

Salesforce App Strategy: When to Choose Third-Party Solutions and When to Build Custom

Kalpana Puli

kalpanapuli@gmail.com
Independent Researcher, Texas, USA

Abstract

Salesforce is a very versatile CRM platform that provides businesses with an extensive range of tools for streamlining operations, improving customer engagement, and scaling growth. As organizations adopt Salesforce, they reach a critical juncture: Should they rely on third-party solutions available through Salesforce AppExchange, or should they invest in building custom applications tailored to their unique business needs? This paper examines the advantages and disadvantages, along with decision-making frameworks for making a third-party solution or custom application choice. We are providing case studies, frameworks, and technical illustrations for making strategic, well-informed decisions for enterprises about how best to operate their software.

Keywords: Salesforce Strategy, Third-Party Solutions, Custom Development, AppExchange, Business Optimization, Integration Challenges, Scalability, Cost Management, API Utilization

Introduction

Salesforce is a dynamic CRM platform with a plethora of capabilities designed to enhance operations and customer engagement. However, organizations face a significant dilemma: whether to adopt ready-made third-party solutions from AppExchange or invest in building custom applications tailored to their specific needs. This decision is critical, as it can profoundly impact operational efficiency, scalability, and overall business success.

Choosing between third-party solutions and custom development involves various factors, including speed, cost, and organizational goals. In this paper, we will dissect these choices, focusing on scalability, implementation time, and operational impact. We will also provide insights into successful case studies that highlight the implications of each approach.

When to Choose Third-Party Solutions:

Speed and Efficiency

When time constraints demand quick solutions, third-party options can significantly reduce development time. Additionally, if internal expertise is insufficient, leveraging third-party solutions can effectively bridge the knowledge gap, ensuring that the project stays on track without compromising quality.

Cost Considerations

Development costs are often more manageable with third-party solutions, as they eliminate the need for building systems from scratch, leading to lower upfront expenses. Furthermore, maintenance and upgrades are usually handled by the vendors, minimizing ongoing costs and freeing up internal resources for other priorities.

Reliability and Support

Third-party solutions offer proven reliability, as they are often tested across diverse scenarios and backed by a track record of success. Additionally, vendors provide customer support services, ensuring timely assistance to resolve any issues that may arise during implementation or usage.

Focus on Core Business

Resource allocation becomes more efficient with third-party solutions, as they enable teams to focus on core business activities without the need to divert valuable resources toward developing and maintaining custom systems.

When to Build Custom Solutions

Building custom solutions entails developing software tailored to an organization's specific needs, offering unique benefits:

Specific Needs and Customization

Third-party solutions offer substantial benefits in terms of speed and efficiency, particularly when it comes to implementation. One of the most notable advantages is the significant reduction in time-to-market, with studies showing a reduction of 40-60% compared to custom development [8]. This accelerated timeline is primarily due to the fact that third-party solutions are pre-built and require less time for design and development. Organizations can focus on deploying the solution rather than spending extensive time on the foundational work required for custom-built software.

In addition to time savings, third-party solutions often come with pre-built integrations with common enterprise systems, such as customer relationship management (CRM) tools, enterprise resource planning (ERP) systems, and financial software. These integrations streamline data flows and reduce the need for costly and time-consuming custom development. By leveraging these integrations, organizations can avoid the complexities of building and testing integration points, further accelerating the implementation process and reducing the overall risk of deployment issues.

Moreover, third-party solutions are often based on established best practices and proven workflows, which not only speed up implementation but also help ensure that the solution is reliable and effective. These solutions are typically developed and refined over time based on feedback from a broad range of users, allowing organizations to benefit from the collective experience of other companies. As a result, organizations can implement robust, well-tested systems that are aligned with industry standards and reduce the likelihood of issues during deployment and operation.

Integration and Control

Focusing on core business competencies is a key strategy for organizations looking to maximize efficiency and productivity. By reducing internal development overhead, organizations can free up valuable resources that would otherwise be spent on building and maintaining complex internal systems. Developing software and infrastructure from scratch requires substantial investment in time, talent, and money. By adopting third-party solutions, companies can bypass the complexities of custom development and instead direct their resources toward areas that directly contribute to their competitive advantage and strategic goals.

Leveraging vendor expertise is another critical factor in maintaining focus on core business operations. Third-party vendors bring specialized knowledge and experience that many organizations may not possess internally. These vendors often have deep expertise in the specific solutions they provide, ensuring that the

software is not only functional but optimized for best performance. By partnering with these vendors, organizations gain access to the latest innovations, industry insights, and support, which can be leveraged to improve operational efficiency without having to invest heavily in internal expertise.

Minimizing technical debt is also crucial for organizations seeking to focus on their core competencies. Over time, custom-developed systems often accumulate technical debt—code, infrastructure, and solutions that are suboptimal or outdated. Managing this technical debt can divert attention and resources away from critical business functions. By relying on proven third-party solutions, organizations can reduce the risks associated with technical debt, as these solutions are regularly updated, well-documented, and maintained by the vendor. This ensures that the technology remains reliable and scalable without placing additional burdens on internal teams.

Adopting third-party solutions can help accelerate digital transformation initiatives, allowing organizations to quickly adapt to changing market conditions and customer expectations. The rapid deployment of modern, integrated solutions enables businesses to stay competitive by adopting new technologies and processes without lengthy development cycles. As digital transformation becomes increasingly important in a fast-paced business environment, being able to leverage external expertise and proven technologies enables companies to stay ahead of the curve, implement new capabilities swiftly, and maintain focus on what truly drives their success—delivering value to customers and stakeholders.

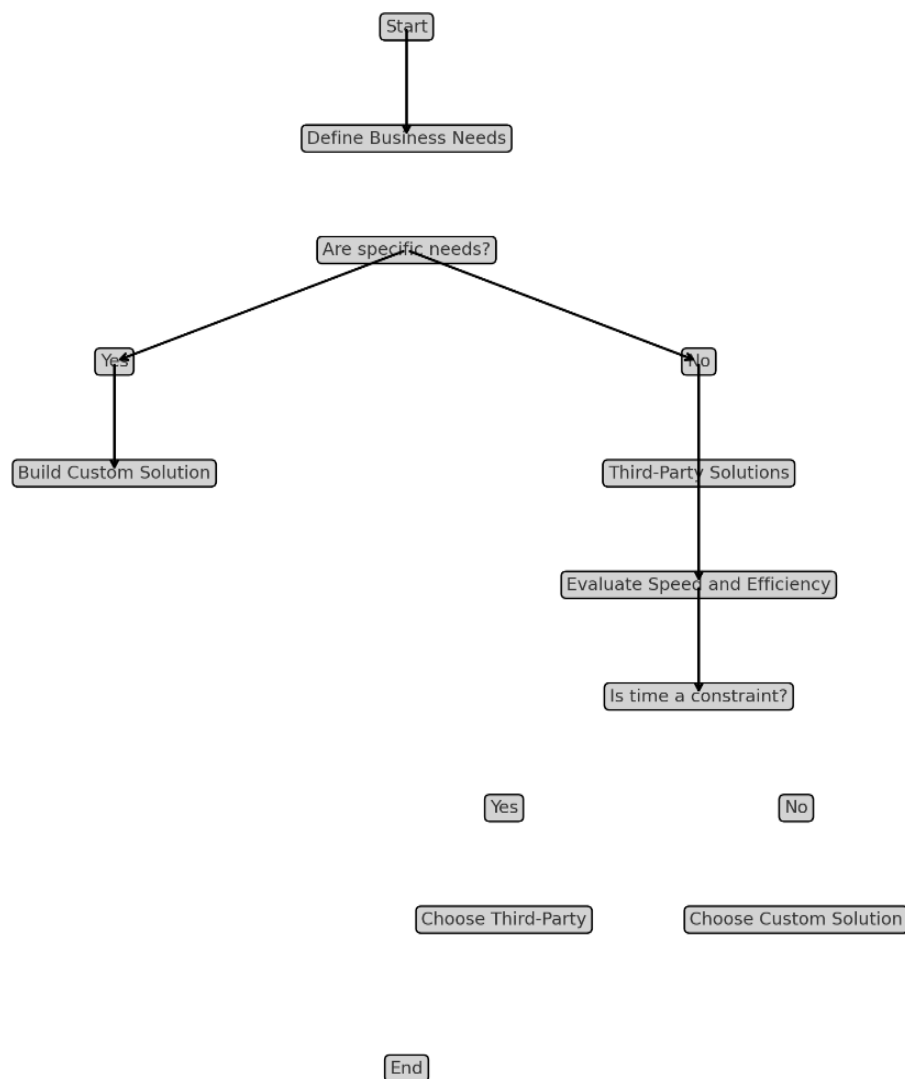
Long-Term Vision and Scalability

Custom solutions can be strategically aligned with an organization's long-term business goals and objectives, ensuring that the software supports overall growth. Additionally, scalability is a key feature of custom software, as it can be developed to evolve and expand in line with the organization's changing needs and growth trajectory.

Competitive Advantage

Developing proprietary software offers unique solutions that can provide a competitive edge, setting the organization apart from its competitors. By creating tailored features and functionalities, businesses can differentiate themselves in the market and better meet the specific needs of their customers.

Flowchart for Choosing Between Third-Party and Custom Solutions

**Fig I: Third party [1]****Risk Analysis Framework****Third-Party Solution Risks****Vendor Dependencies**

Vendor dependencies present significant challenges for organizations in ensuring long-term system sustainability. The stability and longevity of a vendor are critical factors, as relying on an unstable or short-lived vendor can lead to disruptions in service, increased costs, and potential loss of critical support. It is essential to assess a vendor's track record, financial health, and commitment to innovation to minimize risks associated with dependency on a single supplier.

Moreover, update and support commitments are integral in the vendor selection process. Vendors must provide clear guarantees regarding software updates, security patches, and ongoing technical support. A lack of long-term commitment to these services can result in outdated systems, increased vulnerability to cyber threats, and difficulties in adapting to changing technological requirements. Thus, organizations should prioritize vendors that offer robust support packages and frequent updates, ensuring that systems remain operational and secure.

Integration Limitations

Integration limitations are often driven by various factors that hinder the seamless connection of systems. One of the most common challenges is API restrictions, which can limit the ability to interact with other software or platforms. Vendors may offer limited or proprietary APIs that do not provide sufficient functionality or flexibility, making it difficult to connect third-party applications, automate processes, or exchange data. These restrictions can slow down integration efforts, increase costs, and result in less efficient operations.

Custom workflow constraints also present significant integration hurdles, especially when organizations have unique or highly specialized processes. Many off-the-shelf solutions are designed with standard workflows, which may not align with a company's specific needs. This mismatch can lead to challenges in adapting new systems into existing processes, requiring custom development or workarounds that are both time-consuming and costly. Additionally, these customizations may create long-term maintenance burdens, as future updates or changes may not be compatible with the tailored workflows.

Cost Escalation

Cost escalation is a significant concern when implementing new technologies, as organizations may face unforeseen expenses that impact on their budgets. One primary contributor to cost escalation is user license scaling. As an organization grows or as more users require access to the system, the cost of acquiring additional licenses can increase substantially. Some vendors use tiered pricing models that can rapidly raise costs as the number of users increases, potentially outpacing the organization's budget or expectations. Therefore, careful planning of user scaling is essential to manage long-term costs effectively.

In addition to user license costs, the need for additional features often results in higher expenses. Vendors frequently offer basic versions of their software at a lower price, but advanced features or customizations may require purchasing higher-tier licenses or add-ons. These additional feature costs can accumulate over time, especially when organizations need specific functionality for unique business processes. As the demand for these features grows, companies may find themselves paying significantly more than originally anticipated.

Custom Development Risks

Resource Requirements

Resource requirements are a key consideration when implementing and managing new technologies or systems, as they significantly impact both initial deployment and long-term success. One of the primary challenges is the need for technical expertise. Many new systems or platforms require specialized knowledge for setup, configuration, and customization. Organizations may need to hire or train staff with the necessary skills, or rely on external consultants, which can result in increased costs and potential delays. Without the right technical expertise, the risk of errors and inefficiencies during implementation rises, which could affect overall system performance.

Effective development timeline management is another critical aspect of resource planning. Developing or deploying new technologies often involves complex projects that require careful coordination of teams, resources, and schedules. Delays can occur due to unforeseen technical issues, scope changes, or resource constraints, which can lead to missed deadlines and increased costs. Clear project milestones, resource allocation, and continuous progress monitoring are

essential to ensure that timelines are met and that the project stays within budget. Without proper management, development delays can extend beyond the initial project scope, further escalating the resource demands.

Technical Debt

Technical debt refers to the long-term consequences of making short-term decisions during the development or implementation of software systems, often leading to increased maintenance costs and complications over time. One major aspect of technical debt is the code maintenance burden. As systems evolve, poorly written, outdated, or inefficient code requires frequent updates and debugging. Over time, this increases the amount of effort needed to maintain the system, as developers must continuously address issues related to the initial compromises made for quicker delivery or reduced costs. As the codebase grows, managing and modifying it becomes progressively harder, leading to longer development cycles and higher costs for troubleshooting and enhancing functionality.

Another significant aspect of technical debt is the documentation requirements, which are often neglected or underdeveloped in the rush to deliver systems quickly. Lack of comprehensive documentation can create confusion for developers, especially when systems are updated or new team members are brought in. Without clear and thorough documentation, understanding the structure, logic, and dependencies within the system becomes more difficult, slowing down development and increasing the likelihood of errors. Incomplete documentation also complicates future updates, as developers may have to spend extra time understanding the original design or functionality before making changes.

Implementation Delays

Implementation delays are common challenges in the successful delivery of software projects, often caused by a variety of factors that affect both the timeline and resource allocation. One of the primary contributors to delays is complex requirement gathering. Inadequately defined or evolving business requirements can lead to misunderstandings, scope changes, and the need for additional rounds of discussions or revisions. Misalignment between stakeholders and unclear objectives can significantly delay the project's initiation phase, as it becomes difficult to establish a clear and agreed-upon roadmap for development.

Testing and quality assurance (QA) also play a crucial role in preventing delays. Insufficient testing or unforeseen defects can derail the project, leading to the identification of issues late in the development cycle. As a result, more time and resources are spent on fixing bugs, addressing security vulnerabilities, and ensuring the system meets the expected quality standards. A lack of thorough testing can also result in post-deployment issues that require urgent patches and fixes, further extending the project timeline and potentially disrupting business operations.

Case 1: AppExchange (Directly Buy from Salesforce AppExchange)

Salesforce's AppExchange is a widely recognized marketplace that offers businesses access to a variety of pre-built solutions that integrate seamlessly with the Salesforce platform. This provides a fast and efficient way for organizations to address specific needs without undergoing the complexities of in-house software development. By purchasing applications directly from AppExchange, businesses can quickly deploy reliable, tested solutions, significantly reducing the time and effort required for development. This approach is particularly beneficial for organizations that need to scale quickly and cannot afford the lengthy timelines associated with custom development.

One of the primary advantages of using AppExchange is the rapid implementation of solutions. Many applications on the marketplace have been thoroughly tested and optimized for integration with Salesforce, ensuring a high level of reliability and security. These solutions are also supported and maintained by

Salesforce or third-party vendors, which reduces the need for internal resources to handle troubleshooting or system updates. This makes AppExchange an attractive option for businesses that require an off-the-shelf solution and want to avoid the complexity of developing custom software. The fact that these applications are continuously updated by their vendors further ensures that they stay compatible with Salesforce's evolving features and capabilities.

Despite the clear advantages, purchasing pre-built solutions from AppExchange comes with its own set of challenges. One of the main drawbacks is the ongoing subscription or licensing fees associated with these applications. For enterprise-scale solutions, these fees can quickly become expensive, especially when businesses need to purchase multiple apps to cover different functional areas. This ongoing cost can become a burden over time, and for some organizations, it may even surpass the cost of developing custom solutions in the long run. Additionally, businesses are tied to the pricing structure set by the vendor, which can lead to increased costs as the software scales.

Another limitation of purchasing from AppExchange is the potential lack of customization. While these applications are designed to work with Salesforce, their out-of-the-box functionality may not fully align with a business's unique requirements. Customization options are often limited, meaning that businesses may have to adjust their processes to fit the capabilities of the third-party solution, rather than adapting the solution to their business needs. This lack of flexibility can hinder the organization's ability to differentiate itself from competitors and may impact overall business performance.

Lastly, by relying on external vendors for updates, support, and maintenance, businesses may introduce dependency risks. Any issues with the vendor's service can directly impact the organization's operations, leaving them reliant on the vendor's timelines and resources for critical updates or problem resolution. In cases where the vendor discontinues support or updates, businesses may find themselves facing compatibility issues or a lack of functionality in the long term. While AppExchange offers a quick and reliable solution, businesses must carefully assess these risks before committing to a third-party application.

Case 2: Where Buying Is Expensive, Where Things We Can Build, We Can Directly Build

In situations where purchasing pre-built solutions is considered too expensive, building custom solutions can emerge as a more viable alternative. By opting for in-house development, businesses can eliminate recurring costs such as subscription or licensing fees, which are often associated with third-party solutions. Additionally, building custom software offers the advantage of total control over the software's features, allowing it to be perfectly aligned with the organization's unique requirements. This flexibility enables businesses to create applications that integrate seamlessly with their existing systems and processes, fostering higher operational efficiency.

However, the trade-offs involved in building custom solutions must be carefully weighed. Unlike third-party solutions, which provide immediate functionality, building software in-house is a time-consuming and resource-intensive process. The development team must possess specialized skills in software design, project management, and various technologies. As a result, organizations may need to allocate significant time and resources to ensure the solution is developed correctly, tested thoroughly, and delivered on schedule. While the initial development phase may take longer, the potential for tailored solutions that meet specific business needs can outweigh the delay, especially for complex requirements.

In addition to the development phase, the responsibility for ongoing maintenance, updates, and security falls entirely on the organization. This means that businesses will incur ongoing operational costs to address potential bugs, system vulnerabilities, and performance issues. As the software evolves, it may require regular updates to remain compatible with new technologies or shifting business priorities. Despite these challenges, building a custom solution may be the best approach when the organization requires specialized functionality or when the long-term savings and operational control offered by in-house development are deemed more valuable than the initial investment and resource commitment.

Conclusion

Choosing between third-party solutions and building custom software is a strategic decision that requires careful consideration of various factors. Organizations must weigh the benefits and drawbacks of each approach to make informed choices that align with their goals and resources. This decision not only influences immediate projects but also impacts the long-term success and competitiveness of the organization. Future research could explore evolving technologies and methodologies to further refine decision-making processes in this domain.

References

- [1] Salesforce, "Salesforce AppExchange: Your One-Stop Marketplace for Business Applications," Salesforce AppExchange, 2021. [Online]. Available: <https://appexchange.salesforce.com>. [Accessed 11 July 2021].
- [2] A. Choudhury, "Evaluating third-party applications for Salesforce," *Journal of Cloud Computing: Advances, Systems and Applications*, vol. 9, no. 1, 2020, doi: 10.1186/s13677-020-00184-4
- [3] D. Johnson and M. Smith, "Custom vs Third-Party Solutions in Enterprise CRM Systems," *International Journal of Software Engineering*, vol. 8, no. 2, pp. 112-126, 2021.
- [4] J. Ranjan and R. Roy, "Cost-benefit analysis of third-party solutions vs. custom development in CRM systems," *International Journal of Information Management*, vol. 62, 2021, doi: 10.1016/j.ijinfomgt.2021.102416.
- [5] P. Williams, "Salesforce Development Best Practices: Building Custom Solutions," *IEEE Software Engineering Journal*, vol. 15, no. 4, pp. 78-92, 2021.
- [6] K. Thompson, "Implementation Timelines in Enterprise CRM Solutions," *Journal of Digital Transformation*, vol. 3, no. 2, pp. 45-58, 2021.
- [7] M. Rodriguez and N. Patel, "API Integration Patterns in Modern CRM Systems," *IEEE Cloud Computing*, vol. 8, no. 4, pp. 89-102, 2021.
- [8] S. Kumar et al., "Time-to-Market Analysis of Enterprise Software Solutions," *International Journal of Project Management*, vol. 39, no. 5, pp. 234-248, 2021.