The buy vs. build software decision is one of the most important decisions your enterprise will make as you approach an IoT implementation. Your development team may be multi-talented. Your leadership team believes it can be done. But, for organizations using IoT to deliver assets to the marketplace, there is a significant difference in the set of skills, investment, and time required.

An IoT solution requires a platform with an architecture to support a combination of hardware, software, networking, customer interfacing, and data management. An IoT platform serves as the foundation for applications and must orchestrate many moving parts.

So how can you decide if your team should design, build, test, and manage its own IoT platform, or purchase a license to a software service? Without careful analysis, it may seem that building in-house is more affordable, but there are a number of factors to consider:

- Is your team equipped to build a secure, scalable architecture sustainable enough for present and future use cases?
- Will your team be able to monitor the platform and provide post-development support?
- Is your enterprise prepared to develop working interfaces for teams and customers?
- Can you source the members of a capable team with IoT expertise and skills for every part of the stack?
- Will the ROI for building in-house be more or less than the total cost of ownership (TCO)?

Generally, a buy vs. build software decision relies on the following factors:

- Strategic direction
- Time to market
- Team resources
- Maintenance
- Customization needs

LOSANT PROVIDES THE TOOLS YOU NEED TO SUCCEED

The Losant Enterprise IoT Platform allows enterprises to effectively build applications that securely scale to millions of devices. With real-time stream processing and batch processing capabilities, users can create dynamic experiences and perform complex analytics. All of Losant's components, from Edge Compute to End-User Experiences, work seamlessly together to transform data into tailored IoT solutions.
WHAT IS THE TOTAL COST OF OWNERSHIP FOR IoT

Total cost of ownership is a financial estimate used to calculate the direct and indirect costs of a product or system. For an IoT solution, a TCO estimate includes the initial implementation costs and all costs incurred by the asset during its life of service. This could include but is not limited to devices, data storage, data transfers/messages, software, hardware, labor, repairs, security auditing, monitoring, and support. The long-term total cost of ownership is significantly higher by going the build route. When building a platform, all of those costs will be assumed by the enterprise, however when licensing a platform you will have a lower TCO. Many of the considerations are included as a part of the license. A common consideration for enterprises to make is how the TCO affects the potential ROI.

CALCULATING TIME AND COST

Of course, the requirements of your IoT solution and the time it takes to build will depend on the business problem you are trying to solve, or the product you are trying to develop. If the problem is very specific, buyers may consider buying a vertical application. Platform buyers who are considering a long-term strategy may consider buying a robust, extensible application enablement platform like Losant. Certainly, you should let the data drive the decision.

To help calculate time and cost for your specific use case, here are two industry resources:

- Indeema IoT Solution Cost Calculator
- MachNation IoT Platform Build or Buy Total Cost of Ownership (TCO) Calculator

As you consider the time and cost investment required, also consider how getting the foundation of IoT architecture provided for you could save your team significant development time. According to McKinsey’s Survey of IoT Practitioners 2018, IoT leaders have found success with relying on external partners for IoT expertise. This enables the internal team to instead focus on the current business problems and initiatives.

The truth is that even if your enterprise subscribes to a cloud service in an effort to build IoT applications, some configuration will be required. The question should instead be, how can you streamline IoT application development work for your team?
STREAMLINING IoT APPLICATION DEVELOPMENT

What does it take to streamline IoT application development? According to the analysts at MachNation, using an IoT application enablement platform or (AEP) is 40 percent less expensive than building and maintaining an in-house solution. Not to mention, some of the most popular cloud vendor services including MS Azure, AWS, GCP, and IBM each offer a large catalog of independent services, but the gap between these disparate services and a delivered IoT solution can be difficult and expensive.

“As with Losant, you can focus on creating an IoT solution that delivers value for your business without having to spend time and energy on the nuts and bolts of things like maintaining and scaling infrastructure.”

MICHAEL KUEHL
CTO / LOSANT

As mentioned before, even a cloud service purchase will require some configuration. It requires construction of architecture for IoT-specific applications and writing code, versus having some of that foundation already built for your organization with an AEP. Beginning with or layering in an application enablement platform like Losant can enable your team to streamline development to achieve strategic business goals, build market-ready IoT solutions.

The Losant application enablement platform is designed with ease-of-use in mind to significantly save teams development time. Learn how you can streamline application development using Losant.

LOSANT ENTERPRISE IoT PLATFORM TEAM: WHAT WE BELIEVE

Losant is a progressive product team composed of software engineers, solutions engineers, and automation specialists. Together, we produce superior technology for enterprise IoT solutions. We believe in continuous improvement and work toward our vision of an ever-connected world. As we adapt to our changing environment and add features to our IoT cloud platform, we consider usability, flexibility, reliability, and security to promote ease of use for our customers.

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