The Business Leader’s Handbook for Building an Automation Center of Excellence
There was a time when simply implementing automation technology in your enterprise put you a step ahead of the competition. These days, business and IT leaders everywhere understand the necessity of automating processes. Your competitive edge hinges not on whether you automate, but how you do it.

An automation center of excellence (COE) includes the people, processes, and technology necessary to maximize the benefits of automation, including robotic process automation (RPA). It is crucial to finding new automation opportunities, scaling your automation within the organization, and carrying out a long-term vision.

This handbook guides business leaders through the process of designing and building a center of excellence for automation.

Why All the Hype About COEs?

The discussion around automation centers of excellence is relatively new, but forward-thinking organizations have already used the COE model to transform the way they operate. Banks with automation COEs have drastically reduced the cost of complicated processes like loan origination. Automating manual processes like HR onboarding and offboarding has allowed other enterprises to grow without adding FTEs. Businesses across a variety of industries are taking note of these success stories and thinking about implementing their own centers of excellence.

The business world and the technology landscape have both changed dramatically in recent years. For one thing, business software can do a lot more than it used to. Every department in your organization is probably using a variety of applications to streamline their operations and help them meet objectives. Some are small niche applications or even homegrown tools. You not only need an automation solution that can interface with all these disparate systems and applications, you also need an overarching automation strategy that reaches every department and team.

Automation software itself has also moved beyond what was previously possible. A tool that can manage a few individual tasks isn’t enough—leading companies are pushing for total digital transformation. This means automation solutions that integrate with any application, maximize the ROI of your existing business software, enable DevOps, keep your information secure, provide dashboards and analytics, and more. Even if you start small, your solution should be able to grow to meet these objectives. A center of excellence will help it do so quickly and efficiently.

An outcome of all this change is that the line between operations teams, IT departments, and business units have all blurred. Everyone is now involved with the technology that runs your organization. In an organization without a solid strategy, this can be confusing and lead to governance and security issues. In an organization with a center of excellence, these different roles work together in a structured way so each can contribute their unique skills to furthering the objectives of the business.

Recognition is growing that automation centers of excellence are highly beneficial to the bottom line. A COE can accelerate progress on projects that increase revenue, serve customers more effectively, and save on costs.

Who Needs a Center of Excellence?

An automation center of excellence might sound like something that belongs in a large enterprise, but businesses of all sizes benefit from the framework. In a large company, a common challenge is overcoming complex environments and existing islands of automation. A center of excellence ties everything together, helps identify automation priorities and opportunities, and prevents you from reinventing the wheel every time you bring automation to a new part of the company.

In a smaller business, you want to set yourself up for future growth. A haphazard automation strategy may seem like it works well when you only have a few critical workflows to automate, but delaying the implementation of best practices only creates more work down the road. Furthermore, limited resources make it all the more important to maximize the ROI of your automation software investment. Regardless of your size or industry, establishing a center of excellence now will pay substantial dividends down the road.
What is an Automation Center of Excellence?
An automation center of excellence goes beyond seeing automation as a tool or tactic for streamlining individual tasks and looks at the bigger picture. The COE treats enterprise automation as an ongoing project requiring planning, testing, and regular evaluation.

COEs and the Automation Landscape
Modern automation technology offers a variety of options for meeting your unique business requirements. An automation center of excellence is not tied to any one type of automation software—in fact, anything you are using to automate processes should be under the umbrella of the COE. That includes job scheduling (also known as workload automation, or WLA), robotic process automation (RPA), automation tools built into your business applications, or custom tools.

A term often mentioned alongside process automation is business process management (BPM). BPM and centers of excellence are closely linked. BPM is concerned with optimizing business processes to improve operational agility and corporate performance. A center of excellence has similar goals, while also adding a focus on the technological foundations of successful automation.

Business process outsourcing (BPO) has been a popular way to reap the benefits of automation without placing too much of the burden on in-house IT. However, many businesses are now looking to move automation back home. A center of excellence allows your organization to take control of its own processes in a streamlined and efficient manner that doesn’t leave IT resources strained. Taking back process automation also allows for greater agility—a software robot can be configured or reconfigured in minutes without needing to work within a BPO contract.

The Center of Excellence Framework
The automation center of excellence framework can be divided into two interrelated pillars: people and processes, and systems and infrastructure. In both parts of the framework, it’s essential to lay a solid foundation for your ongoing enterprise automation project. Getting your people, processes, and technology in order in the beginning ensures that you will make the most of your automation investment and be ready to efficiently implement automated processes in the future.

People and Processes
You may be transitioning to a digital workforce, but your human team is still the key to a successful transformation. The first pillar of the automation center of excellence framework involves putting the right people together with the right processes.

The Automation COE Team
Automation projects don’t have to be spearheaded by the IT department, but IT should be involved from the start. For a successful automation project, you’ll need a core group with a variety of diverse skills.

The core team identifies business pain points, documents existing processes, gathers requirements, researches automation solutions, and builds the initial workflows.
This team should be made up of people who embrace change and champion process improvement. Often these people have already automated some of their own work and want to help others. People skills, organization, and a talent for research are just as important as programming ability for this group.

We recommend making sure your core team includes the following skillsets. In some cases, one person can cover multiple roles.

**The Business Analyst**
The business analyst has a talent for visualizing process improvements. A great business analyst will not only be able to document processes as they are today, but also redesign them to meet future requirements in enough detail that developer can build the workflows easily. This person should be a respected individual who can lead good discussions with process stakeholders.

**The Developer**
This job involves taking well-documented processes from the business analyst and converting them into automated tasks and workflows. Depending on the needs of your organization and the capabilities of your automation solution, the developer may not have to be an actual programmer—it can be anyone with the ability to build effective workflows. Some automation teams have multiple levels of developers.

Recruit this role wisely. Often the best developers in your company will be accustomed to turning to custom coding to solve any problem. You COE developer should understand the benefits of implementing a comprehensive automation tool. They are still developing, just in a more efficient way.

**The Operations Specialist**
The operations team will be a key part of your automation center of excellence once it gets off the ground, so they should be represented on the core team from the start. These are the people who make sure everything is running on time and without errors. They will be aware of all automation in the enterprise and will be the first ones called if anything goes wrong. Keeping operations in the loop ensures that they will be equipped to solve most automation problems without escalating the issue to development. It will be helpful to the operations team to have good documentation of processes and plans for notifications, escalation, and error handling.

**Spreading Automation Throughout the Enterprise**
Whether it was the IT manager eager to save time on manual processes, a business user who had already been automating tasks on his own, or an executive with dreams of making the enterprise more productive, your automation project probably started with people enthusiastic about the benefits of automation technology. But after finding an automation solution and quickly putting together a couple automated workflows, many businesses struggle with next steps. Automation software with the power to transform whole enterprises is left to manage a handful of file transfers or report generation tasks. The HR department wonders how they could save time processing paperwork, but have no idea that they could be using the solution that accounting has already implemented. In some cases, there are even employees with unfounded negative ideas about automation.

To move from the initial implementation to an enterprise-wide center of excellence, you need to have a few more people on board.

**The Evangelist**
Your evangelists, or automation champions, may have been members of the original core team, or they could be part of the management team from anywhere in the business. The important thing is that they know about the power of automation and are gifted at explaining business benefits. They've already experienced successful use cases with the automation software and are ready to get the rest of the company excited about it.

**The Role of Functional Teams**
The core team and, eventually, the steering committee will be responsible for identifying new automation opportunities in departments across the enterprise. Some functional teams will have been involved with the automation project from the start, but others won’t learn about the new automation
solution until it has already been implemented. In these teams, find a project manager to help with the documentation of processes and implementation of automation for the team. This should be someone extremely familiar with the current processes who also values process improvement.

**The Executive Sponsor**
Getting executive sponsorship and visibility is key. An executive sponsor could be a CIO, CTO, or CFO. They will be someone committed to maximizing ROI for your organization, and they will see how the long-term savings from automation fit into the big picture of the organization’s finances. This person could end up sitting on the steering committee.

**The Steering Committee**
The steering committee will help your automation project obtain the resources it needs. It will hold regular meetings to review recent automation case studies and prioritize upcoming projects. The committee will have a plan and process to measure ROI for each automation candidate.

**Prioritization and Best Practices**
Your core team is assembled and your automation solution is efficiently managing at least one business process. Where do you go from here?

**The Weighted Matrix**
There’s a potentially endless queue of processes in your organization that could be automated, and you need a quick and accurate way to prioritize their importance to the business. A weighted matrix, such as a Six Sigma cause and effect (C&E) matrix, is an invaluable tool for the COE team. The matrix will include various criteria for evaluating processes, such as frequency, effort required to automate, criticality to the business, potential time savings, and anything else that is significant to your organization. Each factor is assigned a value based on its importance. Enter the automation candidates into the matrix to determine priority.

The team responsible for prioritization should discuss each automation candidate to ensure a common understanding of the process and its appropriate score for each factor. The best practice is to let each team member score the process privately before sharing their answers with the team. Use the average or the score that represents the majority.

**Approaches to Automation**
Robotic process automation at the user interface level is one of the most popular and useful tools out there, but it’s not the only way to build automation. An effective automation center of excellence team will understand the various automation options at its disposal and know how to choose the best one for each workflow.

Automating each step in the existing process using interface-level RPA is perfect for a proof of concept or other low-volume tasks that aren’t critical to the business. It’s fast and easy and doesn’t require much expertise. For processes automated as-is, you should still take the time to do some research. Fully document the process, including any alternate paths in the workflow, before automating.
If you have a process that involves multiple people and is fairly high-frequency, you should consider optimizing your automated workflows with a combination of GUI and back-end automation. Go through the process steps that you have documented and make note of where you can automate via the backend; for example, with APIs and web services. You'll find that this method improves the stability of the process and the speed of execution, and still doesn't require programming expertise if you are using the right automation tools.

Sometimes a process deserves not just the optimization of certain steps, but a full revision of the workflow. Usually these processes are high-volume, mission-critical, or require especially rapid execution. To rework the process, you can leverage an established process improvement methodology such as Lean Management or Six Sigma, to review the process, identify areas of inefficiency, and map a new workflow. Out of the three approaches to automation, this one takes the longest to develop. But for a critical, high-frequency process, it can also lead to the greatest gains in ROI.

There will be a large number of employees who need access to the automation tool. Make sure you have role-based security in place so they each only have the access they need—some may need to execute workflows but shouldn't be able to edit them, while view-only access will be adequate for others. Have detailed audit logs of everything created, edited, or run. A high volume of automated processes also requires robust error handling and notifications. All tasks and workflows should be designed to report on failures.

**Automation Templates**
Create documentation on best practices for creating automation. Many processes will have reusable elements, so don't waste time reinventing the steps for each workflow. Ensure your automated processes are constructed for consistency, efficiency, accuracy, and auditability.

**Training**
Anyone responsible for automation operations should have the skills to manage and maintain automated workflows. Adequate training ensures that the operations team won't be repeatedly escalating issues back to development and that business users can interact with the software to the extent that their role requires.

For anyone who will be involved with the development process, training should also extend to the best practices documents and workflow templates created by the center of excellence team.

**Measuring ROI**
There are many ways to measure the value of your solution. Determine which are the most important to your unique business objectives and identify a method of reporting. In some cases, you might have an automatically generated report of tangible metrics. In other cases, you may need to create a plan for functional teams to report to the steering committee on successes and failures.

Measuring your ROI is important for the continual improvement of your COE processes and to substantiate ongoing funding.
Centers of Excellence in the Real World
While many companies are still struggling to understand automation technology options and transition to a mature, strategic way of handling automation, others have already made drastic performance improvements using the center of excellence model.

Here are just two examples of businesses that were transformed through an automation COE:

COE Success Story 1: Banking
A large U.S.-based bank was suffering from inconsistent manual handling of transactions, including processing inbound and outbound ACHs, file transfers, payments, partner data, and others. Besides causing a poor customer experience, the issue was creating an average of 20 percent overtime each week. The error rate was high and employee morale was low.

The bank developed an automation center of excellence to tackle the problem. The core COE team was formed from operations and IT, which gave them the technical expertise to move beyond GUI automation and build sustainable workflows. The team had input from each department, a project manager, and an executive sponsor.

Following COE best practices, the team documented and analyzed all processes, reworking them to cut out the waste. When the processes were fully optimized, they were automated. The team also came up with the idea for a transaction hub to process the transactions that had previously been so time-consuming.

Thanks to these changes, employee morale went up and turnover dropped by 10 percent. There was a 55 percent reduction in average handling time and a 75 percent reduction in process costs. 24/7 monitoring and processing is now in place, even on banking holidays. Best of all, NPS scores show a 40 percent increase in customer satisfaction.

COE Success Story 2: Human Resources
A leading human resources firm needed a new approach for their largest client. The client required a dedicated support team of 55 FTEs to process employee terminations at a rate of 3,000 per day. A long ramp cycle was expected to bring the whole team up to speed. The human capital management company implemented an enterprise-class robotic process automation solution and COE practices. The 11-person automation center of excellence team included two developers, four business analysts, and three operations analysts.

Today, the company has over 100 software robots in production and are continually expanding their automation footprint. Revenue increased by 15 percent, and their transformation not only won them the original contract, it allowed them to build a template for future growth opportunities.

Next Steps
Transforming your business through automation requires changing mindsets within the organization. Some will see the value of automation from the start, but you’ll still need to plan and optimize your COE processes. Other employees won’t be sold on the new solution and processes until they see successful use cases springing up all around them. If your COE is successful, eventually it will simply become the new normal for everyone in the organization.

As a leader in your business, start by finding your fellow automation enthusiasts. Seek out the people with the skills and knowledge to lead the core team and the ones who can help spread an appreciation for automation to all teams and employees.

Whether you are just getting started building a COE or working to perfect the processes you have in place, we have tools to help you with prioritizing projects, calculating ROI, and more. By spearheading the automation center of excellence project, you can lead the charge towards digital transformation.