Selling IT Automation to Your Organization



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"The reality is that with heightened expectations around system security and availability, you no longer can afford not to automate."

T is under more pressure than ever to deliver higher and higher levels of uptime, while rapidly deploying business-changing applications across a web of complex, growing systems and services. The age-old do-it-yourself manual method to keep systems running and secure is riddled with inconsistency, inefficiency and risk. And while the organization is clamoring for you to be more efficient and effective, they're not listening when you bring up automation.

Sound familiar?

You're not alone. Most IT departments spend a majority of their time (and budgets) on manual tasks to manage infrastructure and applications. The reality is that with heightened expectations around system security and availability, you no longer can afford not to automate.

Take the cloud as an example. It's been around for several years, but it's just recently that organizations wrapped their arms around a strategy of how to use and manage it. And, just when you think you understand what the next generation of infrastructure is going to look like, you suddenly get thrown containers and microservices to manage—along with the infrastructure you already have a management plan for—further confusing what was thought to be a clear strategy.

So organizations such as yours are in a constant state of cycling out older technology and bringing on newer technology, which simply means more management with the same resources. IT automation is a way for your organization to reliably reduce the timeline of bringing new technologies and applications onboard to deliver them to users, bringing value to the organization.

Somehow, in the midst of the constant state of upgrade, IT is required to maintain a secure environment. Even with putting aside all the focus placed on managing infrastructure, the work necessary just to secure that infrastructure can be equally taxing.

Take the simple example of the Heartbleed bug in 2014. When the SSL vulnerability was announced, it had a widespread impact and just about everyone in IT knew about it. For some environments, it wasn't a simple

"IT automation helps to accelerate the timeline of deployments, updates and upgrades, helping transform IT into a high performing team and delivering results more quickly." fix; an initial patch was required along with some additional patches to update dependent services. Perform a task like this across tens or hundreds of systems, and you'd be looking at a completion time in a matter of days. Given that the initial exploit came out within 48 hours, those days of time-to-patch were days you simply didn't have.

Automation can be used to inventory and identify vulnerable systems, patch a set of test systems, and, upon approval by your security team, patch the remainder of your impacted systems in a matter of hours.

IT automation helps to accelerate the timeline of deployments, updates and upgrades, helping transform IT into a high performing team and delivering results more quickly. It dramatically improves cycle times—and not just a marginal increase of, say, twice as many. According to the State of DevOps Report by Puppet Labs, IT automation can give IT teams a 30x increase in code deployment frequency, letting you deploy software faster, which in turn results in more frequent update iterations and faster response to change requests. It does so while also increasing predictability of the outcome, generating 60x fewer failures than management tasks performed without automation¹. Automation also improves efficiency, letting IT manage more systems with the same limited staffing, while increasing visibility, as automation can report on the success or failure of a given task across hundreds of systems at once.

But when it comes to selling IT automation, the fact is either your organization will love it or hate it. The love comes from the efficiency gains and faster deployment cycles; the hate stems from you proposing yet another layer of process and control over something IT or development staffers may want to manage themselves.

So, how do you properly sell IT automation to your organization and have it be welcomed with open arms?

Making the IT Automation Pitch

First off, no one is expecting you to be a salesperson. But there is some element of pitching the benefits to the appropriate members of

¹ Puppet Labs, State of DevOps Report (2015)

the organization to get buy-in. Because IT automation can be a fundamental change in not just how you handle deployment, but also the maintaining of the environment configuration, you can't simply thinkto walk into your boss' office with an "it will make our lives easier" pitch and presume you'll sell them on IT automation.

So, what's the right way to convey the value of IT automation?

The first step is to recognize you're going to need to sell IT automation to more than just IT; it's a change that impacts how IT, support, development and DevOps all work—and work together. So as you plan to pitch, you'll need to tackle the problem and the solution from a few different angles.

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Start with Where You Are

The pitch begins with gathering information about the state of IT, the work currently being done manually, the time and effort spent on accomplishing repetitive tasks and the work not being done because of it. This should encompass areas of work that impact IT management, development and DevOps. It's understanding this "state of manual IT" that will help you provide context throughout the many conversations you'll need to have.

From that functional state of the union, defining where IT wants to be in terms of its services, response times and efficiency comes next. This will be the vision of what can be — standardized servers and services, monitored configurations, automated consistent changes and a more stable environment to accomplish strategic IT, development and DevOps initiatives.

But expect some very different conversations. As you'll see, the way you'll tell the story to management (and the questions they'll raise) will be very different from that of the other stakeholder teams such as support, development and DevOps. Each conversation should consist of benefits to the organization and an addressing of concerns — each from the point of view of the team to which you're selling IT automation.

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Selling Management

Because the idea of implementing IT automation completely changes the way IT provides service to its customers, you won't get anywhere unless you start with management. To better prepare you for the conversation, use the lists of benefits below to steer the discussion in a positive direction, while making yourself aware of the concerns management will no doubt have.

Benefits

Management always wants to know why implementing a new system or platform will benefit both IT and the organization as a whole. Start with the following benefits to begin the conversation and round them out with additional benefits specific to your organization:

- Control Without automation, installing an application, updating a
 server or configuring security can all end with very different results,
 depending on who performs the task and how they accomplish it.
 IT automation provides a level of control and consistency, ensuring
 a quality of service every time.
- **Stability** Manual setup and maintenance across multiple systems results in instability from inconsistency. Automation provides a stable, known environment in which to work.
- Reporting Today, you likely have zero reporting on configurations changed, patches applied, applications installed and systems updated. By implementing IT automation, those tasks are all documented, allowing for detailed auditing and reporting.

Concerns

The benefits will only get you so far, as management will instantly have questions around whether implementing IT automation will actually improve operations, including:

 Time savings — Putting any new platform or system in place takes time. You'll need to address just how much time IT automation is going to save in man hours. "Since automation isn't about a single project or initiative, it's likely that there's not a clean-cut place in the budget for it."

- Cost Since automation isn't about a single project or initiative, it's
 likely that there's not a clean-cut place in the budget for it. You'll
 need to either find budget or justify it against the time savings,
 establishing an ROI period.
- Time to implement It's unlikely the automation solution implementation itself will be completely automated. So you'll need to have some idea around the number of servers in your data center that will utilize automation, and how long it will take to fully roll out IT automation.
- Accountability Management will always be concerned with who
 in IT can do what. And given automation extends the reach of an
 individual to impact potentially thousands of systems with a single
 automated task, this concern is equally heightened. Demonstrating
 an ability to know who is using the tools and who is making
 changes, and having an ability to audit usage should something
 break will be critical to satisfy management.

Selling Stakeholder Teams

You only need management's nod of approval largely to make certain you have budget approval. Once you have buy-in from management, the real selling starts. Now you need to go to the various teams within the organization that either will utilize IT automation or, at very least, be impacted by it. This includes, at a minimum, development, support and DevOps.

The goal is to not just sell them, but to make them a part of the sale itself. You're going to need these teams to embrace and utilize IT automation, so getting their buy-in and support moving forward will be critical.

Benefits

Many of the benefits of IT automation can be shared by both management and stakeholder teams, with some variation on perspective, given that these teams are the ones in the trenches.

"With an ability to quickly build servers and deliver in minutes rather than weeks, teams can complete their tasks at a more rapid pace."

- Consistency Everyone benefits from making sure each server is built the same; each team can expect and rely upon the same configurations, security levels and credentials used to get their jobs done.
- Speed With an ability to quickly build servers and deliver in minutes rather than weeks, these teams can benefit from an ability to also complete their tasks at a more rapid pace, while also increasing the frequency of deployment cycles.
- **Stability** By creating profiles that are stable, none of these teams have to manually check to make sure everything is set correctly, letting them focus on the actual task at hand.
- Ease of use Not everyone knows an OS, service or application intimately (such as UNIX or SQL Server), nor do they want to. IT automation simplifies deployment, maintenance and support, letting even those with no expertiseto successfully—and consistently accomplish tasks they'd otherwise need to involve other members of the organization to accomplish.

Concerns

Like management, stakeholder teams will be concerned about such a monumental shift in how things get done, in this case, somewhat more so, because the very idea of IT automation invokes thoughts of something besides the stakeholder teams doing the work—which will, no doubt, raise some eyebrows.

- Control Because you're suggesting an automation platform be
 placed between these teams and the systems they manage, there
 may be a concern about losing permissions for servers and
 applications. Addressing their ability to maintain control is key.
- Managed Items Everything is managed by people today, so establishing — at least conversationally — what will (or, possibly, could) be managed by IT automation will be up for discussion.

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- Accountability Since many hands are in the server soup, they
 each want to be sure no one is making untracked changes that
 may impact another team. Addressing how IT automation tracks
 changes will be equally important to this group, as it is management.
- Another tool? Seriously? Often, the purchasing and rolling out
 of "yet another tool" creates more problems than it solves. You'll
 need to ensure them that IT automation will not just solve the
 manual task problem, but also will relieve them of those same
 tasks, letting them focus on more critical initiatives.

The goal of selling IT Automation is to get the conceptual buy-in from all involved. The initial pitch of the benefits and resolving any concerns that are raised will only get you a part of the way. Once you have this buy-in the question of "What's next?" will be raised. And you can't implement IT automation on your own.

So, how do you ensure the sale of IT automation will "close"?

Creating a Sense of Ownership

The selling process isn't just getting an initial approval from all involved; it's also about pulling those teams into the planning process. The success of implementing IT automation will rest a lot on whether you get each team to feel it has a stake in that success. By creating a sense of ownership within each stakeholder — even those that may never see the platform in use, such as a security team — you'll have not only the initial buy-in you need, but the ongoing support necessary.

When you plan the implementation of IT automation, make sure stakeholders think about using IT automation for modeling, testing, deploying, enforcing and remediating a desired state — both in concept and in execution. In concept, the teams need to think in terms of adhering to desired states. More importantly, in execution and as part of the planning process, you need their buy-in on a definition so that each team feels like it participated and is an active member of the IT automation project.

These states shouldn't be limited to an overarching single definition for a given server (such as a golden image of a database server); instead

have the stakeholders think about defining states for IT automation throughout the entire stack of your IT infrastructure, including:

- Core Infrastructure This includes operating systems and core services (such as AD, DNS and NTP).
- Application Infrastructure Applications that provide database and Web services that serve as the foundation for other applications reside in this layer.
- **Applications** Your client-facing applications reside here.

Also, as you work to create this sense of ownership, remind the teams that IT automation also shouldn't be limited to just deployment, for example. It needs to be used as part of the entire lifecycle of all parts of your infrastructure including deployment, initial configuration, ongoing orchestration and decommissioning.

Once you have both the buy-in and stakeholder teams working to help plan the implementation of IT automation, you can confidently remove the "For Sale" sign from IT automation and consider it a done deal.

Putting the "Sold" Sign on IT Automation

It's never easy trying to sell any new piece of technology to your organization. The simple belief of "if it's not broke, don't fix it" stands in the way of any new suggested tool — no matter how much it's believed that tool will better the IT organization. And IT automation is no exception.

Selling IT automation is as much about understanding the current state of manual tasks, as it is the promise of what IT automation brings to the table. Having a comprehensive grasp of what IT currently can and cannot do will help to positively color the "pitching" you're going to need to do.

By planning to address both management and the affected technical stakeholders from a benefits standpoint while addressing their concerns, you raise the possibility of a successful sale. Remember,

"Once you have buy-in and stakeholder teams working to help plan implementation, you can remove the For Sale sign from IT automation."

"Now that you know how to sell IT automation, you need to choose the right tool." you're not just putting a new system in and asking everyone to start using it. Instead you need those involved or impacted to raise their hand wanting IT automation and then asking for that same hand in planning its implementation.

Involving IT, development, support DevOps, and management in implementation planning solidifies their support of IT automation as not just another tool in the IT tool belt, but as a foundational piece of how IT designs, implements, supports and discharges the systems, services and applications critical to the success of your organization.

IT is better when you automate. Now that you know how to sell IT automation, you need to choose the right tool. Puppet Enterprise makes it easy to automate the provisioning, configuration and ongoing management of your machines and the software running on them. To learn how Puppet Labs software can help you deploy your own software faster, be more productive, and gain insight into infrastructure configurations and operation, visit https://puppetlabs.com.

With nearly 20 years of enterprise IT experience, Nick Cavalancia is an accomplished consultant, speaker, trainer, writer, and columnist and has achieved certifications including MCSE, MCT, MCNE and MCNI. He has authored, co-authored and contributed to over a dozen books on Windows, Active Directory, Exchange and other Microsoft technologies. He has spoken at conferences such as the Microsoft Exchange Conference, TechEd, Exchange Connections, and on countless webinars and at tradeshows around the world.

