### Case Understanding

SELCO India is a humanitarian enterprise based in Bangalore that provides solar-powered solutions for the needs of India's disadvantaged inhabitants. By empowering the disadvantaged to become productive individuals, their economic conditions can be greatly improved, according to SELCO's central concept and objective. Their lack of access to clean and cost-effective energy sources has been one of their most critical obstacles. Even today, the majority of the rural population relies on inefficient energy sources. By giving them access to clean and pollution-free solar energy, SELCO made repeated efforts to remedy the issue. Given the usual income of a rural household, it is no longer a financially viable option. In 2008, Mr. Harish Hande was able to restructure his business with the assistance of the International Finance Corporation (IFC), the commercial finance subsidiary of the World Bank, following initial financial difficulties. SELCO India remained a for-profit enterprise, but Mr. Hande was able to locate new investors who were more receptive to the company's goals. Mr. Hande was also able to preserve his sales and service firm, including its core of highly motivated employees. Given India's diversified population, in which 40 crore low-income individuals are still unable to access affordable and sustainable energy solutions, SELCO India must broaden its reach. This void needs the expansion and scaling of SELCO India's services in order to bring the benefits of solar energy to more people. SELCO aspires to grow its business without compromising its objective to serve India's poor population. We must create a comprehensive marketing proposal for SELCO India's future company expansion.

# Solution Summary

The department will explore for digital solutions to increase efficiency, transparency, and productivity. IT will handle all social media backends. The IT department will look after App development, regional call centres, Chatbot deployment, IOT & Cloud enablement AIML integration, Blockchain inclusion, installing CRM-MIS-ERP & finally Website design/management

#### Solution

The term "digital transformation" is more than simply a fad. It's risen to prominence as an important topic of conversation among companies everywhere. This is where SELCO's IT department will play a major role. Maintenance and repairs, project planning and monitoring, site surveys, and inspection management are just some of the areas where the department will be on the lookout for digital solutions to boost efficiency, transparency, and productivity.

# Developing Android Application.

In order to manage a solar-powered product, you need a custom-built app and a dashboard that show you current charging data, real time energy generation by solar panels and other useful information in real time. Among the app's many features is access to a payment processing and financing system. People in rural areas will be able to use the finance feature to look into different financing options, learn about the current status of their applications, and become familiar with the many financing schemes that are available to them. Standard languages like English, Hindi, and all other regional languages will also be supported by the app. An exceptional, devoted crew will handle the app, which offers a straightforward design and a minimalistic UI for a great user experience. The app will also have a toll-free number for users to contact customer support with any questions or complaints.

The ability to perform electronic proof of identity checks (e-kyc) using the app will also be useful when asking for financial aid (loans, for example). Chatbots will be available for frequently asked questions and other simple inquiries.

Customers will be able to bypass the middleman altogether by using the E-commerce function to place their orders. We can also offer a way for users to keep tabs on their orders and find out exactly when their packages will arrive. Order-placing processes are thus redone from the customer's perspective. If a customer's solar panel breaks, for example, they can quickly and easily place an order for a replacement.

Products' model numbers, important account managers, and warranty statuses are also supplied. The user will be forewarned of impending difficulties with the assistance of AI and ML.

### Social Media Technical Aspect

The IT department will be in charge of the backend for all of the social media accounts (Facebook, Instagram, LinkedIn, Twitter and WhatsApp). The IT department will be responsible for the necessary paperwork, verification, etc. The IT department will handle the technical aspects of protecting the privacy and security of the social media handles. The analytics section will also be responsible for overseeing the analytics for social media accounts.

# Regional Call Centers

The IT department will take on a massive project by establishing regional call centres that will operate around the clock to answer user questions. There will be options for receiving responses in Hindi, English, and many regional tongues. Jobs in the countryside will be created as a result of this as well.

### Chatbot development and deployment

Creating and releasing Chatbots that users can interact with to resolve minor issues with the product. Both the website and the Android app will have access to the chatbots. To further assist customers, the team will create a chatbot tailored just for WhatsApp.

## **IOT** enablement & Cloud Computing

In order to ensure that the PV Panel and Product is operating at peak efficiency, it is possible to perform data completeness and data quality validation at the field level using an IoT device that is connected to a cloud network. With the use of IoT, solar energy assets can be monitored from a single dashboard, where any problems can be immediately addressed.

#### **AIML**

The effectiveness of a solar energy product firm is directly tied to the quality of their field machinery. For optimal performance, the machinery must be well-maintained. Moreover, this is where AI and ML come into play. Automated inference makes it simple to spot concerns before they escalate. A failure or technical issue can be anticipated with the use of an advanced digital transformation plan powered by artificial intelligence. The automated and regulated reactions are made possible with the aid of the prediction-based function. It is much simpler for the business to eliminate bottlenecks and enhance equipment maintenance when it can anticipate and handle problems as they arise. Therefore, investigate AI options if you want to automate the energy collecting procedure at your company.

Refining, examining, and keeping tabs on. In terms of asset management, demand forecasting, and prediction, AI platforms excel. Artificial intelligence (AI), bolstered by other new technologies like the internet of things (IoT), big data, and sensors, can improve an asset's efficiency by devising novel key performance indicators (KPIs), reports, and procedures.

#### Blockchain

Blockchain technology helps ensure a reliable and efficient supply of renewable energy. Transactions between operators are now traceable, secure, and speedy thanks to this ground-breaking technology, which provides peer-to-peer platforms for all financial transactions and uses decentralised storage to record all data. Also this technology can be applied for data transfer between IOT enabled Solar device.

#### CRM

The sales team will be able to better track leads, take action, and record progress thanks to the integration of customer relationship management software. After an order has been placed, its progress may be followed in real time, thanks to the CRM. It's possible to record, monitor, and modify all consumer interactions in real time.

#### MIS

Reports and a dashboard detailing Sales, Client target area, Product efficiency, Customer contentment, Sales forecasts, and Insights from analysed data may be generated with the use of Management Information software. The MIS's hardware and software will be set up and managed by the IT department. Separately, we 'll be in charge of all MIS, ERP, and CRM system connectivity.

### Accurate requirement gathering tool

The site inspection group will be able to collect necessary data for the project or product with this instrument. Information such as square footage, unit count, electrical appliances, and previous billing records can be recorded with high accuracy.

### Enterprise Resource Planning (ERP)

A high level of integration should exist between the system and processes. To align the strategy for order reception, stock check, inventory management, financials, sales, HR, etc., we must subscribe to an ERP module, likely SAP. IT will aid in streamlining all other processes and provide numerous data sets to the Analytics department.

### Website Designing and management

Consumer engagement has evolved over the past few years. And solar companies need to use cutting-edge development and design tools to keep up with soaring demand. There is no way to begin the process of digital transformation without first focusing on the design and construction of a functional website. This broadens the potential customer base. The increased exposure will also aid in expanding the company's operations and maximising their return on investment. In addition, connecting with the audience via a high-quality website is essential. In this approach, we may inform the public about the benefits of solar powered products and the economy behind it benefiting the bottom economy. Branding and website creation are important from a business and societal standpoint, so IT team will give their full attention.

### Conclusion

Therefore, IT will have to promote a digital environment conducive to solutions that boost efficacy, openness, and output. In order to facilitate more cooperation between companies, the IT department will institute new IT norms. Its responsibility is to ensure the safety of any sensitive data and to provide help to the other departments as needed. Cloud computing and enterprise resource planning will facilitate efficient teamwork. The IT staff will be working to implement state-of-the-art IT infrastructure in order to improve the quality of IT services and support they offer. By doing so, the IT department can guarantee the smooth processing, analysis, and presentation of all data.