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CASE STUDY

THE BEHAVIORAL CHANGE JOURNEY

With market share under threat from fintech upstarts, one global bank underwent an IT transformation in 2016. In the first four articles in this case study series, we charted how the bank used DevOps to automate the software lifecycle, with operations and delivery working together to produce better quality code more frequently, and more quickly.

In this fifth article, we find that DevOps is not just about using automated tools and breaking down silos. When carried out optimally, it is also a catalyst for cultural change within an organization, enabling a large company to outpace digital natives.

Introduction

> *Coming together is a beginning.*
> *Keeping together is progress.*
> *Working together is success.*
>
> **— Henry Ford**

In 2016, a leading global bank was struggling to drive value through its IT landscape. Its market share was under threat from online payment innovators like PayPal and peer-to-peer lending firms such as Funding Circle and Z. PayPal, for example, makes 42,000 software executions per day, with $13,500 in payments processed every second. Using DevOps, its developers are part of a self-service culture that works to improve application build times, eliminating the chaos associated with support tickets[1].

DevOps delivers significant benefits to customer service and customer experience. With that mindset, Infosys helped deliver a DevOps transformation at the bank so that applications could be deployed faster, better and less expensively.

Because DevOps brings together development and operations at every step of the software life cycle, it reduces process friction and waste in development and ops processes.

Benefits include improved delivery frequency of code, faster application time to market, reduced failure rate and faster mean time to recovery when a fault occurs[2].

DevOps is not just about using automated tools and breaking down organizational silos. When carried out optimally, it is also a catalyst for cultural change within an organization, enabling a large company to outpace digital upstarts. Measuring this change should be woven into simple KPIs that align with overarching business goals.

Even though the bank achieved sizable gains in service quality and costs reduction (both through automation and reduced hours worked), DevOps was still not working as well as it could. While not desirable, this is a natural situation for the initial phase of implementation. There is an inherent ongoing struggle in less mature agile teams between developers who want to release code quickly and operations engineers who want to control changes so that infrastructure and applications run reliably. Simply automating the software life cycle does not remove this culture clash[3].

Mindsets had to change at the individual, team and leadership levels. Instead of finger-pointing and a blame-ridden siloed way of working, agile teams needed to collaborate in a "one-team" approach. As former US President Harry Truman once said, "It's amazing how much can be accomplished if no one cares who gets the credit."

Once the first rollout of the transformation was complete (in 2017), behavioral experts joined the program team to educate and enable team members to develop a more mature DevOps mindset.

At this stage in the transformation, with code changes now integrated and released more frequently, attention turned to redesign cultural practices that did not serve the company vision. The team conducted a baseline assessment across the four tiers of individuals, teams, leadership and processes.

Skills training and empowerment of individuals

A survey was carried out of more than 600 individuals working in the agile teams, and interviews were conducted with selected participants and leaders. The data was enriched through observations and shadowing by an executive council. Both individual strengths and opportunities were analyzed. To baseline the analysis, the assessment team used metrics such as empowerment (an individual's sense of impact and purpose), skills (upskilling opportunities and increased roles certifications), personal motivation and adaptability (openness to change and thoughtful risk taking), and tool availability (ability to use industry-leading tools).

From the analysis, lack of empowerment and lack of skills were flagged as particular problem areas. Unclear roles and responsibilities and insufficient skills and tools training were determined to be the cause.

To change individual behavior, a two-phase approach was implemented between February 2018 and January 2019:

Phase 1. Update agile team roles for increased relevance and accuracy and implement skill retraining.

Phase 2. Synergize performance management with updated roles and provide further, more specialized skills and tools training.

Improved team dynamic

Mature agile teams depend upon continuous feedback on team member behavior and business outcome. At the same time, product owners and other senior officials embrace a shared and servant leadership mindset, which promotes team-oriented behavior and investment in employee development.

In this context, behavioral change ensures that teams are fully accountable to complete a defined process or service.

Metrics were used to baseline the team's behavioral change journey:

- Alignment. Clarity of the team's mission, vision and goals
- Member obsession. Putting individuals at the center of the transformation
- Relationships. Trusted relationships of collaboration among the team, vendor and business partners
- Functionality. Addressing barriers to performance.

After analysis was undertaken through interviews, shadowing, surveys and observation, lack of continuous feedback practices and a sense of overall dysfunction in the agile teams were cited early on by behavioral experts. Root causes for these problems were attributed to fear of failure, unempowered roles and a lack of trust between team members.

To change these behaviors at the team level, a two-phase approach was implemented between February 2018 and January 2019:

Phase 1 actions included 46 facilitated team-specific action-planning sessions for team improvement and a series of team-building exercises that consisted of interactive group activities, exercises and games to build trust, communication and collaboration.

Phase 2 actions included impact measurement of the 46 team action plans and expanding the sessions to include more agile teams. Team-building sessions were also conducted to raise awareness between agile teams and the rest of the organization, with increased buy-in and a sense of trust and respect.

Improved leadership buy-in

According to McKinsey, in fully mature agile teams, 85% of team members say that their leaders demonstrate servant leadership, with the team involved in strategic and organizational decisions that affect them.

This falls to 50% when agile teams are just starting out on the transformation journey[4].

Along with a more delegating leadership style, leaders of a DevOps team must ensure transparent information dissemination and sharing. Leaders also provide knowledge and capabilities are available to the whole team. This fuels continuous learning and a more proactive and empowered team dynamic.

Specific metrics were employed to baseline the leadership behavioral change journey:

- Renewability. Ability to adapt to changing business dynamics and market conditions
- Employee focus. Creating a work environment that fosters empowered teams
- Vision and business case. Ability to support varying software delivery methodologies to achieve business goals
- Leadership commitment. Persistence to see initiatives through to successful completion.

Data analysis, surveys and shadowing by the executive council found that within teams, leadership commitment was the main area to be improved. Also, leadership needed to take on a more customer and employee-centric focus. In some of the agile teams, no formal employee development was in place, and between teams, agile ways of working weren't formalized.

To change these behaviors at the leadership level, again a two-phase approach was implemented between February 2018 and January 2019:

Phase 1 actions included boot camp sessions to build trust and find agreement on overall strategies and priorities that were in line with business goals. Also, one-to-one coaching sessions were employed to develop leadership skills, including coaching, delegation and empowerment. A leadership capability assessment was then carried out to increase aptitude in the four competency areas of transformation, servanthood, cohesion and connectivity.

Phase 2 actions included one - to-one coaching to ensure boot camp learnings were applied.

Optimizing the process

Agile teams that work with DevOps processes should demonstrate individual drive, servant leadership, standardized ways of working and a cohesive community spirit.

The bank ensured that integration, validation and delivery of software scaled up by including resilient digital tools and platforms early in the transformation. These tools provided rigor and speed to the entire process.

As outlined in previous articles in this series, processes were made faster, better and less expensive by ensuring that:

- there were no manual deployments
- technical debt wasn't an issue
- software achieved a minimum operating standard (MOS)
- team performance was measured regularly in an objective fashion, i.e., by following DevOps principles
- security vulnerabilities and operations issues were mitigated

That said, behavioral change was still needed to ensure a well-practiced workflow covering dependencies, handoffs and integration points. When baselining the behavioral change journey, having an agile team accountable for performance issues was also a sticking point.

Through interviews, data analysis and work shadowing, the root cause of process issues came down to (1) unclear decision authority and integration points and (2) KPIs and performance management that were not aligned to an agile and DevOps way of working.

To change these behaviors at the process level, a two-phase approach was implemented between February 2018 and January 2019:

Phase 1 actions included updated agile processes as roles became more formalized and updated KPIs to align with the "how" for agile ways of working.

Phase 2 actions included IT teaming sessions to agree on finalized roles and processes and synergizing new KPIs with HR and talent management processes.

Where to next?

Ongoing, the bank continued to use an external partner (Infosys) to sustain the behavioral change program across all four behavioral dimensions, with the intent to achieve further success in its ongoing IT transformation.

KPIs such as deployment frequency, speed of deployment, deployment success rate and mean time to restore (MTTR) will be used to manage performance at the team level.

The retained experts will ensure that the software development life cycle is refined further, with focus given to continuous leadership and business education. They will also ensure that reskilling achieves critical impact. Continuous agile coaching will persist, and career development, goal setting and performance management will take center stage; there will also be a focus to recast strategically important roles.

The end goal is continuous learning and a more proactive and empowered team dynamic.

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