3 Future of Applications Impacts on Customer Experience

The future of applications will have three direct impacts on customer experience. To meet their organization's CX goals, application leaders must enable more joined-up, personalized and responsive composable customer experiences.

Overview

Impacts

- A shift to the creation and use of packaged business capabilities (PBCs) will enable application leaders to compose more integrated, personalized and effortless customer experiences.

- As demand for personalized and effortless customer experiences outpaces organizations’ ability to deliver them, a shift to a product-based delivery model is needed.

- IT projects will need to be assessed on their ability to meet customers’ rapid and increasing demand for integrated, personalized and effortless customer experiences and processes.

Recommendations

To effectively navigate these impacts and maximize their organization's investments in customer experience (CX), application leaders should:

- Improve customer experience by using PBCs and APIs to build better customer journeys and integrated, effortless customer experiences. Compose integrated, personalized and effortless customer experiences by using PBCs and product delivery models.

- Deliver faster, and more responsive experiences to customers by combining product delivery models with PBCs that support new composable enterprise business models and digital business transformation.

- Use a product delivery model to experiment with new CX projects in a multiexperience environment, and to test customer response to emerging technologies and platforms — such as AI, event-driven architectures and multiexperience platforms.

Strategic Planning Assumptions
By 2022, 25% of new applications will be delivered, priced and consumed as libraries of packaged business capabilities, up from less than 3% in 2019.

By 2022, over 75% of small and midsize SaaS vendors will use product-style delivery and the architecture of packaged business capabilities to compete with less agile mega-SaaS providers.

By 2023, 40% of professional workers will orchestrate their business application experiences and capabilities like they do their music streaming experience.

Analysis

Gartner’s future of applications research discusses how IT applications will change and how this will affect the way that application leaders deliver business outcomes and form productive partnerships with the business. This will require IT to change how applications are sourced, architected, delivered and supported (see “2020 Strategic Roadmap for the Future of Applications”).

The three impacts to customer experience applications should be understood as:

- The impact of packaged business capabilities.
- The impact of the product delivery model.
- The impact of composable customer experiences.

Application leaders will need to adopt new approaches to the delivery of customer-facing applications.

Organizations will look to create an environment where IT and business users can compose new customer application experiences, and customers can further personalize those experiences. Application delivery will change because of this trend.

The future of applications will enable the delivery of:

- **Effortless customer experiences across all customer interactions.** This will be done by anticipating the needs of customers using AI-powered customer insight and packaged business capabilities to build application customer journeys. Customers will benefit from processes that are integrated and require less effort and time to complete.

- **Multiexperience personalized interactions in a real-time, event-driven environment.** This will give customers the ability to choose which technology-enabled capabilities they want from their suppliers.

- **Rapid enterprise agility and transformation.** This will be done by taking advantage of digital product management that enables continuous delivery of innovation through channels and touchpoints.
Faster delivery of responsive customer experiences. These experiences will reduce the effort required of the customer and support their objectives.

Figure 1 outlines the impacts and recommendations for application leaders.

**Figure 1. Impact Appraisal for Application Leaders**

### Impact Appraisal for Application Leaders

<table>
<thead>
<tr>
<th>Impacts</th>
<th>Top Recommendations</th>
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Source: Gartner
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### Impacts and Recommendations

**The Impact of Packaged Business Capabilities**

A shift to the creation and use of packaged business capabilities will enable application leaders to compose more integrated, personalized and effortless customer experiences.

Application integration will be the greatest challenge for application leaders. Application leaders will need to continue support for changing customer-facing processes and one of the most significant changes in the future of applications will be the shift from large monolithic applications to the creation and use of PBCs.

PBCs are self-contained miniapplications that are accessed via APIs. PBCs mainly contain web services, data and metadata.

Technology application providers and citizen developers will create PBCs. PBCs are assembled into suites that will be sold like traditional applications by technology providers. However, these composed suite applications will enable organizations to consume business capabilities at a
much more granular level. They will also enable citizen developers to be suppliers of PBCs. For example, e-commerce business users can create their own online merchandising PBC to manage a single product category for which there is no other commercially available support. They can then share that capability with other people in the organization who would like to use it.

Since applications will consist of collections of PBCs, organizations will be able to assemble applications and their own PBCs in a manner that is personalized for both employees and customers. Gartner believes that by 2023, 40% of professional workers will orchestrate their business application experiences and capabilities like they do their music streaming experience (see "Gartner’s Top Strategic Predictions for 2020 and Beyond: Technology Changes the Human Condition"). This impact is currently being experienced by employees and their applications, but it will soon move into the world of the customer. PBCs will provide organizations with the ability to personalize customer journey experiences by enabling the organization and the customer to compose a customer application experience. This is beneficial to both the organization and the customer. The organization’s application capabilities are easily composed into new applications, from which the customer gains an integrated, personalized and effortless experience.

Cloud applications are available in public cloud marketplaces, and from platforms such as Salesforce AppExchange or Microsoft Azure Marketplace. As PBCs enable increased flexibility, Gartner believes that we will see more applications providers move toward creating PBCs and assembling them into applications suites (for example, for sales, HR, finance and supply chain). APIs will enable organizations to connect their existing applications, new applications and new PBCs together and create new business processes faster. This includes those processes that touch the customer (see “Innovation Insight for Packaged Business Capabilities and Their Role in the Future Composable Enterprise”).

The Impact of the Product Delivery Model

As demand for personalized and effortless customer experiences outpaces organizations’ ability to deliver them, a shift to a product-based delivery model is needed.

Great customer experiences create higher levels of customer retention and improve an organization’s financial results. Organizations will continue to use technology to deliver customer experiences, because the ability to scale customer interactions is leading to lower costs.

As a result of this, IT and the business will be challenged to:

- Create these new technologically supported experiences.
- Know where they should allocate their technology so that it actually provides the customer with the desired outcomes.

This is where organizations have shifted from project-based delivery of technology to a product-based delivery model (see “2019 Strategic Roadmap for Becoming a Digital Product Delivery..."
Organizations have too many new technologies to evaluate and the rate of innovation continues to increase. Old project-based delivery models are unable to keep up. The project approach requires:

1. The collection of requirements
2. Verification of the requirements
3. Planning the construction of the application to meet those requirements
4. Testing the application
5. Rollout of the application

This often leads to long cycle times that can span years.

Organizations are looking for rapid innovation to support changing customer needs. This is driving a shift toward product delivery of applications. Product delivery uses a minimum-viable-product approach. This approach is iterative.

Observations of how the user interacts with the application drive improvements to the application. Improvements to the application continue so long as the application delivers customer business value. The applications are retired when they no longer deliver customer business value. The organization can then reallocate resources to other products. This produces product maintenance cost savings for the organization (see "Prepare Now for the Future of Digital Product Management").

This model is very similar to what has happened in the smartphone and tablet market. New versions come out to replace the old. These new versions have more features based on data collected about how users interacted with the previous version.

Applications will follow this same process. Emerging artificial intelligence (AI) tools will enable organizations to make improvements based on the tool’s observations and recommendations (see "Shape the Future of Customer Experience With Customer Analytics"). The product model will also help organizations to test out new multiexperience models and determine what mix of type, touch, chat, gestures and voice can be used to support customer-facing processes across a growing number of technologically enabled touchpoints.

Moving to the product model will enable IT organizations to deliver innovation faster and work with the business to support the delivery of business outcomes, while minimizing development investment.

Additionally, this model can be used to assemble teams of IT and citizen developers (or just citizen developers). These teams can extend the business’s ability to deliver customer-facing applications
quickly and in great volumes. This will also be beneficial to the customers, as integrated customer processes require less effort.

**The Impact of Composable Customer Experiences**

IT projects will need to be assessed on their ability to meet customers’ rapid and increasing demand for integrated, personalized and effortless customer experiences and processes.

Customers want to have customer processes personalized to them and that will require organizations to deliver composable customer experiences via their applications. This will be a challenge for the organization. However, making this change will signal that the organization is adopting a customer-first mindset for their IT projects.

Customers’ needs and wants continually evolve and change over time. These changing wants and needs will continue to challenge organizations and IT. Organizations have been held back by the slow speed at which applications that support customer processes can adapt to how the customer wants to conduct business with the organization.

Even when organizations are able to deliver that experience, it does not take long for the customers’ needs or wants to change again.

Another challenge is that, with the growing numbers of technologically enabled customer touchpoints, customers want to mix and match these to their own style. They want processes that support the way they want to do business, rather than supporting the way the organization wants them to do business.

This is why organizations need to move toward being composable enterprises — able to more quickly assemble application PBCs that are personalized to a customer demographic. The future of applications for customers is made up of composable experiences. The organization must provide an environment where customers can take processes as they are or personalize them (within limits) to the way they want to work with an organization.

PBCs and product delivery models will enable organizations to deliver composed applications and customer experiences.

PBCs and product delivery models will also enable organizations to recompose applications over time and keep pace with customers’ changing needs and wants.

Therefore, application leaders will need to move toward an environment where IT, business users and citizen developers can provide applications that can be composed to meet their customer’s desired outcome. These composed applications will also deliver a reduction in customer effort, which will improve the overall customer experience.

**Acronym Key and Glossary Terms**

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<th>Definition</th>
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<td>API</td>
<td>Application Programming Interface</td>
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Recommended by the Authors

2020 Strategic Roadmap for the Future of Applications
Predicts 2020: The Future of Application Architecture, Development, Integration and Platforms
Apply the Principles Behind the Future of Applications to Digital Commerce
Understand the Hype, Hope and Reality of Composable Infrastructure

Recommended For You

Architecting Growth Under Selling Expense (Sellex) Pressure
Client-Submitted Key Account Plan Examples
Risk Culture by the Numbers
Prioritizing Dimensions for Message Personalization
Key Account Program Structure Library