait times
    - Labor costs
    - Kiosk maintenance/operation costs

  - Projected savings
  - Net Promoter Score (NPS)

- **Qualitative:**
  - Customer satisfaction surveys (for kiosk users)
  - Customer perception of wait time

By combining both types of data, we get a more holistic view of the impact of the kiosks. Quantitative data gives us hard numbers about usage and efficiency, while qualitative data helps us understand customer sentiment and perceptions, which are crucial for long-term success.

BEST RESEARCH METHOD TO CHOOSE TO COLLECT DATA FROM THE AUDIENCE. BEST APPROACH TO REACH OUR AUDIENCE.

Given that our experiment involves both quantitative and qualitative data, a mixed-methods research approach is ideal. This means combining different research techniques to gain a comprehensive understanding of our audience's behavior and opinions.

Breakdown of suitable research methods and the best approaches to reach our target audience:

RESEARCH METHODS:

- **Quantitative:**

  - **Surveys:** Use brief surveys on the kiosk screen or printed receipts to gather feedback about customer satisfaction, perceived wait time, and overall experience. We can incentivize participation with discounts or small giveaways.

  - **Observation:** Station a staff member near the kiosk to observe customer interactions, usage patterns, and potential pain points. This can provide valuable insights for improving the kiosk's design and functionality.

  - **Transactional Data Analysis:** Analyze the sales data generated by the kiosk to track order volume, popular items, and peak usage times. This will help assess the kiosk's impact on sales and optimize its performance.

- **Qualitative:**

  - **Interviews:** Conduct brief, semi-structured interviews with customers who have used the kiosk. Ask open-ended questions about their experience, preferences, and suggestions for improvement.

- **Focus Groups:** Gather a small group of diverse customers for a moderated discussion about their overall perception of the kiosk, potential concerns, and ideas for enhancing its features.

REACHING OUR AUDIENCE:

The best approach to reach the target audience (fast food customers) is to conduct the experiment directly within the fast-food restaurant environment. This ensures that we are collecting data from real customers who are actively making purchasing decisions.

To increase participation:

- **Promote the kiosk:** Use signage, menu boards, and staff recommendations to encourage customers to try the kiosk.
- **Offer incentives:** Provide discounts, special offers, or loyalty points to customers who use the kiosk.
- **Make it easy to use:** Ensure the kiosk interface is intuitive and user-friendly, with clear instructions and minimal steps to complete an order.
- **Provide support:** Have a staff member available to answer questions and guide customers through the kiosk process, especially during the initial rollout.

By combining these research methods and outreach strategies, we can collect valuable quantitative and qualitative data from target audience, leading to a deeper understanding of their needs and preferences, and ultimately, a more successful product.

DESIGN THINKING CYCLE

The Design Thinking cycle is a powerful framework for innovation, and the results of our research can be used to fuel each stage of the process:

1. **Empathize:** Research data allows us to delve deeper into customer needs and pain points. Analyze the qualitative feedback from surveys and interviews to understand their motivations, frustrations, and desires when ordering fast food. This will help tailor the kiosk experience to better address their needs. Quantitative data like order times and adoption rates can further validate our assumptions and highlight areas for improvement.

2. **Define:** Use research insights to refine the problem statement and pinpoint specific challenges that the kiosk needs to solve. For example, if customers express frustration with long lines, we might define the problem as "How might we use kiosks to reduce wait times and streamline the ordering process?" This clarity will guide subsequent ideation and prototyping efforts.

3. **Ideate:** Armed with a deeper understanding of customers, brainstorm new ideas for features, functionalities, or even entirely new kiosk designs. We will leverage the data to address pain

points, enhance the user experience, and potentially drive more sales. For instance, if customers express a preference for customization, we could explore options for more flexible order modifications on the kiosk.

4. **Prototype:** Use the research to inform prototyping phase. Incorporate the insights gained into the design and functionality of the next iteration of the kiosk. This could involve testing different interface layouts, payment options, or promotional strategies based on customer feedback.
5. **Test:** By conducting further tests with refined prototypes, we can gather additional data to validate new ideas and identify areas for further improvement. This iterative process allows us to continuously refine the kiosk based on real user feedback, ultimately increasing its chances of success in the market.

DATA OUTCOME

POSITIVE OUTCOME

If the data from our experiment is positive, indicating that customers embrace the kiosks, they improve order speed, and show potential for cost savings, the next steps should focus on scaling and refining the solution:

1. **Iterate and Enhance the MVP:**
    - Analyze user feedback from surveys and interviews to identify areas for improvement in the kiosk's design, interface, and functionality.
    - Address any technical glitches or usability issues that emerged during the experiment.
    - Explore new features or enhancements that could further improve the customer experience and streamline operations.
2. **Expand the Pilot:**
    - Roll out additional kiosks in the same restaurant or other locations within the fast-food chain.
    - Gradually increase the number of kiosks over time while monitoring their performance and impact on operations.
    - Consider testing the kiosks in different restaurant environments to ensure their adaptability to various layouts and customer demographics.
3. **Refine the Business Model:**
    - Analyze the data on labor cost savings and increased order volume to develop a comprehensive financial model for the kiosks.
    - Determine the optimal number of kiosks per location and the staffing levels required to support them.

- Develop a pricing strategy for selling the kiosks to other restaurants, considering factors like hardware costs, software licensing, and ongoing support.

4. **Marketing and Promotion:**
    - Create a marketing campaign to highlight the benefits of the kiosks to both restaurant owners and customers.
    - Emphasize the improved customer experience, faster service, and potential cost savings.
    - Develop educational materials to help restaurant staff and customers understand how to use the kiosks effectively.
5. **Continuous Improvement:**
    - Establish a feedback loop to continuously gather data and insights from customers and restaurant staff.
    - Use this feedback to iterate on the kiosk design, software, and overall user experience.
    - Stay abreast of technological advancements and industry trends to ensure the kiosks remain cutting-edge and competitive.

By following these steps, we can leverage the positive results of our experiment to scale the kiosk solution, drive adoption in the fast-food industry, and ultimately improve the dining experience for customers while benefiting restaurant owners.

NEGATIVE OUTCOME

If the data from our experiment is negative, indicating that customers are not embracing the kiosks, they are not improving order speed, or they are not showing potential for cost savings, the next steps should focus on understanding the reasons behind the negative results and using that information to iterate and improve the solution:

1. **Analyze and Learn**
    - **Deep Dive into the Data:** Thoroughly analyze both quantitative and qualitative data to identify specific pain points, bottlenecks, or areas of customer dissatisfaction.
    - **Conduct Follow-Up Research:** If needed, gather additional feedback from customers through surveys, interviews, or focus groups to gain deeper insights into their negative experiences.
    - **Identify Root Causes:** Determine the underlying reasons why customers are not using the kiosks, why they are not speeding up orders, or why they are not cost-effective. Are there usability issues? Are customers concerned about privacy? Is the value proposition unclear?
2. **Reframe the Problem:**

- Based on the findings of analysis, we redefine the problem statement to more accurately reflect the challenges that need to be addressed.

- For example, if customers find the kiosk interface confusing, the new problem statement might be: "How might we design a kiosk interface that is intuitive and easy for all customers to use?"

3. **Ideate and Iterate:**
   - Use the insights gained from your analysis to brainstorm new ideas for addressing the identified problems.

   - Consider potential solutions like redesigning the interface, simplifying the ordering process, adding new features, or addressing customer concerns about privacy or data security.

   - Create new prototypes that incorporate these solutions and test them with users to gather feedback.

4. **Pivot or Persevere:**
   - If the negative results are significant and the problems seem insurmountable, it may be necessary to pivot and explore alternative solutions or approaches.

   - However, if the issues are relatively minor and can be addressed through iteration and improvement, it may be worthwhile to persevere with the kiosk concept and continue refining it based on user feedback.

5. **Communicate and Learn:**
   - Share the findings of your analysis with your team and stakeholders.

   - Be transparent about the challenges encountered and the lessons learned.

   - Use this as an opportunity to foster a culture of learning and continuous improvement within your organization.

Negative results are not necessarily a failure but rather a valuable learning opportunity. By embracing the Design Thinking cycle and using negative data to drive iteration and improvement, we can increase the chances of developing a successful product that meets the needs of both customers and businesses.