



Automation Primer

A quick-start guide to
cutting costs in your business

Need to cut costs? We regularly assess businesses for chances to optimize procedures through automation. How you document, define, analyze, and ultimately minimize time-consuming processes to increase speed, cut costs, and maintain reliability.

Related Sources:

<https://www.thoughtworks.com/insights/articles/four-bad-ways-use-rpa>

<https://hbr.org/2018/06/before-automating-your-companys-processes-find-ways-to-improve-them>

<https://www.forrester.com/report/Use+The+Rule+Of+Five+To+Find+The+Right+RPA+Process/-/E-RES144074>

<http://documents.bpm.com/flowforma/Forrester%20Research%20Report%20-%20RPA,%20DPA,%20BPM%20And%20DCM%20Platforms.pdf>



Evaluating Processes



What part of my business?

1. Horizon 1 - Extend core business
2. Horizon 2 - Develop new opportunities
3. Horizon 3 - Learn future opportunities

Cost savings should only focus on horizon #1 - known core businesses.

Do not shut down #2-3 to cut costs! Now's the time where people are, but this is when you need it the most (But that's a different talk)

Vaporware is accelerating #2 and #3, because our #1 horizon was completely disrupted.



What are my goals?

Automation can have many outcomes

- Increase Speed or Throughput
- Increase Quality or Reduce Errors
- Decrease Cost or Effort

These goals are not mutually exclusive, as they're intertwined
One should take priority over the others, and realize that there are tradeoffs.

For example, we often can decrease cost by:

- simply getting rid of very expensive quality controls, while maintaining an acceptable level of quality.
- 80% gains by cutting top 20% speed. Makes us a bit slower, but keeps us alive during downsizing.



How do I define success?

Set SMART goals within these variables

- Income (Total Revenue from Process)
- Throughput (Cycles / Time)
- Effectiveness (Successful Cycles / Total Cycles)
- Labor Costs (FTE Hourly Rate * Hours / Cycle)
- Material Costs (Dollars / Cycle)

Within automation, how do we define a successful effort?

Remember, throughput, income, or effectiveness might all change -- even if we're just shooting to lower costs.

So keep these other metrics aligned -- as tweaking cost will often change another metric.



Do we know the process?

We should automate known processes

- Mature Core Business
How old is this process? (>5 seasons)
- Not Evolving
Changes in the past year? (<5)
- Defined, Simple, and Centralized
How many decisions? (<5)
How many Steps or “Clicks”? (<500)
How many Systems or People? (<5)

If we don't **know** the process, it's not ready for automation. (Why we focus on Horizon 1 automation)

In our eyes, these are the basic requirements for successful automations. If we don't meet this basic evaluation, we look for something else.

Expanded on Forrester Rule of Fives

- 5 or Fewer Applications to Orchestrate
- 5 or Fewer Decisions during the Process
- 500 Clicks or Less Required

Basic Evaluation:

- How long does the process take to make 1 cycle?
- Is it prone to errors?
- Is the data structured or unstructured?
- High Volume or High Frequency?
- Mature and Stable?

Look For:

- Process that aren't evolving quickly
- Have low complexity
- Humans spend a large amount of effort
- Humans add very little value (software can do it the same or better)

We ask 50+ more detailed questions about each process on our Assessment (currently free):

<https://www.vaporware.net/business-optimization-assessment>



Getting Started

Once we've found a good candidate, here's how we get started with Automation



Optimize for Cost

How is our process designed?

- Optimize (and validate) before Automating
- What is our tolerance for speed or quality?
What impact would this have? What's our cost for retries?
- Can we remove any expensive decisions or options?
Without losing disproportionate market share?
- Can we call this something different or are we using shrinkflation?

Mapping, Analysis, and Redesign. There's no Silver Bullet here.
This effort takes time. Upfront investment that pays off in 12 months or less.



Prepare for the new

Expect a transformation

- **Start Small**
Evolution, not disruption
- **Monitoring**
How do we lessen the impact of failure without humans?
We need to be more purposeful in our testing
- **Maintenance**
Plan to keep systems and processes modern

If this is your first time doing it, here are 3 pitfalls that most companies hit.



Our Recommendations

Vaporware's approach for 10x automation

- **Use APIs, not GUIs**
Custom Software, not "Robotic Process Automation"
- **Organize Teams, Not Functions**
Automation makes existing teams more effective
Don't separate "IT" into a single department
- **Start with scale**
Processes where people spend a lot of time
Look for structured data

You still have to solve underlying business process problems.
Automation makes specific applications and entire business processes to change.

Consider restricting automation into specific "service" organizations / departments within your business



Field Services Case Study

1. Documented the existing processes, tools, and roles
2. Eliminated unnecessary variety
Removed a line of business that only captured 2% of their revenue but accounted for 20% of their office staff time
3. Profitability transparency for field technicians
Related each service to profitability, even for the field technicians
4. Unified tools with custom software integrations
Unified scheduling (Google Calendar ICS Backed) across all services
5. Pre-filled customer communication (semi-automation)
Communication timing was varied, but content was not

You can see more details and other examples at <https://www.vaporware.net/work>



Related Tools & Services

Generic tools to get started today

1. [Zapier](#) - Self-Service API Connector Tool
2. [Process Street](#) - Capture Structured Form Data for Zapier
3. [Pipefy](#) - Programmable Kanban Boards
4. [Fibery](#) - Build your own Flexible App (WYSIWYG Database)
5. [Smartsheet](#) - Automatable Spreadsheets
6. [Streamline](#) - Vaporware's Automation Offering ([Free Assessment](#))

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These are self-service and generic (but modern!) tools that help you fit most any process.

We're here to help as well