



IMPROVING EFFICIENCY IN SAP BY SIMPLIFYING THE USER EXPERIENCE

User Experience (UX) in SAP



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Executive Summary

Companies using the SAP suite of products may not be seeing the full benefits from the range of features purchased. Much of this has to do with systems that weren't designed for different end users of varying skill levels who need to complete a variety of tasks throughout the day. Indifference, confusion and frustration cause hundreds of hours' worth of wasted time and only further nurture the unproductive work environment. Through high-level User Experience projects, companies can easily reverse this inefficiency. A customized project plan can be developed through the help of a User Experience system analysis that not only simplifies processes for employees, but also allows companies to optimize their operation. These solutions maintain data integrity across departments and can even completely eliminate the need for system training. The intuitive interface can remain consistent across every device for higher user adaptation, ultimately bringing more money to the bottom line.

Introduction & Background

Many types of conglomerate companies who utilize SAP solutions have wasted too many manhours with a frustrating end-user experience in their systems. When employees are forced to confront a system they may not understand, there is already initial hesitation. That fear and discomfort only increases if the UI is not well designed. For years, companies have turned a blind eye to this problem as the initial scope of their budget may have only allowed for a set program with a designated training period, but it only winds up costing more over the years as even the simplest transactions become a hassle or take several minutes when it should only take several seconds. It may surprise CEOs to know just how many people can't order spare parts or create a work order based on their current suite of products. There may be a fraction of people in a company who really use the more complex SAP interfaces on a daily basis: pulling reports, analyzing the dashboards and integrating departments into the full program of enterprise solutions. However, there is still an entire user base of workers at every level who still need to understand the basic features in order to do their jobs well.

At one point, companies might have purchased GUI XT which was produced by a company called Synactive, but it was difficult to convince management that they needed to first purchase SAP and then subsequently purchase a new product just so people could use it. It should be noted that GUI XT did work for the people who bought it, even if the concept was hard to swallow. Now there are more options available like UI5 that can allow even more customization, but the potential combinations of this solution are practically endless.

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In order for a consulting company to give valuable advice for how to best use SAP, they need to have the experience with a variety of companies. For example, Pepsi and Coca-Cola may both produce carbonated beverages on a large scale, but their processes will be different at every step of the way. Before any recommendations could be made, their partner company would need to understand each level first. Rizing has worked with companies that make everything from aluminum cans to soap, and has seen how businesses can differ and still be surprisingly the same. The patterns clearly show resources like SAP were lost on employees who couldn't make sense of the program and had no interest in trying to figure it out. High-level User Experience in SAP projects are meant to be the bridge between this chasm of IT workers designing a system that a factory employee is unable to operate. It starts with making the UI work for a company rather than against it.

Problem Definition

Companies who buy complex software are typically persuaded by the array of features that promise to show the real-time big picture of how the business is performing in order to maximize the bottom line. Asset management and decision making can be carried out faster by having full access to easy-to-understand information. Instead of having to pour over endless numbers for productivity, fast analysis can be done with one quick glance. However, SAP is a system that was made with generic goals in mind. It can't be used as-is for employees who aren't highly trained in how it works. In fact, it often can't be used in this way under any circumstances. Consider one of the largest transmission companies in Canada, who needed to schedule electrical outages, but their system wasn't able to accommodate this request. As mentioned, there are ways that a company can still work with the system, but it's understandable that this barrier would cause a search for a more customizable suite.

Trying to mold a business into the features can result in a disparity between the data and the truth which can then cause larger problems down the line. Even the super users may not fully understand if they're wasting time on a process that could be automated because they don't have anyone to ask. This can be difficult for companies to accept, especially considering the expense of implementing SAP. The features aren't necessarily readily understood by anyone, and it can take years before all of the secrets are defined. The strategy taken by a high-level User Experience is to puzzle through the various processes that are necessary for an employee at any level to understand, and then to make it easier for them to perform while still keeping the existing infrastructure.

Training is another factor that companies may severely underestimate — both in terms of time and in effectiveness. It can take literally millions of dollars' worth of man hours, and it often results in an extreme underutilization of the system. Showing someone how to do something and having them perform it are not remotely the same. Asking workers if they have questions during training is often pointless because they're still trying to grasp the most basic changes to begin with. One example of this was seen in one of the world's largest consumer goods companies that uses SAP within many departments. After several years of implementing the SAP system, the executives still see end users who struggle with performing simple functions. The IT team denies they can make changes that will help because it's not accounted for in their budget, and the management team thinks it's too late to make the changes anyway. This type of inefficiency exists in many companies that use the out-of-the-box SAP, and the disconnect costs too much to let it continue.

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Businesses also struggle with data integrity. When there is so much to keep track of, numbers can become skewed for a variety of reasons. If a worker doesn't understand how to give direction to the system or what a field name stands for, then decision makers become understandably hesitant to use the reports available. This can stem from nomenclature problems or just a lack of understanding the interface. If a worker is familiar with a physical part or task by one term and they can't find that exact term anywhere in the system, it opens up the possibility of guessing or avoiding the situation entirely. Help is often unavailable due to schedule constraints. This particular problem is also a side effect of the one-size-fits-all approach of EAM enterprise software on the market. Data problems can become especially rampant if a company has high turnover. Every worker has a different history with technology, and poor past experiences can cause people to have a mental block to even the most simplified processes.

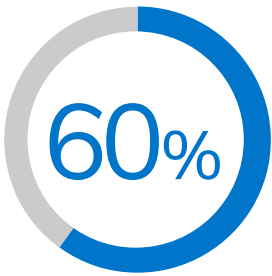
Solution Overview

The challenges that companies feel before and after implementing SAP software are understandable, and not uncommon in the slightest. SAP can do wonders for asset intensive companies in need of a complete EAM solution. Although integrating SAP with other systems can often bring even more severe variations of the training and data-input problems we've already defined. Hiring a company to perform a high-level UX assessment can mean the difference between a company making do with what they have, and receiving the maximum benefits out of their investment. Optimizing UX is a necessary expense that makes the system function effectively for workers of all kinds. It makes training nearly non-existent, and doesn't overwhelm workers with new jargon or X number of steps needed to input a simple work order. Technology impresses and frustrates everyone due to its frequent improvements and updates. It also means changing the upgrade process so the upgrades are present without having to relearn a new process every time there's a new release (which can be quite often.) The point is to have the back end changes that bring faster functionality and better security added to the system, not the front end changes which will change an interface and confuse employees. Just like when popular apps change on smartphones, it can have the unintended effect of actually destroying the app's popularity over time while the developers truly think that they are making a better end product.

Specific Methods and Time Plans

Rizing has found success by using SAP UI tools like NetWeaver, UI5, Personas, Fiori and Work Manager to customize and connect as many departments as needed in large organizations. We create our own templates to provide to companies that work as project accelerators. For a company that has little to no experience with these tools, creating a UI5 page from scratch even for something as simple as a work order may take several weeks. However, our templates can be seamlessly adopted by companies to show the simplicity and the difference it makes to have more intuitive processes for their users. Rizing looks at how the process works in each type of technology used, and we show our clients how to make every interface look exactly the same, so the user is instantly and instinctively triggered to know what to do and how to do it. Consider the example of any ATM. Every time a person approaches the machine, even when a Chase ATM is different from a Bank of America ATM, the user knows exactly how to get cash without needing additional instructions. Creating notifications and work orders should be just as simple. During the implementation stage, Rizing can also brand these templates specifically for the company, using programs like Web Dynpro so the system's look and feel stays consistent.

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Rizing usually devotes 60 percent of the time to the User Experience System Assessment and 40 percent to actual implementation project. Typically, the process works by spending 75 percent of the week shadowing workers and seeing how they interact with the technology (without interference.) Essentially Rizing UX Assessment starts immediately and goes straight to the heart of where a company is at that second. Then, we identify the major problems that need to be resolved for specific processes, so we can start drawing up the custom UX solutions. Any company that considers using SAP is already operating on such a large scale, that this type of systematic approach may be next to impossible within an organization. People are too emotionally invested in their jobs to provide unbiased opinions. Rizing recognizes the patterns across departments to start boiling down the problems to simple, actionable steps.

Companies will receive end-to-end flow charts where they can get a sense of how the plan will work in the real world. Services also include giving the company several ways to see the process, including recommendations, presentations and strategy documentation. Specific goals include turning a process that might have taken 5 minutes before into a task that requires only 30 seconds. A worker should be able to press one button to deliver accurate data, which can then be generated into a report that shows the trends of production. When a company multiplies the amount of time saved across workers, the savings and cost benefits are again confirmed when using our plans.

Cutting down on training from eight hours to one is obviously one major perk of using Rizing, however that's not the ultimate goal of a high level project. Recall the ATM example — our end target is to eliminate the need for training completely (or as close to it as possible). It cannot be stressed enough that the cost of the full project is marginal compared to how much time, energy and money it saves for everyone involved.

Rizing has had tremendous success using UI5 specifically to make all of this happen. The program can take current interfaces and lay another interface over it to achieve the consistent look an employee needs to develop a thought map for their jobs. This new version lets a worker at any level begin work immediately. It also means a company can start seeing just how much more they're capable of doing. For example, one of the world's largest transportation companies that operates a network in the US, spreading through 23 states, had a maintenance project where the terms were dictated by federal regulators. The company had three choices for completion, and were understandably a little confused about the best solution to pick. They could either create a system of their own or use one of the two commercial tools out there. Both of these tools were missing about 20 percent of the total capabilities the company would have needed to finish what they needed to do and still comply with their restrictions. Using UI5, they were able to build their own solution with the existing technology so they were able to get the total functionality of SAP. The solution was specifically created for this customer's unique business needs, and companies of every type can take advantage of these tailor-made services.

Summary

Company employees are rightfully confused by how SAP's interface works on such a large scale, but that doesn't have to be the end of their relationship with the system. By choosing Rizing and conducting a UX System Assessment, companies can enjoy the full benefits of the SAP software they have paid for without alienating workers or spending additional funds on ineffective training. By working through each part of your business, Rizing can uncover the right UX solution path for your processes, which will ultimately result in higher acceptance levels from employees and increased productivity in every department across your organization.