

Client Needs Briefing
Project: Client Needs
Date: 2024-09-29
Team: P10

1. Identified Client Needs

a) Control and Adaptability of Network Resources

Clients require applications that dynamically adjust to varying network conditions. These applications must manage network resources through Shabodi's APIs, optimizing performance across multiple network types (public, private, 5G).

Interpretation: Leveraging network resources effectively is essential for improving application performance in complex enterprise environments.

b) Utilitarian User Experience (UX)

Clients prioritize functional simplicity over aesthetics. The applications should solve real business problems with straightforward designs, avoiding complex user interfaces or unnecessary visual elements.

Interpretation: The user experience should focus on simplicity, ensuring ease of use and minimal design, catering to business users prioritizing function over form.

c) Fast, Iterative Development

Shabodi emphasizes rapid development cycles. Functional prototypes should be delivered quickly (e.g., "Hello World" in 10 minutes), leading to fully operational applications within weeks.

Interpretation: Short development cycles will create quick feedback loops, facilitating continuous product improvement based on user input.

d) Real-Time, Low-Latency Performance

Low-latency performance is critical for time-sensitive applications (e.g., video streaming, machine monitoring, gaming). Real-time functionality ensures a smooth user experience, which is essential in high-demand environments.

Interpretation: These applications must minimize latency to meet client expectations in performance-heavy industries like manufacturing and gaming.

e) Device Control Integration

Clients need the ability to control devices (smart glasses, IoT devices, etc.) through the application. This feature differentiates the solution from standard communication tools like Zoom, offering unique control options for network-connected hardware.

Interpretation: Device control is a core feature for industries that require remote operation and monitoring capabilities.

f) Enterprise and Manufacturing Focus

The primary target audience consists of manufacturing enterprises, whose main goals include reducing operational costs and improving efficiency. The applications should address business-specific issues such as minimizing on-site expert visits.

Interpretation: Solutions should solve operational problems specific to enterprises with high cost-efficiency and performance requirements.

g) Leveraging Shabodi's Network APIs

Clients have access to Shabodi's network APIs but may require assistance integrating them effectively. A critical expectation is to host multiple APIs within one application, demonstrating the full capability of the Shabodi sandbox.

Interpretation: Applications should seamlessly utilize Shabodi's APIs, showcasing the platform's flexibility and strengths.

h) No Monolithic Applications

Clients prefer modular applications over monolithic ones to ensure flexibility and scalability. This adaptability allows the solution to evolve alongside changing enterprise needs.

Interpretation: Development should focus on modular, adaptable components that support long-term scalability and customization.

2. Prioritization of Needs

High Priority Needs:

- Control and adaptability of network resources
- Real-time, low-latency performance
- Device control integration
- Enterprise and manufacturing focus

Medium Priority Needs:

- Utilitarian user experience
- Fast, iterative development cycles
- Leveraging Shabodi's network APIs

Low Priority Needs:

- Avoidance of monolithic applications

3. Problem Statement

Based on the identified needs, we propose the following problem statement:

Enterprises in industries such as manufacturing require network-aware applications that can dynamically control devices and adapt to varying network conditions. These applications must deliver real-time, low-latency performance, prioritize functionality over aesthetics, and leverage Shabodi's platform to solve practical, business-critical challenges quickly through iterative development cycles.

4. Next Steps

The team will validate these needs through benchmarking against similar solutions and continuous feedback from clients. The focus will remain on ensuring the solutions are practical, adaptable, and meet real-world enterprise challenges effectively.