ACCELERATING BANKING EFFICIENCY

3 CHANGES TO LEGACY IT
THAT CAN SPEED UP INNOVATION

endava

CONTENTS

INTRODUCTION

Cloud computing, infrastructure-as-code, continuous deployment, agile development, micro-vice architecture, test automation, DevOps. Today's enterprise technology landscape is radically different from what it was a mere ten years ago. Business and consumers alike have come to expect IT systems that are capable of evolving rapidly, almost instantaneously, all the while remaining stable, secure, and cost-effective.

Yet, banks continue to **spend an average of 80% of their annual IT budget on run-the-business costs**. In a worst-case scenario release cycles are slow, operations remain dependent on manual processes, IT infrastructure costs continue to hurt the bottom line and mitigation of regulatory risks caused by out of date technology is a constant distraction for C-suite executives.

Legacy IT has gotten a bad reputation, and it can be easy to become despondent in the face of all the information out there which talks about needing to build new platforms from scratch, which is unrealistic in established and highly regulated businesses.

This leads us to ask two questions:

1. What opportunities are out there to help you take advantage of advances in enterprise technology, such as building applications faster, deploying with confidence, reducing maintenance costs and remaining competitive within the ever-changing banking industry?

2. How do you exploit this technology without having to completely overhaul the systems that you have?

We have explored 3 opportunities that can help you make the most of your current infrastructure while allowing you to do business the way that your clients expect.

CLOUD READINESS

HOW TO MAKE THE TRANSITION TO A CLOUD-FIRST STRATEGY MORE QUICKLY

Moving Enterprise applications into the cloud brings the promise of quicker deployments, more manageable infrastructure costs, and additional benefits like better-sourced data and advanced analytics. Yet regulatory issues and concerns about data security have some organizations concerned about using public providers for production systems.

According to **Reuters**: *"The biggest global banks estimate saving $15 billion by 2020 from cloud adoption, cutting technology infrastructure costs by 25%. About two-thirds of global financial firms are predicted to be using cloud services in a significant way by next year."*

So, what are some of the compelling reasons to make the move to the cloud?

Innovation – the cloud offers the ability to increase productivity and efficiency by reducing the need for IT infrastructure administration and allowing resources to focus on developing and delivering new products and services more quickly;

On-demand scaling and agility - cloud-based services are agile and easy to scale up (or down) on-demand, adhering to organizational computing needs;

Risk mitigation – the responsibility for ensuring capacity, redundancy and resiliency is shouldered by the cloud provider. Moreover, the ability of cloud computing to scale can equip banks with more control over issues such as security;

Cost reductions – the cloud allows you to move your IT spend from CapEx to OpEx, and consumption models mean you are paying only for the compute time you use, resulting in significant savings. The ability to flex your computing capacity results in more business efficiency.

The Challenge:

There is significant concern when it comes to the regulatory implications of cloud adoption for banks. Banks must ensure that they can seamlessly transition things from the cloud back to their own databases in case of any mishaps so that the customers are assured they will receive seamless service continuity. In addition to this, customers and regulators must feel confident that personal information is properly stored, used, and secured.

The Solution:

Cloud enables failing fast due to the fact that it is optimized for speed and it increases agility through operational efficiencies because it gives banks the ability to spin up more cost-effective environments in less time, fostering innovation and reducing some of the more annoying RTB costs.

Furthermore, moving the Dev and User Acceptance Testing (UAT) landscapes to cloud services allows for a "safe" entry into the world of cloud-based computing, where issues of data security and regulatory compliance can be tested and resolved without risk to production.

Three ways to get started:

1. Move dev and test into the cloud first

To test out how it works, prove security is sufficient, and allow application teams to work in an environment more conducive to continuous delivery and continuous integration.

2. Use experts as accelerators to develop your internal staff

Take them on a journey. Many operations people will initially see Continuous Integration/Continuous Delivery as a threat, and the transition from separate dev and ops teams to a single DevOps culture is significant. Employing experts and embedding them into existing teams can help smooth the transition and reduce fear and stress in your organization.

3. Be prepared to fail early and fail fast

It might sound like the exact opposite of what you want to do, but failing fast is an essential part of driving growth and innovation in your business. It is not a process of fail and stop altogether, but rather one of iteration. Take learnings, adjust what you are doing, and then adjust your trajectory. Keep repeating the cycle and making incremental gains.

Encouraging your IT engineers to try new things and celebrating the knowledge gained when attempting something new, even if it fails to be 100% right the first time, can help accelerate their learning. With Continuous Integration/Continuous Delivery in place for Dev and UAT environments, teams can be much faster when deploying a new idea and seeing if it works, and if it doesn't, that failure is not a failure, but rather another step towards success.

EFFICIENCY THROUGH AUTOMATION

HOW TO REALIZE THE TRUE BENEFITS OF DEVOPS AND CONTINUOUS INTEGRATION/CONTINUOUS DELIVERY

You know that you want to support your businesses growth by operating more efficiently and effectively. This need is so pronounced that it has resulted in the rapid growth of DevOps in what can appear to be an unstructured way. It is the complete opposite of the structured, traditional way of delivering IT.

The first steps in successfully launching a DevOps initiative should be about defining what it really means for your business and creating a business case for it. Once those are both in place, one of the challenges facing many CIOs is the temptation to try to "boil the ocean" when moving to a more automation-focused way of working. It is hard to know where to start, and then you have to factor in the cost.
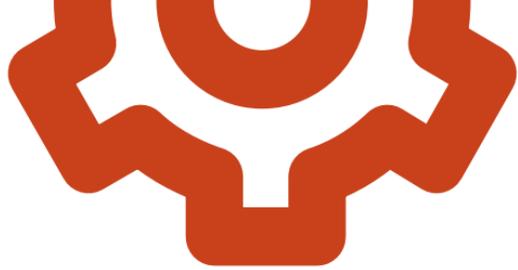
The Challenge:

As banks have become increasingly cost-conscious, overall IT budgets have come under increased scrutiny. CIOs are now tasked with reducing costs, usually achieved by reducing business complexity or investing in implementing system enhancements, which means incurring upfront expenditure. As a result, cutting innovation budgets is the only realistic option for cash-strapped CIOs.

Departments within the bank often engage in fierce disputes to improve their technology platforms. The front office is usually most interested in enhancements to client interface and user experience. However, regulatory and product changes tend to take priority to ensure that legal, compliance, tax and reputational issues are kept to a minimum.

But by driving efficiency and cost savings through automation, you can start to make more room for more innovative work. Automation also allows the people you do have to focus on more meaningful and important tasks. Using Continuous Integration and Continuous Delivery can dramatically increase the speed at which you develop and deploy new products, making your business more competitive.

The Solution:

Automation means different things to different people. Even as dev teams increasingly adopt Agile development practices and aim for a Continuous Integration/Continuous Delivery approach, they often find the existing operations processes to be a bottleneck.

Getting DevOps right means more than having dev and operations sit together under the same organization, it means embracing new tools and technologies for provisioning server resources and quickly spinning up new environments at scale. It is important to avoid the pitfall of focusing too much on new tools that may not fit into your infrastructure or be difficult for your staff to learn to use.

It is also imperative that you don't overlook the cultural aspect and potential resistance to change, which can be very difficult to do "from the inside". While change is important, the disruption it causes can result in stress among the employees and give the impression that things are getting worse before they start to get better.

Don't lose faith, and offer an open-door policy for employees to voice their concerns. Keep referring back to the business case and keep everyone focused on the end goal.

Three ways to get started:

1. Start small

Pick one thing that is immediate and critical. If you are struggling to identify what that could be, consider creating a value stream map which provides an overview of an end-to-end process from a customer's point of view. These maps help to prioritize the key items based on current costs. By visualizing work, you will conquer the important task of helping teams understand what happens between silos, by unveiling the truth behind the process. Physically sketching a process or product work-flow pinpoints inefficiencies, allowing teams to prioritize and solve the fundamental issues, yielding the greatest benefits. Inviting the business stakeholders to be part of this process helps the team stay focused on the key objectives that drive transformation forward.

2. Take your time and prepare your teams for change

Changing your culture for the better requires good communication explaining why the change needs to happen, having people who can demonstrate the benefits and help teams to change their ways of working. Gartner predicts that **through 2022, 75% of DevOps initiatives will fail** to meet expectations due to issues around organizational learning and change. More than technology, it is culture that determines success.

3. Create new job roles

To really break down silos you can't ask someone to just do their old job in a new way. Create all new, mixed job descriptions (for example a former Systems Administrator can now be a Deployment Engineer) and ask people to apply for the jobs that they want. Gain their buy-in and their commitment and tap into their unexplored potential. While this may create some short-term stress in the organization, remember that engineers like progress if and when they can see value.

ENGAGING WITH THE CUSTOMERS OF THE FUTURE

HOW TO USE A DIGITAL-FIRST STRATEGY TO BE MORE RESPONSIVE TO CUSTOMER NEEDS

Rapid advances in technology are disrupting the traditional bank model. These changes are forcing banks to reconsider how they interact with their consumers and adopt technology to provide better products and services.

According to a report by PwC, by **2020 social media will be the primary medium to connect, engage, inform and understand customers**, from the mass "social mind" to the minutiae of each and every individual, as well as the place where customers research and compare banks' offerings. To reach out to these groups, banks need to adopt new technology solutions to better understand the user preference of convenience and speed.

This way of engaging with customers also produces huge amounts of valuable data. Banks can leverage the data available to them (things like the core customer information, transaction history, customer service data) and combine it with important life stages (entering college, marriage, children, retirement) to anticipate customer's needs before they even realize they have them. This will give banks the opportunity to educate their customers and cross-sell different services the bank offers that are targeted at specific needs.
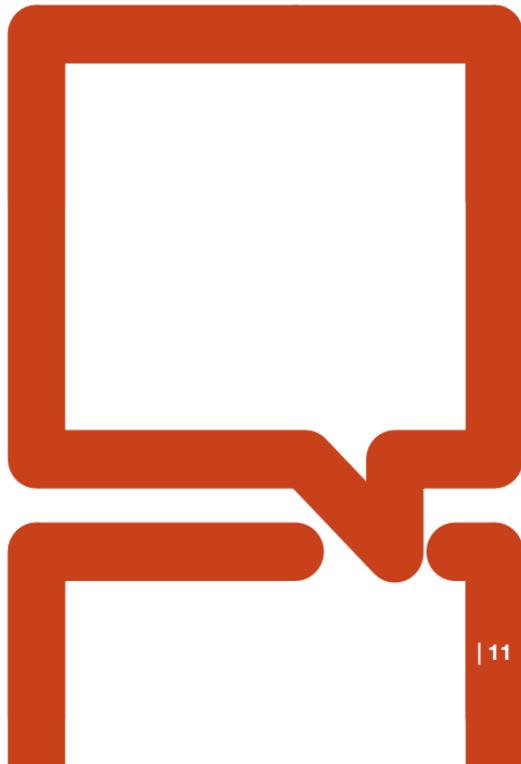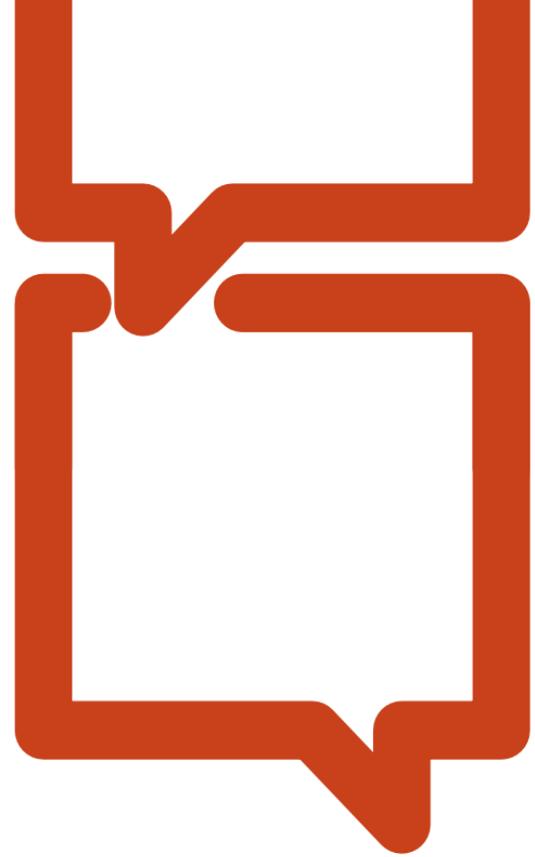
The Challenge:

With so much new technology out there, it can be difficult to choose when to buy off the shelf or when to build something bespoke. Most retail banks are so heavily invested in their core banking systems that any move to digital-first is largely driven by what the core banking vendor(s) can provide. However, the need to differentiate also means that "keeping up with the Jones's" is often not enough.

The Solution:

Consider engaging a true digital strategy partner, with expertise not only in digital user experience but the technology that makes it work. Together with your dev team, they can help you create and build a bespoke digital solution to satisfy a niche in the market that your business is uniquely positioned to address. Developing custom APIs, integrating web and mobile, and offering digital experience catered to a particular customer experience, for example, a banking app that allows merchants to push special offers to cardholders by using their location, can go a long way toward winning over customers who demand a better digital experience.

Find areas where you can use technology to innovate, being prepared to fail fast if necessary, but also pass on the savings and learnings of where you are successful to the business.

Three ways to get started:

1. Conduct consumer insight workshops

Understand what your customers really want. It is not enough to think you know what they want. Make sure you are addressing real needs, which will fortify your success moving forward.

2. Identify a gap in the market that only you can fill

Banks with legacy infrastructure also have a lot of experience and clout. While start-ups may be more nimble, they may not be able to offer what you can at scale. Identify your niche.

3. Build on existing customer relationships to attract the next generation of customers

Having an established relationship with existing clients and going above and beyond to meet their needs will result in word-of-mouth referrals which are far more valuable than any marketing campaign. Building the referral process into your digital experience can make it easier for existing clients to invite new people to try your services.

CONCLUSION

Whether the objective is driving Gen-Z and Millennial consumers to a retail platform, attracting HENRYs (High Earners Not Rich Yet) to a next-generation wealth management platform, or simply reducing RTB cost in order to allow smarter investment in the future, the simple fact is that step-change is required within your bank and it's not an easy one to make.

The first hurdle is overcoming legacy drag and creating an environment that fosters innovation. Quick and safe "try and fail fast" environments are possible; they have been proven in other industries. Financial Services firms are easily paralyzed by fears from regulators - moving to a Continuous Integration/Continuous Delivery environment for dev/test/UAT before production will allow experimentation and proof of concept in a controlled environment.

The second hurdle, the threat of the FinTechs, is mostly smoke and mirrors. Start-ups have a singular advantage - they can move fast because they are unencumbered by legacy and regulation. Behind every successful FinTech, however, is a bank. Regulation will evolve as technology evolves. New tech is not a threat to traditional banking, it's an opportunity - but only for those who know how to exploit it.
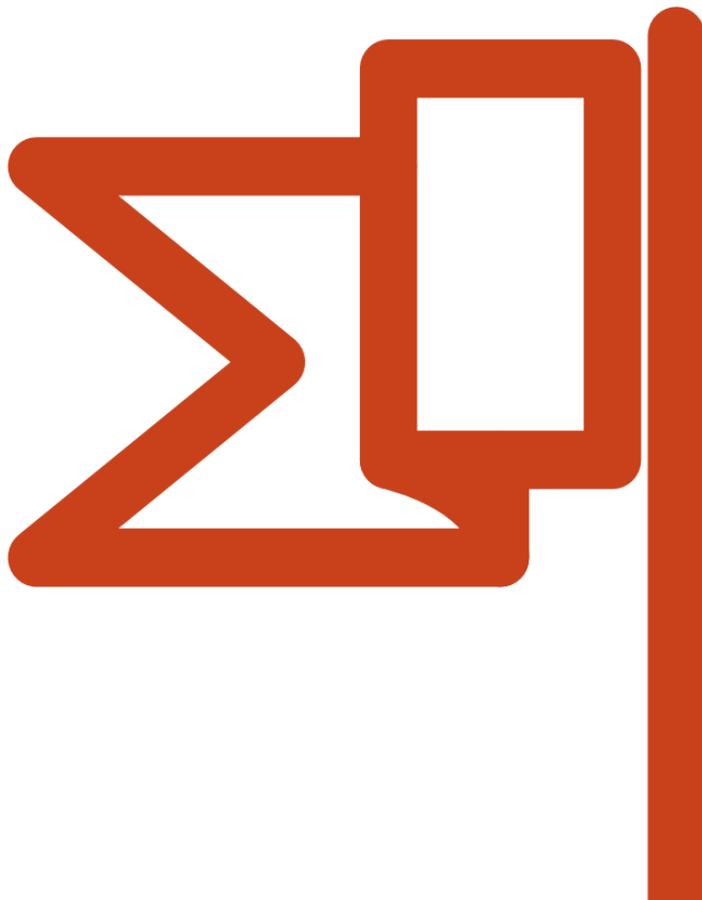
The tech side is easy; the culture side is hard. Banks must focus on changing the way that they do technology. This change is harder when you try to make it happen from within because a lack of fresh perspective and old habits mean that your efforts can result in doing the same thing in a slightly different way, and not getting new results. Instead, ask for help. Use multidisciplinary teams which mix your own people with external experts who are willing to push back and tell you hard truths, but who share your vision of the end goal and will help you to get there more quickly.

Once you are taking advantage of all the benefits of automation and the cloud, you can truly start to satisfy the needs of the front-office teams and the way that you are engaging with your clients. You can start mapping user-episodes that cross a variety of siloed departments (and probably platforms) and use your new-found skills to get systems to work together to improve your CX and drive innovation. You will be comfortable in the cycle of ideation to production, where you are constantly feeding back learnings into the product and making regular and meaningful improvements, resulting in increased client and employee satisfaction that comes from dealing with systems that just work.

CONTACT US

Endava is a leading next-generation technology services provider and helps accelerate disruption by delivering rapid evolution to enterprises. Using Distributed Enterprise Agile at scale, Endava collaborates with its clients, seamlessly integrating with their teams, catalyzing ideation and delivering robust solutions.

Want to know more?
contactus@endava.com