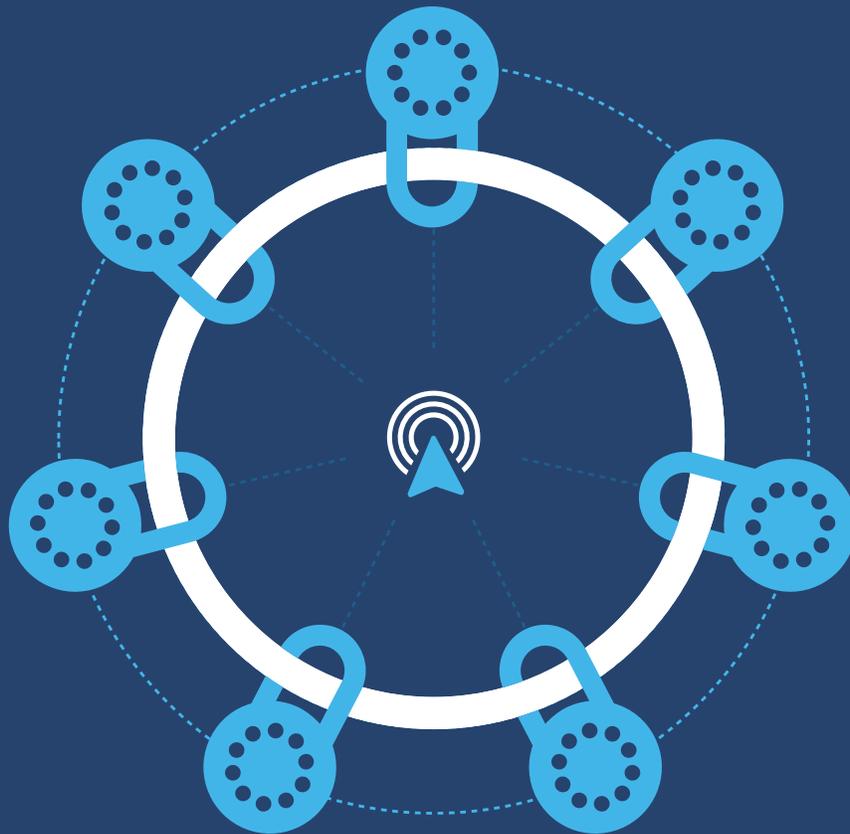


# 7 Truths You Don't Want to Ignore When Modernizing Legacy Software



It's hard to let go of something successful. Many enterprise grade software systems have reliably served the needs of their businesses, and the people who used them, for years and even decades. These legacy systems have survived multiple releases and multiple revisions of their help manuals. Users generally suffer through, or perhaps they use only a minimal amount of functionality because they have a limited understanding of how the system works.

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## Introduction

But it's inevitable that — at some point — old models, systems, and approaches will fail, or at least they will fail to keep abreast of the changing needs of an organization. Today's business applications must support a range of business requirements in addition to providing meaningful metrics, and tying into other areas of the organization, such as sales. Right now (and we mean right now) is the time when the failure of a legacy system to keep pace will begin to take its toll on the efficiency and performance of your organization if new ideas, trends, and opportunities are ignored.

Here are seven truths you do not want to ignore when evolving your enterprise software.

### 1. The CFO Is No Longer The Key Decision Maker

It used to be that, if the ROI for the enterprise software solution under consideration made the CFO happy, you would have a sale. Those days are gone. While the CFO is still a key stakeholder, a purchasing decision is now influenced by many people in the organization, from HR to IT and the individual end users.

The demand for simple, easy-to-use, and compelling user experiences is becoming a strong driver. Company decision makers are now realizing what the rest of the world is realizing: If your intended end user does not embrace your new software system, you will miss opportunities or outright fail in your business goals.

#### Implication

That's why enterprise software must be designed with appropriate input from key stakeholders, including end users. Re-designed software that does not take this approach will end up with a bloated and expensive-to-develop-and-maintain feature list that does not service the end user. It will be inevitably – and quickly – replaced, if it reaches the implementation stage at all.

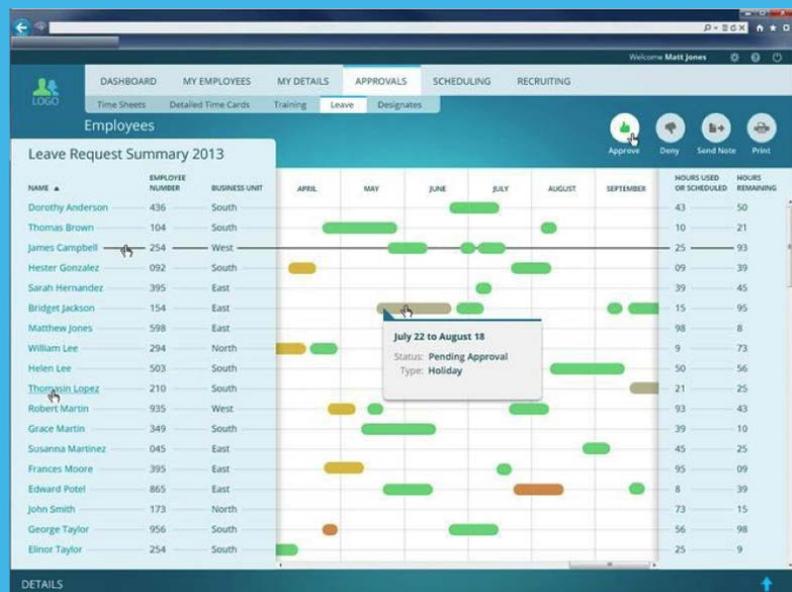
## 2. Focus On Value, Not Features

With the growing popularity of the cloud and SaaS models, huge pre-configured software behemoths will see their demise. This applies to many types of software. Organizations will purchase “value packages” that they feel serve their current needs, and that have the capability to scale as their needs grow, or as a business case can be made for additional features. This broader market shift among major software vendors must be reflected in your own legacy migration; users and their managers within different departments of your organization have come to expect some level of personalization and customization with any software system they use.

### Implication

The design and development of your software needs to be modular and task-based in nature. It can't just be designed and developed like a monster feature list that people will dig through to find what they need. You must be able to map features and usage to particular users and what they value, and be able to turn these features on and off to suit specific needs. Lastly, you must be able to convincingly “sell” the merits of these capabilities to the decision makers and users within your organization.

*This screenshot highlights a key value for workforce management: at a glance, quickly assess scheduling gaps, and get high-level summaries with a mouse-over. These features were designed after careful consideration of real-life workflows and value to the end-user.*



### 3. Mobility Is A Requirement, And It's Not What You Think

Everyone knows mobility is coming. In fact, everyone knows mobility is here. But what does this mean beyond different form factors and arguments about whether to go native versus HTML 5 versus something in between? The key is about how the workforce – and that's people – are now behaving (working). While you will still have some individuals, such as an admin, spending some time at a desk to enter data via "traditional" software, many end users will be fitting tasks into moments of free time. They'll be looking up customer and product information while enroute to a customer meeting, or requesting vacation time while waiting at the airport. Some users may have a work day that is almost entirely mobile and they'll be doing most of their business tasks in this context.

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#### Implication

The design and development of enterprise software must easily accommodate doing tasks quickly and be interruption tolerant, so that a task can be completed later and elsewhere. The technology must take into account the fact that online connectivity may be hard to predict. There may be little distinction between a "mobile task" and a "desktop task;" users may start a task on a mobile device and complete it later on a desktop back at the office.

Mobility can also be more than simply allowing mobile users to accomplish mandatory tasks. Mobile offerings and services introduce a completely new way for the various internal departments/practitioners to interact with their employees – to solicit information in context, to reduce barriers to data entry, and to provide multiple touch points of interaction between employee and manager. All of these can lead to greater productivity (more time on task) AND higher employee engagement.

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Enterprise software must be flexible enough to integrate and support business practices and employee engagement.

## 4. Productivity Measurement Is Meaningless Without Engagement

Almost all software that is deployed at an organizational level has some need to measure employee productivity. However, employees are only productive if they are engaged, have the tools that help facilitate doing their tasks.

Driving employee productivity involves:

- Ensuring you have the right people;
- Make sure they are engaged and motivated;
- Having software applications that are not so cumbersome in data entry that the act of measuring productivity ends up decreasing it. The key is to develop a software solution that will keep the user engaged through simplicity and ease of use.

### Implication

Enterprise software must be flexible enough to integrate and support business practices and employee engagement. This has implications for both the customization of the software design and its integration into other IT systems.

Here are three illustrative scenarios:

#### Scenario 1

A mobile-based web form that can be easily pushed to employees can allow for frequent mini-surveys to elicit feedback. The reverse is also true — an easily accessible mobile web form can allow employees to share team achievements or stories with the organization.

*(Note: Email is often used for this purpose today, but these records tend to get lost, or certainly not associated, with performance management files).*

#### Scenario 2

An intuitive and mobile-accessible timesheet application allows employees to track their time efficiently and easily — with less time and less effort than returning to a browser to use cumbersome timesheet software.

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One of the reasons big data is so, well... big, is that new data is being generated all the time that can impact the decisions that must be made today or even this minute.

### Scenario 3

A mobile-friendly intranet encourages more frequent posting, more sharing, and more contribution from a larger employee base. Imagine an internal social network that allows employees to share photos instantly from their device, create tags and comments, and tell stories — all while contributing to a shared culture and creating a living record of achievements and progress throughout the year.

## 5. Real Time – Live!

One of the reasons big data is so, well...big, is that new data is being generated all the time that can impact the decisions that must be made today or even this minute. Organizations may still need to track employee surveys and so forth over long periods of time, but there is growing need to understand what is happening now. For instance, workforce management (especially who to staff, and when to start them) can be time-sensitive to the hour for critical project requirements. Without authentic and efficient time-management technologies, it can be difficult to see who is being used at full (or under) capacity.

### Implication

The internal social network cited above is just one example of how real-time data may be helpful. In addition, real-time data can help managers deal with unexpected absences, or react to short-term emergencies. Quickly updated and available data can provide a more efficient and effective workforce planning tool – employees just out of training courses can apply those skills more quickly if the system can be easily updated to take those new skillsets into account.

## 6. Driving Revenue

The link between the sales funnel, open opportunities, and even medium-to-long-term planning, is crucial for timely and effective workforce management. But there is often a gap between this essential business information and the current status of who's staffed, who's available, who should be hired, and when competency development should be introduced (and if so, what kind)?

So what do people do? The best they can with the tools they have. In fact, all over the world, organizations still rely on shared spreadsheets (sometimes versioned beyond belief), with data manually entered from one tool to another. But with multiple manual entries, and disconnected data, the extra effort (not to mention the error rate) is becoming problematic.

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### Implication

While it may not be realistic to expect every enterprise software system to have integration with the entire service offering of Salesforce (for example), it is realistic to explore how (and when) information from the sales funnel can be integrated into the solution. This allows the departments across a company to move from being a standalone department to a valued and strategic partner that can support the business direction of the whole organization.

## 7. User Experience And Technology Are Integral In Driving Success

Evolving your enterprise software is ultimately a business decision. The technical and user-experience design considerations are there because they can impact — both positively and negatively — the business outcome. While this is a statement of the obvious, many organizations fail to execute on its implications when designing and developing new solutions. They, for instance, may just consider the

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business and technical aspects of a new design and “layer the user experience on top.” Or, similarly, they ignore some of the key technical considerations when deciding on a design and business direction.

### **Implication**

Successful projects of this magnitude start off with a well-considered product strategy. It’s absolutely necessary to get representatives from all key areas of the organization — business, technology, user experience — aligned and on board with the goals of the product revamp as well as the design and development direction. This doesn’t mean analyzing the situation to death, but it does require careful consideration of the implications the technical and design aspects will have on the business, and vice versa.

### **Conclusion**

Bloated enterprise software system behemoths are quickly becoming a thing of the past. HR is no exception. Today’s users, accustomed to the easy and intuitive experience of the best consumer apps, are demanding more. It’s a paradigm shift that software vendors will ignore at their peril. Organizations must take stock of what is happening in the broader enterprise market as they look to migrate, evolve, and adapt their own in-house legacy software systems.

In fact, this may be the ideal time for organizations to engage their stakeholders – executives, managers and end users – to develop custom systems that are faster, more intuitive, and more mobile friendly than what is currently available from traditional vendors mired by a legacy mindset. If you adopt these seven truths as guiding principles for your new build or system migration, the result can only be a more efficient and user-friendly system that will pay direct benefits to your bottom line.

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by Meaghan Reinecke, UX Solutions Architect  
and Scott Plewes, VP User Experience

## About the Authors



Meaghan Reinecke, UX Solutions Architect  
Meaghan is a UX Solutions Architect with a focus on user research. Her project experience ranges from being a team player for larger research, design, and development projects, to conducting independent projects with clients. Working with local, national, and international clients in both the public and private sectors, her product knowledge spans a wide variety of business and consumer applications. She is comfortable with ethnographic research techniques, traditional usability testing, prototyping and walkthroughs, and card-sorting techniques. She has also conducted numerous heuristic evaluations of interaction and information design. Meaghan holds a Master's degree from the Human-Oriented Technologies Laboratory at Carleton University and regularly conducts training courses on behalf of Macadamian for Usability in User-Centered Design and User Research.

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## About the Authors



As VP User Experience Design at Macadamian, Scott brings over 20 years of experience in understanding customers and how to incorporate their needs into software product design. He's put his skills to work on overseeing the user experience design of dozens of mobile, web and desktop applications. Scott is a sought after speaker and author of many papers, articles and talks offering insights into design innovation. He embodies the Macadamian philosophy that successful products are built on committed business relationships, passion for design, and a true desire to create a useful and delightful user experience. Scott holds a Master's degree in Science from Queen's University. [scott@macadamian.com](mailto:scott@macadamian.com)

# Thank you.

m a c a d a m i a n

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