DEEPER INTO DIGITAL TRANSFORMATION

Software Rollout and Support in the Era of Remote Work

Userlane White Paper | July 2020

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Why We Compiled This White Paper

> **To remain competitive, enterprises need to introduce new technologies. This is even more applicable now as companies have to shift to a remote environment due to COVID-19. But if customers and employees don't know how to work with new technologies, then a company's digital transformation investments will yield no returns. This is why enterprises need to reassess how they train their software users and find new ways to optimize their software training and support efforts.**
>
> Hartmut Hahn, CEO, Userlane

The term digital transformation has been around for quite some time now, and organizations across the world have been planning and executing their digital strategies over the past few years. It is common knowledge that inefficiencies related to legacy systems have been one of the main driving forces of digital transformation. However, there is another unprecedented force that is pushing companies deeper into digital transformation, namely COVID-19.

The coronavirus pandemic has essentially caused companies to experience "forced digitization." In a very short period of time, businesses of all sizes have had to instantly switch to remote work and establish clear processes on how to work, collaborate, and learn in a remote work environment.

One of the most critical components of a successful remote work strategy is having the correct software in place, but rolling out new software presents its own unique challenges. Many companies, especially large enterprises, still rely on legacy systems and software, and employees are often resistant to change. Coupled with concerns about how to implement software quickly and successfully as well as how to train employees (or customers if the company also sells a service) in new software, it is no surprise that companies are fearful of sudden change.

In this white paper, we cover **(a)** how digital transformation, especially in terms of remote work, is driving companies to roll out new software, **(b)** what is needed to roll out software successfully, and **(c)** how companies can effectively train and support new and existing users* in any new or updated software. The aim of this paper is to help companies navigate this new era of remote work and stay ahead of the competition through the successful rollout of software and the automation of software support.

* Within the context of this paper, end-users can refer to both employees (for enterprise companies rolling out new internal software, such as an ERP or intranet) and customers (for enterprise companies also selling customer-facing applications and may therefore have to provide training and support to these customers).

INTRODUCTION

An Unprecedented Change and the Acceleration of Digital Transformation

2020 has brought about unparalleled changes socially, economically, and politically. For businesses, the instantaneous shift to a remote (or decentralized) workforce means that software is even more important now than it has been over the past decade. Not only has COVID-19 disrupted the way companies do business but it has also significantly quickened the pace of digital transformation, forcing companies to reassess their software, systems, structures, and processes. This is backed by research from IDC[1], which indicates that the need for new solutions that support remote work and collaboration will drive growth in global software investments.

According to results from Flexera's 2020 CIO Priorities Report[2], which is based on feedback from 302 CIOs and senior IT executives from across the globe, 91% of respondents expect the pace of digital transformation to increase in 2020, with many CIOs planning to heavily adopt cloud technologies (public, private, and multi-cloud) and Artificial Intelligence. In order to support this shift, 36% of the IT budget has now been set aside for enterprise innovation and growth. Other research conducted by North Carolina State University's Enterprise Risk Management Initiative and Protiviti Inc.[3] discusses how "existing operations and legacy technology infrastructure pose a risk to companies that can't transform quickly enough to compete against companies that were 'born digital'."

Change is now the norm, and it is imperative for businesses to keep pace with the demands set by digital transformation if they are to survive and thrive in a post-COVID-19 world. Referring to Flexera's report, findings indicate that the shift to embrace all things digital means that CIOs need to make daily decisions even faster, particularly when it comes to modernizing their technology landscape. Although companies have had to respond to the initial economic crisis with contingency planning and short-term spending cuts, they will need to allocate budgets to IT again once the economy starts to recover.

According to results from Flexera's 2020 CIO Priorities Report[2], 91% of respondents expect the pace of digital transformation to increase in 2020, with many CIOs planning to heavily adopt cloud technologies and Artificial Intelligence.

There has definitely been little reprieve for companies this year, and the hard work is only just beginning. In the following sections, we take a deeper look at how the accelerated pace of digital transformation is driving companies to roll out new software (and do so successfully) and what companies can do to provide optimal software and IT support to end-users.

Chapter One

CHAPTER ONE

The Forces Driving Businesses to Adopt New Software

Digital transformation means survival during this tumultuous time.

It is important for businesses to keep in mind that digital transformation is not simply a matter of implementing new technology: Culture and customer experience are also crucial factors if companies are to be successful in the coming years, especially in a remote environment.

At its core, digital transformation is about people and optimizing both the employee experience and customer experience. After all, customer experience and business growth are ultimately driven by the employee experience*. When it comes to software, employees and the modern-day customer do not want to work with outdated technology. A study from MIT Sloan Management Review[4] points out that employees across all age groups want to work for companies that are committed to becoming digitally mature.

It is, therefore, evident that software plays a crucial role in both the employee and customer experience, and companies still using (or even selling) outdated or poor-quality software are positioned to fall even further behind the competition.

IDG's State of Digital Business Transformation 2018[5] further highlights the need for companies to innovate and digitize: Regarding enterprises, transitioning to a digital-first business model has been cautious. Close to 40% of organizations have begun forming and executing a digital approach, with 7% stating they are already an enterprise-wide digital business. In the greater scheme of things, 7% is a rather low figure, and if companies are to separate themselves from the proverbial pack, they will need to introduce software and processes that will help them become agile, speed up time to market, and provide exceptional customer service.

Therefore, as we enter a new decade that has already presented unexpected challenges, there is a need for organizations to adopt new software in order to become fully digital and put both employees and customers at the center of their digital strategy.

Below are the two main forces driving digital transformation in the foreseeable future.

*For more information on this causality, you can read PwC's Fuse CX and EX Global Consumer Insights Survey 2019[6] and Denise Lee Yohn's article Why Every Company Needs a Chief Experience Officer[7] on HBR.

CHAPTER ONE

1 From Legacy to Liability: The True Costs of Legacy Software

Legacy systems have proven to be a huge barrier to digital transformation, but this comes as little surprise: It is well-known (and well-documented) that legacy systems are a threat to business, especially in terms of the costs* these systems accumulate. And with COVID-19 pushing businesses further into digital transformation, companies are becoming increasingly aware of the limitations presented by their existing technological setup. Indeed, any problematic areas of a company are going to be amplified by the current economic recession brought on by the coronavirus pandemic.

Victor Hoeck, writing for Digitalist Magazine[8], states:
"It stands to reason that technology will remain a crucial driver of competitiveness even in this new economic era… It might be true that, due to the pandemic, the focus will shift more from opening new revenue sources to improving operational efficiency, from open-sky innovation to best practice, from upfront investment to pay-as-you-go, from the open-plan office to the home office. But all these factors will strengthen the case for the cloud."

> **Large companies that have long histories and extensive operations could find it particularly difficult to adapt quickly to competition posed by younger companies that digitize products and services or use technology to operate more efficiently.**
>
> Mark Beasley, professor at North Carolina State's Poole College of Management

Thus, despite the difficulties of modernizing legacy systems, it is evident that companies will ultimately need to start leveraging cloud technology (including SaaS applications). This will help them remain competitive in the market, save on maintenance and operational costs (from an IT perspective, the cloud is much easier to maintain), and evolve as digital technology evolves.

Further, the amount of time and resources it takes to maintain legacy systems also detracts enterprises from focusing on innovation and digital strategy. Results from the 6th Annual Logicalis Global CIO Report[9] show that most of the CIOs interviewed for the survey state that they spend up to 60% of their time managing IT legacy. With such a large portion of time spent on old technology, CIOs are risking their future as well as the company's ability to stay resilient.

From quick-and-easy set-up to allowing companies to scale as technology evolves, cloud computing is an integral part of digital transformation, being agile, remaining competitive, and maintaining customer relevance in an aggressive, modern-day market.

*The true costs of legacy software include direct costs, which include high cost of ownership and support and maintenance costs, and indirect costs, which are caused by a lack of performance and speed (these costs include a poor CX, a negative impact on brand image, lack of scalability, and security threats).

CHAPTER ONE

2 The New Normal? Ushering in the Era of Remote Work

Remote work is not an unfamiliar concept, but the speed at which companies have had to make the shift to a remote environment is unprecedented. Although many believe that remote work is simply a temporary solution until the threat of COVID-19 has passed, statistics and research suggest the opposite is true. For example, the CEO of Twitter, Jack Dorsey, has announced that employees will be allowed to work remotely permanently from now on.

Research from Deloitte[10] shows that 42% of employees say their employers are not providing them with the digital tools they need to work remotely.

Remote work essentially relies on cloud technology. According to research from IDC, "organizations are shifting to … 'cloud-only' when developing their next-generation competitive advantage systems and services." And as companies increasingly add digital-first technologies, public and private cloud is certain to play a prominent role. After all, cloud technology is what enables employees to collaborate in real-time and work from anywhere in the world.

If COVID-19 has proven one thing, it is that companies have had to become innovative and inventive fast. Remote work on a large scale is also a grand social experiment. But one guaranteed outcome of this experiment is that customer and stakeholder expectations will change significantly. Digital transformation has now become a matter of survival, and if companies are to move into this new phase of fast-paced digital transformation, they will need to introduce new technologies and develop and execute digital processes to become truly digital-first companies. Not only will this ensure their success but it will also help them prepare for future disruption.

Although the major theme of this white paper is based on the premise that the future of work is remote, this does not mean that the future of work will comprise an entirely remote workforce. Until something radically changes things again, there will always be a need for employees to work on-site. However, the world of business will certainly see a relatively large increase in the number of employees working remotely, and organizations will do well now to implement long-term strategies – including retooling and enabling employees to work with new software – to maintain a successful and more permanent remote environment.

It is clear, then, that without the correct technology in place to enable remote work, companies will not be able to empower their employees and/or customers and help them derive maximum benefit from the opportunities both remote work and digital transformation present.

In the next section, we cover how to overcome the challenges connected to rolling out new software by providing a list of the critical success factors needed for smooth implementation.

Chapter Two

CHAPTER TWO

Critical Success Factors for Software Rollout

Rolling out new software is a social-technical, multilayered process that requires long-term commitment, a carefully crafted and well-defined plan, clear measures for success, attention to detail, and a focus on numerous specific activities that lead to successful outcomes.

When it comes to implementing an ERP or CRM system, for example, research has shown that there have been numerous cases of implementation failures (in world-renowned companies) over the years, often stemming from customization issues, premature go-lives, selecting the wrong third-party companies, data migration problems, and much more.

However, amid the failures, there have, of course, been many successes, and such success comes down to numerous critical success factors (CSFs). Based on our research, we identified the five most critical success factors (CSFs) for software rollout, namely: Proper stakeholder management, a user-centric vendor selection process, integrated knowledge management, disciplined project management, and broad software adoption.

Research on CSFs for IT implementation dates back to as early as 1979, and, over the years, more and more scholars and studies have contributed significantly to implementation success in terms of critical factors, particularly for ERP implementation. Some of these CSFs include top management support, change management culture, user training and education, as well as knowledge management and open and honest communication[11].

CHAPTER TWO

1 Successful Stakeholder Management

> **Make a list of every person, team and department that will use the new tool. This includes day-to-day users, as well as leaders who consume data the tool will produce. Be sure to not only address who your stakeholders are, but how they will be impacted and the timing of the impact.**
>
> Eileen O'Loughlin, Software Advice, a Gartner Company

As stakeholders are the very people who actively influence the entire rollout project and have a direct impact on its outcome, selecting the right stakeholders for the project cannot be stressed enough. Thus, proper stakeholder management – as well as not rushing the process of selection – is the first critical step to a successful rollout.

With proper stakeholder management, companies will guarantee that (a) software vendors and developers will have a complete (and realistic) list of requirements to work from, (b) software developers will be able to navigate challenges as they arise during the development process, and (c) all relevant persons will complete the project within a manageable scope.

However, achieving proper stakeholder management can be challenging. Many companies tend to make numerous mistakes during this process. In Digital Transformation Is Not About Technology[12] (an article on Harvard Business Review), the authors give an example of one such mistake: The tendency of businesses to bring in "an army of outside consultants who tend to apply one-size-fits-all solutions." This approach, as the authors emphasize, is not as effective as leveraging the knowledge of those inside the organization, or, in other words, those employees who have "intimate knowledge about what works and what doesn't in their daily operations."

To overcome the challenges connected to this selection and management process, it is important for companies to approach stakeholder management with careful consideration and an actionable plan. Based on our research, such a plan could include the following steps:

1. Conduct an IMPACT Analysis*, which can be used to make a list of everyone who will be using the new software.
2. From the IMPACT Analysis, identify stakeholders (both internal and external).
    - Questions to ask to help with identification include:
        - Who will use or be affected by the final product?
        - Which departments will use the new software?
        - What are the legal requirements of the project?
        - Whose support is critical to the success of the project?
        - Which stakeholders have intimate knowledge of business processes?
        - Will selected stakeholders be able to dedicate enough time to the project so that they can make smooth project decisions?
    - These stakeholders should be strong communicators and negotiators and should have robust leadership skills, solid know-how, professional correctness, and common sense.
3. Integrate each stakeholder's individual requirements, priorities, and goals into one cohesive vision.
4. Define clear roles and responsibilities for each stakeholder and for the project as a whole.
5. Ensure that upper management (a) continuously manages (but not micromanages) stakeholders throughout each stage of the rollout project and (b) cultivates trust between users and the project team.
6. Ensure that there is a recurring feedback loop between stakeholders and management.

* For further reading on IMPACT Analysis, you can download Perforce's white paper Impact Analysis for Requirement Changes[13].
** Literature on CSFs for ERP implementation points out that top management support is one of the main CSFs for successful implementation. This is because, as stated in Hailu's and Rahman's research on CSFs for ERP implementation success, when "implementation oversight is delegated to lower management levels, [this] often results in a lack of proper commitment of time and resources required for a successful implementation of the system."

CHAPTER TWO

2 User-Centric Vendor Selection Process

According to research[14] on achieving enterprise software success, more than 75% of respondents stated that it is the buyer organization, and not the software vendor, that is responsible for ensuring successful software solutions.

When it comes to selecting the best-fit software for the company, there needs to be substantial buy-in from relevant stakeholders. For this reason, real users and power users* must be a part of the selection process as they best understand the ultimate requirements. Power users, in particular, have in-depth knowledge of business processes, and they should be the ones responsible for facilitating knowledge transfer between consultants and end-users.

The importance of involving users in the vendor-selection and implementation process is strongly supported by research. For example, research conducted by Zhenyu Huang for the Central Michigan University cites a study, which found that "people's involvement in implementation [and] support for the system ... are highly correlated to the success of such a system[15]." Moreover, during the selection process, it may even be advantageous to include someone who is reluctant to adopt new technology as well as those who are enthusiastic about the project.

Below is a brief list of how to make the vendor-selection process as user-centric as possible:

- Create a strong Vendor Selection Team that comprises individuals from the organization who have expertise in the particular areas of business the software will support. These individuals should also have a vested interest in the vendor selection process.
- Involve power users in all formal meetings and brainstorming sessions.
- Encourage end-users and stakeholders to meet informally. Having informal meetings creates a casual atmosphere, which may encourage end-users to voice their opinions more freely.
- Ensure that the implementation of the project is run mostly by project managers and users and not the vendor, although the vendor does need to be a strategic partner throughout the process.
- Ensure that there is trust and communication between internal and external teams, and avoid creating an "us vs them" scenario.

* Power users are a segment of the employee or customer base (or a focus group) who are heavily involved in testing the software before and after go-live. They are also the ones who will provide authentic, valuable feedback to stakeholders. Real users, on the other hand, refer to employees or customers who will simply work with the new software on a daily basis (they can also be referred to as direct users or end-users).

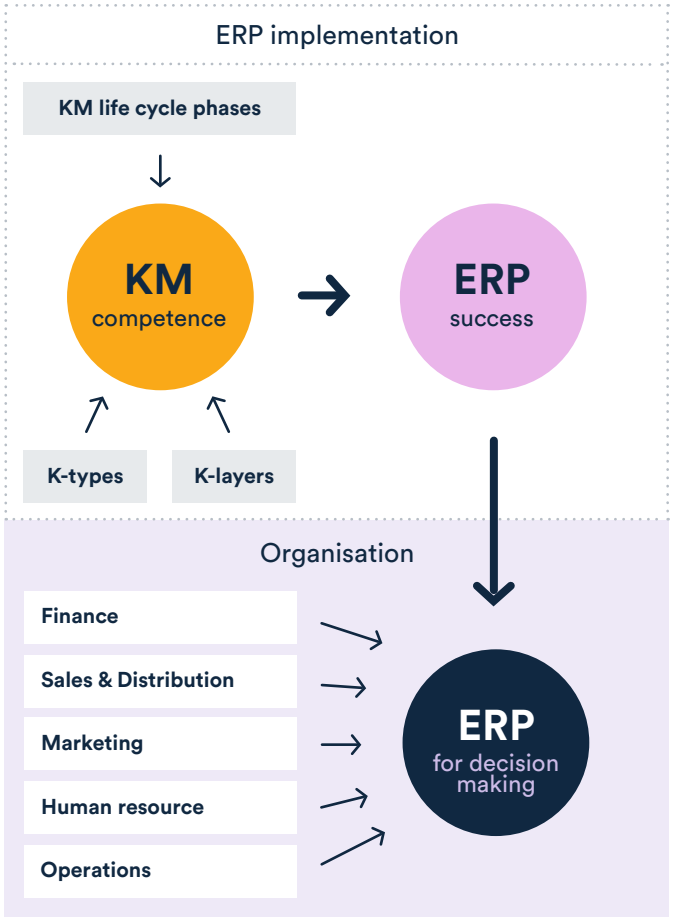
CHAPTER TWO

3 Integrated Knowledge Management

According to research by academics from various universities in England[16], "implementing a sound knowledge management strategy … is seen as a mandatory condition of success for organizations … ." Although the focus of this research is on ERP systems, it gives a good overview of how knowledge management (KM) can have a significant positive impact on the software implementation process. When it comes to knowledge management, the ideal is to have an extensive and effective exchange of knowledge between stakeholders and organizational members. One way to achieve this is through the IKMC framework.

What is the IKMC framework?

The authors of this research explore what is known as the Integrative Knowledge Management Competence Framework (IKMC). This framework gives companies an insightful overview of the different KM life cycle phases (creation, transfer, retention, and application) as well as the knowledge types (software knowledge, business process knowledge, organizational knowledge, and project management knowledge) and layers (what, how, why, with). For example, by using this framework, stakeholders can find out what sort of knowledge related to the software has been created and how it was created as well as how it has been transferred (such as via workshops or training sessions) and retained (such as via documentations or buddy systems) during implementation. This will, in turn, help them establish what is lacking and how to address such issues.



The idea behind this framework is that knowledge related to the software rollout is created and managed by the collaborative efforts of stakeholders (project managers and vendors in particular) and is then passed on from one party to another. By using various methods to retain the knowledge, it is re-used when needed during the software implementation stage and beyond. By integrating the three components (k-types, k-layers, and KM life cycle), stakeholders will be able to build up KM competence within the organization, which, when done effectively, will contribute to the ultimate success of the software rollout.

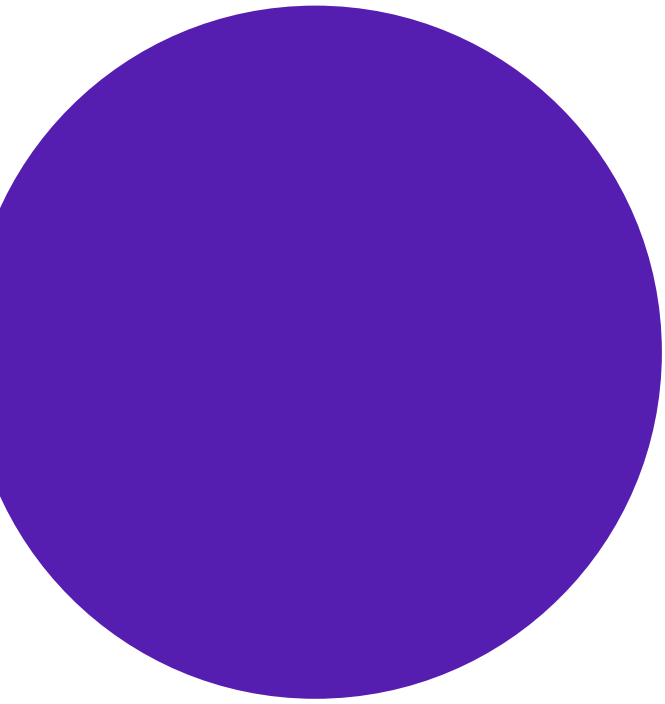
On the left is a diagram depicting the IKMC framework for ERP success.

Why should companies use this framework?

Implementing the IKMC framework is an approach large enterprises should consider for the implementation of particularly complex software systems as it will give all stakeholders knowledge on:

- what features and functions the software needs to have;
- current business processes and organizational structure (and if this needs to be changed to facilitate knowledge transfer);
- the attitude and behavioral aspects of employees regarding change;
- organizational cultural knowledge and how to retain this knowledge*;
- how to plan data migrations and customization; and
- what methodologies and approaches are needed to manage the implementation.

All-in-all, such an integrated framework, which defines the relationship between k-types, k-layers, and life cycle, will help relevant stakeholders manage knowledge effectively (i.e. increase KM competence of the organization) throughout the entire implementation process, which will ultimately help them meet business requirements and improve both decision-making performance and organizational results.



* A company's organizational culture can also be considered as a knowledge resource as it gives the context in which stakeholders and employees create, acquire, share, and manage knowledge. Although we will not elaborate on this further, it is important that companies bear in mind that a massive cultural shift may be necessary in order to change employees' behaviors and attitudes so that they will be more open and willing to share their knowledge.

CHAPTER TWO

4 Disciplined Project Management

It goes without saying that a successful software rollout cannot be achieved without meticulous planning. Rolling out new software requires many resources and large groups of people who have to collaborate and work within a tight timeframe. Ideally, those managing the project need to hold supervisory positions and should have the authority to make decisions on how to complete processes. In order to achieve a successful outcome and desired results, the entire rollout needs to be managed and monitored continuously.

Numerous studies that we looked at mention having a project champion as a CSF for software implementation. While we do not elaborate on this further, it is important to keep in mind that having a project champion—typically someone at senior management level who performs the functions of leadership, facilitation, and marketing of the project to end-users—has been proven to play a crucial role in the successful outcome of a software rollout project.

There are many ways to manage a project, but one of the most popular methods is the five phases of project management developed by the Project Management Institute. To guarantee the success of the rollout, stakeholders should work through each of these phases, addressing each step under each phase.

Below is an example of how the five phases of project management can be used for a software rollout project:

1. **Project Initiation**
   - Conduct a feasibility assessment and due diligence.
   - Establish if customization to the software (and to what extent) is needed and if the software to be rolled out is capable of handling such customization*.
   - Define, as specifically as possible, what challenges the software is to solve and tie this to the company's overall objectives.
   - Determine which company (if not done internally) will assist with data migration.
   - Develop a project initiation document.
   - Identify stakeholders, appoint a project manager with the relevant skills and knowledge, and obtain stakeholder sign-off.
   - Define the scope statement, initial budget, and resources.
   - Define project ROI in order to later establish payback after implementation.
   - Document all requirements for the project in a Software Requirements Specification document.
   - Determine the software development cycle to be used.
   - Determine the project vision as well as the vision for "life after implementation."

2. **Project Planning**
   - Create a procurement management plan to determine the vendor's needs.
   - Establish the project scope.
   - Assign clear roles and responsibilities to stakeholders and personnel.
   - Create work breakdown schedules.
   - Determine relevant KPIs, deadlines, milestones, and quality assurance and control metrics.
   - Establish an open information policy to ensure effective communication.
     This policy should include:
     - an overview of and the why behind the implementation;
     - details of the business process change management;
     - hosting meetings on change management strategies and tactics;
     - ensuring interdepartmental communication by having representatives from each department actively contribute to the project;
     - establishing points of contact; and
     - providing regular updates.
   - Establish a feedback mechanism, such as scheduling regular meetings and reports.
   - Create a risk management plan, which should include creating a change management plan.

3. **Project Execution**
   - Provide regular status updates.
   - Ensure there is robust communication between stakeholders as well as adequate documentation, which all stakeholders can access.

* Studies, such as those by Hailu and Rahman, suggest that if an organization wants to reduce the total cost of implementation, it is best practice, then, to reduce the amount of customization.

4. **Project Performance**
   - Consistently measure KPIs and audit milestones.
   - Determine how the project is progressing (project managers can use Earned Value Analysis[17] for this).

5. **Project Closure**
   - Hold a post mortem to identify successes and failures.
   - Prepare a final project report.

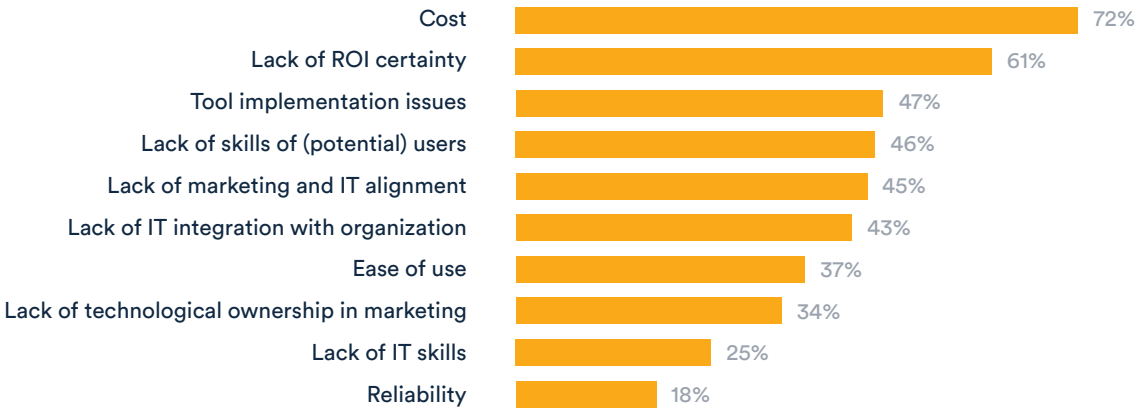
Lastly, creating an implementation timeline can go a long way in helping all stakeholders and employees visualize the entire project. For good examples on this, you can view these timelines used by UC Berkley[18].

CHAPTER TWO

5 Broad Software Adoption

Software adoption is the most important driver of the success of a software rollout. Thus the difficult process of software adoption needs to be managed carefully. As the graph below (which is based on research from IBM[19]) indicates, there are at least 10 barriers to successful software adoption in organizations:

Barriers to using technology



> **The effectiveness and overall success of an enterprise-class piece of software does not lie within the technology itself but in the processes and procedures around them. Many a software deployment delivers 100% on the business requirements only to fail in the final phase of user adoption.**
>
> SandHill, Achieving Enterprise Software Success

The fourth barrier, in particular, highlights the necessity of having software training and support plans to equip users with the skills needed to work with the software effectively. We will address this barrier extensively in the next section (Chapter 3).

Another barrier to software adoption not mentioned in the graph above is resistance to change, a psychological condition that is a major issue across all organizations in all industries (we also discuss this further in chapter 3.1). Many employees or customers are often hesitant to adopt new technology and thus prefer to rely on older systems.

One of the key factors to overcoming this resistance is to leverage the knowledge of stakeholders (such as senior management who have been selected as ambassadors for the new software) and the passion of end-users who are enthusiastic about new technology to drive software adoption. These end-users are often referred to as innovators or early adopters, and companies should use their enthusiasm as a catalyst for getting users who are more resistant to change on board with the new software. This form of training, or knowledge transfer, takes a more human or people-centric approach and encourages end-users to interact with each other and share best practices.

> **Success depends on having easily deployable and functional software with appropriate training and policy support. New software is not readily accepted by 80 percent of users, because they don't see the benefits, just the problems.**
>
> SandHill, Achieving Enterprise Software Success

As is the case with all stages of the rollout process, ensuring broad software adoption takes time. There are many ways to maximize software adoption, some of which also include:

- holding meetings or discussions with end-users detailing why the new software was implemented and explaining how the software will bring more value to them;
- setting a deadline to move all content from the old system to the new one (this way, all information can only be accessed in the new software);
- helping users with technical implementation;
- appointing team leaders in each department to encourage software use and offer support;
- having a rewards mechanism in place to encourage software usage; and
- creating a feedback system so that end-users can voice their opinions and make suggestions for improvements.

However, it is ultimately continuous software training and support that will guarantee broad successful adoption.

Before we move on to the next section on CSFs for training and support, it is necessary to understand what broad software adoption looks like. This is why we have compiled this checklist, which can be used to assess whether your training and support plans are working:

- ☐ There is high user acceptance and increased feature adoption.
- ☐ There are increased activation and product engagement rates.
- ☐ Users are achieving work-related goals and are more productive.
- ☐ Users become self-sufficient and no longer need to search for external help.
- ☐ There is a decrease in the number of support tickets.
- ☐ There is improved user experience resulting in higher user satisfaction.

Chapter Three

CHAPTER THREE

Critical Success Factors for Software Training & Support

Training and supporting end-users in any software application can be an expensive, time-consuming, and challenging process. With business requirements constantly changing and software continuously evolving, companies nowadays are forced to consistently ensure end-user proficiency.

To avoid excessive costs and to guarantee the ROI of the software rollout, training and support efforts need to be highly effective. To achieve this, we identified the four most relevant critical success factors for software training and support.

> **The benefits an organization plans to realize from a new software will not materialize until users have embraced and are productive with the new applications and processes.**
>
> Gartner

CHAPTER THREE

1 Mitigated Resistance to Change

As mentioned in the previous chapter, resistance to technological change is one of the many factors hindering the change management programs of enterprises. If users are hesitant to work with new software, they will, in all likelihood, be resistant to training too. Thus, the first step toward achieving successful training outcomes is to address resistance to change.

In an article titled How to Deal With Resistance to Change[20] from Harvard Business Review, author Paul Lawrence provides some solutions to how companies can address and overcome this resistance:

① Understand the true nature of resistance, which can, oftentimes, be social.

② The reason for the change must be communicated to end-users.

③ Get people involved in the change and encourage them to participate in effecting this change. However, it is important for upper management or those involved with software training to remember that end-users are often experts in the older systems, and their expertise and the contribution they make to the company must be recognized.

④ Upper management must understand that it takes time for change to take effect and for end-users, in the context of this white paper, to adopt new software. End-users need to develop new skills to work with new technology, and if they need to work with complex software, this can be a lengthy process.

Ultimately, mitigating resistance comes down to strong upper management. As Didier Bonnet, coauthor of Leading Digital, states: “The job of a manager is to help people cross the bridge – to get them comfortable with the technology, to get them using it, and to help them understand how it makes their lives better[21].”

CHAPTER THREE

2 Effective Training Methods

Software training*, which is part of a company's knowledge transfer process, takes place before the go-live phase of the software rollout. Training should begin with educating the project team and ultimately end with the end-users. Thus, all stakeholders involved in the rollout process need to have some level of training in the new software in order to transfer knowledge between teams and end-users. To begin the training process, stakeholders must:

1. create a robust plan for end-user support and training;
2. implement train-the-trainer (TTT) programs;
3. create, prepare, and deliver all the learning resources that are necessary to onboard and train users;
4. have the implementation team (or trainers) show users how to work with the software (or at least certain parts of it) in a test environment;
5. perform user assessments to establish how users are reacting to the training and if they are understanding how to work with the new system;
6. perform User Acceptance Testing to ensure the software is ready for end-users to work with; and
7. gather feedback from users for potential areas of improvement either with usability or with training.

The 2018 LinkedIn Workplace Learning Report[22] indicates that:

68% of employees prefer to learn at work;

58% of employees prefer to learn at their own pace; and

49% of employees prefer to learn at the point of need.

While training and support are ongoing processes (training, of course, does not simply end with the go-live), the idea is to have the majority of users working in the software on the day of go-live. When it comes to training and support methods, most enterprises resort to using webinars, peer-to-peer training with advanced users, on-site training, support communities, job aids (step-by-step instructions on how to perform a certain digital process), online and offline learning resources (such as PDF documents and handbooks), videos, scheduled demos of the system, and digital learning tools, such as Learning Management Systems. They may also leverage the after-sale support provided by the chosen software vendor.

* Research conducted by Zhenyu Huang shows how increasingly important software training and education have become over the past two decades. For example, during 1998-2002, only 42.9% of articles considered education and training as one of the CSFs for ERP implementation. This figure, however, rose to 72,2% by the end of 2007.

According to Didier Bonnet, familiarity with and interest in digital technology varies widely among employees. For this reason, training efforts should therefore reflect those differences.

For these to be truly effective, however, they need to include certain elements, which we have listed below (this can be used as a checklist). Every form of software training and support should, therefore, include as many of the following elements as possible.

Effective training should:

- ☐ begin with the most important processes to be learned within the software;
- ☐ provide short-term microlearning experiences*;
- ☐ offer a rewards mechanism;
- ☐ be personalized (i.e. not a one-size-fits-all approach);
- ☐ include self-paced learning;
- ☐ provide easy-to-access resources and support; and
- ☐ provide contextual learning in the flow of work.

Effective support should:

- ☐ provide continuous feedback and collaboration between the company and end-users;
- ☐ have on-demand help that is always available; and
- ☐ empower end-users to be self-sufficient.

Another way to guarantee the efficacy of software training methods is to ask the following questions:

1. Does it promote user engagement?
2. Does it enable and increase knowledge retention?
3. Does it provide synchronous learning and not detract users from being productive?

In the next section, we take a look at a new software solution on the market that is designed to provide optimal software support and ensure seamless usage by incorporating all the above-mentioned elements that make training and support successful.

* Microlearning is a skills-based learning approach that breaks down content into easy-to-digest learning units and short-term learning activities. These activities contain just the right amount of information to help learners achieve a particular goal.

CHAPTER THREE

3 Seamless Software Usage With Digital Adoption Solutions

Although some of the above-mentioned training methods may include elements of effective software training and support, most of them often tend to fall flat in certain areas as they are not designed to keep up with the pace of technological change. Furthermore, these methods are generally asynchronous in nature, meaning that when users are working in the new software, they need to navigate away from what they are doing to consult external resources. This, in turn, adds friction to the learning process and hinders productivity.

This is why learning in the digital workplace and in the era of remote work needs to take a new approach. Working with software needs to be as frictionless as possible – after all, the ultimate reason for introducing new technology is to improve productivity and efficiency.

According to research from SandHill, software buyers are interested in getting expert help to improve usage levels, with a total of 87 percent of respondents expressing an interest in paying for extra services to grow usage levels.

Ensuring seamless software usage largely depends on constant support, which should be contextual and relevant to the end-users. Oftentimes, companies simply implement once-off training, provide lengthy documents that do not offer the exact help a user is looking for in their moment of need, or turn to the IT department to help end-users.

However, there is a solution to providing optimal and continuous support for users without heavily relying on IT support, and it involves automation through the use of digital adoption solutions.

What are digital adoption solutions?

Digital adoption solutions (DAS) are relatively new to the market, but ongoing research continues to prove their effectiveness for software training and support. In 2019, Gartner released a report on how to increase sales productivity with DASs[23]. The aim of the research was to assess how sales teams, which need to use an increasing number of software applications to get their jobs done effectively, can use DASs to drive adoption and productivity, increase usage and the user experience, and incorporate continuous development.

Although this research looked specifically at the use of DASs for sales teams, such solutions can be used by all companies across all departments to onboard, train, and support both employees and customers in any software application.

How digital adoption solutions work

Digital adoption solutions offer interactive step-by-step guides that lead users through any process in a software application. These interactive guides, which occur on-screen and live within the application, are designed to make handling new digital processes more effective.

With such interactive step-by-step guidance, learning new software becomes a personalized and tailored experience. DASs are designed to break processes down into easy-to-navigate and logical steps (microlearning), thus helping users to learn sequentially at their own pace.

As a result, users no longer need to rely heavily on IT help desks or other external learning resources as they are able to support themselves. This is what makes DASs particularly relevant for companies with a distributed workforce as users can learn any new software application no matter where they are located.

To summarize this section, digital adoption solutions provide end-users with the following elements that ensure seamless software usage:

- a learning-by-doing approach via step-by-step interactive guides;
- synchronous learning;
- contextual learning that is tailored to end-users' training needs;
- microlearning experiences;
- just-in-time content;
- elements of gamification;
- streamlined workflows;
- a centralized repository of software know-how;
- the ability to be self-sufficient in working with the software; and
- improved user experience and onboarding process.

However, simply providing training and support in the form of a DAS is only one part of guaranteeing truly effective and broad software adoption. The other part involves the continuous optimization of training and support through the use of analytics (which DASs provide), which we discuss below.

CHAPTER THREE

4 Optimized Software Training and Support With Analytics

To provide optimal support, companies need to invest time in analyzing how end-users are working with the software based on data. One way to do this is via usage analytics. Those in charge of training and support can then leverage this data to determine:

- user engagement and areas of stickiness;
- how users are adopting the software across different segments;
- what type of customers (in the case of customer-facing software) are using the product the most, if customers are deriving value from the software, and how to retain customers;
- the results of A/B testing; and
- how to reduce waste and focus on the work that delivers the most value to the business and customers.

Then, based on these findings, those in charge can deliver the following results:

- improved user experience;
- increased customer retention;
- getting users to higher-value activities faster;
- development of new features; and
- a decrease in support tickets.

Leveraging newer technologies that enable product analytics, such as DASs, will help companies obtain objective and quantitative data to make effective changes. Traditionally, user surveys were conducted to generate such insights. However, in terms of data quality, speed, and effort, user surveys pale in comparison to using analytics software.

> **What companies really want to know is whether employees actually learn and retain the information, and whether it's the right information for improving business performance.**
>
> Jonathan Ferrar, VP IBM's Smarter Workforce[24]

Below is a checklist on how to leverage product analytics solutions to achieve the best optimization results:

- ☐ Determine clear objectives before beginning data analysis and create a tracking plan, which includes all events and properties needed to be tracked.
- ☐ Get people involved (i.e. experts/ data scientists, which may require outsourcing) who have a comprehensive understanding of (a) the software that has been rolled out, (b) how to use the analytics tool to its fullest potential, and (c) what the business' needs are and know how to connect business goals to the data.
- ☐ Focus on high-priority areas that are performing poorly in comparison to industry averages.
- ☐ Ensure transparency between relevant stakeholders and create an understanding of how certain factors and indicators are computed. There also needs to be clarity on how decisions are made and what actions are to be taken for optimization.

Concluding this chapter, companies always need to keep in mind that training and support do not have an endpoint. Capitalizing on automation technologies, like digital adoption solutions, and leveraging usage analytics help to constantly improve processes, which consequently reduces costs, enhances productivity, and leads to higher user satisfaction.

According to McKinsey[25], companies that use customer analytics comprehensively report outstripping their competition in terms of profit almost twice as often as companies that do not.

CONCLUSION & OUTLOOK

In Closing

For businesses across the globe, 2020 has proven to be an exceptionally challenging year. Due to the COVID-19 pandemic, companies of all sizes have had to instantly switch to a remote work environment, and for many, this has meant implementing and adopting new technologies. However, as this white paper has explored, rolling out software is never an easy process, and it is a task that requires a huge commitment and investment.

> **Organizations need to gear up and align the culture, people, processes, and intelligence gathering to embrace this rapidly changing environment.**
>
> Protiviti Managing Director Jim DeLoach

In an attempt to help companies navigate and master the current business climate, this paper has provided the critical success factors needed for software rollout and support. There are, of course, many other CSFs that we could have discussed (such as data quality, data migration, allocation of resources, and technical implementation), but we selected the CSFs that we believe are the most important based on our research.

Below is a table summarizing the identified CSFs and our recommendations on how to achieve a positive outcome for each factor.

Critical Success Factor	Key Insights
CSFs: Software Rollout	
Successful stakeholder management	• Conduct an IMPACT analysis to identify key stakeholders • Define clear roles and responsibilities for each stakeholder • Garner strong support from upper management • Establish a feedback loop between stakeholders and management
User-centric vendor selection process	• Create a robust Vendor Selection Team with internal stakeholders • Ensure high end-user involvement (real users and power users)
Integrated knowledge management	• Apply the Integrative Knowledge Management Competence Framework
Disciplined project management	• Have a complete list of requirements and realistic expectations • Ensure there are enough resources for project completion • Define clear objectives and accurate estimates • Establish an open communication policy and feedback loops • Consistently measure KPIs and milestones • Conduct Earned Value Analysis • Create a final project report
Broad software adoption	• Establish robust software training and support plans • Identify goals and milestones • Establish what successful adoption looks like
CSFs: Software Training and Support	
Mitigated resistance to change	• Understand the nature of the resistance • Communicate the change and the reason for it to end-users • Encourage users to participate in the change process
Effective training methods	• Begin with training stakeholders • Create a solid plan for end-user support and training • Perform user assessments and User Acceptance Testing • Establish a feedback loop between end-users and stakeholders • Deliver training (via an LMS, webinar, DAS) that includes elements such as microlearning, self-paced learning, learning in the flow of work, and support that is on-demand
Seamless software usage	• Leverage DASs, which automate training and support
Optimized software training and support with analytics	• Utilize analytics software or DASs to determine usage analytics • Use the data to improve user experience

The entire process of a software rollout and beyond ultimately begins with designing a robust change management strategy and defining clear goals and then proceeding through each stage of implementation with strong leadership, excellent project management, high end-user involvement, and commitment to ongoing software training and support.

When the right technologies are in place – and when both customers and employees start to adopt new software successfully through effective training and support – companies will be in prime position to move forward with their digital transformation initiatives in the era of remote work.

Outlook: The Future is Remote

There are articles upon articles on the internet that discuss how COVID-19 will shape the future of work. Gartner predicts that there will be nine emergent future of work trends, with remote work sitting at the top of the list.

A recent Gartner poll[26] showed that almost 50% of employees are likely to work remotely after COVID-19, which is a 20% increase from before the pandemic. Although we do not posit that the future of work will comprise an entirely remote workforce, we can say with confidence that remote work is here to stay.

A study conducted by Gartner[27] in April 2020 found that 74% of the CFOs surveyed said that they expect to move previously on-site employees to a remote environment post-COVID-19.

Undoubtedly, the coronavirus pandemic has proven to be a large-scale remote work experiment. While many companies, which have kept pace with digital transformation, have been able to adapt quickly to a remote environment, others still relying on legacy systems or struggling with processes connected to remote work have had to (drastically) rethink how to adjust to having a distributed workforce.

For this reason, we are certain that the pandemic has been a wake-up call for businesses in terms of how far along they are in becoming digital-first companies. This is why we predict that over the next few months and years, more and more companies – particularly those in legacy industries – will turn to cloud-based technologies, including SaaS applications, to help them keep pace with digital transformation and prepare them for a future of work that will largely comprise a distributed workforce and virtual workplaces.

But as this paper has explored, implementing new software is only one part of the equation in having a successful and enabled remote workforce. Employees will need to be able to work effectively with new technology, and this is why we also predict that many companies will start exploring solutions that (a) offer automated training and support, (b) drive business value through user adoption, and (c) guarantee a solid ROI on the implementation projects.

To summarize, we predict that:

- Remote work will become the new norm for companies worldwide.
- Companies will start thinking more radically about the way we work with and adopt new technologies.
- There will be a proliferation in the implementation of and investment in cloud-based technologies, including SaaS applications.
- Companies will start exploring new technologies that will automate user onboarding and software training and support (such as DASs).

Shifting to and creating a strong remote environment will come with its challenges. Certainly, many companies may have been in "fire-fighting" mode over the last few months. But as more and more organizations – including those in 'legacy' industries – begin to adopt more remote work operations, they will need to dive deeper into digital transformation to enable their employees and customers digitally and succeed in the post-COVID-19 world.

We hope that the insights provided in this white paper will be useful to your company as you continue to innovate and adapt to this new era.

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