In the times of Amazon one-click buy, Facebook's easy timeline navigation, WhatsApp's easy chat/call, the focus of user experience is paramount in companies. As people use these applications there is a general expectation from them to have their internal IT systems to match up those capabilities and performance. Providing an enhanced user experience of IT applications to internal and external users is a top priority for CIO's and IT directors.

Let us review two options by which Accrete Solutions helped two different clients achieve CRM UI optimization for improved user experience and increased productivity. Incidentally, both clients had the same objective in terms of UI but had very different project scope/budget.

- Option 1: Use the standard SAP CRM Web UI and optimize it through custom development

- Option 2: Use SAP Fiori Apps to develop custom CRM applications

Part 1 of this blog will cover the UI optimization with Standard SAP CRM web UI (Option 1)

The below example is from a client which was using SAP CRM standard UI for in-house repair order processing. They wanted to improve the UI features to make it intuitive for internal users and to improve their productivity. No matter what options you choose, there are best practices in terms of UX design and testing. You can pick and choose the best practices that apply to you. We followed the following steps:

Benchmarking

Before we start the new UI design, we benchmark the As-Is process to effectively assess the improvements. The tangible benefits of UI optimization can be calibrated better, when the existing user experience is documented and tracked. You can use the number of minutes taken to complete an order, number of clicks taken to run for a single action etc. These metrics are easy to calibrate than user experience KPI's such as customer satisfaction scorecard, ease of use etc. We used the number of clicks in the as-is process which came about to 37 clicks to complete a repair order from start to end.

User flows (aka user stories)

As a start, we developed user flows for different repair order processing scenarios. These include the input fields they key in, details they want to see, follow up activities they do, etc. The standard SAP CRM uses the page layout with header and item view in two screens. So, the user has to first enter all the header details, then move on to line item view to enter item details. Once the repair order is created, the repair steps need to be added and released. The user then creates a confirmation for recording time and spare parts used etc., as a follow-up and moves to another screen - enters the actual duration, root cause categories, parts etc. and completes the confirmation document. Once the confirmation is completed, user adds the outbound delivery line for shipping repaired product and billing line (if billable) for the repair order in CRM. The rest of the logistics and billing process takes place in SAP ECC. All these user flow steps came up to be around 37 clicks for the standard repair process flow. User flows development helped us analyse the critical user input fields, fields that are unimportant, areas we can automate etc.

Design and Prototyping

The standard UI from SAP CRM offers two basic design patterns for the main order details screen. These are page layout, which consists of one single column, and the tile layout. We used tile layout as it provided an option to limit the order view to one page for both header and item details. Once the design pattern is finalized, we developed wireframes to add the input fields, details needed, follow up activities based on the user flow

previously developed. Listed below are some of the things that were done during wireframe development.

- We used 80/20 rule to prioritize the fields needed for the repair process. This way we eliminated most of the unused data and flows which were previously slowing the UI flow.

- Used a single page to view both header and item details for the repair order. Brought some of the critical fields of the item details to the header view. This eliminated the need to go to item details

- Used button based action enhancement to automate steps like adding repair steps using a template, adding an outbound line after confirmation.

- Also, we captured the details required (time and category) for the confirmation document in this screen and automated confirmation creation process. This completely eliminated the need to go to the confirmation screen.

- Used tabs to sequentially map the user flow ex. Notes to read the cause - > operations to add repair steps -> spares to add parts-> Admin to view the main lines -> analysis to add categorization for confirmation-> Transaction history to view confirmations were created.

Original repair order screen

Repair order screen after enhancement

Testing and Iterations

No matter how much you brainstorm design ideas in prototype, the actual optimization happens in testing and iterations. Following agile development methodology helped us, as we ran through the prototype with business for constant feedback. As we went through each iteration, the design got better with business user feedback on what they liked and what they wanted to improve. This immensely helped the project team to meet the customer expectation

Result:

The redesigned repair order screen flow through CRM web UI screen modification helped business users to view the most critical piece of information needed for their work. It made the screen flow intuitive and helped the client reduce the number of clicks from 37 to 19 to complete a repair order process, which was a substantial improvement over the existing process. These improvements enabled client's repair technicians to improve their productivity and focus more on revenue-generating activities.

In part 2 of this blog we will see how we can achieve the UI optimization through Fiori Apps.