

MODELING OF MANAGEMENT PROCESSES IN AN ORGANIZATION

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Summary: *When driving any major change within an organization, strategy and execution are intrinsic to a project's success. Nevertheless, closing the gap between strategy and execution remains a challenge for many organizations [1]. Companies tend to focus more on execution than strategy for quick results, instead of taking the time needed to understand the parts that make up the whole, so the right execution plan can be put in place to deliver the best outcomes. A large part of this understands that business operations don't fit neatly within the traditional organizational hierarchy. Business processes are often messy, collaborative efforts that cross teams, departments and systems, making them difficult to manage within a hierarchical structure [2]. Business process management (BPM) fills this gap by redefining an organization according to its end-to-end processes, so opportunities for improvement can be identified and processes streamlined for growth, revenue and transformation. This white paper provides guidelines on what to consider when using business process applications to solve your BPM initiatives, and the unique capabilities software systems provides that can help ensure both your project's success and the success of your organization as a whole. majority of medium and small businesses, big companies and even some govermental organizations [2].*

Key words: business processes, management processes, business process management, process lifecycle

1. INTRODUCTION

In a world where people increasingly depend on technology to support any major change, process excellence initiatives usually go hand in hand with supporting technologies that help companies deliver desired business outcomes, such as connections to brands, innovations in customer service, better products and improved business models [1, 2].

BPM suites, which have evolved as a means of helping companies achieve these goals, do add value, but they are often monolithic systems that take a high level of expertise and training to implement and use. As a result, these systems can take so long to implement that they become counterproductive, and create upfront disruption that can adversely affect the business. It also makes these systems slow to make an impact, creating challenges for companies that need quick results to retain customers and drive profits in a highly competitive market.

Today's customers interact more with products, services and service teams through software. With easier access to the Internet from tablets and mobile devices, they are more apt than previous customers to look for other products and services if their current ones are not meeting expectations. As a result, there is more pressure on companies to lower costs, and provide better services and faster development and delivery cycles [3].

No longer can they afford to wait a year or two before seeing a return on their investment. Organizations need agile systems that are faster to market, while still adding the value that BPM suites have to offer.

To meet these needs, business process applications are rising as an alternative to BPM suites. Business process applications minimize hand coding and speed up development and delivery cycles with visual tools that can be utilized by business users and developers alike.

Applications are delivered through a test, learn and pivot approach, where having requirements, design, development and deployment condensed into a single platform allows companies to deliver solutions more quickly for immediate feedback from customers, employees and partners [3, 4]. If changes need to be made, developers can pivot and make adjustments within hours or days, compared to a hand-coded solution that could take months to redesign.

As a comprehensive platform for building business process applications, software systems supports your full range of BPM needs, whether they be top-down, business transformation initiatives or a need for smart process applications that incorporate information from disparate systems, including line-of-business, enterprise resource planning and social.

BPM needs can also include a way to rapidly build custom apps that can be IT led or driven by business owners to solve specific process-based challenges. Regardless of the initiative, software system drives transformation, growth and revenue through rapid-assembly applications that automate business operations with minimal disruption, while providing the business with immediate value [5].

1.1. Identifying processes

When evaluating and identifying processes that can be improved to deliver desired business outcomes, it can be difficult to find time to map out all end-to-end processes that your organization may have. To save time, subject matter experts (SMEs) from each area can be called on to identify core and value-chain processes that would be good candidates for automation. SMEs look for processes that are repetitive, error prone, causing chokeholds or have other characteristics that make them easy to automate [2, 4].

Software system's ability to rapidly assemble business process applications also makes it easy to test out candidate processes that have been identified for automation, at a low risk and cost. Visual, no-code tools make it possible to assemble applications within hours, as opposed to the lengthy development cycles of hand-coded solutions.

As mentioned previously, this makes it easy to gain feedback and make adjustments in a very short period of time. If it is decided that a process is better off left manual, the resources that have been spent to test the process are minimal compared to a similar effort with a custom solution [6]. Sometimes, just attempting to improve a process can bring about changes, by putting a stop to "*it's always been done this way*" kind of thinking, despite the fact that there is no real understanding of the impact or costs involved.

To help people understand the value that automation is adding to a process, Software system's reporting capabilities let you derive all kinds of data to monitor, measure outputs and clearly see how each process is performing in comparison to the original. This makes it easy to maintain visibility into the more detailed aspects of the business and identify further opportunities for improvement [4, 6].

2. MEASURING AS-IS PROCESSES

Once you have identified the processes that will be automated, there are many different ways to measure these processes and identify KPIs, so you have something to measure against once the new processes are in place. Possible ways to measure processes include looking at cycle times, looking at the number of resources allocated to a process, and looking at the time each resource spends to complete the process lifecycle [7].

KPIs should align with overarching organizational strategies and goals. A clear vision of how KPIs tie into organizational strategies can make a big difference in gaining and maintaining buy-in from the business to ensure your project's success. Once the automated process is live, software system provides dashboards and reports, like those shown in the diagram below, that can be used to measure the new process against the original.

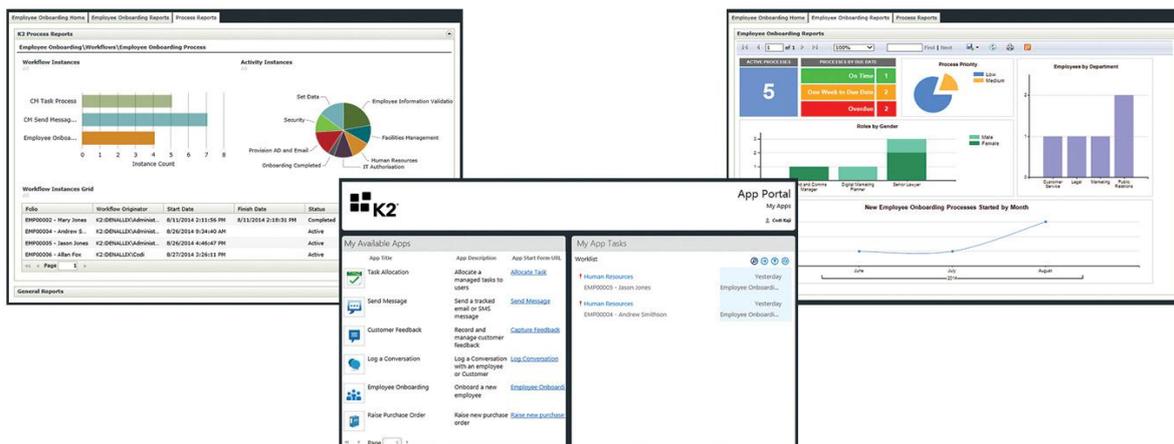


Fig. 1. Example: Software system K2 provides dashboards and reports

With software system, you can create high-level or detailed reports that measure information, such as overall process times, number of process instances or individual user performance. In addition, a universal task list makes it possible to see the status of all running processes from within a single view, making it easy to track and manage them.

For example, software system K2 can also measure manual processes within larger processes to identify further opportunities for improvement. That said it is important to understand that business process automation is not about automating people out of processes but eliminating the time-consuming, redundant components that slow employees down.

Understanding where there is value in automating and where there is value in maintaining a manual process is an important but sometimes difficult discernment to make.

Software systems can help through a unique ability to measure processes end-to-end, including any manual processes that fall within the larger process [5]. This makes it easy to maintain full process visibility instead of just the automated components. Software systems customers currently use this ability to measure manual subprocesses to identify opportunities where employees would be better supported through further automation.

2.1. Determining to-be processes

After processes have been measured and KPIs determined, the to-be processes can be mapped out. Before this step is taken, it is important to make sure that all process requirements are understood. Understanding the full process, rather than just the process steps is important, both in determining how the process can be optimized for the workflow engine, and in understanding interdependencies on other processes and systems to set the rest of your project up for success [6, 7].

Business owners, sponsors, stake holders, SMEs, analysts and architects all play a pivotal role in working together to understand and map each process. Numerous tools, including the more common *Business Process Model and Notation (BPMN)*, are used to capture process maps and overall business requirements. Today, there are several dozen different modeling tools in the market with a variety of capabilities.

Software systems encourages each organization to choose the design and process-modeling method that best matches their organizational goals and competencies. Organizations can either choose their own process modeling tool or use software system's model-and-run design approach of mapping out processes directly into software system's execution-based designer.

For large processes and initiatives, pure process modeling and planning tools are generally used and encouraged. By using design and modeling tools that support BPMN as an output, software systems can import these process models as a starting point for further modeling in K2 software system.

BPMN effectively acts as a common translation between an organization's design-and-modeling tools of choice into something that can be executed and monitored as a running solution. However, for smaller initiatives, software system's process designers are designed to support rapid process automation modeling through a model-and-run design approach, and mapping out the process directly into the designer eliminates the extra step of having to import the design into an executable system.

These designers provide visual process maps that give companies the flexibility to make quick updates to a business process or solve individual process needs, without having to worry about the onerous process modeling that usually accompanies these types of endeavors. When mapping out processes, it is also important to look at how system capabilities can optimize and shorten process lifecycles. Software systems provides process architects and analysts with an array of advanced features that make it possible to support complex business scenarios, such as multiple approvers needing to review a task at the same time or a business rule specifying that if a claim is over a certain dollar amount, it is routed to higher-level management for approval before processing.

In addition, escalation and exception handling capabilities make it possible to alert a manager or reroute tasks when someone is sick, on vacation or has not responded to a request within a specific timeframe, ensuring that the business continues to run smoothly. With software system, it is also possible to dynamically create teams or make updates to existing teams without having to make changes to backend systems, making it easy to update responsibilities and roles as people are promoted or their area of focus changes.

3. CHOOSING A METHODOLOGY AND IMPLEMENTATION STRATEGY

As process requirements are captured and you draw closer to execution, there are many methodologies to choose from that will define the approach you take in carrying out your BPM initiative. Some of the better-known approaches are *Six Sigma*, *Lean*, *Lean Six Sigma*, *Agile*, *Waterfall* and *Change Management* [2].

The size of your company and the training of your employees can make a big difference in which methodology you choose. Software system's goal is to support the approach that is best suited to your business or department. While some companies do adopt one methodology and implement it across the organization, other companies prefer a softer approach, with methodologies and approaches varying widely from department to department, depending on employee and departmental needs. Software system's flexibility with regard to methodology makes it possible to implement K2 software system across multiple departments with varied implementation approaches, as needed.

If your organization does not lean heavily toward any one methodology, and you are unsure of the best approach to use, K2 pairs exceptionally well with Agile, due to its advocacy of small, incremental releases and iteration. However, other methodologies or blends of methodologies can just as easily be used if better suited to your organization's practices, in combination with the incremental approach [8].

In alignment with modern BPM practices, sciences theory recommends an incremental approach when undertaking a large BPM initiative for a variety of reasons. Large big-bang projects inherently have a higher rate of failure since testing can be difficult prior to implementation, and a failure to account for a single interdependency can have knockouts that effect the entire project.

There is also a higher learning curve with this approach and more pressure on employees to sink or swim when adopting new technologies. If the organization simply isn't ready for the new technology and takes longer than expected to adjust, performance can decline, which can have a detrimental effect on the business. With an incremental approach, development and delivery leaders can quickly develop, deliver and gain feedback, so processes can be fine-tuned to best suit the unique needs and practices of the organization.

The first process should be something that is small enough to implement in a short time frame but big enough to make a difference in terms of how it will benefit the organization. With software system, the incremental approach works especially well due to the speed with which K2 applications can be developed and delivered, ensuring quick implementation and short delivery cycles. Getting feedback from users in early phases also helps with user adoption, by making sure each application meets user needs and requirements.

3.1. Gaining and maintaining business buy-in

Gaining and maintaining business buy-in is critical to the success of any initiative. A key element in this regard, that many organizations lack, is making sure that solutions align with user requirements. SMEs are extremely experienced and knowledgeable within their area of expertise and can tell you what they wish they had in terms of access to data, better systems, etc., but can't necessarily draw you a picture of exactly what it is they're looking for. To this end, K2's rich user interface and visual process models, as shown in the diagram below, make it quick and easy to create a visual diagram or process map that SMEs, stakeholders and future users can look at to determine what they like and what is lacking.

Traditionally, when creating custom applications, questions about rules, data and integration points are asked upfront. Developers then go off to build the application, and once it is completed, bring back the finished project for review. The building period can take months to complete, and if missing elements are identified during the review period, this can mean that part of the project needs to be completely scrapped and redone, resulting in several more months of work.

Software system's quick application-assembly toolset and visual features ensure that this doesn't happen. Visual diagrams that map out each step in the process within K2's designers make it easy to review processes before they go live to ensure they align with business requirements.

The same applies to a user interface that has been built to incorporate critical information from disparate line-of-business systems, which may be tied to a workflow. Process reviewers can view the interface directly in the designer and make sure the right information has been included [9]. If adjustments do need to be made after the solution is live, updating the interface or process using K2's no-code visual tools is a cinch.

4. CONCLUSIONS

A BPM strategy that includes K2 for execution will empower your business to keep up with the quickly changing market. Across enterprises and within departments, software system is represented in every industry by companies that are using business process applications to transform their business.

Software systems customers are amazed at how quickly transformation takes place and report millions of dollars in savings from shorter cycle times, fewer errors, enriched customer service and improved service-delivery models [9, 10].

K2 software system closes the gap between strategy and execution through an execution-based approach that supports your BPM strategy every step of the way. By combining agile with value, we deliver transformation in a blueprint that will meet your needs – with minimal disruption and maximum value – so you can continue to grow your business and increase your bottom line.

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