

Original Article

Applying User Experience in an Enterprise CRM: Considerations and Process to Balance UX Innovation with an Iterative Delivery Mindset

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Abstract - Customer Relationship Management (CRM) is vital for businesses of all sizes. Building a successful CRM solution involves getting numerous complex and interdependent functions right, UI/UX being amongst the most crucial. An effective UI/UX can significantly enhance the overall CRM experience, thereby increasing the chances of success of the solution. This manuscript will go over the importance of UI/UX and outline best practices for achieving optimal results. Businesses can improve customer satisfaction and engagement by focusing on a user-friendly design, ultimately driving better outcomes.

Keywords - CRM, Web applications, User experience, User interface, Agile.

1. Introduction

CRM remains a critical part of most businesses. CRM oversees customer interactions and significantly influences how the company does business and, often, its reputation. CRM is especially crucial in customer service, marketing, and tech support. Salesforce, a primary provider of CRM technology, maintains that an effective CRM implementation can positively impact a business's bottom line by driving up to 30% sales revenue growth, 32% customer retention, higher digital conversions with up to 28% additional online revenue as well as up to 20% of decreased IT costs. Many companies fail to stay current with the changing expectations of their customers. Social media platforms like Twitter and Facebook have transformed customer-company interactions. Customers no longer rely solely on customer service websites or phone calls and often use social media handles to raise concerns and issues. With these being raised more publicly, businesses need to respond promptly or risk being perceived as negligent to their customers' needs. CRM users often need access to vast amounts of data as is, often in real-time. Poorly designed interfaces can result in confusion and inefficiencies and cause mistakes, ultimately negatively impacting end customer satisfaction. It is imperative to design the CRMs to be simple and intuitive while displaying enough actionable information to allow the CRM user to assist the customer. Supporting large sets of information across various functions and multiple integrations across the web, chat, voice calls, etc., can leave a modern CRM platform complex and overwhelming. Addressing these issues requires deeply understanding the needs of the business, CRM users, and end-users. A well-

designed CRM will allow users to perform tasks quickly and accurately. This is where user experience is important, as an effective UX design can turn a complex CRM system into a simple yet engaging user experience. User experience is a multi-disciplinary field focused on obtaining a deep understanding of users to design intuitive experiences that are usable, valuable, and desired.

As such, UX is bigger than just the user interface. UX is one of the key components of the overall strategy and vision driving the product. UI and UX are often interchangeably mentioned and confused. UI refers to the screens, buttons, toggles, icons, and other visual elements you interact with when using a website, app, or electronic device. UX refers to one's entire interaction with a product, including how one feels about the interaction. For a product to succeed, it must have both UI and UX excellently delivered electronic device. UX refers to one's entire interaction with a product, including how one feels about the interaction. For a product to succeed, it must have both UI and UX excellently delivered. While well-detailed documentation is available on UI/UX applications to standard web experiences, no manuscript focuses on considerations when applying these principles to an enterprise CRM. The manuscript will cover key aspects of UI/UX that must be solved to drive an effective CRM (refer to Figure 1) strategy, including intuitive navigation, responsive design, and accessibility. Understanding and implementing these best practices can help businesses create a more efficient and user-centric CRM solution, improving customer relationships and business growth.



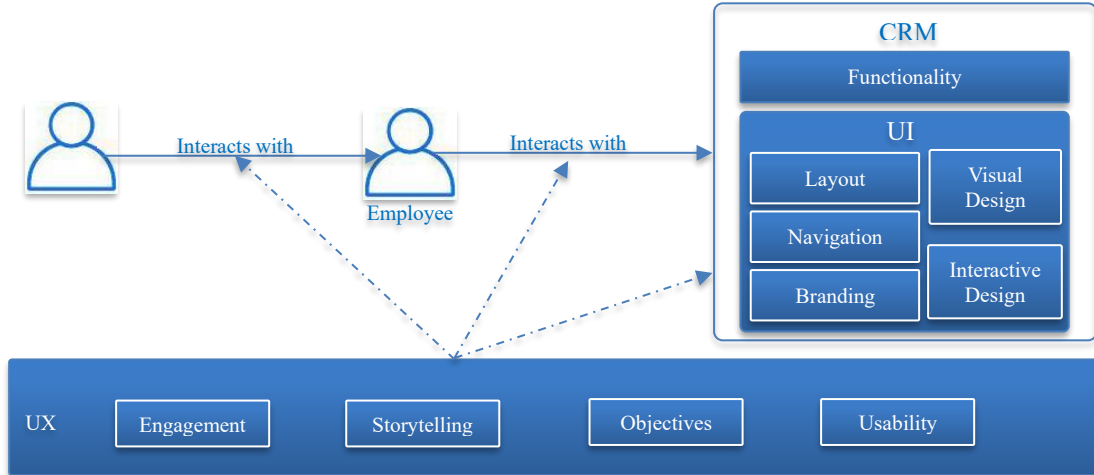


Fig. 1 UI v/s UX in a CRM

2. Why does UI/UX in CRM Matter?

As discussed in the introduction, UI focuses on the aesthetics and presentation of the flow, while UX emphasizes functionality, intuitiveness, user satisfaction, and overall experience. Both UI and UX are crucial for a modern, data-heavy CRM solution. A well-designed UI/UX can streamline complex tasks, directly impacting key CRM KPIs such as Contact Resolution Time (CRT) and First Contact Resolutions (FCR). In a world where time is of the essence and user satisfaction drives sales and retention, this can have significant financial implications.

Modern CRMs are becoming increasingly data heavy. Adding more functions and data without a comprehensive and uniform data presentation strategy often leads to cluttered interfaces, making even simple tasks seem complicated. To address such issues, teams need to understand not only the functionality offered by the CRM but also the users of the CRM and the journeys of the end customers they interact with. UX Designers can then use these insights and approach the task with thoughtful designs and innovations to deliver meaningful visuals that clearly display the necessary data with actionable choices. Such experiences not only speed up task completion but also encourage user adoption. Certain Benefits that are achieved by investing in a CRM UI/UX are listed below

- Improves Efficiency and Productivity by streamlines task completion, enabling users to concentrate on their primary duties.
- Improved Employee Satisfaction which leads to higher adoption rates, as employees are more inclined to use a platform that simplifies their tasks.
- Seamless and intuitive user experience guarantees that everyone, regardless of their technical skills, can efficiently use the CRM. This uniform user experience has been proven crucial in sustaining productivity and ensuring precise data and process management.
- Lowers overall support and training costs as an intuitive

CRM strategy reduces the need for training and minimizes help requests. When users can easily navigate and use the CRM intuitively, they require less assistance, leading to a decrease in overall organizational spends.

3. Understanding the User Experience Approach

This section will review user experience and some core concepts before discussing how these can be applied during the application development lifecycle. User Experience (UX) is a user's overall experience when interacting with a company, product, or service. It is a broad term that encompasses how a user feels, what they think, and how they interact with something. The goal of UX is to create a positive experience for the user by making it easy, efficient, and relevant. UX designers work to understand the user's needs, abilities, and limitations and to create products that are intuitive and natural for them to use. UX design is a multi-disciplinary field. Some key aspects that makeup user experience include Information architecture, User research, Content strategy, Visual design, Typography and layout, Functionality and Interaction design. The following sub-sections will dive deeper into some of these topics.

4. What is UX Design and Considerations

User Experience (UX) design is the process design teams use to create products that provide meaningful and relevant experiences to users. UX design involves the design of the entire process of acquiring and integrating the product, including aspects of branding, design, usability and function. Some key aspects to consider for UX design

- UX design should leverage data and analytics as primary drivers, evaluating and enhancing design performance with the same precision and rigor applied to revenue and cost metrics.
- This is not a one-time delivery but an ongoing, iterative process. There are always opportunities to optimize based on the evolving needs of the product, market, end-

customers, employees, and their feedback.

- It integrates every aspect of the user experience, combining physical, digital, and service design to ensure smooth and cohesive interactions.

Some key constituents of user design are listed below:

- **Design thinking:** This is often achieved by organizing design sessions with various stakeholders and users of the application and by Divergent and convergent brainstorming
- **Investigating customer interactions:** What are the distractions, how to draw attention to the most important elements, creation of efficient flows in terms of solutions and time, Solving for Screen load time and perception,
- **Consistency:** Creating expectations for behavior, Reducing rogue process
- **Accessibility:** This comprises Solving and optimizing Information hierarchy, Color-blindness and contrast, Screen readers and tab order within and between elements, Touch targets and range of motion, as well as enabling additional interaction means like Keyboard short cuts
- **Aesthetics:** Utilizing a standardized design system, appropriate designs based on devices, user agents, and breakpoints must be supported.

4.1. What is UX Research

UX research is studying how users interact with a product or service to understand their needs, behaviors, and pain points, gathering insights that can be used to improve the design and functionality of that product or service, ultimately creating a better user experience.

This is achieved by

- Understand the users, their needs and behaviors.
- Generating requirements and recommendations from actual user insights to inform product roadmap and strategy
- Understand software and deliver data-driven recommendations
- Measure the quality of the user experience when users interact with a product, service, or system
- Help reduce costs by increasing efficiency and decreasing impacts on productivity and business KPI(s)
- Measure the value of the products, services, or systems delivered and use it to guide future work.

Measuring delivered value by identifying goals and KPI(s) you aim to solve and measuring them after each iteration is recommended.

This helps understand the business value delivered and captures the ROI of user experience decisions. A good framework is HEART (Happiness, Engagement, Adoption, Retention, Task success).

4.2. What is Design Thinking?

Design thinking is a non-linear, iterative process that teams use to understand users, challenge assumptions, redefine problems and create innovative solutions to prototype and test. Refer to Figure 2 to review the various design thinking phases.

- **Empathize:** Research your users' needs.
- **Define:** State your users' needs and problems.
- **Ideate:** Challenge assumptions and create ideas.
- **Prototype:** Start to create solutions.
- **Test:** Try your solutions out.

The first two iterations focus on gaining an empathic understanding of the problem that needs to be solved. The next two iterations explore solutions using the empathy data, focusing on patterns and problems. The last phase focuses on materializing the design ideas generated and then using the learnings as feedback to feed into the next cycles of this process.

4.3. Advantages of Applying UX Design in a CRM

In a CRM, UX design focuses on the usability of functionality, ease of navigation to get to it, and the overall experience when servicing a customer's need while using that function. The advantages of focusing on UX design in a CRM include

- **Productivity:** A CRM tool focused on UX will enhance productivity by simplifying usage and minimizing complex experiences that can lead to errors.
- **Higher adoption rates amongst employees:** While it is always possible to train employees to use a CRM, a CRM with ease of use and navigation is far more likely to encourage adoption than a complex one.
- **Higher sales and conversion rates:** A CRM with a more intuitive experience and usable data points will result in higher conversions as it allows employees to focus on the conversation.
- **Higher retention:** Customer retention is a tricky topic for most businesses. A repeat and loyal customer is more financially beneficial for the company than trying to convert and acquire a new prospect, which also comes at a significant cost. A customer who wants to cancel their service needs convincing to stay. A modern CRM will offer employee data points like sentiment analysis, solutions to the customer's issues and recent events from the customer accounts or journey. A well-designed CRM interface will allow the employee to absorb all this data while simultaneously making a case for the customer to stay.
- **Reduced operational costs:** This combines higher productivity, reduced training time, etc. A better-designed CRM is more than likely to have significant positive impacts on a company's costs.

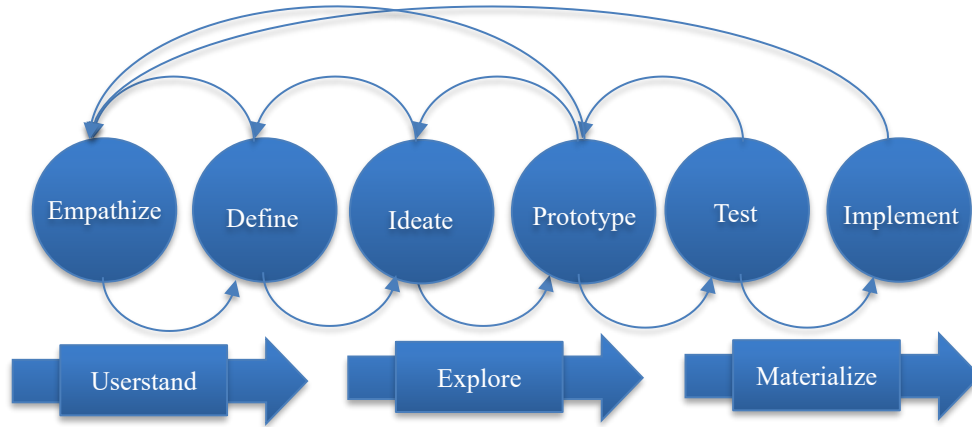


Fig. 2 Design thinking approach

5. Process for Iterative UX in an Enterprise CRM

5.1. Areas of Focus

Before applying UX Design in a CRM, let us first analyze recommended areas to focus on. This is a generalized list based on the exact needs of the business or customers, and different organizations may also identify other focus areas.

- Simplifying access and navigation: Getting to the required functionality or data should be intuitive and efficient. This is often a numbers and analytics game, as higher used functions should be placed ahead of less frequented capabilities in the navigation.
- Data organization and presentment: A well designed and uniform data presentation strategy simplifies UX, reduces training costs, boosts productivity and can also drive positive influence on business KPI(s)
- Simplified workflows: Understanding and simplifying user workflows by reducing confusing touchpoints, reducing clicks, and automating repetitive sub-steps can go a long way toward increasing overall efficiency.
- Uniform error messaging: Clear prompts and messaging can help employees be more efficient with their messaging and help them concentrate on the conversation instead of tinkering with the CRM application.
- User Feedback: Creating a process to listen to and learn from user feedback is important, as people who use the application in the field often provide the best first-person insights. This also drives better engagement with employees who feel their voices are heard.
- Responsive design: This allows employees to use the application as they see fit. This is especially important for web apps accessed on multiple devices, user agents, or breakpoints.
- Flexible personalization options: Understanding where employees might want to tailor CRM based on personal choices can drive adoption. For example, allowing employees to choose between dark and light modes is a

more requested function in modern CRMs and enterprise applications.

- Integration with other apps and Third-party tools: Seamless handoffs where they cannot be avoided can help prevent jarring experiences. Modern CRMs integrate with various third-party tools, and having a uniform strategy for such integrations helps with productivity and efficiency.
- Accessibility: Accessibility in UX design is creating digital products and services usable by people of all abilities, backgrounds, and circumstances. The goal is to ensure that everyone has the same level of access to information and services and that the user experience is seamless and enjoyable.

5.2. Applying the Principles to an Enterprise CRM

So, what does an iterative UX process look like for a CRM application. Let us review the various phases recommended for a CRM's UX design process. The process laid out here can be applied to most enterprise applications, not just CRMs. It is critical to have a clear RACI (Acronym for Responsible, Accountable, Consulted, and Informed, a tool used in project management to assign roles and responsibilities) for each phase and have clear input, output and measurable KPI(s). Figure 3 reveals what a design thinking process should look like for a CRM. How the various phases align with the traditional design thinking approach is detailed below.

- User Research: This is studying and understanding users' needs, behaviors, and motivations by observing how they interact with a product or service and gathering feedback through interviews, surveys, and other methods to inform design decisions and improve the overall user experience. In a CRM, this is the phase when the team understands the business goals and performs user research to get feedback. Additional feedback may be available from earlier strategy iterations, prior designs and prototypes, and analysis of pilot/beta groups.

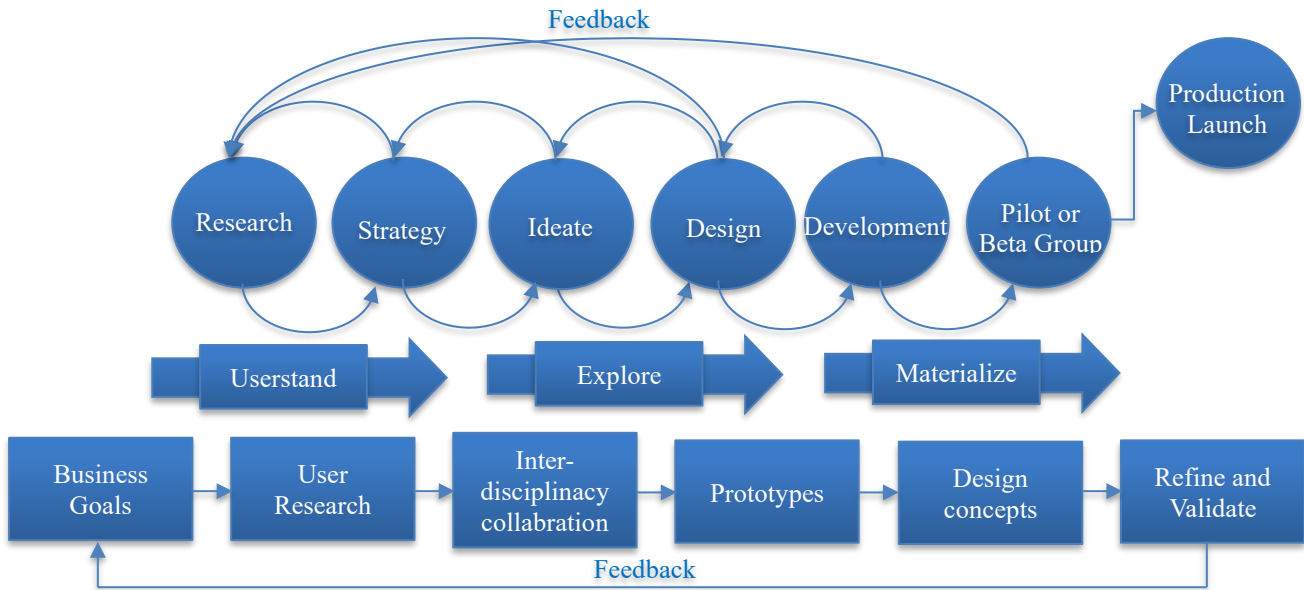


Fig. 3 Applying design thinking to a CRM

- Strategy: User Research drives strategy, which is the plan of action designed to reach an improved future state of the organization’s user experience over an established period. This generally starts with creating a vision, breaking it into iterative goals to measure progress, and developing an iterative plan.
- Ideation: This step generally involves the creation of personas, scenarios and journeys that align with the strategy and plan. This may utilize the creation of personas and scenarios. This is the phase where the UX research team should collaborate with stakeholders, application user groups, and technology and business teams to start brainstorming solutions.
- UX Design: As discussed earlier, this creates products that are easy to use and enjoyable for users. This step is where workflows are defined, wireframes are created, and high-fidelity prototypes are made available to the teams. In the development cycle, this is where understanding what a prototype iteration would look like is finalized and socialized to the various stakeholders.
- Development: This step is where developers build, test, and refine the app or a prototype in cycles to improve it, incorporating the UX design into functionality. During this step, UX designers work closely with the product owners and development team.
- Beta Test: This is the stage in the software development process where a product is released to a select group of users for testing and feedback before its official launch. This step could be a pilot group or an actual production launch in some applications. The feedback from this phase is provided back to the research step. Often, the goal of this step is to generate early learning by providing a means to run experiments with a small control group. Feedback from this step is feedback to prior stages.

6. Challenges when applying UX Principles to a CRM

Implementing UX principles in an enterprise CRM often encounters several recurring challenges. Below are some of the common issues faced

- Unreliable user research: This issue might arise from a failure to identify and select a user group that truly represents the CRM’s users. This misstep often leads to incorrect or unreliable assumptions early on, causing inaccuracies in the UX process.
- Timeline pressures: Integrating UX Research into product development can extend the timeline. However, pre-committed deadlines often pressure teams to start building immediately without giving UX the necessary time to analyze data and formulate a strategy.
- Non-collaborative Teams: As mentioned, a UX research methodology depends on multi-disciplinary collaboration from the application’s various stakeholders. This may require representation not just of the business and product teams and users of the application but also often depends on the development as well as teams that execute product and business operations. Some enterprises may be unable to build a collaborative cross-organization team due to priority challenges across the various teams. The lack of co-located teams also hampers this step. However, various advancements in work-from-home tools have significantly mitigated this issue.
- Inability to adjust to the UX process: The Design thinking process is purposely non-linear to promote flexibility and can involve multiple parallel concepts being assessed or validated side by side. This does not come naturally to most development organizations using traditional SDL approaches. This often starts at the top, with a leadership understanding and buy-in major factors in generating

alignment.

- UX and iterations: This is the flip side of the UX equation, where organizations blockade all development until a UX Prototype has complete alignment. This can also happen when UX teams feel pressured to create the best prototype before moving to the next stage. This can hinder overall delivery in two ways.
 - It causes delays in the overall development process by postponing the start of development. Development teams face constraints such as fixed capacity and certain development concerns, like the underlying platform, which must be addressed sequentially and cannot be parallelized. This can be mitigated by clearly identifying aspects of the product that need not wait on UX.
 - Some aspects of UX are often better validated through development prototypes and beta tests rather than endless design iterations. This is often due to fear of prototype failures at later stages. UX leadership can address this by encouraging teams to utilize the entire process rather than getting stuck in earlier stages in pursuit of perfection.
- Getting stuck with a Bad idea or Assumption: Like development teams, UX teams can often become emotionally invested in their designs and deliverables, making it challenging to let go. Rather than refining an idea that is not producing the desired outcomes, it is better to reevaluate options at an earlier stage. Effective UX and development leadership is crucial to ensure that UX teams move forward efficiently. Perfectionism and emotional attachment can obstruct the design-thinking process and hinder agility. If a solution is not working, it is more beneficial to go back to research and create one that truly meets user needs.

7. Future Trends in UX and CRM

Modern advancements in cloud and AI/ML have significantly changed almost all areas of software development and SDLC. Below are some important trends to watch out for in UX

- The integration of AI and Machine Learning with CRMs is here to stay. There are various use-cases, ranging from recommender systems, where the CRM can anticipate the next steps or provide recommendations, to innovations that make CRM more user-friendly and productive, enhancing their intuitiveness and efficiency. UX needs to ensure these fit into the overall ecosystem intuitively without causing significant cognitive overload for the employees.
- There is a growing emphasis on data visualization to

enhance decision-making. This is achieved by transforming complex data into clear visual formats, enabling users to quickly understand key information, boost customer insights, and make well-informed decisions. These approaches also help when a CRM must be accessible on various devices, catering to the needs of a constantly mobile workforce. UX needs to find ways to blend these cohesively into the system.

- Modern multi-variate testing and data analysis capabilities, combined with advancements in machine learning, can significantly accelerate the prototype and analysis stages. Recent advancements have also begun integrating AI into UX and UI tools and processes. Some emerging areas to consider
 - AI can be used to understand user behavior and needs better.
 - AI can be used to process user-research data.
 - Various tools are now incorporating AI into the design phase, which helps automate and optimize the creation of designs.

8. Conclusion

User experience is often seen as complex and challenging for most businesses due to its non-linear nature, which does not align with traditional SDLC. Additionally, setting up UX properly can be difficult in terms of defining organizational goals, identifying the right stakeholder teams, and establishing a collaborative environment. Goals can range from focusing on user-centred design, usability, and UI to encompassing other human-software or hardware interactions, including ergonomics and accessibility. Consequently, many organizations are unsure where to begin when applying these principles to complex applications like CRMs.

However, the user experience of CRMs is more critical than ever due to the evolving nature of products, audiences, and AI capabilities. User experience impacts not only the employees using the CRM but also the end customers' needs, expectations, and overall journey. Organizations incorporating automation into CRM capabilities must still address the user experience needs of their end users. Doing this effectively can yield significant benefits, including increased user satisfaction, reduced costs, and improved product or brand perception and performance.

This paper discusses real-life considerations when applying the UX process to large and complex enterprise CRMs. Key takeaways include ensuring leadership buy-in and maintaining a flexible process that does not hinder the team's agility or creativity. Leadership buy-in and understanding are crucial for creating a collaborative environment among the various cross-organizational teams needed to research and address CRM UX.

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