

8 Simple Digital Transformations to Increase Organizational Agility

Roland Maucher



In today's highly competitive environment, Organizational agility is the ability to quickly sense and respond to change. At a time when data is considered a business asset, traditional data management systems will not add value, but will generate additional costs. The success of manufacturing companies will be defined by the way they harness their data, transformed into usable business knowledge. Actify believes that manufacturing companies have enormous, and often untapped, potential which is hidden and unused within various business systems.

When businesses strive for the way things used to be, rather than adapting to the way things are, they fail. The sooner you embrace your data, the sooner you can start adding real value to your business. Many small and medium-sized businesses shy away from smart data projects due to the perceived costs and complexities. Once you have the perspective that 'digital transformation' is a journey and not a destination, there can be no excuse to starting a new digital initiative today.

In this article we will discuss some practical digital transformations that can be cost-effectively applied within your organization and with great ease. We will share the steps towards increasing operational agility.

1. Drive more innovation
2. Produce better quality products
3. Automate paper driven processes
4. Rapidly respond to sales opportunities

Technology itself is not the whole answer. In our experience, to be successful, any new approach must simultaneously consider organizational goals, business strategy, work processes and culture towards technological changes.

1. Drive more innovation

Create a culture of innovation. Organizations that are consistently able to innovate do so through the purposeful management of a systematic innovation process.

Innovation is everyone's job. You can't rely purely on the efforts of a small R&D or engineering department to originate new innovations. Instead, create a culture in which everyone is entrusted and empowered to innovate. The responsibility for innovation migrates from engineering to C-level executives who run the extended enterprise.

Digital Transformation 1: Enterprise Collaboration

Technology alone will not elevate your business to the next stage of the transformation journey. Collaboration and an open mindset is key to discovering new ways of thinking and working, which increases levels of participation and motivation. Innovation cannot and should not just be about the product, it

must include the process from effectively gathering the disparate content and files to keeping files in sync for efficient collaboration. Innovation comes from the enterprise. Therefore, enable cross-department collaboration, data management and quick access to extended product data that can help make critical business decisions faster. Every stage of your process can be improved with continuous communication and collaboration. This can now be easily achieved using Actify Centro.

Digital Transformation 2: Data Accessibility

Innovation is not driven by luck. Innovation stems from a place of experience and knowledge. Having both the context and ability to visualize the big picture drives people to come up with unique solutions to tough problems. Many job functions around the enterprise require information that comes from Engineering documents and CAD files. However, while product information and product files are created and generally used effectively within engineering, their use is often limited to the engineering department. Enterprise workers may disrupt the engineering team to gain access to crucial information. As a result, engineers spend valuable time administering information to the wider enterprise. Since engineers are responsible for implementing and executing new innovative ideas. Organizations must effec-

tively use their engineering resource to their full potential and release them to drive innovation.

To mitigate this information bottleneck, Actify has developed Centro which acts as a neutral enterprise platform, collecting information from multiple product data sources to enable enterprise data accessibility, delivering value to all stakeholders. Actify Centro is used to integrate a variety of organizational disciplines both within and outside of engineering. Data accessibility empowers workers to operate on the road, at work or at home. We believe that when you respect individuals for who they are and how they operate, it significantly increases productivity.

2. Produce better quality products

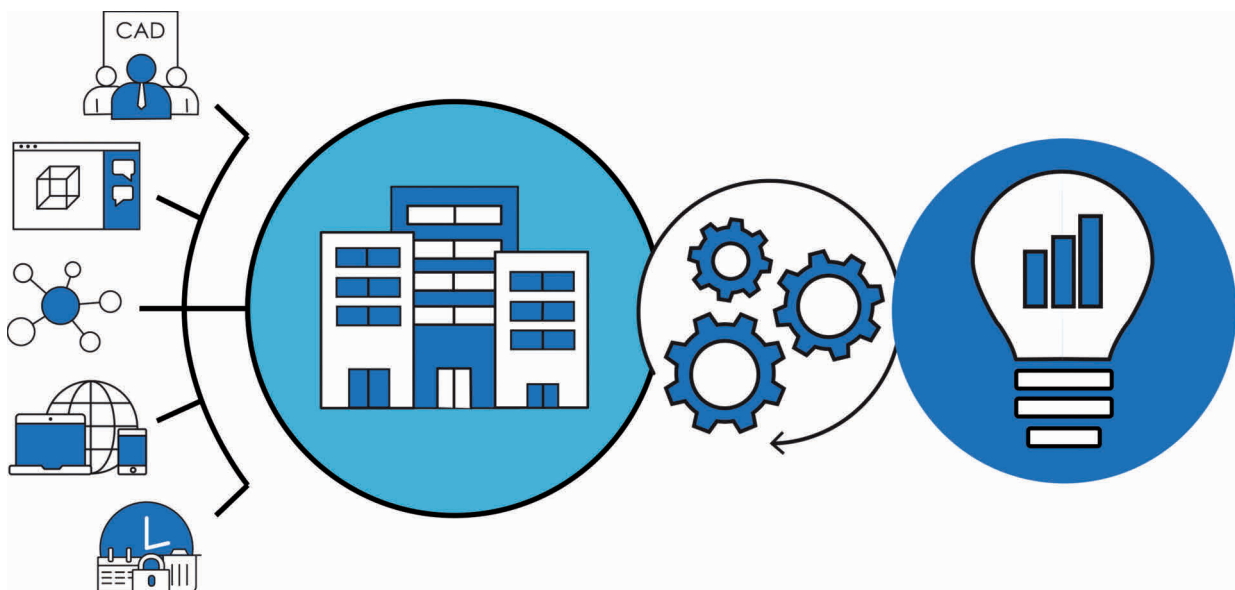
Life for a manufacturer used to be much simpler. Markets evolved at a more leisurely pace and parts were sourced locally. Fast forward to today, where smart connected products are intrinsically more complicated because of integrated sensors or electronic parts, and competitors can arise from any corner of the globe. At a similar pace, business technology has evolved to make our lives simpler. However, these applications have become inherently more complicated. The creation of a smart connected product demands the involvement of many different expertise. Cooperation

between software, electrical and mechanical teams are required to realize and fulfill the requirements of today's smart products.

The movement toward smart connected products has cause many manufacturers to feel vulnerable. How can companies compete when they still struggle with effectively managing product development for their discrete components, let alone adding sensors and electronics? Technology is disrupting the manufacturing industry, but many discrete manufacturers are not ready. They are too busy trying to re-invent processes and implement change throughout the organization, but their legacy systems are not agile enough to support these changes. Evolving customer requirements and internal process change creates undue pressure on enterprise workers. This is where some companies see digitalization as a huge advantage.

Digital Transformation 3: Data Visualization

Effective data visualization to augment communication holds the promise of transforming product development—reducing time to market, improving product quality, and enhancing product capabilities to best satisfy customer and market needs. Effective data visualization begins with the ability to leverage CAD models and share them with downstream stakeholders, the supply chain,



and customers. An effective data visualization solution must overcome three major challenges, beyond just viewing capabilities.

Cost – Budget allocation is a highly scrutinized activity and many small – to medium-sized businesses simply cannot afford to purchase expensive CAD authoring licenses or additional seats for line-of-business systems to support all the potential downstream users.

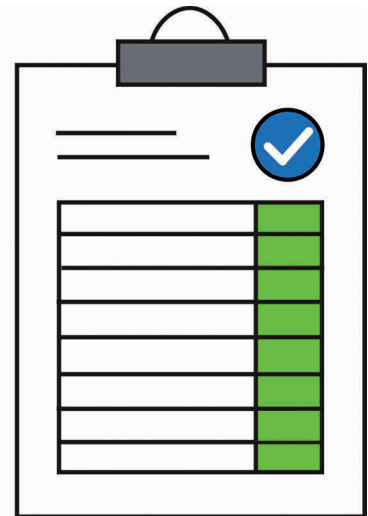
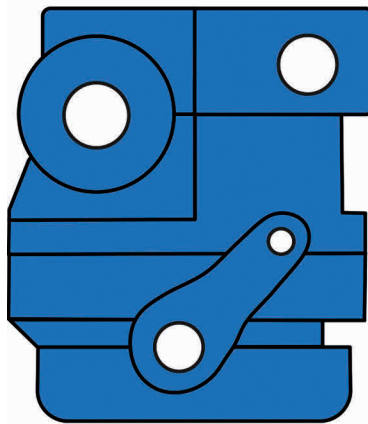
Ease-of-use - Enterprise acceptance requires intuitive tools that are easy to use. Traditional enterprise applications fail because they are too difficult to use and require substantial training. Sophisticated business systems by their very nature are complex and the applications' interface becomes cumbersome for the casual user.

File and platform agnostic - The ability to manage and accept any file type made accessible not only on desktop and laptop computers but also on a wide range of mobile devices including work tablets and smartphones.

Digital Transformation 4: Operational Flexibility

In a dynamic and volatile world, operational flexibility is a strategic priority that manufacturing organizations cannot afford to ignore. The ability to simultaneously meet changing customer demand while also controlling costs. As product complexity and variability increases Manufacturers must anticipate and account for change. An organization's relationship with their customer and approach to Standardization and Configuration management becomes increasingly important. Companies need to start with formal requirements management and traceability to meet their customer's expectations and achieve compliance.

Actify provides an enterprise platform underpinned by a graph-oriented database which enables flexible deployment, tailored to client specific needs. Actify Centro will gather content created throughout the development and product lifecycle. Feedback from the field can come full circle, informing the development of next generation products. Customer and warranty databases can be leveraged to guide product decisions. No matter what product you make, agility requires a solid digital foundation. With Actify Centro, you can manage your digital assets from idea through end of product life. Associate all project infor-



mation, providing context and a platform to capture change and review past decisions and provide insight to optimally make new decisions.

3. Automate paper driven processes

Many of today's manufacturing companies store their data in line-of-business systems like PLM and ERP. Today people must go to each of those data sources to extract what they need, then join the dots between all the information so they can get an accurate picture. Typically, manual data collection, meetings and regular reporting are the methods most companies employ to extract information from their enterprise workers or line-of-business systems. We observe a high-volume of static Excel spreadsheets being copied and passed around the company as the primary means of communicating data.

Today employees are looking for easy and fast ways to share information and complete their work. Shadow IT represents the unknown applications and facilities that enterprise workers use to meet their data exchange needs: USB devices, mobile devices, email, and online file transfer services. If you don't provide an effective platform to manage enterprise data within your organization, you're at risk of employees connecting and sharing through unmanaged networks outside of your organization.

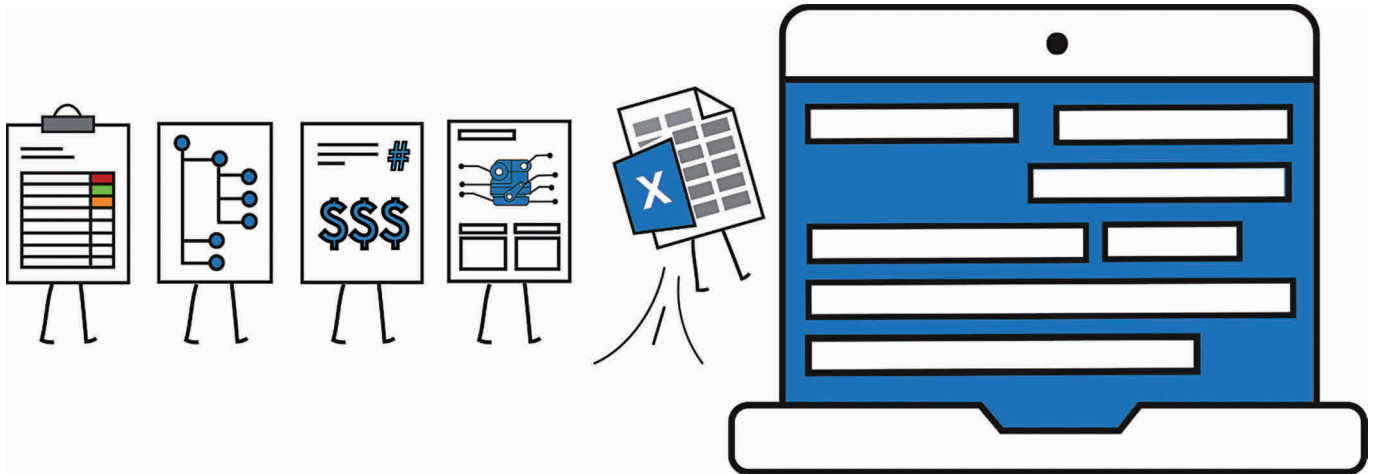
Digital Transformation 5: Effective Data Management

Replace your static Excel spreadsheet with a dedicated business tool. Actify's business tools can be configured to replicate your company's Excel driven process; this ensures you can retain your organization's unique competitive advantage – the process. Minimize process change and gain all the benefits from modern software. Single version of data, accessible anywhere, change audit, store and access previous versions and compare changes between revisions. Not everybody needs to author or edit files, but all workers need access to data to support their role. Data governance insures that the right people have access to the right information.

Actify's business tools can make data entry more efficient. Simple and intuitive data filtering can eliminate human error. When business tools are equipped with knowledge of your enterprise, filtering by location will display only the machines and resources available at that facility. Assigning people from drop-down menus and date pickers ensures human error is not a barrier to your organization's operational agility.

Digital Transformation 6: Automation & Integration

Automation can increase the output of your organization while reducing costs making it an essential component to



becoming more agile. Too often expensive engineering resources are wasting valuable time administering information to the wider enterprise. Actify can automate the extraction of PMI, metadata, parts properties and other engineering data from CAD, and disseminate the information far more consistently than manual efforts. Optimize and automate mundane processes to increase the available man-hours and mitigate human error.

Integration allows organizations to create a central software architecture that's able to seamlessly connect and pass data between business systems. Cut down the inefficiency of dealing with multiple software solutions and eliminate bottlenecks.

Actify gives you the best of both worlds. We appreciate that no single monolithic enterprise application can meet all the business-management needs of the organization. Existing legacy applications are unprepared to handle the growing business and process complexity we see today. Actify believes that 'platformization' provides companies with an opportunity to combine the capabilities of leading business tools. Unify enterprise applications with integration and maximize existing investments into Line-of-business systems while providing a sustainable path to software upgrades and data migration.

With Automation and Integration, you can reduce communication delays while increasing data accuracy, essentially making your business run faster and more efficiently. Actify offers many integration options and provides experienced developers with a range of capabilities to help you create integrations and connections to the systems and tools used by your business.

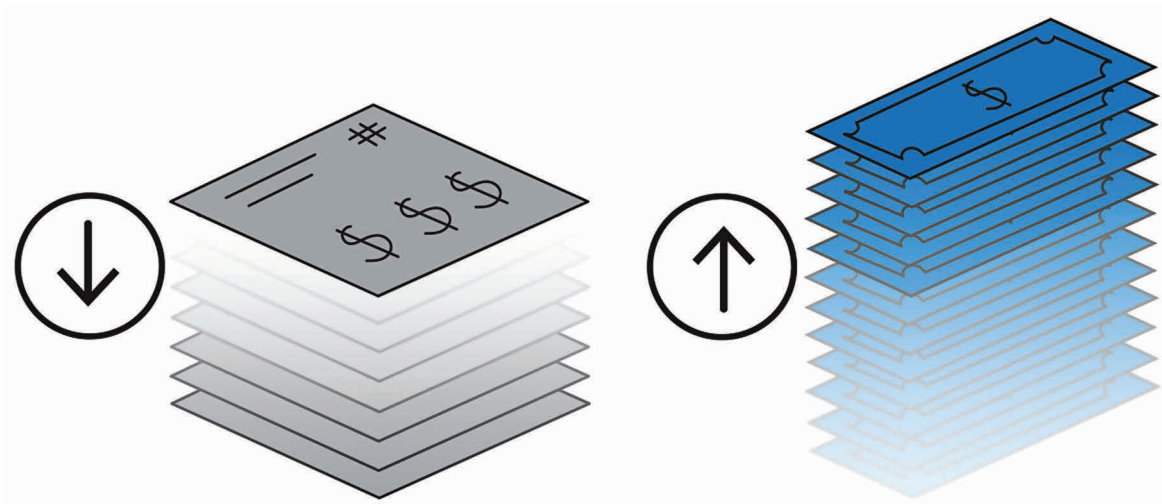
4. Rapidly respond to sales opportunities

This must be one of the most curious challenges that we've encountered during numerous client engagements. Some manufacturing organizations are 'too busy' to respond to sales opportunities or their internal process takes too long to respond within a given time frame. Simply stated, they are too busy to make money.

To make the sales process more agile, speed and throughput are not the only aspects to consider. To ensure that new business opportunities are both feasible and profitable, we must consider the importance of leveraging enterprise data and alignment with customer requirements to rapidly produce profitable bids that can also result in higher sales productivity. Quickly develop high quality quotes that can lead to higher close rates, increased revenues and enrich your customer relationships.

Digital Transformation 7: Data Discovery

Necessary data no longer resides within one application. Organizations have several structured siloed data sources (systems and databases such as; CAD, ERP, cost accounting systems and warranty databases.). Multiple data sources, countless different file types and disparate files scattered across network drives and geographic locations provides a growing challenge to govern and manage data within your organization. Furthermore, product data is hidden within CAD files such as Product Manufacturing Information, GD&T, etcetera The challenge we've observe within a lengthy quoting process is not about generating more data, it's about accessing the existing disparate data and gaining insight. Have we produced something like this before? Or, how much did we quote for this last time? Etc. Time is valuable, and your work force is busier than ever. Is your organization truly achieving progress? Or, are your workers wasting valuable time searching for crucial information? Release your hidden product data with data discovery. Centro provides greater enterprise visibility and disparate data visibility, implementing controls and tools to react and respond to opportunities and insights identified through a connected manufacturing infrastructure. Centro can standardize your data in a user-friendly and easily accessible format to enable the organization to leverage



product data to optimize commercial returns.

Digital Transformation 8: Dedicated Quoting Tool

For companies that offer a wide range of products or provide a 'build-to-order' 'make-to-order' service find it increasingly difficult to make the quoting and ordering process simple and fast for the customer. Sales and service reps cannot continually be retrained or expected to keep up with the ever-changing sales conditions. Quoting has become a labor-intensive manual process with endless part numbers and many iterations between sales and engineering. Actify has developed a quoting tool that leverages legacy project information extracted from enterprise applications. Deploying such a tool will immediately enable greater throughput, faster response to sales opportunities, enhance the buying experience, while ensuring that only profitable quotes are put in front of customers.

Conclusion

Companies' must be prepared to evolve their enterprise systems and business strategies to meet market velocity challenges. Unfortunately, many companies rely on aging line-of-business systems and legacy infrastructure that is just not up to the task. The vast majority of discrete manufacturers have PLM solutions in place that are over 10 years old. These solutions were not designed to support today's requirements. These old systems

primarily focus on CAD data management for discrete products. If companies want to increase their organizational agility, a new approach is required. Companies need to expand their digital vision and embrace more up-to-date solutions enabling new levels of efficiency based on industry best practices.

The success of your organization will not be achieved through the creation and collection of data. Success will be defined by the way business data is transformed into usable business knowledge to create value. Actify believes that manufacturing companies have enormous, and often untapped, potential which is hidden and unused within various business systems. Many companies are looking at digital strategies to achieve their operational goals of becoming better, faster, and cheaper.

About Actify

Actify is a global leader in delivering powerful, easy-to-use, affordable Product Data Intelligence solutions to the aerospace, automotive, industrial automation, and discrete manufacturing industries. Actify's solution enables designers and knowledge workers alike to participate in product design and development activities, thereby lowering collaboration costs and improving manufacturing performance. Actify empowers a diverse audience of users by delivering business solutions that do not require design expertise or costly CAD software and supports all major 3D & 2D CAD formats. ■



Roland Maucher
Actify Europe GmbH

E-Mail: rmaucher@actify.com

Contact