Successful Digital Transformation: Apps At The Ready

Conducted by Vanson Bourne
Commissioned by VMware
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Global Commentary Report

May 2020
Agenda

Demographics

Section 1 – Pre-pandemic vs. during pandemic (US/UK only)

Section 2 – Digital transformation: The state of play

Section 3 – The app development process

Section 4 – Training, technology and team alignment

Appendix
Demographics

5000 respondents were interviewed during March and April 2020, split in the following ways...
Demographics (1)

...country

Showing respondent country [5000]
Demographics (2)

...respondent type

- IT decision makers (ITDMs)
- Business decision makers (BDMs)
- App developers

Showing respondent type [5000]

...organization size

- 500-999 employees
- 1,000-2,999 employees
- 3,000-4,999 employees
- 5,000 or more employees

How many employees does your organization have globally? [5000]
Within which sector is your organization? [5000]
Demographics (4)

...growth

- Underperforming (-1% or less)
- Not growing (0%)
- Low growth (1-5%)
- Medium growth (5-15%)
- High growth (15-25%)/Hypergrowth (25%+)
- Don't know/Did not answer growth question

Showing how respondents would characterize their organization’s annual level of growth in terms of revenue [5000]

...pandemic

- Pre-pandemic respondents
- Pandemic respondents

Showing whether respondents entered the survey before or during the pandemic [5000]
1. The current pandemic appears to have had a positive influence on mindsets toward change, alignment between teams, and the way in which organizations are approaching digital transformation.

2. Success with digital transformation and application/software development and deployment is only possible if a holistic approach that incorporates people, processes and technology is utilized.

3. High/hyper growth organizations provide a blueprint for success that focuses on people, processes and technology, all of which enable them to improve the overall human experience of their customers and their employees.
Section 1

Pre-pandemic vs. during pandemic (US/UK only)
The benefits of modern, cloud-native applications

The COVID-19 pandemic has shaken businesses to their core, but through the utilization of modern, cloud-native applications, large organizations in the US and UK have managed to remain operational, with these apps enabling their remote workforce and maintaining reliable uptime. Not only that, but many surveyed organizations have witnessed benefits for their agility, with respondents reporting that they been able to push quick updates in response to the changing landscape and rapidly add capacity for scaling.

Without the unique benefits that cloud-native applications provide, many organizations may have found themselves in a much more precarious than they currently do.

During the current COVID-19 pandemic, what are the main benefits to your business of utilizing modern, cloud-native applications? [503] US and UK pandemic respondents only.
Mindsets toward change have been transformed

While it would be a naïve exaggeration to suggest that this pandemic has been a positive experience for businesses, it has demonstrated that many are better prepared for change than expected. This is demonstrated by the larger proportion of pandemic respondents who believe that when it comes to transformational change through software, their organization is on the cutting-edge and is quick to embrace change, compared to those who believed this pre-pandemic.

The same pattern is present when respondents report on their personal mindset to change, and while both shifts in attitude are born out of necessity, it shows that when the chips are down, organizations and their employees can adjust and move at speed.

What is your organization’s mindset/your personal mindset when it comes to transformational change through software? [1050] US and UK respondents only, split by pre-pandemic vs. pandemic.
Involvement in app/software development decision making

The pandemic appears to have increased ITDM involvement within the decision-making process around app/software development, with approaching half of pandemic ITDM respondents reporting involvement in all decisions, compared to under a third pre-pandemic. This change of approach to decision-making indicates that organizations have realized how important their apps and software are in a unique and challenging time such as this and they have increased the number of seats at the table as a result.

But, could this cause a decision-making bottleneck? This is a distinct possibility, considering that the desire to be involved in all or the majority of app/software development decisions, among both ITDMs and BDMs, has also increased since the pandemic took hold. ITDMs and BDMs possibly see their increased desire to be involved as a way of ensuring their job security, but if it limits their organization’s ability to make decisions at speed, then that will present a longer-term issue at a time when agility is a necessity, not a luxury.

How much involvement do you currently have in application/software development decisions in your organization? [350] US and UK ITDM respondents only, split by pre-pandemic vs. pandemic

How much involvement do you want/wish you had in application/software development decisions in your organization? [700] US and UK ITDM and BDM respondents only, split by pre-pandemic vs. pandemic
Cross team alignment has improved

Alignment between different departments is a crucial driver of success at the best of times – during this pandemic, its importance increases exponentially. Therefore, it is reassuring to see that perceptions of alignment across app developers, ITDMs and BDMs have improved slightly.

For all businesses, this is a time where the phrase “all hands to the pump” has never resonated more. It appears that this mindset has filtered down to the teams involved in app development and digital transformation (DX) initiatives, and they are now working more closely with one another, realizing that how they act now will define the future and longevity of their organization.

Proportion describing alignment as "Excellent" between the following

- Excellent – Between app developers and IT decision makers
- Excellent – Between app developers and line of business decision makers
- Excellent – Between IT decision makers and line of business decision makers

Showing respondents who describe the alignment between the above groups in their organization as "Excellent - they work together exceptionally well" [1050] US and UK respondents only, split by pre-pandemic vs. pandemic.
Shifting digital transformation priorities

DX priorities have been subtly redirected during the pandemic, with the significance of upgrading existing platforms having become more critical than ever, now that the majority of workforces are remote. Further to this, the emphasis being placed on the human experience has also increased, with priorities such as improving the customer experience, improving the employee experience, improving collaboration, and attracting and retaining the best talent all tracking in an upwards direction.

Organizations have realized that if they can improve the working lives of their employees at a difficult time like this, then that could have a positive knock-on impact for the customer experience also. And even if this is not the case, then prioritizing people and experiences over finances under the current circumstances is an amiable action to take.

Which of the following are the main priorities for digital transformation within your organization? Combination of responses ranked first, second and third (1050) US and UK respondents only, split by pre-pandemic vs. pandemic.
Maintaining a competitive edge

When it comes to maintaining a competitive edge through updating and transforming applications, pandemic respondents place a greater level of importance on applications that allow them to engage with their supply chain, their customers (e.g., via marketing systems/content management) and their employees (e.g., via collaboration systems), compared to pre-pandemic respondents. This demonstrates a clear understanding that maintaining and building strong internal and external relationships for the future is what will be remembered during these difficult times.

Those who paint themselves in a negative light as opportunistic predators during this crisis will be the ones who suffer. Whereas those focusing their efforts on relationship building, through the transformation of apps that assist their supply chain, improve collaboration, and enhance their marketing reach, will be the ones who take their place.

Which applications/software, if not updated/transformed to modern/digital platforms run the risk of compromising the organization’s competitive edge? [1050] US and UK respondents only, split by pre-pandemic vs. pandemic.
Section 2
Digital transformation: The state of play
Digital transformation background

100% Have been digitally transforming
87% Have had elements of DX hindered
99% See room for improvement in future DX efforts
97% Have encountered at least some DX successes
Digital transformation priorities

DX has now been an ongoing process for companies around the globe for the best part of two decades, with the internal and external need for these transformations having changed regularly during that time. But the three most common priorities cited by respondents of their organization’s DX efforts have been a constant over that period. In a time when speed is crucial to everything an organization does, it is no surprise to see business efficiency at the top of the pile, while upgrading and improving upon technology provides the basis for what DX actually is. Further, successful organizations will always have improving the customer experience top of mind when implementing changes.

However, companies must also remember that transformation efforts should consider the impact that they have on employees, otherwise there is a chance of declining employee morale and individuals moving on to where the grass is greener – something which may result in wider DX efforts taking a step backward rather than forward.

Which of the following are the main priorities for digital transformation within your organization? Combination of responses ranked first, second and third [5000] omitting some answer options
Challenges to digital transformation success

It certainly hasn’t been plain sailing for most organizations when they’ve tried to roll out DX programs, with 87% of respondents admitting to at least one challenge (slide 17) that has hindered their progress.

The more common of these challenges pertain to areas relating to processes and technology – two of the three key pillars of any DX effort. Security is of course a crucial aspect of any technology-based change, but there are often a huge number of hoops to be jumped through which can make these types of processes feel like a real uphill battle. Not only that, but the length of time that DX has been occurring for has led to many organizations creating a melting pot of technology platforms that do not complement each other, making integrating new apps/software into their technology stack increasingly difficult. The third pillar of successful DX initiatives are the people, and those not putting the right people in the right places to enable a successful change are finding themselves hamstrung before the change gets underway.

All three pillars – people, processes and technology – must be working in harmony for the initiative to have a positive impact, and meet all of the aims and objectives.

Which of the following challenges do you believe have hindered your organization’s digital transformation efforts from being successful? [4977] respondents whose organization has been digitally transforming, omitting some answer options.
Improving future digital transformation efforts

Despite not featuring among the top three challenges to have hindered DX efforts within organizations (slide 19), the importance of people to DX becomes clear here, with three of the five most commonly cited improvements all relating to people in some way.

The way that information flows between different teams can define the success or failure of the entire initiative, but the quality of said information is what will ensure that end user requirements are met, which is ultimately the most important outcome. And without the right people spearheading the change, it is all too easy for inaccurate information to be provided, critical steps to be missed, and technical issues to cause a bigger stumbling block than would have otherwise been the case, all of which can cause a project to fail.

Which of the following do you believe would bring about the greatest level of improvement when it comes to your organization’s digital transformation efforts in the future?
Combination of responses ranked first, second and third [4977] respondents whose organization has been digitally transforming, omitting some answer options.
Putting the right people in the right places is critical

Further cementing the importance of people to DX efforts, overwhelming majorities of respondents agree that those organizations with software-minded leaders are more successful, and that success is dependent on having people with varied technical skills involved in the efforts. While this is likely to be easier said than done for many organizations, they must realize that the world has changed, and those with an agile mindset, such as an app developer, are better suited to leading future initiatives.

Organizations with software-minded leaders are more successful

88%

In order to succeed, it is imperative that people with varied technical skills are heavily involved in digital transformation efforts at my organization

94%

Showing the percentage of respondents who agree with each of the above statements [5000]
Attitudes towards transformational change through software

Another key factor when it comes to any type of change, but particularly transformational change through software, are mindsets. The attitudes of many employees can often fall into two main camps – “if it isn’t broken, don’t fix it” and “what’s in it for me (WIIFM)?”. This presents organizations with an issue before the change even gets underway. But any company that can effectively distil critical information down to their employees, demonstrating why the change is important for the business and how it assists them on a personal level will be off to a winning start.

High/hyper growth (HP) organizations have clearly found an effective way of getting employees on-board with transformational software change, as more than 70% of respondents report that they personally like to be on the cutting-edge, embracing the possibilities of change. This is reflected in respondents’ attitudes toward their own HP business, with approaching two thirds indicating that their organization is on the cutting edge. Attitudes often filter down from the top, so any company positioning themselves as an innovative advocate of change will undoubtedly start to see improved results.

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<thead>
<tr>
<th>Organization’s mindset</th>
<th>Personal mindset</th>
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<tr>
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<td>0%</td>
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<tr>
<td>Total</td>
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<tr>
<td>Underperforming (-1% or less)</td>
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<td>Not growing (0%)</td>
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<td>Low growth (1-5%)</td>
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<td>Medium growth (5-15%)</td>
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<tr>
<td>High/Hyper growth (15+)</td>
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- My organization is change averse and sees change as disruptive
- My organization sees the value in change, but moves slowly
- My organization sees the value in change and moves quickly towards it
- My organization is on the cutting-edge, and is quick to embrace change

- I’m change averse and like things the way they are
- I see value in change, but I’m slow to get on board
- I see value in change and I’m quick to get back on board
- I like to be on the cutting-edge and truly embrace the possibilities of change

What is your organization’s mindset/your personal mindset when it comes to transformational change through software? [5000] split by growth
Contributors to digital transformation successes (big or small)

For HP organizations, two of the three critical pillars of DX have more commonly played their part in successful efforts – processes and people. These processes center around increased agility and speed. Processes such as continuous integration and continuous delivery (CI/CD) allow for much greater levels of flexibility among development teams, enabling them to more rapidly and reliably adjust code to meet end user requirements. The people-based element of strong alignment across teams demonstrates how important it is to have everyone singing from the same hymn sheet – without teams working in unison, towards the same goals, the chances of DX success decline significantly. The importance of technology also cannot be underestimated, with around three in ten of all respondents reporting that their organization’s DX efforts were successful when apps/software integrated well with existing/legacy systems.

This shows just how critical a holistic approach, involving people, processes and technology is to the overall success of an initiative.
Section 3

The app development process
Application and software project obstacles

When it comes to obstacles standing in the way of app/software projects, the importance of people, processes, and technology is further crystalized, with HP organizations the most likely to identify at least one blockade from each of the three pillars. Taken in isolation, too many platforms, outdated processes, and conflicts of opinion, can all undermine a project, but if all are present then the chances of derailment substantially increase. But, with HP organizations the most likely to report each of these obstacles, it seems that these businesses simply have a greater understanding around many of the challenges that they must overcome if they hope to succeed. This is a fundamental part of becoming successful – identify a flaw and overcome it.

Conversely, underperforming (UP) organizations tend to focus more on their lack of budget and the skills gap, demonstrating an overall lower level of maturity as a business and when it comes to app/software projects.
Moving software/application efforts into production

Consolidating the argument that HP organizations are more proficient at uncovering and fixing their problems (slide 25) is the fact that these companies are much more successful when it comes to their app/software projects. Not only are they better at getting net-new application efforts and update/upgrade efforts into production, but they are also more efficient, with three quarters of their efforts getting there in the planned time frame, on average.

Looking ahead, if these HP organizations are able to totally rid themselves of their people, process and technology obstacles, then it stands to reason that their success rates will rise further. Yet, for those at the other end of the growth spectrum, averages below a 50% hit rate indicate that they are a long way from where they need to be. Apps and software are now more critical than ever to both DX efforts and remaining operational, so UP organizations must find a robust and quick solution to their issues.

How many of your organization’s net-new software/app efforts make it to production? [5000] split by growth

How many of your organization’s existing software/app update/upgrade efforts make it to production? [5000] split by growth

How many of your software/app efforts make it to production in the planned time frame? [4888] respondents whose organization has at least some software/app efforts that make it to production, split by growth
Measuring success for new/updated applications

For an app/software project to be deemed a success, organizations must effectively measure a range of metrics that enable them to understand how the app/software has been received by end users. This will allow them to iron out any creases with performance and take these learnings into future projects. HP organizations are again leading the way here and are more likely to be measuring all listed success metrics than their UP counterparts, aside from whether the app/software is delivered on time, which ultimately becomes irrelevant if the roll out flops.

Metrics such as retention rate, downloads, subscriptions, and churn rate are all fantastic indicators as to the quality of an app, but UP organizations are extremely unlikely to be measuring each of them, so cannot possibly know the full picture regarding the success of their release – this must improve for future efforts.
Working with rigid, manual or sequential processes

Rigid, manual and sequential processes are still commonplace across surveyed organizations, including those growing rapidly. This aligns with the fact that respondents from HP organizations identified outdated development processes as one of their key obstacles with app/software development efforts (slide 25). Often there is a requirement for certain process stages to follow a sequential pattern, but organizations across all growth bands must be aware of the impacts these non-agile phases can have.

And it would seem that they are, as 94% of surveyed app developers and ITDMs cite at least one consequence of such steps, with attention most commonly focused on impacts linked to speed. Tardiness when it comes resolving bugs, overall development time, and identifying flaws during development will all impact the end user in their own way, but perhaps more concerningly, three in ten report that fewer end user requirements are met in the first place. Organizations must find a way of integrating more agile processes into their application development projects if they hope to improve the human experience of their employees and their end users.

Is your organization mandated to follow a rigid and/or manual, sequential process as part of application/software development and delivery? [3350] respondents that are app developers or ITDMs only, split by growth

Which of the following consequences do you/does your team face as a result of not adopting an automated path to application/software deployment? [2148] respondents that are app developers or ITDMs only and whose organization is mandated to follow a rigid process as part of app/software development
Time-consuming elements within app/software development

Spending more time in certain stages of the app/software development process is fine, as long as these areas benefit the overall quality of the end product. This is made clear by the fact that respondents from HP organizations more commonly report that the most time-consuming elements of their application development projects are initial user testing, quality assurance testing, and general code testing. Each of these areas are directly linked to the end result demonstrating that HP businesses have a clear focus on the end user experience when developing and delivering applications.

Quality will almost always take precedence over quantity, and HP organizations have realized that if they do have to sacrifice speed due to manual, sequential processes (slide 28), then the only replacement is to deliver a high-performing application.

Which of the following stages of the application/software development and deployment process are the most time-consuming in your organization before the app or software can be rolled out to end users? Combination of responses ranked first, second and third [3350] respondents that are app developers or ITDMs only, split by growth, omitting some answer options.
Agility and innovation

As seen, rigid processes are still common across organizations from all growth bands (slide 28), yet this has impacted UP companies more significantly than HP businesses when it comes to their agility within the app/software development process. A lack of agility doesn’t just impact the speed with which app developers and ITDMs can produce net-new and updated applications, but it also has consequences for the employee experience, end user experience, and the amount of time available for teams to innovate.

Despite spending around 40% of their time on maintenance and having to use outdated processes (slide 25), IT and app development teams from HP businesses are still managing to spend half of their time innovating, on average. This leaves just 10% of their time unaccounted for, likely being spent on background and non-critical tasks, which indicates a level of efficiency that UP companies cannot match. Innovation plays a huge role in keeping end users engaged and satisfied with their experience, and HP organizations have clearly grasped this.

**Average proportion of agile steps involved in app dev projects**

<table>
<thead>
<tr>
<th>Growth Type</th>
<th>Agile Steps (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>60.00%</td>
</tr>
<tr>
<td>Underperforming (-1% or less)</td>
<td>20.00%</td>
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<tr>
<td>Low growth (1-5%)</td>
<td>5.00%</td>
</tr>
<tr>
<td>Medium growth (5-15%)</td>
<td>0.00%</td>
</tr>
<tr>
<td>High/Hyper growth (15+)</td>
<td>5.00%</td>
</tr>
</tbody>
</table>

**Average proportion of time in app dev process spent innovating vs. carrying out routine maintenance**

Thinking about your organization’s application/software development process, approximately how much of your/your team’s time is spent innovating/carrying out routine maintenance/updates? [3350] respondents that are app developers or ITDMs only, split by growth.
Modernizing app development processes is crucial

Plainly demonstrating the importance of continuously reviewing the speed and efficacy of app/software development processes are the large proportions of surveyed app developers and ITDMs who admit that the overall success of the release and the end user experience depends on modernizing processes. Ultimately, the end user experience must be front and center when it comes to app development. Those organizations that cannot find more space within their processes for agile steps and innovation will suffer negative consequences that could easily lead to even worse internal and external outcomes.

When rolling out new applications/software, delays from rigid, sequential processes during the development process are detrimental to the overall success of the release.

Without successfully modernizing application/software development processes, organizations will not be able to deliver a best-in-class end user experience.

Showing the percentage of app developers and ITDMs who agree with each of the above statements [3350]
Benefits of using a more autonomous app development model

A great way to incorporate more speed and agility into the app/software development process is through provisioning an autonomous self-service model for developers. As highlighted by app developers and ITDMs from HP organizations, some of the benefits are directly linked to the human experience of both end users and employees, while also providing greater efficiency. This yet again identifies the intrinsic links between people and processes, and with HP respondents showing a greater understanding of some of the possible benefits, it is easy to see why they are ahead of their UP counterparts.

Perhaps a level of education is required in UP businesses as to the breadth of positive impacts that an autonomous self-service model can deliver, which could in turn increase the speed with which they begin to implement such a model.

How would a more autonomous self-service model for provisioning environments to developers, and deploying applications and software benefit your organization? [3350] respondents that are app developers or ITDMs only, split by growth, omitting some answer options.
Section 4

Training, technology and team alignment
Lose talent or improve efficiency across the whole organization...

The direct impacts that processes can have on people and efficiency are clear. Almost half of app developers and ITDM respondents have felt so frustrated as a result of processes that they’ve considered leaving their organization altogether, while the vast majority see the potential efficiency benefits of a test and learn approach. Organizations must utilize processes that do not crush the employee experience – monotony and a lack of autonomy are two major dislikes for many employees around the world, and if this is what they experience for too long then they are willing to move on. Further, a test and learn approach provides great agility to a business, ensuring that if they are going to fail, then they do it quickly and can then take a different path, which is an approach with benefits that can transcend app development and IT teams.

48%

The frustrations I’ve felt within the app/software development process have led to me considering job opportunities elsewhere

80%

If more parts of the organization embraced the kind of processes that developers strive to use (e.g. test and learn), the entire organization would work more efficiently and effectively

Showing the percentage of app developers and ITDMs who agree with each of the above statements [3350]
Training delivers greater productivity

Another way of keeping employees interested and motivated, aside from streamlining processes, is to provide appropriate training that gives them the opportunity to hone their skills and perhaps choose a more specialized career path. HP organizations are delivering training more readily to specialized development team employees and domain specialists when compared to other businesses across the rest of the growth spectrum. This shows how important the creation and deployment of modern applications is to a successful business.

And there are vast productivity benefits from providing this training as well, with approaching two thirds of respondents from HP businesses reporting that productivity has significantly increased as a result. With training able to deliver boosts for employee morale and productivity of the business, UP companies must find a way to provide more training opportunities or they risk falling even further behind those ahead of them on the growth curve.

To whom does your organization offer training in order to move towards more modern application/software development and deployment methodologies? [5000] split by growth, omitting some answers

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<table>
<thead>
<tr>
<th>Specialized development team employees (just those working on the high priority modern applications)</th>
<th>Domain specialists (e.g. networking, security, infrastructure/cloud, end user computing/mobility, etc.)</th>
<th>Employees working on existing/legacy systems</th>
<th>New employees</th>
<th>All development and IT team employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
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Productivity has significantly improved

- Total
- Underperforming (-1% or less)
- Not growing (0%)
- Low growth (1-5%)
- Medium growth (5-15%)
- High/Hyper growth (15+)

Showing the percentage of respondents who report that investment in training employees on more application/software development and deployment methodologies has resulted in a significant improvement in productivity [4812] respondents from organizations who offer training in order to move towards these methodologies, split by growth.
Technology modernization is fundamental to success

People and processes are only as efficient as the technologies being utilized. And respondents evidently realize the importance of using the most modern versions of available technologies if their organization hopes to witness success when it comes to DX and app/software development projects. Modern technology will undoubtedly produce modern apps, so any organization that has struggled to see benefits from improving their processes and providing better training to their employees, should be turning their attention to modernizing their technology ecosystem, as all three areas are strongly intertwined.

81%

Deployment of emerging technology such as AI or cloud-native technology (when done correctly) is an important part of digital transformation success

80%

In order for my organization’s application/software development projects to be more successful, we must modernize the technologies we use to develop and deploy these apps and software

Showing the percentage of app developers and ITDMs who agree with each of the above statements [3350]
Benefits of technologies that deliver more modern apps/software

The positive impact that technology can have for an organization is plain to see, with approaching half of app developers and ITDMs reporting an improved end user experience as a possible benefit of using technologies that deliver more modern apps/software. But just as strikingly, a notable proportion of respondents from HP companies point towards a happier app/software development team as a potential plus point, reaffirming how technology can improve the broader human experience. And there are practical benefits as well, with the performance and agility of the apps produced also likely to increase.

Technology provides the foundation for any DX initiative or app/software development project, so organizations that can modernize the tools at their disposal will unquestionably see their chances of success increase.
Enable people with technical skills to drive success

As already witnessed, respondents are firm in their beliefs that organizations with software-minded leaders are more successful and that if DX efforts are to thrive then people with varied technical skills must be involved (slide 21). This attitude is once again on show, with eight in ten believing that greater success could be achieved through putting people with a technical background in more advanced roles.

But will they get the opportunity? Well, in HP businesses there is certainly a strong chance, with more than 90% of surveyed app developers and ITDMs indicating confidence in their career path and opportunity to grow within their organization. However, the same cannot be said of those from UP companies. With the apparent importance of putting the right people in the right places in order to obtain success, these low performers might have to rethink their internal development schemes and external talent acquisition plans.

My organization would be more successful if leadership positions (e.g. CEO) were filled by people with a technical background in app or software development or something similar.

Showing the percentage of respondents who agree with the above statement [5000]

How confident are you in terms of your career path and opportunity to grow within your organization/company? [3350] app developers and ITDMs only, split by growth
The benefits of elevating app/software development employees

Without great leaders, organizations cannot hope to evolve or increase their levels of performance. But according to many respondents, elevating IT and app/software development team members into leadership roles could see both of these things happen. And the positives don’t stop there, with respondents from HP organizations more commonly believing that benefits such as an improved end user experience and an improved mindset towards transformational change through software can also be realized.

It’s logical that those with a more technical background would be better able to convince the wider organization as to the benefits of a technology-based change, due to their greater knowledge of its inner workings. Therefore, those who are struggling to overcome anti-change mindsets, or have employees who are slow to get on-board (slide 22), should be open to elevating more technical staff members if they hope to evolve in the future.

Which of the following benefits has your organization experienced (or would experience) from elevating IT and app/software development team members into leadership roles? [5000] split by growth, omitting some answers
Success is only possible if teams are aligned

While it's clichéd, the phrase “teamwork makes the dream work” can certainly be applied to respondents’ opinions around the need for alignment when it comes to DX. The vast majority of those surveyed believe that greater alignment between all app/software development stakeholders would lead to higher success levels with DX. But unfortunately, approaching six in ten are convinced that the goals of DX for app developers, ITDMs and BDMs in their organization aren’t aligned. The sooner that these different departments realize they are all working towards improving the future of their organization, the sooner success levels will increase.

Greater alignment between all of the different stakeholders involved in the application/software development process would lead to much higher levels of success with digital transformation.

In my organization the goals of application/software developers, ITDMs and BDMs for digital transformation aren’t aligned.

Showing the percentage of respondents who agree with each of the above statements [5000]
Level of alignment and the impacts of misalignment

As is to be expected, the proportion of respondents from HP organizations who believe that alignment is excellent across key stakeholders in the app/software development process is substantially higher than that of UP companies. While those at the lowest end of the growth spectrum undoubtedly have traditional concerns around budget and the skills gap (slide 25), they must not lose sight of how important it is to have everyone pulling in the same direction.

This is particularly pertinent when considering the possible consequences for the three pillars of people, processes and technology – disjointed processes, tricky integrations, and decreasing employee satisfaction are a recipe for disaster in any organization, particularly one that is already underperforming from a growth perspective.

Showing the percentage of respondents who report that alignment between each of the above team pairings is “Excellent – they work together exceptionally well” [5000] split by growth.

Which of the following impacts have been experienced in your organization as a result of the misalignment? [4557] respondents who did not report “Excellent” alignment across all team pairings, omitting some answers.
Alignment between teams directly impacts the customer

The importance of alignment cannot be understated, and respondents are clear about this. Greater progress with digital transformation and the level of customer experience that can be provided depend on teams working together towards a better future for the organization and its customers. Without alignment between teams, companies can wave goodbye to any competitive edge that they might have previously held, and they can say hello to average performance, stodgy applications, and failed DX initiatives.

Aligning teams behind common objectives is the first step on the road to greater success, and what must follow are more agile processes, more modernized technologies and putting the right people in the right places. These are the three pillars that will help to elevate a UP company up through the growth bands, but only if they are willing to make the necessary adjustments.

- **85%**
  - If app developers and ITDMs had a stronger alignment, it would enable better digital transformation progress in the future.

- **81%**
  - The level of customer experience my organization delivers is directly related to the extent to which developers, ITDMs and BDMs are aligned.

Showing the percentage of respondents who agree with each of the above statements [5000]
Appendix - growth
Digital transformation priorities

Which of the following are the main priorities for digital transformation within your organization? Combination of responses ranked first, second and third [5000] split by growth, omitting some answer options
Which of the following challenges do you believe have hindered your organization’s digital transformation efforts from being successful? [4977] respondents whose organization has been digitally transforming, split by growth, omitting some answer options.
Improving future digital transformation efforts

Which of the following do you believe would bring about the greatest level of improvement when it comes to your organization’s digital transformation efforts in the future?

Combination of responses ranked first, second and third [4977] respondents whose organization has been digitally transforming, split by growth, omitting some answer options
Appendix – respondent type
Digital transformation priorities

Which of the following are the main priorities for digital transformation within your organization? Combination of responses ranked first, second and third [5000] split by respondent type, omitting some answer options.

- Increasing business efficiency
- Improving the customer experience
- Upgrading existing technology platforms
- Increasing our competitiveness within the industry
- Reducing costs
- Driving sales/revenues
- Improving the employee experience
- Improving collaboration within the organization
- Attracting and retaining the best talent

Which of the following are the main priorities for digital transformation within your organization? Combination of responses ranked first, second and third [5000] split by respondent type, omitting some answer options.
Which of the following challenges do you believe have hindered your organization’s digital transformation efforts from being successful? (4977) respondents whose organization has been digitally transforming, split by respondent type, omitting some answer options
Improving future digital transformation efforts

Which of the following do you believe would bring about the greatest level of improvement when it comes to your organization’s digital transformation efforts in the future? Combination of responses ranked first, second and third [4977] respondents whose organization has been digitally transforming, split by respondent type, omitting some answer options.
Attitudes towards transformational change through software

What is your organization's mindset when it comes to transformational change through software? [5000] split by respondent type

- My organization is change averse and sees change as disruptive
- My organization sees the value in change, but moves slowly
- My organization sees the value in change and moves quickly towards it
- My organization is on the cutting-edge, and is quick to embrace change

What is your personal mindset when it comes to transformational change through software? [5000] split by respondent type

- I'm change averse and like things the way they are
- I see value in change, but I'm slow to get on board
- I see value in change and I'm quick to get back on board
- I like to be on the cutting-edge and truly embrace the possibilities of change
Contributors to digital transformation successes (big or small)

Which of the following do you believe have contributed to the successes (big or small) of your organization’s digital transformation efforts? [4977] respondents whose organization has been digitally transforming, split by respondent type, omitting some answer options

- Those in charge of the change had the appropriate knowledge/skill sets
- We embraced CI/CD when deploying new apps/software
- The appropriate information was provided to our apps/software developers so they could meet end user requirements
- The apps/software we implemented integrated well with existing/legacy systems
- A “test and learn” approach was adopted/encouraged
- The entire workforce was bought into the wider vision
- Alignment across teams was strong
- We budgeted well to account for our entire strategy
- We have a streamlined and efficient security and regulatory approval process
- We got new features built and released quickly and easily
- We use a small enough number of platforms for the change not to become overcomplicated

Which of the following do you believe have contributed to the successes (big or small) of your organization’s digital transformation efforts? [4977] respondents whose organization has been digitally transforming, split by respondent type, omitting some answer options
What obstacles get in the way of your organization's application/software projects? [5000] split by respondent type, omitting some answer options
Consequences of rigid, manual processes

Which of the following consequences do you/does your team face as a result of not adopting an automated path to application/software deployment? [2148] respondents that are app developers or ITDMs only and whose organization is mandated to follow a rigid process as part of app/software development, split by respondent type, omitting some answer options.

- Slower time to resolution of bugs/issues
- Slower application development times
- Slower to identify flaws during application development
- Less time for innovation leading to fewer modern applications being produced
- Large number of bugs/issues during roll out
- Fewer end user requirements are met
- Inability to respond quickly to end user feedback
- Missed performance objectives
- Missed deadlines

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Which of the following consequences do you/does your team face as a result of not adopting an automated path to application/software deployment? [2148] respondents that are app developers or ITDMs only and whose organization is mandated to follow a rigid process as part of app/software development, split by respondent type, omitting some answer options.
Time-consuming elements within app/software development

Which of the following stages of the application/software development and deployment process are the most time-consuming in your organization before the app or software can be rolled out to end users? Combination of responses ranked first, second and third [3350] respondents that are app developers or ITDMs only, split by respondent type, omitting some answer options.
Benefits of using a more autonomous app development model

How would a more autonomous self-service model for provisioning environments to developers, and deploying applications and software benefit your organization? [3350] respondents that are app developers or ITDMs only, split by respondent type, omitting some answer options.
Benefits of technologies that deliver more modern apps/software

Which of the following benefits has your organization experienced (or would you experience) from using technologies that deliver more modern applications/software? [3350] respondents that are app developers or ITDMs only, split by respondent type, omitting some answer options

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Total</th>
<th>App developers</th>
<th>ITDMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved end user experience</td>
<td></td>
<td></td>
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<tr>
<td>More efficient use of app/software developer time</td>
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<tr>
<td>Increased app/software performance</td>
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<tr>
<td>Greater chance of success with digital transformation initiatives</td>
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<tr>
<td>Increased app/software agility</td>
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<tr>
<td>Increased app/software scalability</td>
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<tr>
<td>A happier app/software development team</td>
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</tbody>
</table>

Which of the following benefits has your organization experienced (or would you experience) from using technologies that deliver more modern applications/software? [3350] respondents that are app developers or ITDMs only, split by respondent type, omitting some answer options
The benefits of elevating app/software development employees

Which of the following benefits has your organization experienced (or would experience) from elevating IT and app/software development team members into leadership roles? [5000] split by respondent type, omitting some answers

- Improved efficiency across the business
- Increased company performance
- More innovative solutions developed
- Improved end user/customer experience
- Increased agility
- Improved mindset toward transformational software change from the wider organization
- More appropriate budgeting and resourcing for transformation projects

Which of the following benefits has your organization experienced (or would experience) from elevating IT and app/software development team members into leadership roles? [5000] split by respondent type, omitting some answers
Alignment between teams

Showing the percentage of respondents who report that alignment between each of the above team pairings is “Excellent – they work together exceptionally well” [5000] split by respondent type

- Excellent – App devs and ITDMs
- Excellent – App devs and BDMs
- Excellent – ITDMs and BDMs
Involvement in app/software development decision making

Current involvement

- 0%: I have no involvement in any decisions around app/software development
- 10%: I am involved in the minority of decisions around app/software development
- 20%: I am involved in around half of the decisions around app/software development
- 30%: I am involved in the majority of decisions around app/software development
- 40%: I am involved in all of the decisions around app/software development

Desired involvement

- 0%: I want/would like no involvement in any decisions around app/software development
- 10%: I want/would like to be involved in the minority of decisions around app/software development
- 20%: I want/would like to be involved in around half of the decisions around app/software development
- 30%: I want/would like to be involved in the majority of decisions around app/software development
- 40%: I want/would like to be involved in all of the decisions around app/software development

How much involvement do you currently have in application/software development decisions in your organization? [1700] ITDM respondents only

How much involvement do you want/wish you had in application/software development decisions in your organization? [3350] ITDM and BDM respondents only, split by respondent type
Appendix – organization size
Attitudes towards transformational change through software

What is your organization’s mindset when it comes to transformational change through software? [5000] split by organization size

My organization is change averse and sees change as disruptive
My organization sees the value in change, but moves slowly
My organization sees the value in change and moves quickly towards it
My organization is on the cutting-edge, and is quick to embrace change

What is your personal mindset when it comes to transformational change through software? [5000] split by organization size

I’m change averse and like things the way they are
I see value in change, but I’m slow to get on board
I see value in change and I’m quick to get back on board
I like to be on the cutting-edge and truly embrace the possibilities of change
Contributors to digital transformation successes (big or small)

Which of the following do you believe have contributed to the successes (big or small) of your organization’s digital transformation efforts? [4977] respondents whose organization has been digitally transforming, split by organization size, omitting some answer options

- Those in charge of the change had the appropriate knowledge/skill sets
- We embraced CI/CD when deploying new apps/software
- The appropriate information was provided to our app/software developers so they could meet end user requirements
- The apps/software we implemented integrated well with existing/legacy systems
- A “test and learn” approach was adopted/encouraged
- The entire workforce was bought into the wider vision
- Alignment across teams was strong
- We budgeted well to account for our entire strategy
- We have a streamlined and efficient security and regulatory approval process
- We got new features built and released quickly and easily
- We use a small enough number of platforms for the change not to become overcomplicated

[Bar chart showing responses]
Moving software/application efforts into production

How many of your organization's net-new software/app efforts make it to production? [5000] split by organization size

How many of your organization's existing software/app update/upgrade efforts make it to production? [5000] split by organization size

How many of your software/app efforts make it to production in the planned time frame? [4888] respondents whose organization has at least some software/app efforts that make it to production, split by organization size
Alignment between teams

Showing the percentage of respondents who report that alignment between each of the above team pairings is "Excellent – they work together exceptionally well" [5000] split by organization size.
Involvement in app/software development decision making

Current involvement

- I have no involvement in any decisions around app/software development
- I am involved in the minority of decisions around app/software development
- I am involved in around half of the decisions around app/software development
- I am involved in the majority of decisions around app/software development
- I am involved in all of the decisions around app/software development

Desired involvement

- I want/would like no involvement in any decisions around app/software development
- I want/would like to be involved in the minority of decisions around app/software development
- I want/would like to be involved in around half of the decisions around app/software development
- I want/would like to be involved in the majority of decisions around app/software development
- I want/would like to be involved in all of the decisions around app/software development

How much involvement do you currently have in application/software development decisions in your organization? [1700] ITDM respondents only, split by organization size

How much involvement do you want/wish you had in application/software development decisions in your organization? [3350] ITDM and BDM respondents only, split by organization size