CUSTOMER EXPERIENCE TECHNOLOGY FOR FINANCIAL SERVICES - GLOBAL

Technology Innovation 2019
Contents
Background and Company Performance ................................................................. 3

Industry Challenges .............................................................................................. 3

Technology Attributes and Future Business Value of Flybits ............................... 3

Conclusion ............................................................................................................. 6

Significance of Technology Innovation ................................................................. 7

Understanding Technology Innovation .................................................................... 7

Key Benchmarking Criteria .................................................................................... 8


The Intersection between 360-Degree Research and Best Practices Awards ........ 10

Research Methodology .......................................................................................... 10

About Frost & Sullivan .......................................................................................... 10
Background and Company Performance

Industry Challenges

Of the many challenges banking and financial services institutions experience, customer acquisition ranks near the top of the list. Gaining and retaining customers can be an expensive and lengthy process, primarily due to antiquated and inefficient methods of customer outreach. Third-party advertisements—i.e., printed flyers, web media, and email—and incentives such as sign-up bonuses, cash-back rewards, or waivers of annual fees are not cost effective. Ill-timed and non-personalized outreach efforts can cause customers to treat them as distractions rather than helpful suggestions. An increasing number of innovative big tech and financial technology (fintech) market entrants are upping the ante on banks, embracing an experience-first design culture that redirects market strategy from product-centricity to more consumer-centric services and innovation. Leveraging big data analytics, digital contextualization, machine learning, artificial intelligence, and cloud-computing, these businesses create personalized direct-to-consumer use cases that are both relevant and convenient. Frost & Sullivan believes that to stay competitive, banks must continually incorporate sophisticated technology into their business models. By embracing technological innovation and gathering data from proprietary (bank-owned), public, and third-party (devices) sources, banks and financial institutions can gain holistic understandings of their customers and their customers' needs, to provide tailored and frictionless customer service experiences—including mobile and connected devices. By marketing during convenient times, they can take advantage of opportunities to cross-sell and upsell products and services, increasing customer retention, and minimizing customer acquisition costs.

The process of building data contextualization solutions is extremely difficult. Each use case requires multiple data scientists to navigate complex and lengthy product development and integration cycles. Solutions providers must be able to engineer solutions that: manage the complexity of machine learning, data science, semantic processing, and data contextualization with ease; provide intuitive customer experiences; integrate well with legacy infrastructure; and adhere to strict privacy standards for customers. These solutions need to be able to bring together data sets from various sources, normalize them together, and then allow them to interoperate. In addition, they must also be agile so that users can customize to meet their individual needs.

Technology Attributes and Future Business Value of Flybits

The idea for Flybits originated as a five-year research project at the Massachusetts Institute of Technology Media Lab in Cambridge, Massachusetts, and Ryerson University in Toronto, Canada. Recognizing a trend across industries, whereby customers were being exposed to a rapidly increasing amount of services and information, Flybits' founders envisioned a new paradigm, in which information would find users rather than users having to search for information. With significant intellectual property (IP) and proprietary knowhow to build upon, the founders spun off their research in 2013, creating an out-of-the-box solution to enable channel providers to deliver contextualized (highly specific and personalized) products and services to their customers. Focusing primarily on retail banking, wealth
management, and insurance companies, Flybits provides enterprise-level hyper-personalization capabilities to clients all over the world, ultimately improving the customer experience and solving a critical challenge in the banking and financial services industry.

**Unburdening Businesses from their Information Technology Complexities**

In the modern banking and financial services industry, market participants must be able to offer highly contextualized products and services, which, due to big tech and fintech entrants, is quickly becoming the norm industry-wide. For financial institutions with legacy infrastructure, building and integrating the technology necessary to enable these changes can be a daunting task.

Flybits' end-to-end platform simplifies this process, essentially managing the information technology (IT) complexities of data science, hyper-personalization, and contextualization in a way that allows its clients to create and implement experience design use cases with ease. By removing this technological burden, clients can remain relevant and compete with their peers on the customer engagement front with speed and the ability to scale.

Through two main products—Flybits Experience Studio and Flybits Concierge—Flybits' clients can assemble data, orchestrate experiences, and deliver those experiences to their customers. Flybits Concierge functions as a turnkey solution that minimizes IT involvement so that clients can go to market quickly. It is also malleable—able to adapt to existing applications and scale with ease. Once users enable Flybits Concierge, they can then leverage Flybits Experience Studio to create and provision consumer experiences. For instance, Flybits has allowed TD Bank—one of its largest clients—to use geolocation data to connect its customers with nearby mobile mortgage specialists. More recently, Flybits partnered Ronald McDonald House Charities to build a “Virtual Front Desk” mobile application, which uses device data to facilitate communication and personalize interactions with families during their stay.

Drawing on an ecosystem of proprietary, public, and third-party data sets—i.e., from mobile devices—Flybits enables its clients to develop comprehensive profiles of their customers and then leverage data insights to cross-sell or upsell relevant products at the appropriate time. With holistic views of their customers, Flybits' clients can tailor their marketing to only include relevant and timely products and services, thereby increasing operational efficiency and minimizing customer acquisition costs. Flybits' platform enables clients to retain and acquire customers, foster financial literacy, and ultimately increase revenue.

**Channel Enablement through Removing IT Complexities and Streamlining Time to Market**

Flybits characterizes its value proposition as one of channel enablement. By removing the IT complexities of data contextualization, the company allows its clients to go to market and scale quickly, ultimately competing with big tech and fintech market participants. Flybits Concierge is an out-of-the-box solution. It requires minimal IT involvement during integration, saving banks and financial services institutions time and effort. Flybits' method of integration involves an extensive library of prepackaged use cases, which companies can
leverage to streamline time to market, completing integration in less than 90 days. Customers pay on a tiered basis by user volume.

Although, in most cases, Flybits starts new clients with about ten possible use cases, some of the company's clients have more than 100 use cases. Flybits created its platform to evolve and scale quickly, and so, once the primary wave of integration takes place, clients can then develop new ideations of how they would like to customize it to meet their individual needs. The platform also integrates well with legacy infrastructure, which is often a key hindrance that banks and financial services institutions often face.

**Forward-thinking Company**

With 22 patents, Flybits is also an extensively forward-thinking company that aims to anticipate new technological developments and business models, and then implement operational changes to align with industry mega trends. For instance, Flybits recognized a trend in the way companies and solutions providers manage data, whereby companies retain ownership of their customers' data instead of handing it over to their IT solutions providers. Flybits developed a model in which client data is never handled in an identifiable manner - rather it is anonymized and tokenized to ensure confidentiality and privacy of the end-users.

Identifying the opportunity in a market shift, Flybits designed and launched a marketplace that unifies industries, creating a set of algorithms that allow non-competitive enterprises to develop partnerships and share data insights without having to collocate data. Although Flybits primarily deals in core banking, the company envisions an entire ecosystem in which multiple industries converge, with it as the unifier. While all of these different industries, products, and services come together, Flybits uses the banking vertical to unite them. As big tech, traveling, shopping, and lifestyle permeate the banking world, banking will need to enter those spheres as well. What these verticals all have in common is transactions, so the banking industry has a unique opportunity to facilitate this interoperability.

In addition to attending key industry events such as Finovate, Flybits also hosts an annual thought leadership event, Flybits Airshow, which is geared towards senior executives and financial leaders in the market. Intended to establish Flybits as a thought leader and innovation partner in the market, the Flybits Airshow also includes speakers, panels, and demonstrations that explain how the company can impact banks and financial services institutions and their consumers. Flybits initiated the event because many of its clients needed help developing their go-to market strategies. The Flybits Airshow provides the opportunity for these clients to refine their solutions to become more active.

**Funding and Geographical Expansion**

Since its establishment in 2013, Flybits has grown to more than 100 staff with deployments in Latin America, the US, Canada, the UK, and Germany, and it is expanding into the Middle East and other parts of the world. It has offices in Toronto, Ontario; New York City; Redwood City, California; London, United Kingdom; and Dubai, United Arab Emirates. The company has also attracted investments from various traditional venture capitalists—e.g., Point72 Ventures, Portag3 Ventures, TD Bank Group, and Information Venture Partners—as
well as strategic investors such as Mastercard, Citi Ventures, Australia's Westpac, Vodafone, and Bosch. The company's most recent round of funding amounted to $35 million, which it will use to increase its presence in key geographies and expand its products. Particularly, Flybits will build out its offices in Toronto, New York, and London. With such a presence, Flybits is truly global.

**Conclusion**

As internet connectivity transitions to the next stage of incremental development, users no longer need to search for information; instead, information finds them. Advances in Big Data are enabling enterprises to initiate smart interactions and go from being passive to proactive in their approaches, addressing customer needs with increasing precision. Solutions providers that wish to offer their technology in the banking industry must develop products that incorporate various data sets, foster their interoperability, integrate with legacy vendors, and scale to meet a growing number of use cases.

Flybits' platform enables retail banks, wealth management companies, and insurance companies to offer highly contextualized products and services that are relevant and timely. It integrates quickly, removing IT complexities and drawing on an extensive library of use cases to accelerate time to market. Flybits has also embraced the future of data science, creating a marketplace for non-competitive vendors and incorporating a business model that allows clients to retain their proprietary and sensitive data. These best practices have led the company to achieve more than $50 million in funding from well-known strategic and traditional venture capitalists. As a result of this demonstrated thought leadership, commitment to channel enablement, and ensuing business success, Flybits earns Frost & Sullivan's 2019 Global Technology Innovation award in the customer experience technology for financial services market.
Significance of Technology Innovation

Ultimately, growth in any organization depends on finding new ways to excite the market and maintaining a long-term commitment to innovation. At its core, technology innovation, or any other type of innovation, can only be sustained with leadership in 3 key areas: understanding demand, nurturing the brand, and differentiating from the competition.

Understanding Technology Innovation

Technology innovation begins with a spark of creativity that is systematically pursued, developed, and commercialized. That spark can result from a successful partnership, a productive in-house innovation group, or a bright-minded individual. Regardless of the source, the success of any new technology is ultimately determined by its innovativeness and its impact on the business as a whole.
Key Benchmarking Criteria

For the Technology Innovation Award, Frost & Sullivan analysts independently evaluated 2 key factors—Technology Attributes and Future Business Value—according to the criteria identified below.

Technology Attributes

Criterion 1: Industry Impact
Requirement: Technology enables the pursuit of groundbreaking ideas, contributing to the betterment of the entire industry.

Criterion 2: Product Impact
Requirement: Specific technology helps enhance features and functionalities of the entire product line for the company.

Criterion 3: Scalability
Requirement: Technology is scalable, enabling new generations of products over time, with increasing levels of quality and functionality.

Criterion 4: Visionary Innovation
Requirement: Specific new technology represents true innovation based on a deep understanding of future needs and applications.

Criterion 5: Application Diversity
Requirement: New technology serves multiple products, multiple applications, and multiple user environments.

Future Business Value

Criterion 1: Financial Performance
Requirement: Potential is high for strong financial performance in terms of revenues, operating margins, and other relevant financial metrics.

Criterion 2: Customer Acquisition
Requirement: Specific technology enables acquisition of new customers, even as it enhances value to current customers.

Criterion 3: Technology Licensing
Requirement: New technology displays great potential to be licensed across many sectors and applications, thereby driving incremental revenue streams.

Criterion 4: Brand Loyalty
Requirement: New technology enhances the company’s brand, creating and/or nurturing brand loyalty.

Criterion 5: Human Capital
Requirement: Customer impact is enhanced through the leverage of specific technology, translating into positive impact on employee morale and retention.
Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analyst follow a 10-step process to evaluate Award candidates and assess their fit with select best practice criteria. The reputation and integrity of the Awards are based on close adherence to this process.

<table>
<thead>
<tr>
<th>STEP</th>
<th>OBJECTIVE</th>
<th>KEY ACTIVITIES</th>
<th>OUTPUT</th>
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<tbody>
<tr>
<td>1 Monitor, target, and screen</td>
<td>Identify Award recipient candidates from around the globe</td>
<td>• Conduct in-depth industry research • Identify emerging sectors • Scan multiple geographies</td>
<td>Pipeline of candidates who potentially meet all best-practice criteria</td>
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<tr>
<td>2 Perform 360-degree research</td>
<td>Perform comprehensive, 360-degree research on all candidates in the pipeline</td>
<td>• Interview thought leaders and industry practitioners • Assess candidates’ fit with best-practice criteria • Rank all candidates</td>
<td>Matrix positioning of all candidates’ performance relative to one another</td>
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<td>3 Invite thought leadership in best practices</td>
<td>Perform in-depth examination of all candidates</td>
<td>• Confirm best-practice criteria • Examine eligibility of all candidates • Identify any information gaps</td>
<td>Detailed profiles of all ranked candidates</td>
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<td>4 Initiate research director review</td>
<td>Conduct an unbiased evaluation of all candidate profiles</td>
<td>• Brainstorm ranking options • Invite multiple perspectives on candidates’ performance • Update candidate profiles</td>
<td>Final prioritization of all eligible candidates and companion best-practice positioning paper</td>
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<tr>
<td>5 Assemble panel of industry experts</td>
<td>Present findings to an expert panel of industry thought leaders</td>
<td>• Share findings • Strengthen cases for candidate eligibility • Prioritize candidates</td>
<td>Refined list of prioritized Award candidates</td>
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<td>6 Conduct global industry review</td>
<td>Build consensus on Award candidates’ eligibility</td>
<td>• Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates</td>
<td>Final list of eligible Award candidates, representing success stories worldwide</td>
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<td>7 Perform quality check</td>
<td>Develop official Award consideration materials</td>
<td>• Perform final performance benchmarking activities • Write nominations • Perform quality review</td>
<td>High-quality, accurate, and creative presentation of nominees’ successes</td>
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<td>8 Reconnect with panel of industry experts</td>
<td>Finalize the selection of the best-practice Award recipient</td>
<td>• Review analysis with panel • Build consensus • Select recipient</td>
<td>Decision on which company performs best against all best-practice criteria</td>
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<td>9 Communicate recognition</td>
<td>Inform Award recipient of Award recognition</td>
<td>• Present Award to the CEO • Inspire the organization for continued success • Celebrate the recipient’s performance</td>
<td>Announcement of Award and plan for how recipient can use the Award to enhance the brand</td>
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<tr>
<td>10 Take strategic action</td>
<td>Upon licensing, company is able to share Award news with stakeholders and customers</td>
<td>• Coordinate media outreach • Design a marketing plan • Assess Award’s role in future strategic planning</td>
<td>Widespread awareness of recipient’s Award status among investors, media personnel, and employees</td>
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The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of our research process. It offers a 360-degree-view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan’s research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry participants and for identifying those performing at best-in-class levels.

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best-in-class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages more than 50 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on six continents. To join our Growth Partnership, please visit http://www.frost.com.