

EXECUTIVE SUMMARY

Client Name: “Alpha”

Industry: Hospitality

Location: USA

No. Employees: 11-50

Client Challenges:

1. Transparency of project overall.
2. Verifiable timeline wasn't set.
3. Need for more development, but lacking clarity on the details.
4. Sourcing of additional hardware and verification safety.

Solutions:

1. GearForge team took control of project management.
2. After thorough review, establishment of anew timeline.
3. Embedded microcontroller with C++.
4. Used Python to create scripts.

Results:

1. Set a timeline of two years with three phases.
2. At completion, project will create new line of recurring revenue.
3. Forecast of pricing to a five-year window.
4. Return of control to the client, making them much more comfortable with the project.

PRODUCT LIST

Hardware:

1. Embedded Microcontroller

Software:

2. C++
3. Python

Housekeeping Cart Supplier Increases Efficiency With IoT Consulting

CLIENT CORPORATE SUMMARY

The client in question (“Alpha”) is a solutions provider for housekeeping as well as food and beverage departments in hotels across the world. Using custom carts and a highly-efficient organizational system, Alpha helps hotels organize their departments more efficiently and save money. Alpha services hotels as small as 150-room luxury boutiques and as large as 3,000 room properties.

CHALLENGES SUMMARY

Providing the technology which runs individual carts in different hotel size and style properties across the world is a huge challenge. Like many large corporations, tracking all the individual pieces of a project is a full-time job, especially when using an outside development team.

Alpha wanted to create custom embedded software for a new line of carts. A wide variety of hotels would use these carts, so adaptability was a must. The new software would allow quick and easy tracking of linen, terry and other amenities through each point of the system, making replenishment much more efficient.

To build this software, Alpha hired an outside development firm. However, without an on-staff expert to manage the development team, the timeline was quickly thrown out the window and issues went undiscovered. The Alpha team felt they had no visibility into their own project, and no control over their new software. That's when it became necessary to bring in a trusted expert to manage the development team and provide extra expertise.

SOLUTIONS SUMMARY

When GearForge Software came in we used a team of five to handle the project: a project manager/solution architect, developer, designer, writer and marketing specialist.

Utilizing weekly meetings to review process and progress, along with a specific project management system, the GearForge team melded quickly with Alpha to restructure the project, expose issues and challenges, as well as define and ensure mutual understanding of the project goals. The goals were: to manage the overall software design project, model the price structure of the product and assist with legal and marketing issues.

Once our team dove into the project, we restructured it due to safety issues with

the hardware and assisted with sourcing new components. We also found a disconnect between what the outside development team was telling Alpha and the impact of their work on the timeline.

The carts will contain an embedded microcontroller using C++ programming. Every bit of software on the microcontroller is precious due to space and cycle restraints. Efficient programming is a must, so our team created some scripts in Python.

GearForge worked with both Alpha and the outside development team to prioritize the work items so we can continue to meet the pre-set timeline. Technical guidance was also constantly provided to the development team. We also suggested sourcing additional aid and testing of the hardware to ensure all specifications are met. Our team built prototype screens to demonstrate alternative methods to simplify current process.

RESULTS SUMMARY

The timeframe, set before our entry into the project, was two years. Our team further broke down the timeline into three phases with weekly updates to ensure the project stays on schedule.

Alpha regained full control of their project with our assistance, making them much more comfortable with their ownership of the software.

Upon launch, this software and the associated carts will impact sales by creating a new recurring revenue model for Alpha, and serve as the basis for future advancements. In regards to the price structure, we modeled out a price forecast over a five-year window from launch.

Alpha has stated they are interested in working with GearForge on future projects.

GEARFORGE SOFTWARE

Founded in 2017, GearForge Software focuses on and develops internet of things (IoT) technology and creates custom software solutions.

With two of the only IoT labs in Minnesota, GearForge commits to building and programming the devices necessary to power a wide range of industries throughout the entire United States. With more than 35 combined years of experience in software engineering, along with military-based electrical engineering experience, the leadership team designs and builds IoT solutions end-to-end.

GearForge has a well-defined software development life cycle (SDLC) and can help your business get to market rapidly. From mobile and web applications to cloud infrastructure and IoT, we create greater value and enhance your return on investment.

<https://gearforgesoftware.com/>