

FORTNA

Thought Leadership Series

# 5 Steps to Building a Business Case for Automation



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With 2024 in full swing and most economic indicators showing a return to a more positive growth environment, now is the optimal time to start building an automation business case for your operations and distribution network.

An automation business case must include the automation needed, the location(s), the operational processes, the capital expense, the return on investment (ROI) and, more importantly, how to communicate the value of the automation to an executive team or board. An effective automation business case must address these and other factors, which include:

- Does the automation address key business priorities (customer satisfaction, delivery guarantees)?
- What are the risks of automation?
- What are the alternatives to automation to consider?
- How dependable is the data used for the business case analysis?
- What is the cost of doing nothing?

First and foremost, an automation business case must be constructed through the lens of the executive team or decision-making group. Addressing their priorities using data-backed information and analysis from a credible source can make the difference between success and failure. This FORTNA Insight will address five steps to creating an effective business case for automation.

## Step 1: Defining the value of automation

While some will look at an automation project in pure numbers and its effects on operational and capital expenses, defining the true value beyond financial graphs and charts is critical for communicating its overall value.

Value can be viewed as a lever of sorts, increasing the positive factors of implementing automation and, at the same time, lowering negative impacts on the business.

Increased positive factors after automation include:

- Revenue
- Growth
- Quality
- Service
- Flexibility

Decreased negative factors after automation include:

- Risk
- Order fulfillment time
- Operational costs
- Working capital
- Taxes
- Labor costs



## Calculating automation value

Organizations have struggled in the past with determining true automation value. The President and COO of Turboctic, Shail Khiyara, shared how he determines automation value.<sup>1</sup>

Multiply the total number of automated processes by the total cost per process, then use that number to divide the incremental cash flow post-automation of the project. If the number is less than one, the automation value does not reach expected returns; if the number is more than one, the automation has reached ROI. This equation also must consider the acceptable time it takes to achieve the value of automation.

1. <https://aijourn.com/debunking-scale-determining-true-automation-value/>



## Step 2: Define automation opportunities and alternative scenarios

Examining multiple automation alternatives and weighing the pros and cons is important, as decision-makers will want to know their options regarding value, expense and ROI. Answering some important questions early on can help define the goals and needs for the operation.

- Can the operation stay in the same facility, or is there a need for a new building?
- Does the operation need to add to its distribution network? Where do these new nodes need to be located?
- If staying in the same facility, how do you best utilize capacity and automate inventory and throughput in a small footprint?
- Can the local labor pool support current operations, or is automation necessary?
- Can robotics make a significant impact on cost savings and productivity?

The other critical component of an automation business case is a detailed report on the cost of doing nothing. For an executive, maintaining current operations while optimizing what is available is the least risky and cheaper option. The cost of doing nothing can be analyzed in terms of lost opportunities to service and gain new customers, as well as recruiting and retaining the labor required to fill regular shifts and cover overtime.

## Step 3: Understanding the financial metrics

While an automation project's engineering and mechanical aspects are vital, many executives and boards will view the project through the prism of financial metrics and terms. Many different metrics can be used, but knowing leadership's preferences and priorities can be the key to a successful business case. Below are some of the more commonly used metrics in automation business cases:

- Simple ROI: ratio of net cash flow divided by the initial investment.
- Simple payback: the time, normally measured in years, needed to recover the project's cost.
- Net cash flow: sum of the negative and positive cash flows over the life span of the investment.
- Net present value: the expected future cash flows of a project minus the initial investment.



## Step 4: Identify business risks and mitigation plans

Just as important as the benefits and advantages automation can deliver to an operation, there will be obstacles and risks that can derail and delay a project. While exploring the potential of an operation, it is key to recognize the potential pitfalls and how to mitigate them. Below are some of the most common risks and mitigations with warehouse automation:

### **High investment levels**

Use cost-benefit analysis to ensure the investment will return appropriate cost savings, productivity gains and operational savings. A phased approach can also spread costs over a longer period of time.

### **IT and internal alignment**

Most new automation projects will include a software component that can deliver dramatic results but also raise a system's complexity. Connecting a warehouse management system (WMS) or warehouse execution system (WES) to a company's enterprise resource planning (ERP) software can stress an IT department. Invest the time to work collaboratively with IT pre-implementation to ensure collaboration and support for the implementation.

### **Employee resistance to automation**

Fear of job loss, changes in job responsibilities and the anxiety of change itself can all affect employees' acceptance and ability to work in a new automated environment. Create transparent communications and training strategies that illustrate the benefits of automating, how it will affect them on a day-to-day basis and the overall operational goals.

### **Scalability**

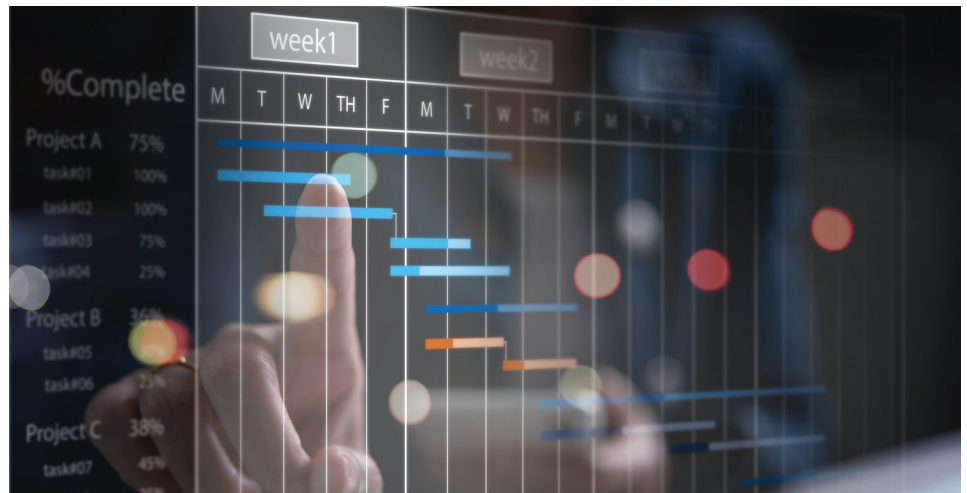
Disruptions and changes in customer demand and expectations are now a normal part of the supply chain. Selecting automation that cannot scale with business growth and does not address SKU proliferation will lead to disappointing results and ROI—keeping growth and expansion in mind when planning and creating an automation business case will give operation flexibility for future growth.



## Step 5: Create an implementation timeline with milestones

An automation business case will need a defined timeline, resources and phased milestones to be achieved. Providing leadership with an integration roadmap can illustrate not only the project timeline but also a snapshot of possible obstacles and any needed downtime before the go-live date.

Creating this timeline will require a cross-functional team that includes IT, operations, maintenance and other stakeholders. This will provide the automation project with views from many different angles and perspectives, creating a more solid proposal with the backing of internal departments.



# FORTNA

## FORTNA CAN HELP

Creating and presenting a business case for automation can be daunting as you work through its many components, personalities and agendas. Partnering with a supply chain expert like FORTNA, who has guided many organizations through the automation business case process, can help you collect and analyze your operational data and find the best-fit automation and processes for today and in the future. We can also assist in the presentation to decision-makers, helping ensure that the benefits and solutions are data-backed and the expected results and ROI are met.

Contact us today at [www.FORTNA.com](http://www.FORTNA.com)