



BITS Pilani

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SEZG685 – Software Product Management

Assignment 1

Title : SunWise System

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SHINE BRIGHT, GO SOLAR RIGHT!

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PRODUCT OPPORTUNITY

Overview: SunWise is a user-friendly solar energy management platform aimed at enhancing the efficiency, performance, and cost-effectiveness of solar power utilization for homes and businesses. Through real-time monitoring and analysis, Sunwise enables informed decision-making, potentially leading to substantial savings. Its intuitive features may also promote the adoption of solar energy, contributing to a more sustainable future.

Product Features

- **Real-time Monitoring:** Track your solar energy system's performance in real-time.
- **Performance Optimization:** Receive automated recommendations for maximizing energy production and efficiency.
- **Financial Analysis:** Calculate potential savings, payback periods, and financing options.
- **Net Metering Integration:** Sell excess solar power back to the grid and receive credits.
- **Customer Support:** Access dedicated support for installation, troubleshooting, and questions.
- **Mobile App Access:** Monitor your solar energy system on-the-go with a convenient mobile app.

PRODUCT OPPORTUNITY

Target Customers

- Homeowners looking to invest in solar energy for cost savings and environmental benefits.
- Small to medium-sized businesses seeking to reduce operating costs and demonstrate sustainability.
- Renewable energy enthusiasts eager to adopt innovative solar energy management solutions.
- Environmentally conscious consumers prioritizing products aligned with their sustainability values.

Overall, SunWise caters to individuals and organizations aiming to harness solar power efficiently and maximize energy savings while minimizing environmental impact.

PRODUCT OPPORTUNITY

Pain Points

- Rising Energy Costs: Increasing utility bills for homeowners and businesses.
- Lack of Energy Efficiency: Inefficient energy usage leading to higher expenses.
- Limited Solar System Visibility: Difficulty in monitoring and optimizing solar energy systems.
- Complex Financial Analysis: Challenges in assessing the financial viability of solar investments.
- Inadequate Support: Insufficient guidance and assistance for solar energy management.

PRODUCT OPPORTUNITY

Value Proposition

- Maximize energy savings: SunWise enables users to optimize solar energy systems, reducing utility bills and saving money.
- Simplify solar management: Real-time monitoring, performance tools, and intuitive interfaces streamline solar energy system management for easy tracking and optimization.
- Ensure financial viability: SunWise provides financial analysis tools to assess solar investments, calculate potential savings, and make informed decisions about energy usage.
- Access dedicated support: Users receive dedicated customer support for installation, troubleshooting, and guidance, ensuring success with solar investments.

ASSESS THE OPPORTUNITY



Customer Interviews

Customer	Customer Requirements
<u>Harsh Jalankar</u>	A significant frustration I face is the lack of visibility into my energy usage patterns. It's difficult to monitor how much solar energy I consume compared to the electricity I use from the MSEB.
<u>Ashwini Nawal</u>	I depend on my utility bills for a rough estimate of my energy expenses, but they lack detail. I feel I'm missing opportunities to save because I lack clarity on my energy usage and potential areas for reduction.
<u>Mangesh Chopkar</u>	When I return home, it's usually just the maid there, and she doesn't use much electricity, leaving our solar panels idle. Selling excess energy back to the grid could be lucrative and energy-efficient, but I haven't explored it much.
<u>Tejaswini Deshmukh</u>	There are so many potential energy-saving measures available, but it's overwhelming to determine which ones will have the most significant impact and be the most cost-effective for her specific situation.
<u>Prabhat Sawarkar</u>	The interviewee noted the high costs of solar energy, expressing affordability concerns, yet they seemed unaware of government schemes aimed at reducing solar energy costs, hinting at a potential lack of awareness or accessibility.

ASSESS THE OPPORTUNITY

Final Idea/Features

- Real-time Monitoring: Customize your metrics and data visualization preferences for real-time performance tracking.
- Performance Optimization: Address common challenges and maximize energy production with tailored recommendations.
- Detailed Financial Analysis: Receive accurate payback period calculations and ROI estimates for informed decision-making.
- Net Metering Integration: Automatically calculate credits and access reporting features for seamless interaction with the grid.
- Enhanced Customer Support: Choose from various support channels with quick response times for any assistance needed.
- Mobile App Features: Enjoy push notifications, remote control capabilities, and offline access for convenient solar system management.
- Cost Estimation: Users without solar can estimate costs with and without our product, and connect with associated authorities for installation.

ASSESS THE OPPORTUNITY

Final Underserved Needs

- Lack of affordable and efficient solar energy management solutions.
- Limited access to real-time monitoring and performance optimization tools.
- Insufficient financial analysis support for informed decision-making.
- Challenges in integrating with net metering systems.
- Inadequate customer support channels and responsiveness.
- Complexity and lack of user-friendly features in existing mobile apps.
- Limited resources for estimating costs and accessing installation assistance.
- Unawareness of government initiatives related to solar energy and cost estimation options.

ASSESS THE OPPORTUNITY

Value Proposition

❑ Pain Points:

- Difficulty in monitoring and optimizing solar energy systems.
- Challenges in assessing the financial viability of solar investments.
- Insufficient guidance and assistance for solar energy management.
- Lack of knowledge about selling electricity back to grid generated from solar panels.

❑ How SunWise solves the problems having with existing system:

- SunWise helps to track solar energy systems so that user can monitor and optimize the system.
- Helps to calculate potential savings, payback periods, and financing options.
- Provides support in solar energy management and guides users to sell back electricity to grid.
- Provides customer support for easy installation of solar energy.

ASSESS THE OPPORTUNITY

Value Proposition

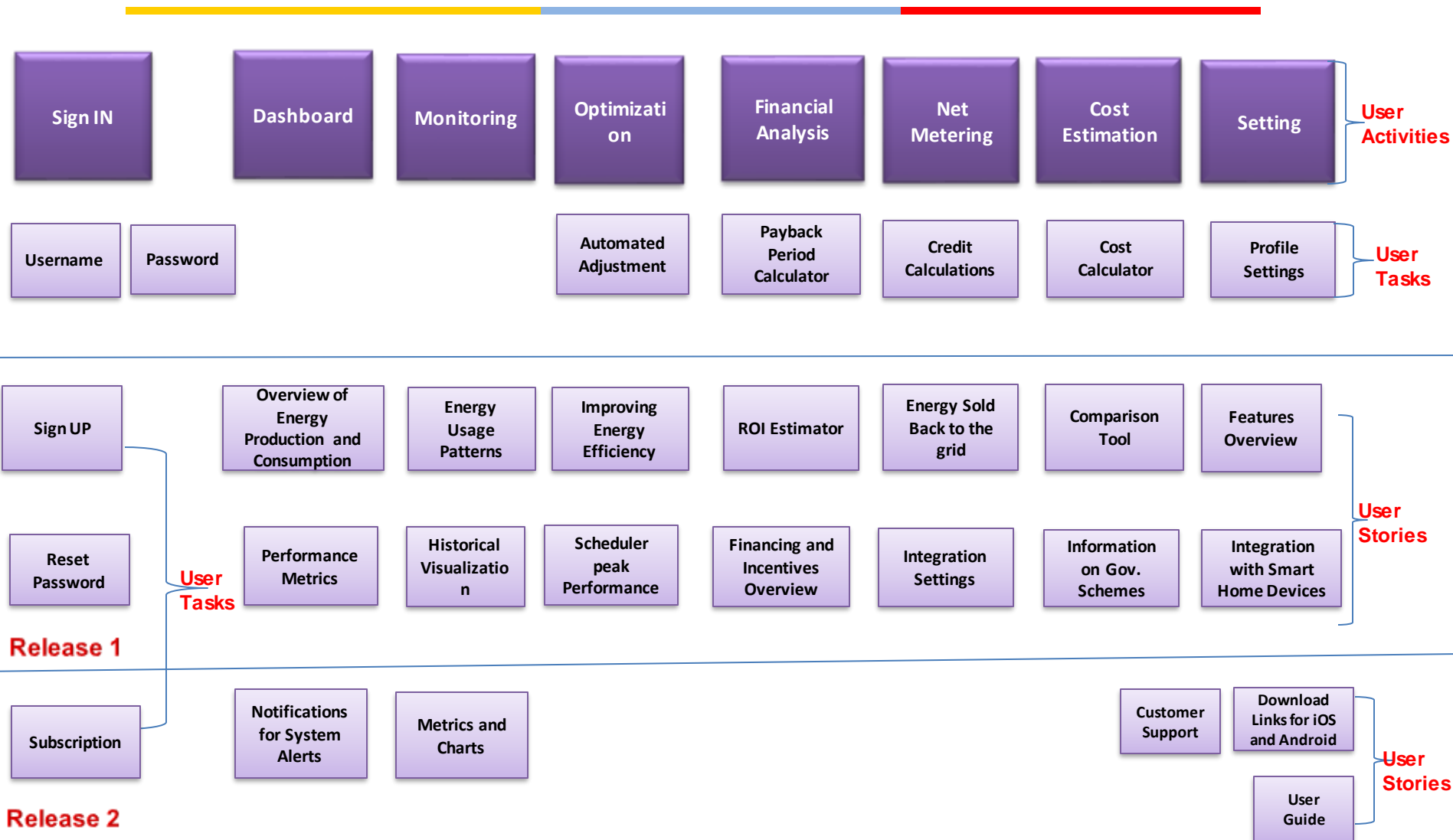
☐ Benefits:

- SunWise offers users the ability to monitor their system's performance in real-time.
- SunWise provides valuable tips to help users optimize their system's efficiency, maximizing their solar energy savings.
- Users benefit from detailed financial analysis, including investment tracking and returns.
- SunWise also offers enhanced customer support services to assist users as needed.

☐ Differentiation from competition

- Helps user to track their solar energy system.
- Provides detailed financial analysis by using advanced tools.
- Provides hardware compatibility where user will have multiple options for choosing type of solar panels, inverters and other hardware components.
- Provides 24/7 customer support to users.
- Provides preferences for specific features within the mobile app, such as push notifications or remote control capabilities.

SUNWISE STORY MAP



SUNWISE BUSINESS PLAN: STARTUP CANVAS OR LEAN CANVAS

Problem

- Complexity
- Lack of Optimization
- Limited Financial insights
- Integration Challenges
- Customer support accessibility
- Mobile accessibility

Solution

- Simplified Interface
- Personalized Recommendation
- Comprehensive Financial Analysis
- Seamless Integration
- Responsive Customer Support
- Mobile App Development

Unique Value Proposition

Sunwise offers a user-friendly platform for managing solar energy, providing real-time monitoring, personalized optimization recommendations, and financial analysis tools. With net metering integration and responsive customer support, Sunwise empowers users to save money, make informed decisions, and support sustainability.

Unfair Advantage

Sunwise stands out with its advanced algorithms for optimization and financial analysis, user-friendly interface, and responsive support. Partnering with top solar providers and utilities boosts its credibility and accessibility.

Customer Segments

- Homeowners
- Small to medium sized business
- Renewable Energy Enthusiasts
- Environmentally Conscious consumers

Key Metrics

- User Engagement
- Energy Production Optimization
- Customer Satisfaction
- Financial Impact
- Mobile App Usage

Cost Structure

- Development and Maintenance
- Customer Support
- Marketing and Sales
- Integration
- Administrative

Channels

- Direct Sales
- Partnerships
- Online Platforms
- Referral programs

Revenue Stream

- Subscription Fees
- Installation Referral commissions
- Data Analytics
- In App Purchases
- Licensing

KEY LEARNINGS: BHATNAGAR RISHABH SUSHIL RITU

❑ Effective Interviewing Skills:

- Learned the importance of persistence when facing rejection during the interview process.

❑ Refinement through Feedback:

- Leveraged feedback from the interviews to iterate and enhance the initial product idea.

❑ Adaptability in Feature Selection:

- Understanding that assumptions about feature importance may not always align with customer priorities.

❑ Communication and Interpersonal Skills:

- Developed effective communication skills through the interview process, both in terms of questioning and listening.
- Recognized the importance of clear communication when discussing product concepts and ideas.

❑ Market Awareness without a Launched Product:

- Realized the importance of staying informed about industry trends and government policies that helped us getting the idea as the government has allocated more budget and subsidy for solar installations

KEY LEARNINGS: KOLLOLI KIRTI ANIL

- ☐ We have to choose a product in which customer value is the most important factor, as I have learned from this assignment. How to conduct customer interviews and ways of asking questions so that customers provide genuine answers is crucial.
- ☐ Modifying product based on customer interview if it does not have any compelling value
- ☐ We also need to assess the market demand for our products and I understand the concept of product market fit by this activity.
- ☐ The transition from numerous ideas to the final one involves a careful selection process based on certain criteria.
- ☐ I learned about the user journey and product features by creating a story map. It helps in understanding user personas, their goals, and how they interact with the product.
- ☐ Additionally, understood the concept of Lean Canvas, as it helps in the concise representation of SunWise System, leading to risk reduction. This methodology efficiently guides us to validate assumptions, reduce waste, and create a successful, customer-oriented Sun Wise software.
- ☐ I learned how to create a software product that is cost-effective and user-friendly.

KEY LEARNINGS – KUMPATLA VIJAYA BRAMARAMBIKA



- ❑ Understanding the importance of market research and analysis in identifying gaps, trends, and consumer needs that can lead to valuable product opportunities.
- ❑ Exploration of innovate product ideas and the significance of customer interaction in refining and developing these ideas based on feedback.
- ❑ Understanding the concept of product-market fit and its major role in evaluating the feasibility of an idea and shaping the development of a product
- ❑ Exploring the process of determining the value proposition during the "Assess the Opportunity" exercise illuminated essential criteria for advancing an idea to the next phase. This phase taught me to carefully evaluate factors such as identifying customer pain points, explaining the advantages of our product, and outlining its benefits to the customer base. Additionally, it underscored the importance of understanding how our product stands out from existing alternatives, a critical aspect in assessing its potential for success and market acceptance.
- ❑ Recognized the potential of products like Sunwise to contribute to a more sustainable future by promoting the adoption of solar energy and enhancing its efficiency and cost-effectiveness.

KEY LEARNINGS: SAYAR PAL

- ❑ We prioritize user experience and ensure that our platform is intuitive and easy to use because we know it's crucial for encouraging adoption and engagement.
- ❑ We leverage real-time data and advanced algorithms for performance optimization and financial analysis because we believe it significantly enhances the value proposition for our users, leading to greater efficiency and savings.
- ❑ We educate our users about the benefits of solar energy and provide them with the tools and insights to make informed decisions because we're committed to driving adoption and contributing to a more sustainable future.
- ❑ We collaborate with solar energy providers, installers, and utility companies to streamline integration processes and offer additional services because we want to enhance the value and accessibility of our platform.
- ❑ We provide accessible and responsive customer support services because we understand it's essential for addressing user concerns, troubleshooting issues, and fostering trust and satisfaction.
- ❑ We regularly solicit feedback from our users and iterate on our platform based on their needs and preferences because we're dedicated to staying competitive and delivering ongoing value.

KEY LEARNINGS: VINITA RAORANE

- ❑ Through identifying a customer segment, understanding their needs, and conducting customer interviews, I have learn how to discover and validate customer needs.
- ❑ By modifying the product idea based on customer feedback and finalizing the product idea and its value proposition, I have learn about iterative product development processes. This involves incorporating customer feedback to improve the product and ensure its alignment with customer needs.
- ❑ By defining the value proposition (bottom 3 layers of the product-market fit pyramid), I have gain insight into crafting compelling value propositions that address customer needs and differentiate the product from competitors.
- ❑ Using a start-up canvas to define the business plan helps in understanding various aspects of starting and running a business, including customer segments, revenue streams, cost structure, and key activities. It provides a structured framework for analyzing and planning the business model.
- ❑ Throughout the assignment, I have encounter various challenges and decisions that require critical thinking and problem-solving skills. These include thinking out of the box to search for a product, interpreting customer feedback, making product modifications, and defining the business plan.

SUN  WISE

THANK YOU