2016 Global Conversational A.I. and Intelligent Assistants Technology Innovation Award
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Background and Company Performance

Industry Challenges

By 2020, customer experience will overtake product and price as the #1 way for companies to differentiate themselves. Companies around the globe are losing billions due to poor customer experiences. Yet, while consumers punish poor experiences by taking their business elsewhere, they also reward companies who get customer experience (CX) right, spending more with businesses who have a history of good service.

A big part of getting CX right is offering customers immediate help and support. This has evolved from toll-free numbers to offshore support centers to automating processes with self-service portals where customers can handle common tasks. However, customers have found that full service by phone often comes with added cost and lost time, and self-service portals often do not cover the need and send customers scurrying back to the helpdesk anyway.

The next wave of evolution was represented by lightweight, general purpose virtual assistants, such as Apple’s Siri; Siri-like intelligent assistants (IAs) are now at work in many organizations. However, many of the consumers and internal business users who these IAs were supposed to be helping have found them incapable of truly supporting and executing on complex or specialized tasks. There are, however, a small number of IA providers who are getting it right: fully integrating the technology into businesses to become experts on the companies they serve.

Technology Attributes and Future Business Value

Criterion 1: Industry Impact

Requirement:

Conversational A.I. solutions go a long way toward solving the earlier “full service versus self-service” conundrum by providing full-service experiences via self-service processes. Companies who deploy conversational A.I. solutions from Next IT are reaping the benefits of lower cost, scalability, and consistency in delivery of messaging and customer treatments. Competitor 2 has the potential for high industry impact—but only among companies who specifically choose to advertise on its network. Next IT has the potential to change the world because its solutions can apply to any company, anywhere, without regard to their presence on a given network.

Best Practices Example:

Amtrak’s Ask Julie, Aetna’s Ask Ann, and the US Army’s SGT STAR are Next IT-powered IAs that are delivering substantial value to their organizations. For example, Amtrak’s Ask...
Julie has delivered 8X ROI and is saving the railroad $1 million per year in customer service emails.

**Criterion 2: Product Impact**

Requirement:

The new wave of IVAs/chatbots, as exemplified by Next IT, is revolutionizing old notions of “customer service” and replacing them with sophisticated strategies to optimize customer engagement. Powered by machine learning and artificial intelligence (A.I.), these solutions are providing conversational interfaces, usually via an avatar, which can provide truly human-like interactions with system users. While early IVAs were little more than a cartoon interface and some extra guidance for search, the technology has evolved such that today’s IVAs can be thought of as emulated humans. This powerful implementation of conversational A.I. transcends mere understanding of user input to actually respond to what a user says, creating the experience of a conversation and delivering the right outcome.

Best Practices Example:

Today, intelligent virtual assistants (IVAs), or chatbots, are helping consumers shop, order services, book travel, schedule meetings, and more. Chatbots, or at least the A.I. technology that empowers them, are also beginning to revolutionize search by moving away from presenting users with lists of choices—à la “search results”—and instead presenting one best choice.

**Criterion 3: Scalability**

Requirement:

Next IT’s IAs are proving themselves capable of meeting the need for intelligent A.I.-based interfaces with companies who handle some of the very highest consumer transaction volumes in the world. The success of chatbots in the marketplace hinges on their ability to perform at a high level with a great many simultaneous customer interactions. Only then can companies go from thinking of conversational A.I. as “an interesting option to try on some accounts” and instead begin relying on it as a key component of their customer engagement operations.

Best Practices Example:

In its first nine months of existence, the IA for a top-tier airline fielded so many questions that the company was able to remove live chat completely due to a drastic decline in demand; this IA has answered 20 million questions to date. Not only has this airline’s IA provided massive gains in organizational efficiency, it has also improved CX quality: the airline is ranked #1 in customer satisfaction by JD Power.
Criterion 4: Visionary Innovation

Requirement:

The development of today’s IAs/chatbots required the vision to synergize five key technologies: machine learning, artificial intelligence and artificial general intelligence (AI/AGI), natural language processing (NLP), real-time analytics, and Web services.

Machine-accelerated productivity automates repetitive consumer and business processes so businesses can scale. The quantum leap here, however, is the way Next IT is applying the technology—not merely to reduce headcount in call centers—but as the tip of the spear for a whole new strategy where user self-help is a catalyst for stronger customer engagements, revenue generation, and share of wallet.

Another example of Next IT’s visionary approach, perhaps surprisingly to many, is the human element. When one of the world’s leading technology providers launched a Twitter site “operated” by the company’s new chatbot personality earlier in 2016, it took the world by storm—for about 24 hours. Fueled by A.I., chatbots are rapid learners, and in that brief span, hackers had fed the budding Twitter star a stream of content that soon had it spewing racist, hate-filled, venomous tweets for all the planet to see. The episode exposed a glaring weakness of that chatbot: its lack of “humanity,” or human oversight of the responses a chatbot gives to a user. This means that a bot passes user interactions off to human agents when it lacks confidence in its ability to respond—and that can help ward off marketplace and public relations nightmares such as what that company experienced. Next IT’s chatbots incorporate human oversight as part of the core model, including the key factor that keeps chatbots out of the kind of trouble described above: the (human-created) design directive that a chatbot engage in goal-based conversations, not open-ended ones.

Best Practices Example:

Amtrak’s Ask Julie is generating 25% more bookings, with a 30% increase in revenue per booking. One of the largest US-based communications service providers (CSPs) deployed a Next IT-based chatbot and its ability to answer not only common questions, but also account-specific questions, has helped the CSP achieve 5X ROI. Companies can choose Next IT with certainty that the company helps its customers transcend mere revenue retention by engaging customers, generating revenue, and providing a solution that can be presented with confidence on the world stage.

Criterion 5: Application Diversity

Requirement:

While there are plenty of A.I.-driven customer service solutions in the market that potentially, could support both external and internal users, most organizations have
deployed them solely to support external customers. Next IT does not deploy its solutions to support internal employees on a “drop-in/afterthought” basis, but as a key component of its strategy, with products specifically addressing internal functions such as IT helpdesk, human capital management (human resources), and, perhaps most innovatively: sales engineering.

Best Practices Example:

Associates of a Wall Street-based global financial services company can potentially require any of hundreds of forms and 350+ online apps in order to serve their customers. On average, associates were spending 20–30 minutes looking for each form or app. After this firm utilized Next IT’s solution and launched what it believes to be the world’s largest, most complex IVA, the system is answering more than 27,000 questions per day and saving the firm $32 million per year in billable time.

**Criterion 6: Customer Acquisition**

Requirement:

Most customers do not want to talk on the phone to get answers; they want automated support: 64% prefer to contact customer service via text entry. This is even truer among millennials, who are highly connected and technologically advanced. So it is not surprising that 76% of younger consumers embrace text messaging as a customer service option, and that these younger consumers are twice as likely as those over age 35 to stay loyal to companies who serve them this way. Millennials currently account for more than one-fifth of all consumer discretionary purchases, which translates into more than $1 trillion in direct buying power. If companies are going to survive and prosper both now and in the years to come, they are going to have to effectively engage with millennials.

Best Practices Example:

The US Army sought a way to engage tech-savvy youth in order to more effectively recruit them. Its Next IT-driven SGT STAR was the first IVA with its own mobile app and the first to talk with users on Facebook. SGT STAR has answered more than 16 million questions thus far and boosted one of the most critical metrics prized by those who deploy and provide Web analytics solutions: SGT STAR has increased average on-site interaction time per user from four minutes to 10.4 minutes. Bottom line, SGT STAR also does the job of an eye-popping 55 recruiters by pre-qualifying recruits and thus delivering more qualified recruit leads.
Conclusion

A decade ago, “customer service” meant providing a Web site and toll-free number for customers to call. Today, sophisticated chatbots are having natural conversations with customers and employees, coupling full-service experiences with self-service economics. Ironically, however, the company receiving this award excels, in part, because in addition to all of that technological firepower, it also has the vision to add human oversight to the mix. As a result of its ability to leverage visionary innovation to deliver considerable, in some cases astounding, financial benefits for a growing roster of blue-chip clients, the company Stratecast | Frost & Sullivan has chosen to receive its 2016 Technology Innovation Award for Conversational A.I. and Chatbots is...Next IT.
Significance of Technology Innovation

Ultimately, growth in any organization depends upon finding new ways to excite the market, and upon 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 three 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 the mind of a singular 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 two key factors—Technology Attributes and Future Business Value—according to the criteria identified below.

Technology Attributes

Criterion 1: Industry Impact
Criterion 2: Product Impact
Criterion 3: Scalability
Criterion 4: Visionary Innovation
Criterion 5: Application Diversity

Future Business Value

Criterion 1: Financial Performance
Criterion 2: Customer Acquisition
Criterion 3: Technology Licensing
Criterion 4: Brand Loyalty
Criterion 5: Human Capital

Best Practice Award Analysis for Next IT

Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows our research and consulting teams to objectively analyze performance, according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are illustrated below.

RATINGS GUIDELINES

The Decision Support Scorecard is organized by Technology Attributes and Future Business Value (i.e., the overarching categories for all 10 benchmarking criteria; the definitions for each criteria are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.
The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, we have chosen to refer to the other key players as Competitor 1 and Competitor 2.

### DECISION SUPPORT SCORECARD FOR TECHNOLOGY INNOVATION AWARD

<table>
<thead>
<tr>
<th>Measurement of 1–10 (1 = poor; 10 = excellent)</th>
<th>Technology Attributes</th>
<th>Future Business Value</th>
<th>Average Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technology Innovation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Next IT</td>
<td>10</td>
<td>9</td>
<td>9.5</td>
</tr>
<tr>
<td>Competitor 1</td>
<td>8</td>
<td>7</td>
<td>7.5</td>
</tr>
<tr>
<td>Competitor 2</td>
<td>7</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>

**Technology Attributes**

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

**Criterion 2: Product Impact**
Requirement: Specific technology helps enhance features and functionality 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: High potential 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

**Decision Support Matrix**
Once all companies have been evaluated according to the Decision Support Scorecard, analysts can then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels. In this case, we believe Next IT offers greater technology attributes at present and far higher future business value.
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 players and for identifying those performing at best-in-class levels.
Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan Awards 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>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Monitor, target, and screen</td>
<td>Identify award recipient candidates from around the globe</td>
<td>Pipeline of candidates who potentially meet all best-practice criteria</td>
</tr>
<tr>
<td>2</td>
<td>Perform 360-degree research</td>
<td>Conduct in-depth industry research, Identify emerging sectors, Scan multiple geographies</td>
<td>Matrix positioning all candidates’ performance relative to one another</td>
</tr>
<tr>
<td>3</td>
<td>Invite thought leadership in best practices</td>
<td>Conduct in-depth examination of all candidates</td>
<td>Detailed profiles of all ranked candidates</td>
</tr>
<tr>
<td>4</td>
<td>Initiate research director review</td>
<td>Confirm best-practice criteria, Examine eligibility of all candidates, Identify any information gaps</td>
<td>Final prioritization of all eligible candidates and companion best-practice positioning paper</td>
</tr>
<tr>
<td>5</td>
<td>Assemble panel of industry experts</td>
<td>Present findings to an expert panel of industry thought leaders</td>
<td>Refined list of prioritized award candidates</td>
</tr>
<tr>
<td>6</td>
<td>Conduct global industry review</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>
</tr>
<tr>
<td>7</td>
<td>Perform quality check</td>
<td>Develop official award consideration materials</td>
<td>High-quality, accurate, and creative presentation of nominees’ successes</td>
</tr>
<tr>
<td>8</td>
<td>Reconnect with panel of industry experts</td>
<td>Review analysis with panel, Build consensus, Select winner</td>
<td>Decision on which company performs best against all best-practice criteria</td>
</tr>
<tr>
<td>9</td>
<td>Communicate 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>
</tr>
<tr>
<td>10</td>
<td>Take strategic action</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>
</tr>
</tbody>
</table>
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 almost 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from 31 offices on six continents. To join our Growth Partnership, please visit http://www.frost.com.