Effectively Incorporating Customer Feedback Into the New Product Development Process

A Strategic Value Assessment

Accenture was engaged by BetaSphere, Inc. to prepare this report. This report should not be construed as an endorsement of BetaSphere or its products or services by Accenture. The data on which this report is based was not independently verified; accordingly, the results may reflect inaccuracies in the underlying data. Other methods or approaches to the study may have yielded different results.
Section 1: New Product Development and The Value of a Customer-Centric Approach

[Introduction]

Accenture LLP was contracted by BetaSphere, Inc. to prepare this report summarizing an assessment of the benefits realized by corporate customers through the use of BetaSphere's software and services. The assessment consisted of a series of interviews with BetaSphere's customers regarding a variety of possible benefit areas, both quantitative and qualitative. The first section of this report presents perspectives on the new product development process, the importance of incorporating customer feedback into the development cycle, and the challenges of acquiring useful feedback via customer testing. The second section provides an overview of BetaSphere's solution and how it enables customer-centric product development. The final sections introduce study approach and results, in the form of three distinct case studies of Betasphere customer experiences, along with a summary of the benefits realized by the entire range of interviewed customers.

[The State of New Product Development]

New product development (NPD) is vital to many business strategies. New products account for over 50 percent of U.S. companies' sales revenues and 40 percent of their profits on average. Existing products are quickly being made obsolete by innovative new products that are driving the standards for performance and potential for differentiation ever higher. Competition is growing more intense as worldwide markets become more accessible and the number of viable global competitors increases. This competitive intensity and rapid technological change has resulted in shorter average product lifecycles that are continuing to shrink. In addition, customers are becoming more informed, sophisticated, and demanding, resulting in less loyalty and higher expectations.

Companies must work faster and smarter with a strong customer orientation. Customer feedback is a key to providing new products that meet or exceed customer expectations. Striving to sustain product leadership, companies are turning to more customer-centric product development approaches that are continuing to shrink. In addition, customers are becoming more informed, sophisticated, and demanding, resulting in less loyalty and higher expectations.

While these components of the new product development process are common, a variety of ways to implement them exist. The NPD process is not always sequential, such that each stage of the product development phase is carefully completed and approved by appropriate functions before progression to the next phase. On the other hand, the spiral process is iterative and multi-functional, incorporating feedback from customers and internal parties and translating it into the next iteration of the product. The spiral process allows customer requirements to evolve, recognizing that market requirements often change during the course of development. This process also involves concurrent team activities in order to reduce downtime by particular functions. In many markets, the result of spiral development is a more customer-centric, higher-quality product that may be met with higher customer satisfaction and potentially greater market acceptance. As companies seek to more closely connect their products with customer needs, they may increasingly employ the spiral method, or some derivative of it, to help their development efforts become more customer-centric.

[The New Product Development Process]

The new product development process may vary according to a company's product type, target customer, risk profile, industry, market dynamics, and a host of other factors. Each company may have different process steps and may execute each step differently. However, many companies share several core components of the process, as illustrated in Figure 1. While these components of the new product development process are common, a variety of ways to implement them exist. The NPD process is not always sequential in practice. In fact, many companies have transitioned from a "waterfall" type of process to a "spiral" process (Figure 2). The classic waterfall process involves comprehensive definition and control of requirements upfront so that the development process runs smoothly downstream. This process is sequential, such that each stage of the product development phase is carefully completed and approved by appropriate functions before progression to the next phase. On the other hand, the spiral process is iterative and multi-functional, incorporating feedback from customers and internal parties and translating it into the next iteration of the product. The spiral process allows customer requirements to evolve, recognizing that market requirements often change during the course of development. This process also involves concurrent team activities in order to reduce downtime by particular functions. In many markets, the result of spiral development is a more customer-centric, higher-quality product that may be met with higher customer satisfaction and potentially greater market acceptance. As companies seek to more closely connect their products with customer needs, they may increasingly employ the spiral method, or some derivative of it, to help their development efforts become more customer-centric.

[Take Away]

Rapid technological change, intensifying competition, and higher customer expectations are making new product development capabilities more strategically important than ever before.

[Figure 1: The New Product Development (NPD) Process Components]

[Figure 2: Product Development Process Comparison]

As the strategic importance of new product development has grown, so have the challenges of implementing it successfully. The dynamics of competition, customer expectations, and technological innovation demand that a company be particularly adept at delivering products that distinctly address buyer values. These changes, in turn, imply the need for product teams to focus on a number of imperatives. These four key NPD imperatives, illustrated in Figure 3, may vary or be defined differently on a case-by-case basis, according to a team or company’s motivations and priorities. In many cases, the imperatives must be balanced against each other according to strategic goals or particular market situations. For example, the need to balance speed to market with meeting customer requirements is often a challenge. A team may thus strive for speed to market acceptance, or the delivery of products to market fast enough to attract customer demand yet still command a strong economic return. It is important to note that speed to market acceptance is very different from time to market, as illustrated in Figure 4. Interestingly, the goal of speed to market acceptance can embody each of the four NPD imperatives. For example, alignment with customer needs and high product quality will both drive market acceptance. Speed and even agility can be accomplished through team efficiency and productivity.

The growing challenges of successful new product development have taken their toll: the probability of new product development failure is high. In fact, industry research indicates that 46 percent of development resources are spent on products that either commercially fail or never make it to market.

There are many causes of new product development failure, ranging from unanticipated costs to poor launch timing to unforeseen competitive reactions. Interestingly, two of the most important reasons development projects fail relate to inadequate customer feedback during the NPD process:

1) Customer values not well defined or understood
2) Product errors discovered too late

As the strategic importance of new product development has grown, so have the challenges of implementing it successfully. The dynamics of competition, customer expectations, and technological innovation demand that a company be particularly adept at delivering products that distinctly address buyer values. These changes, in turn, imply the need for product teams to focus on a number of imperatives. These four key NPD imperatives, illustrated in Figure 3, may vary or be defined differently on a case-by-case basis, according to a team or company’s motivations and priorities. In many cases, the imperatives must be balanced against each other according to strategic goals or particular market situations. For example, the need to balance speed to market with meeting customer requirements is often a challenge. A team may thus strive for speed to market acceptance, or the delivery of products to market fast enough to attract customer demand yet still command a strong economic return. It is important to note that speed to market acceptance is very different from time to market, as illustrated in Figure 4. Interestingly, the goal of speed to market acceptance can embody each of the four NPD imperatives. For example, alignment with customer needs and high product quality will both drive market acceptance. Speed and even agility can be accomplished through team efficiency and productivity.

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1) Customer values not well defined or understood
2) Product errors discovered too late

Inadequate collection and understanding of customer input during the NPD process can lead to sub-optimal product designs and poor market acceptance. In fact, a survey of leading IT executives revealed that the greatest probability of development project failure results from “Lack of User Involvement.” These executives ranked “User Involvement” as one of the four NPD imperatives.
as a key development project success factor, above all others\(^4\).

2) Product errors discovered too late

Product problems or defects discovered too late in the development phase or after launch can be disastrous. Severe bugs and product issues may result in costly reworks or stopped shipments, delayed launches, damage to reputation, loss of customer goodwill, and redeployment of resources to engage in crisis management. Even less severe bugs or “cosmetic” issues, if found in quantity or deemed particularly bothersome, may damage market acceptance and reputation. A more customer-centric approach to new product development, ensuring that customer values are clearly recognized and that products are comprehensively tested in representative customer environments, may allow development teams to address the primary challenges in the NPD process and avoid the possibilities of poor product performance or failure.

**[The Value of Customer-Centric Product Development]**

Customer-centric product development involves the frequent and effective infusion of customer feedback into the development process. The potential benefits achieved from the successful incorporation of customer feedback may allow a team to achieve many, if not all, of their development imperatives, including better alignment with customer requirements, elevated product quality, development speed and agility, and team productivity. The effective incorporation of customer feedback into the NPD cycle is likely to produce significant benefits. The remaining key questions to address, then, are: how and when to gather such feedback, and how to do so most effectively.


One method to elicit customer feedback is through customer acceptance testing. Customer acceptance testing can be usefully conducted at most major stages of the new product development process, as illustrated in Figure 6. Most companies do not consistently engage in all of these types of customer testing, but they usually do attempt to conduct one or more customer tests during the development process. However, to extract the most value from customer acceptance testing and achieve their NPD imperatives, a company must be able to collect
The costs and opportunity costs of applying resources to this initiative can be quite high. In addition, the costs and opportunity costs of applying resources to program management versus core development activities or other priorities can also be significant. Some companies have proven processes but are challenged in finding the capabilities required to execute customer acceptance testing programs. Out of necessity, many companies have internally developed at least some of their services are not needed.

To develop the right product for their target customers, companies must effectively elicit and incorporate feedback from the right evaluators at the right times in the new product development process. As revealed by the customers interviewed for this study, the challenges of accomplishing such a feat are numerous (Figure 7). In addition, the costs and opportunity costs of applying resources to this initiative can be quite high.

**Figure 7: Key Challenges of Conducting Effective Customer Acceptance Testing**

- Lack of adequate resources and time
- Limited access to the breadth and quality of external evaluators and environments desired
- Motivating evaluators to respond and provide insightful feedback
- Obtaining feedback quickly to maximize the time available to address it
- Prioritizing feedback and customer values in order to prioritize development activities
- Opportunity costs of applying resources to program management versus core development activities or other priorities
- Lack of expertise or knowledge about best practices in conducting customer acceptance testing
- Developing the infrastructure and processes to execute effective programs
- Delivering superior customer service throughout the testing program
- Generating valuable suggestions for product innovation or improvements
- Collecting credible testimonials for press releases or marketing collateral
- Monitoring quality or performance of commercialized products in real-world environments

**[Solutions to Address Customer Acceptance Testing Challenges]**

To address these challenges and acquire a best-practices process for customer acceptance testing, a company has three options: internal development, external development, or a combination of the two.

**Option 1: Internal Development, or Do-It-Yourself**

For most companies, the development of an effective and efficient customer acceptance testing program in-house would require a significant ongoing investment in resources, time, and money in order to develop the necessary expertise, infrastructure, tools, evaluator pool, and processes. Based on BetaSphere customer interviews, an example of the effort required to develop a best-practices approach follows:

- Development of Evaluator Pool: Product managers, product marketers, and the sales team might have to invest significant time developing a broad, qualified, and objective evaluator pool—in some cases independent of current customers. This pool would preferably be diverse enough to cover a representative sample of user profiles and environmental variables. Ideally these evaluators would be profiled, screened, and their information catalogued and managed in a database for use in future testing programs.
- Development of Formal Customer Acceptance Process and Infrastructure: A product team might need to invest several product cycles developing and refining a repeatable, formal evaluation process to ensure the quality, quantity, and integrity of feedback. A team of software developers and quality assurance staff might have to spend months developing and testing a user-friendly application or provide a forum for feedback exchange and communication between product teams and their customers.
- Design of Specific Programs: Product managers, program managers, quality assurance staff, test coordinators and engineers might all be involved in designing a specific program, including the development of customer profiles, program and product positioning and messaging, customer interview scripts, and survey questions to elicit necessary feedback.
- Effective Execution of Customer Acceptance Tests: Multiple product team members might be required to manage the ramp-up, execution, and wrap-up of a particular program, depending on the length and complexity of the program. This could include activities such as customer recruitment and screening, customer training and installation, software and documentation duplication, product inventory management and distribution, regular customer contact, phone and email interviews, issue tracking and resolution, and data analysis and reporting.

In addition, product managers and marketers might spend 10-20 hours per week or more involved in customer recruitment and qualification processes, evaluation design, and customer communications. Several engineers might also be required to spend hours communicating regularly and proactively with customers to address their issues. In fact, customer research indicates that program administrative activities such as these could require many hundreds of man-hours of project team time. In addition, customer acceptance testing programs are often cyclical, frequently resulting in downtime for resources when their services are not needed.

- Learning Curve Time and Costs: In most cases, effective customer testing capabilities are outside of a company’s core competencies. Developing and managing programs can require a significant learning and experience curve. This learning curve would have to be carefully planned for, as it could add time and cost to the product schedule.
- Opportunity Costs: Perhaps the greatest cost in developing an effective customer acceptance testing program internally is the time lost by the involved resources, which would otherwise be invested in higher priority activities.

Out of necessity, many companies have internally developed at least some of the capabilities required to execute customer acceptance testing programs. Some companies have proven processes but are challenged in finding the right evaluators. Others have resources to manage the program but lack an effective customer feedback management application. In general, most companies have not devoted the time or resources necessary to achieve robust, effective customer acceptance testing processes.
Section 2: The BetaSphere Solution

Options 2 and 3: External Solutions or Internal/External Combinations

Another possibility to help fulfill customer acceptance testing needs is to outsource the missing or sub-optimal pieces—be they the software, services, or even the entire program—to an expert. By choosing a third-party solution for part or all of the acceptance testing process, companies can avoid most of the effort described previously. Third parties providing relevant offerings might include service firms, market research houses, or software and services companies. Before proceeding with a third-party solution, however, a company should clearly define its objectives and requirements and consider a number of key questions such as those outlined in Figure 8.

The ideal solution, however, it is sourced or acquired, will vary according to a company’s needs, capabilities, and objectives. Unfortunately, having only some capabilities in place will only provide partial achievement of NPD imperatives. On the other hand, the acquisition and development of a comprehensive, best-practices approach to customer acceptance testing may help increase a company’s probability of consistently launching customer-centric, market-winning products.

Section 2: The BetaSphere Solution

One flexible and comprehensive external solution to incorporate customer feedback into the product development process is offered by BetaSphere, Inc. of Palo Alto, California. BetaSphere is a leading provider of software and services enabling customer-centric product development. BetaSphere’s mission is to enable companies to bring better products and services to market faster through a better understanding of customer needs.

By infusing the voice of the customer into the NPD process, BetaSphere helps bridge the gap that often exists between the customer and product development.

Figure 9: BetaSphere Connects Customer and Product

Figure 8: Key Questions for Considering External Solutions

- Does the solution adequately fulfill the gaps in my testing capabilities -- such as recruitment of the right quantity and quality of evaluators, a user-friendly evaluation and communication tool, expert program management resources, or comprehensive services to manage the entire program?
- Will the solution free up team resources to focus on more important, productive activities?
- Does the provider have a strong reputation and history with reputable customers?
- Does the provider have the caliber of product and service I desire?
- Does the provider have expertise or experience in my industry or functional area?
- Does the provider have a protocol for effectively communicating with my project team?
- Will my customers be enthusiastic about and engage with the new tool and/or services?
- If interacting with my customers, will the provider successfully manage customer relationships?
- Will the solution fit easily into my current workflow?
- Will my team quickly learn and adopt the new solution?
- Can the solution scale seamlessly with my growing business and increasing number and scope of projects?
- Will the benefits of investing in this solution outweigh the costs?

Key Questions for Considering External Solutions

Source: Accenture research

By infusing the voice of the customer into the NPD process, BetaSphere helps bridge the gap that often exists between the customer and product development.
Section 3: The Study

- Program Definition and Set-Up: Assist in program planning and definition, including target user profiling, program length, and objectives. Develop compatibility matrix to map available evaluators to target users, systems, applications, and environments to ensure proper testing coverage. Manage product fulfillment and distribution of upgrades or documentation, either electronically or physically.
- Evaluator Recruitment: Recruit, interview, and recommend evaluators using a combination of the company’s selection criteria and BetaSphere’s “best evaluator” profiles, drawing from BetaSphere’s proprietary database of over 70,000 qualified evaluators and/or the company’s customer lists.
- Site Management: Review product installation and use with evaluators. Proactively engage and follow up with evaluators throughout the program via telephone, web, and email channels. Collect marketing, quality assurance, engineering, technical support, and sales feedback regarding product stability, ease of use, feature prioritization, competitive positioning, functionality, and market readiness. Help create and execute web-based surveys and compile customer feedback. Solicit testimonials and identify reference sites for use in press releases or marketing collateral.

[BetaSphere Offerings]

The ideal solution to enable customer-centric product development will vary according to a customer’s needs and program objectives. As such, BetaSphere customers typically choose to employ one of three offerings of BetaSphere’s products and services:

1) Feedback Management Server (FMS™) Product Only: FMS™ application only; available as software license or subscription via hosted application; for recruiting, and site management and wrap-up; for companies seeking a full best-practices solution of BetaSphere to augment their existing capabilities and resources.

2) Turnkey Solution (BetaSphere Select™): FMS™ plus a full range of program management services, including program definition and setup, evaluator recruiting, and site management and wrap-up; for companies seeking a full best-practices solution of BetaSphere to augment their existing capabilities and resources.

3) Business Process Outsourcing (BetaSphere BPO): Longer-term, multi-program contract for BetaSphere’s turnkey solution to manage all or most of a company’s or business unit’s customer acceptance testing needs; for companies seeking the continuity and assurance of the BetaSphere best-practices solution over the long term.

Section 3: The Study

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[Study Approach]

Accenture was engaged by BetaSphere, Inc. to conduct an assessment of the benefits, both qualitative and quantitative, that BetaSphere customers believe they have realized via the use of BetaSphere’s products and services. The study involved the interview of eighteen subjects who had employed BetaSphere for customer acceptance testing programs as a means to enable customer-centric product development. The interviews were conducted by Accenture via telephone or in person in accordance with an objective and defined interview guide. The interview notes were subsequently compiled and analyzed for data, anecdotes, and quotes related to the customer experience and benefits delivered by BetaSphere. The results were then used to develop the Study Results section of this paper in order to provide insight into many of the practices and challenges described in the first section of this document.

[Characteristics of Study Participants]

The participants in this study varied according to their functions, industries, company sizes, target customers, product types, testing timing, and testing histories. Each interviewee had been involved in at least one or more customer acceptance testing programs using BetaSphere products and/or services during the new product development process.

Companies and Markets Represented

The study participants represented eight different companies and ten different business units. The coverage of the interviewees in terms of company size, industry, target customer, and product type is indicated in Figure 10. Each circled number represents an interviewed company; the “a”s and “b”s represent different business units within the same company. The companies represented in the study covered a spectrum of sizes, ranging from ten-person startups to established technology leaders with tens of thousands of employees worldwide. The majority of companies were in the technology space, targeting either businesses (B2B) or consumers (B2C).
### Products Represented

The new products involved in the customer testing programs represented a broad range of complexity and maturity levels. These products ranged from consumer audio software to complex high-end networking hardware systems. The products varied in maturity level, from brand new products in new categories to version releases of established, more mature products. In several cases, companies were testing products that were "larger and more complex" than anything they had launched before. For some participants from smaller companies, the product tested was the company’s first and only developed product. For others, the product tested was a subsequent version of an existing product in a large portfolio.

### BetaSphere Products and Services Employed

Many of the interviewees employed BetaSphere’s turnkey solution which includes the Feedback Management Server™ platform for feedback management, program management services, and evaluator recruitment services. Two of these customers, based on the success of past BetaSphere programs, signed year-long contracts (BetaSphere BPO) for BetaSphere’s turnkey solutions. One of the customers, who had previously developed internal resources such as program management and an external evaluator pool, licensed only the Feedback Management Server™.

### Job Functions Represented

The job functions of the study participants included marketing, engineering, and executive roles (Figure 11). The levels of the interviewees ranged from manager to vice president. Several of the participants had decision-making power for investments in external solutions such as BetaSphere, whereas others had to receive executive or team-wide approval.

### Internal Customer Testing Heritage

The study participants varied in their internal customer acceptance testing capabilities and histories. Figure 12 depicts the customer testing heritage for each of the companies interviewed. Some of the medium and large companies had previously developed internal test processes and resources, including full-time program managers. Some companies had few or no resources for, processes for, or experience with customer acceptance testing.

### Customer Acceptance Testing Types

BetaSphere was employed at several points in the new product development process. Many of the participants used the BetaSphere solution for Beta (external customer) testing programs. Several participants also employed the solution for Alpha (internal) testing management. In addition, others used BetaSphere for post-launch quality and comparative testing. For example, one participant used the solution to help compare her company’s new product performance to that of a competitive product—in a real customer environment with real customers.

### Section 4: Study Results

The interviews revealed a number of key benefits customers believed they realized through the use of BetaSphere solutions. The perceived value of certain BetaSphere benefits varied, as one might expect, according to particular interviewee characteristics, values or motivations. However, the interviewees consistently recognized several benefit areas as compelling. This study did not require a 100 percent correlation between each benefit area investigated and the responses of the interviewees to conclude that a benefit area existed. Rather, the consistent recognition of benefits by participants, supported by data or anecdotal evidence, sufficed. In all cases, the interviewees agreed that BetaSphere helped them address many of the challenges of effectively incorporating customer feedback into their new product development processes.

**[Summary of BetaSphere Benefit Drivers and Business Outcomes Enabled]**

The following chart summarizes the participant responses categorized according to: the challenges of customer acceptance testing, the BetaSphere solution to address these challenges, and the outcomes enabled by the BetaSphere benefits drivers. It should be noted that customer perceptions of these outcomes did vary; thus the outcomes are presented in order from greatest to smallest in terms of the amount of perceived value expressed by interviewees.

Following the summary chart, specific examples, data, and anecdotes are provided to substantiate each category.
<table>
<thead>
<tr>
<th>Customer Acceptance Testing Challenges Identified</th>
<th>BetaSphere’s Solution to Address Challenges</th>
<th>Perceived Benefits Realized from BetaSphere’s Solution</th>
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<tbody>
<tr>
<td>Lack of adequate resources and time</td>
<td>Provided the experienced resources and services required to run an effective program</td>
<td>Reduced time spent on testing administration and non-core activities; avoid adding headcount</td>
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<tr>
<td>Opportunity costs of applying resources to customer testing administration versus other priorities</td>
<td>Provided the tools and services to handle testing needs and administration</td>
<td>Ability to focus on high priority, high impact work during critical phases of the development process</td>
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<tr>
<td>Developing the infrastructure and processes to execute effective programs</td>
<td>Offered the Feedback Management Server; a proven process and best practices in testing program definition and management</td>
<td>Immediately leveraged efficient tools and services for customer testing needs rather than spend time and resources developing internal capabilities</td>
</tr>
<tr>
<td>Limited access to the breadth and quality of external evaluators and environments desired</td>
<td>Recruited qualified evaluators from proprietary database to provide broad coverage of possible external user and environmental permutations</td>
<td>Increased probability of identifying unforeseen product issues from diverse external environments; reduced risk of reworks, recalls, reputation damage, or post-launch crises</td>
</tr>
<tr>
<td>Motivating evaluators to respond and to provide insightful feedback</td>
<td>Achieved high yields of high quality feedback by proactively communicating and following up with each evaluator</td>
<td>Improved likelihood of identifying unique bugs or issues and addressing them before launch; reduced risk of post-launch quality or customer satisfaction issues</td>
</tr>
<tr>
<td>Obtaining feedback quickly to maximize the time available to address it</td>
<td>Motivated and enabled rapid feedback and real-time communication, often within 24 hours of program start</td>
<td>Maximized the time window available for the team to rectify issues, modify features, or educate customers</td>
</tr>
<tr>
<td>Prioritizing feedback and customer values in order to prioritize development activities</td>
<td>Enabled rapid, comprehensive, trackable feedback related to customer issues, suggestions, likes/dislikes, and desires</td>
<td>Helped convey customer value priorities and thus align product priorities and team efforts accordingly</td>
</tr>
<tr>
<td>Delivering superior customer responsiveness and service throughout the testing program</td>
<td>Provided user-friendly tools and proactive, professional services to rapidly respond to customer needs and wants</td>
<td>Attained motivated and satisfied testing customers who provided quality feedback and testimonials</td>
</tr>
<tr>
<td>Lack of expertise or knowledge about test practices in conducting customer acceptance testing programs</td>
<td>Provided years of experience with reputable customers, expertise, and best practices approach to customer acceptance testing</td>
<td>Extracted more value from customer acceptance programs to ensure products meet customer requirements</td>
</tr>
<tr>
<td>Collecting credible testimonials or references for press releases or marketing collateral</td>
<td>Recruited high quality evaluators and encouraged testimonials and references</td>
<td>Leveraged credible testimonials from real users for input into press releases, venture capital discussions, and sales collateral</td>
</tr>
<tr>
<td>Monitoring quality or performance of commercialized products in real-world environments</td>
<td>Offered effective tools and services to implement customer acceptance testing – even after launch</td>
<td>Obtained real-world benchmarks, evaluations, and testimonials regarding product performance and quality that was fed into current marketing efforts or future product requirements</td>
</tr>
<tr>
<td>Generating valuable suggestions for product innovation or improvements</td>
<td>Utilized tools and services to motivate evaluators to provide suggestions and ideas for product improvement</td>
<td>Acquired valuable suggestions and innovative ideas for future product requirements or new, differentiated product development</td>
</tr>
</tbody>
</table>

**Outcomes Enabled by BetaSphere**

1. **Enhanced Resource Efficiency and Productivity**
   - Allowed team to focus on core competencies and high priority activities
   - Driven by Benefits #: 1, 2, 3, 6
2. **Improved Product Quality and Reduced Risk**
   - Launched more stable products with less risk of unforeseen issues or costly reworks
   - Driven by Benefits: 4, 5, 6, 7
3. **Increased Market Acceptance**
   - Got to market with the “right” products that customers demanded
   - Driven by Benefits: 1, 2, 3, 4, 5, 6, 7, 8, 9
4. **Improved Marketing Effectiveness**
   - Acquired valuable testimonials and feedback to refine marketing activities and messages
   - Driven by Benefits: 7, 10, 11
5. **Improved Time to Market for Subsequent Products**
   - Utilized feedback as input for customer requirements and focus development priorities for subsequent version of product
   - Driven by Benefits: 5, 6, 7, 11
6. **Enabled Customer-Driven Innovation and Differentiation**
   - Obtained valuable suggestions and ideas for differentiated products
   - Driven by Benefit: 12
The Benefits Summary Chart presents the benefits achieved by all of the study participants on average. However, each customer had unique experiences and perceived different benefits of engaging BetaSphere. The variability in perceived value connected with the BetaSphere solution depends on a range of influential variables such as individual job functions, product types, companies, risk profiles, and internal capabilities. To further examine the challenges faced and benefits realized by particular customers, three case studies from three distinct companies were constructed. Each study reveals the very different situations experienced by each participant in their efforts to effectively incorporate customer feedback into their development process.

es. Although the particular "pain points" were different, all of the companies shared some challenges driven by internal and external environmental dynamics. Each study also reveals the range of perceived benefits and rationale associated with the use of BetaSphere by each customer. The case studies, which appear at the end of this document, describe three customer and product situations, as outlined in Figure 13.

[Benefits Substantiation]

As presented in the Benefits Summary Chart, BetaSphere customers believe they realized a number of valuable outcomes, or benefits, through the use of BetaSphere solutions. These general benefits categories were aligned with the challenges they addressed and the business outcomes they enabled. Following are sample data and anecdotes obtained from the 18 customers interviewed in support of these benefits areas. It should be noted that customer opinions did vary and that the correlation between responses and benefit categories was not 100 percent. The six key business outcomes are therefore presented in order of the strength of substantiation for each.

[1. Enhanced Resource Efficiency and Productivity]

Allowed team to work more efficiently and focus on core competencies and high priority activities during the development cycle

Challenges

The pressure to "do more, do it faster, and do it with the same or fewer resources" was commonly discussed by interviewees. They also discussed the difficulties of balancing this pressure with the need to develop the "right" product.

1. "Do more": With product lifecycles shrinking, the pressure to produce more products in the same or shorter development cycles is high. Not only does this imply the "need for speed," but it also suggests that individual team members must take on more responsibilities. These managers, occupied with other priorities, suggested they had little time available to dedicate to designing and executing customer acceptance testing. Another apparent factor requiring teams to "do more" is increasing product complexity. Several of the medium and large technology customers claimed that the products they are developing are more complex than ever before. A more complex product may require more work - additional design time, development work, and, importantly, broader and more robust customer testing, while the expected time-to-market is often the same, or even shorter, than the product's less complex predecessors.

2. "Do it faster": Speed is often an imperative for new product development teams as it may offer a range of economic or qualitative benefits. At least three of the study participants were racing against competitors to be first to market with entirely new technologies or product categories. One vice president of a fast-moving software startup said, "In this industry, time is one thing we don't have. And it's something you cannot get more of from a Venture Capitalist!" Most interviewees suggested that customer acceptance testing was a very time intensive and inefficient activity for many product team members. One of the greatest frustrations expressed by interviewees was the time required to elicit meaningful feedback from customers. This often required multiple phone calls per day, sometimes to other countries in different time zones. One product manager claims to have spent "hours on the phone, begging customers to participate." Another frustration was related to the mode of customer feedback. Interviewees claimed that program managers, product managers, and engineers spent hours sifting through quantities of emails, faxes, and notes, attempting to extract and prioritize feedback. One program manager

<table>
<thead>
<tr>
<th>Take Away</th>
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<tbody>
<tr>
<td>BetaSphere helped product teams enhance efficiency and productivity by:</td>
</tr>
<tr>
<td>- Saving them significant man-hours and resources, allowing team members to focus on priorities</td>
</tr>
<tr>
<td>- Making the process more efficient and feedback more actionable</td>
</tr>
<tr>
<td>- Accelerating feedback, maximizing the window for product teams to react</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Customer Description</th>
<th>Product Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Major business unit of leading global networking company</td>
<td>Preparing new multi-million dollar data platform product for market</td>
</tr>
<tr>
<td>2. Rapidly growing software startup</td>
<td>Assessing functioning version of flagship (and only) product</td>
</tr>
<tr>
<td>3. Medium-sized enterprise hardware technology company</td>
<td>Introducing new product category into the consumer market</td>
</tr>
</tbody>
</table>

Note: Case studies appear at end of document
Following is what BetaSphere customers said about each of these benefits.

1. BetaSphere eliminated many of the man-hours and resources required to develop and execute the program, allowing the team to concentrate on their core development work and launch priorities. Said one engineering manager at a large networking company, “One of my major concerns right now is minimizing costs from an FTE (full-time employee) standpoint.” Because customer acceptance testing is often cyclical rather than full-time, several interviewees were seeking a more flexible model to staff these programs on an as-needed basis. The smaller companies interviewed simply did not have the resources or expertise to conduct meaningful customer acceptance testing. Even with larger companies that did have full-time program managers or departments, interviewees believed the process was inefficient and overwhelming for the limited staff they had. In general, most of the interviewees viewed the administration of customer acceptance testing programs, because it was not their core competency, to be a major time and resource drain, stealing them and their team members away from other priorities.

Benefits of BetaSphere

Most of the interviewed parties agreed that BetaSphere helped them increase development team efficiency and productivity. Three main benefits drove this outcome:

1. BetaSphere eliminated many of the man-hours and resources required to develop and execute the program, allowing the team to concentrate on their core development work and launch priorities

2. With its application and professional services, BetaSphere made the customer acceptance testing process more efficient, enabling all parties to spend less time and extract more value from the process

3. Customer feedback was received significantly faster than before, maximizing the time window available for the team to address customer issues and suggestions

Following is what BetaSphere customers said about each of these benefits.

In this industry, time is one thing we do not have. And it’s something you cannot get more of from a VDI.

—VP, Software Company

Without BetaSphere, it would have taken us hundreds of man-hours to get the same kind of product data.

—Product Marketing Dir, Consumer Device Division

Taking a broader view of the time and resource savings, one product marketing director for a consumer device business claimed that the use of BetaSphere “saved us a huge number of hours. We did not have to manage the beta test, and we received reports that enabled us to review the feedback rather quickly. Without using BetaSphere I imagine it could have taken hundreds of our man-hours to get the same kind of data.”

One program manager at a mid-sized technology company summed it up: "The saved man-hours alone of engineering and support costs well outweigh the price for BetaSphere. The other benefits were all value-add. It was an easy sell.”

Above and beyond straight time savings, BetaSphere lowered the opportunity costs of using valuable resources for the administration, logistics, and data analysis associated with customer acceptance testing rather than on their core competencies. BetaSphere was considered a great solution because the use of its software and/or professional services allowed product teams to focus on other priorities — resolving more issues, refining more features, and completing more project tasks — during critical times in their development cycles.

The increased productivity resulting from the use of BetaSphere was substantiated by several interviewees. For example, one product manager claimed that his business unit was able to double the number of customer sites their engineers could support. Other interviewees discussed the benefit of having more time to make the product better before launch. A hardware engineering manager explained that BetaSphere allows engineers to focus on customer acceptance testing processes, many of the interviewees were seeking ways to make the process more efficient.

3. "Do it with the same or fewer resources": Several participants discussed their inability or hesitancy to add headcount to support the increased quantity and speed of work required. Said one engineering manager at a large networking company, “One of my major concerns right now is minimizing costs from an FTE (full-time employee) standpoint.” Because customer acceptance testing is often cyclical rather than full-time, several interviewees were seeking a more flexible model to staff these programs on an as-needed basis. The smaller companies interviewed simply did not have the resources or expertise to conduct meaningful customer acceptance testing. Even with larger companies that did have full-time program managers or departments, interviewees believed the process was inefficient and overwhelming for the limited staff they had. In general, most of the interviewees viewed the administration of customer acceptance testing programs, because it was not their core competency, to be a major time and resource drain, stealing them and their team members away from other priorities.

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3. Customer feedback was received significantly faster than before, maximizing the time window available for the team to address customer issues and suggestions.

Following is what BetaSphere customers said about each of these benefits.
Now we can use that time to deal with customer issues coming in from the field.” Figure 14 provides an example of an engineer’s time allocation during customer testing programs, in hours per week, before and while using BetaSphere.

More Efficient Process
Many of the interviewees were impressed with the process efficiency offered by the BetaSphere solution, and all commented positively on the use of the BetaSphere FMS™ application. As mentioned previously, BetaSphere’s software removed the headaches of the “drowning in paper,” “laborious email strings,” and “reading pages of chat room banter” by providing a central forum for collecting, reviewing, searching, and tracking feedback. The FMS™ also made the distribution of software, online documentation, and updates simple and rapid. One product marketing director for a consumer device company suggested, “Having this central place to go for feedback and reports as well as software distribution made a big difference. It required a minimal amount of effort and generated a minimum amount of hassle.” The FMS™ was also perceived as more efficient for end-users than traditional modes of feedback. One hardware engineering manager mentioned that “the common interface allows end-users to learn once, use many times, and be confident that our company is on top of things.” A software product manager for a consumer device company commented, “The fact that BetaSphere’s FMS™ can handle hundreds of users at a time is valuable, because a single coordinator just can’t handle that volume. And the centralized nature of the communications allows for more responsiveness.”

The FMS™ also served to simplify project team and customer communications by providing a central forum for discussion, communication, and collaboration. In the case of a large networking company business unit, up to nine team members were communicating directly with customers (evaluators) before BetaSphere was implemented. In this company, a program manager traditionally served as the “first line of defense” for routing emails and calls to engineers and product managers, but all team members were generally barraged with emails and calls from parties outside and inside the team. The process was very time-consuming and frustrating for the parties involved, and especially confusing to individual evaluators. Not only that, but the team did all of this work and achieved only 20 percent feedback! Another program manager viewed the use of the FMS™ as a strong internal team did all of this work and achieved only 20 percent feedback!

Another program manager mentioned that “the common interface allows end-users to learn once, use many times, and be confident that our company is on top of things.” A software product manager for a consumer device company commented, “The fact that BetaSphere’s FMS™ can handle hundreds of users at a time is valuable, because a single coordinator just can’t handle that volume. And the centralized nature of the communications allows for more responsiveness.”

The immediacy of high quality evaluator feedback was viewed as another significant benefit of the BetaSphere solution. By receiving feedback more quickly, product teams could maximize the time they had available to address it, thereby creating more stable, desirable products in the same time period. One product marketing director was very impressed by the immediacy and quantity of the feedback, “I got more feedback in 24 hours than I had received in all of the projects I had done with my company before, combined.” He said that the immediate response was particularly memorable: “I can’t forget watching more and more feedback come in—I was just blown away.”

One program manager from a consumer software company said, “We were always challenged with how to reduce the time from the mouths of our customers to the fingers of the developers. BetaSphere helped us achieve this.” A mobile computing peripheral product manager emphasized the potentially mission-critical importance of getting this immediate feedback via BetaSphere. “Getting immediate feedback is critical. The difference between getting feedback on Day 3 of the beta cycle and Day 30 is the difference between resolving an issue before launch or delaying the First Customer Ship.”

Figure 15 is an illustration, based in part on the large networking company interviewees, of the communication flows during customer acceptance testing, both with and without BetaSphere. As shown, the process was quite complicated beforehand, and much simpler with the introduction of the BetaSphere turnkey solution. In addition, Figure 16 illustrates the difference in feedback yields. Without BetaSphere, the project team invested a great deal of time into an inefficient process that only yielded 40 percent feedback. With BetaSphere, the team’s communication process was much simpler and the yield was 90 percent.

Another advantage of the BetaSphere solution, according to several interviewees, was the enhancement in data handling and analysis. The ability to tabulate, sort, search, track, real-time report on, and prioritize feedback was seen as a major benefit of the BetaSphere application. Rapid prioritization of feedback is of key importance for development teams so that they can focus their efforts on the highest priority areas likely to affect market success. One hardware engineering manager from a major networking company commented, “The FMS™ helps us set priorities on solving problems in the right order.”

Figure 15: Example Resource Time Allocation (% of Workweek)

Figure 17 is an illustration, based on BetaSphere customer interviews, of the benefits of accelerated, actionable feedback. By providing the feedback almost immediately in an actionable format, BetaSphere maximizes the time window available for resolving issues and enhancing product quality.

[2. Improved Product Quality and Reduced Risk]

Launched more stable products with less risk of unforeseen issues or costly reworks

Challenges

As products and the environment in which they
operate become more complex, the importance of launching a quality, mini-
mal-defect product has increased. At the same time, customer expectations
have risen, making the risks associated with product defects and failure
greater than ever before. These risks include increased costs due to rework,
recalls, and customer service on defective products, damaged brand equity,
and reduced market share (from both new adopters and repeat buyers).

Many of the medium and large-sized companies with enterprise-class prod-
ucts or consumer applications claimed that their products and user environ-
ments are becoming increasingly complex. Such complexity makes products
more difficult to test internally, since most internal quality assurance labs can
only replicate or anticipate a limited number of permutations of environ-
ments and configurations. One B2B software company, for instance, found
that they had no problem getting quality feedback from a limited group of
consistent, core customers, but they were "not getting the breadth of feed-
back we wanted." 4

Another problem a majority of respondents found in conducting their own
customer acceptance tests was an inability to command satisfactory response
rates. This low feedback yield, they believed, resulted both from a perceived
lack of sufficient resources to follow up consistently with evaluators and a
deficiency of engaged, enthusiastic, and high-quality evaluators. For exam-
ple, the feedback yield achieved by one networking company’s critical new
platform release was only 20 percent. In fact, according to most intervie-
wees, external feedback yield from internally-driven programs rarely exceeded
40 percent.

This combination of inadequate environmental coverage and insufficient
feedback yield may significantly increase the risk of detrimental outcomes or
even failure. Almost all respondents recognized that one risk is the release of
an unstable product with numerous defects. A few interviewees suggested
that top-severity, or “showstopper” bugs might be missed without robust
external testing. Many interviewees also recognized the risk of releasing
products that are not well aligned with customer needs. All of these product
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issues may increase a company’s risk of reduced customer satisfaction,
increased customer support costs, damaged reputation, and lost sales.

Benefits of BetaSphere

Figure 15: Example of Project Communication Flows

BEFORE BetaSphere: Customer Acceptance Testing Efforts to Achieve 40% Feedback Yield

WITH BetaSphere: Customer Acceptance Testing Efforts to Achieve 90% Feedback Yield

Figure 16: Example of Evaluator Testing Coverage and Feedback Yield

The majority of customers interviewed felt that the use of BetaSphere helped
them improve product quality and lessen the risk of product failures by
achieving improved environmental coverage and greater feedback yield.

Improved Feedback Yield

Although improvement in yield varied accounting to the customer’s
traditional response rates, BetaSphere was often credited with
impressive yield increases. For one customer who had previously
achieved a 20 percent response rate in customer acceptance tests, the
initial test run by BetaSphere netted 100 percent response, signifi-
cantly improving the quantity and quality of feedback acquired.

BetaSphere's ability to provide both
superior coverage and yield is illus-
trated in Figure 16. Many intervie-
wees mentioned that when they
attempted to source evaluators
through internal contacts, they had
difficulty achieving their targeted number of potential users meeting target profiles. BetaSphere's ability to provide a large pool of qualified evaluators allowed them to find more testers meeting their target profiles. As previously mentioned, BetaSphere's 'high-touch' strategy also allowed for significantly improved feedback yield, or response rate. In addition, many interviewees also mentioned the fact that BetaSphere's formal process improved the quality of the feedback received.

The combination of robust coverage and yield provided by BetaSphere meant that customers were more likely to catch defects of all types, including mission-critical, "showstopper" bugs. As a product manager at a startup mentioned, "If you find one showstopper bug one month earlier, it can save the project." A computing peripherals company found two "critical" bugs using BetaSphere - one that could have incurred significant return costs, and another that was addressed proactively using documentation. Another consumer software company used BetaSphere as a validation process, to confirm the presence of a bug that would have delayed launch. While they had noticed this bug in the lab, they had not believed that it was serious "because it was an intermittent bug conflicting with a third party software. Once we got validation from BetaSphere that this was indeed an issue, we were able to fix it." Other customers felt that BetaSphere was valuable for its ability to catch smaller, less severe bugs that could be proactively addressed through documentation or customer support. Overall, many customers agreed that their total yield of defects found was increased by BetaSphere. One startup found hundreds of bugs that they "would not have found internally," and another "found about twice as many unique bugs, mostly of cosmetic variety, but some very interesting ones. Without BetaSphere, we would not have known which bugs impacted our customers the most."

Immediacy of Actionable Feedback

Another benefit of BetaSphere expressed by many respondents was the immediacy of actionable feedback received, as previously described in this study's discussion of resource efficiency. Speed to feedback also has important implications for product quality and avoidance of risk. If the faster feedback can be logged and made actionable, the more bugs can be found and potentially fixed prior to launch. Some customers cited specific instances in which the speed of feedback enabled them to accelerate development. "With the increased speed of feedback using BetaSphere, I was able to get five features into the current phase that would have been pushed off until the next version without BetaSphere. This allowed us to have an extremely stable product going to market at FCS (First Customer Ship)." The effect of achieving immediacy and quantity of feedback is illustrated in Figure 17. According to our interviews, the immediacy of feedback achieved with BetaSphere increases the chance of discovering and fixing more of the total existing bugs pre-launch. Finally, discovery of a greater proportion of the potential bugs reduces the chance that there will be a major up-tick in the number of issues discovered post-launch.

Risk Avoidance

The majority of respondents agreed that BetaSphere's solution can be viewed as a risk avoidance strategy, insofar as it reduces the chance that significant, high-cost defects remain in the product through launch. One program manager maintained, "The formality of the BetaSphere process allowed for a higher level of risk management." The risk associated with defects is especially high for truly complex products or new product categories. A startup web software company preparing to release its flagship product claimed, "The biggest risk is making the WRONG product." It is important to note that a defective product launch not only risks the cost of rework and recall, but the reputation of the company as well, as substantiated by a global networking product manager: "First impressions and perceptions mean everything. If you release an unstable product, you can develop a bad reputation in the market that takes several years to turn around. The product must be delivered with the utmost quality and stability."

Overall, customers believed that one of BetaSphere's main value propositions is its ability to help them improve product quality and reduce risks of failure. In turn, the benefits of improved stability and quality are widespread. One respondent remarked that BetaSphere "definitely helped us improve the product launch that takes several years to turn around. The product must be delivered with the utmost quality and stability."

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Take Away

BetaSphere helped many customers boost market acceptance by:
- Improving customer satisfaction, leading to early adopters and advocates;
- Facilitating higher product quality and more customer-centric products, engendering higher customer satisfaction and market demand.

[13]

Figure 17: The Benefits of Immediate Feedback (Example)

<table>
<thead>
<tr>
<th>BEFORE BetaSphere</th>
<th>WITH BetaSphere</th>
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<tbody>
<tr>
<td>Day 10</td>
<td>Day 1</td>
</tr>
<tr>
<td>Significant Actionable Feedback Noted</td>
<td>Significant Actionable Feedback Noted</td>
</tr>
<tr>
<td>BetaTested and Prioritized</td>
<td>BetaTested and Prioritized</td>
</tr>
<tr>
<td>Continuous Feedback and Issue Resolution Time (10 Days)</td>
<td>Continuous Feedback and Issue Resolution Time (2 Days)</td>
</tr>
</tbody>
</table>

Source: Example based on customer interview input

[3. Increased Market Acceptance]
the NPD process has limited companies’ abilities to truly drive market share with innovative NPD practices.

Despite a recognized connection between effective customer acceptance testing practices and improved market acceptance, many of the respondents expressed or implied that their traditional customer testing practices were sub-optimal. For example, most interviewees conducted somewhat ad-hoc customer requirements development, with a limited population or sample size of trusted customers. However, this inconsistent data collection method could actually reduce market acceptance, as it may not provide adequate insight into the needs of new or evolving customer segments.

When it came to driving truly customer-centric products, most companies felt that their traditional testing processes were not entirely effective, due to delayed feedback, ‘feature freeze’ at the time of beta, limited target customer coverage, inadequate bug discovery, lack of customer values prioritization, and insufficient resources to provide top-notch customer service during testing. The combination of these factors left respondents, in general, feeling that more robust, efficient, and intimate customer acceptance testing would improve the degree to which their products were tailored for customer needs, and thus incrementally improve market acceptance.

**BetaSphere Benefits**

Many of the interviewees agreed that BetaSphere contributed to increased market acceptance of their products, not through a direct connection with adoption, but rather through increased customer satisfaction and brand equity associated with producing higher-quality products with more of the features that customers wanted.

Messages about customer satisfaction took two forms during interviews. First, interviewees voiced the opinion that BetaSphere’s high level of customer service and user-friendly Feedback Management Server™ application improved satisfaction for customers, turning a higher percentage of this population into early adopters and brand advocates. Second, interviewees recognized that customer satisfaction (and in some cases, adoption) post-launch was improved by the delivery of products that were higher quality and more aligned with customer needs.

**Excellent Customer Testing Experience**

For companies with high-price products and a limited market size, the provision of superior customer service during customer acceptance testing was paramount, since a significant number of their potential customers might be represented in the target pool. As such, the quality and quantity of interaction during testing can have significant impact on product adoption post-launch. One product manager at a network equipment manufacturer felt that BetaSphere’s FMS “was a great interface not only for customers to post bugs, but also to get feedback on fixes. The customers felt that they got much better responsiveness when BetaSphere was involved.” Indeed, one computing product manager recognized that he simply could not have provided the necessary responsiveness to beta testers without BetaSphere’s assistance: “It improved customer satisfaction by giving us assistance in responding quickly to higher priority issues. If we had to rely on internal resources for this, it most likely would delay response.” The consistency of BetaSphere’s interface across multiple projects and customer sites was also seen as a benefit. One hardware engineering manager remarked, “The common interface allows end-users to learn once, use many times, and to be confident that our company is on top of things.”

**Quality Improvements**

The most widespread message conveyed regarding market acceptance was related to the quality improvements engendered by BetaSphere, and the associated increase in customer satisfaction and adoption. BetaSphere’s influence on product quality was discussed at length in “Improved Product Quality and Reduced Risk” previously. However, a number of customers made the explicit connection between quality improvements facilitated by BetaSphere and improved customer satisfaction and/or market acceptance. One product manager at a networking software business unit recognized the influence of improved coverage on quality, and in turn on customer satisfaction. “BetaSphere helped us in uncovering and then fixing bugs we might not have found and adjusting features we might not have known needed changing. We tested more broadly and therefore achieved better product quality and stability, which in turn led to improved customer satisfaction and service reputation.”

**Brand and Reputation Enhancement**

A number of respondents felt that BetaSphere not only helped improve product quality and thus market acceptance, but that it also helped improve brand quality because customers were aware that their products had been formally, objectively tested. A program manager at a networking software
business unit suggested that “brand equity is enhanced by beta testing because customers know that the company is covering up on potential errors. Customer satisfaction in general is enhanced by beta programs because customers spend less time on the phone. Plus, these customers recognize that the product is easier to use and more reliable.” One networking products product manager also commented that he uses “BetaSphere’s work as a metric for what the market will think about the product.” A VP at a software startup has even used BetaSphere as a success metric with her company’s stakeholders: “We have been quoting the results of this beta test to Venture Capitalists, to our design win partners, and other people with whom we are building business relationships. The president and CEO said that the beta test results are some of the most valuable demonstrations of the work and power of this company’s technology. They have changed their attitudes about our market and customers as a result of the beta test feedback.”

### Customer Value Alignment

Perhaps the most compelling message conveyed related to BetaSphere’s influence on market acceptance centered on the enhanced ability of companies to produce products that were aligned with customer needs. Several respondents mentioned that the improved speed, coverage, and quality of feedback allowed them to adjust or add features that made their products more attractive in the market. Importantly, the format of the feedback and real-time reporting enabled them to quickly prioritize and focus on customer needs. These types of improvements are often not achieved via internal testing. One software executive commented, “Customer feedback is king. In the end, no other opinions matter, as long as you can actually hear directly from customers. For example, the engineers can assert, ‘it’s easy to download.’ But when 6 out of 10 customers had to call technical support for help in downloading, that proves that it’s actually NOT easy to download.” By using BetaSphere, she claimed, “We got terrific feedback from real customers about what they liked, did not like, what they found understandable, what they did not understand, what features they found more appealing and valuable, and which ones they did not understand or value.” As mentioned in “Improved Product Quality and Reduced Risk” previously, one customer was able to include five extra features in his product release as a result of the immediacy of feedback provided by BetaSphere. “This definitely improved market acceptance,” he asserted. In fact, this customer believes that he was able to land two large multi-million dollar deals as a result of the ability to include those five features into the current release. The breadth of evaluator coverage that BetaSphere offers was another contributor to a company’s ability to identify and address customer needs for their full spectrum of target markets. “We used BetaSphere to ensure greater coverage and sample sizes. In general, BetaSphere helped confirm that we were making a product aligned with customer needs. It confirmed customer acceptance of the new user interface, features, and functionality.”

In general, BetaSphere’s ability to elicit a broad range of actionable user feedback helped their customers develop more customer-centric products that achieved higher market acceptance. In the case of two fast-moving startups, BetaSphere’s assistance helped make the difference in successful market acceptance and failure. “The beta test feedback recalibrated us on what was missing in our product before we actually embarked on full-scale development for a deployable product. Without this early feedback, we could have been nearly complete with this current product before realizing there were areas that needed serious attention to be successful. Using BetaSphere may have saved us an entire product development spin that could have been unsuccessful in the market and possibly cost us the company.”

### Improved Marketing Effectiveness

#### Acquire valuable testimonials and feedback to refine marketing activities and messages

**Challenges**

Marketing messages that are intentionally aligned with customer values are most likely to get strong response from customers. Without an intimate knowledge of the customer, it can be challenging to determine the most compelling marketing messages, positioning, and pricing for a given product. In addition, because customer requirements evolve regularly, frequent customer input into the formulation of marketing strategy is valuable. Effective customer testing is one method to determine the strength of one’s messaging, positioning, business model, and value propositions.

The use of customer testimonials, claimed one technology product manager, is a method for conveying credible, positive messages to prospective customers. One software startup executive expressed the value of “having real people say good things about your product before it’s released.” However, using their traditional customer acceptance testing processes, without access to a broad range of evaluators, several of the interviewees in this study expressed difficulty in acquiring credible, compelling testimonials. They claimed that even when evaluators were accessible, it was often difficult to motivate them to provide “official” testimonials.

**BetaSphere Benefits**

Many of the interviewees believed that the use of BetaSphere helped them enhance their marketing effectiveness in a number of ways, ranging from acquisition of testimonials to re-positioning of their products. On the other hand, several of the interviewees did not solicit marketing-related feedback from customers during the BetaSphere testing programs. In these cases, the programs were focused on performance and usability testing only.

Over half of the interviewees claimed that they received valuable testimonials from evaluators as a result of BetaSphere’s solution. As mentioned in “Increased Market Acceptance,” one respondent, a VP at a software startup, used the results of the customer acceptance tests to promote the product with Venture Capitalists, design partners, and other business partners. Two other technology product managers spoke of compelling testimonials that they were intending to use in upcoming press releases. One marketing manager claimed that the testimonials he received from evaluators were “very valuable” and were “going to be incorporated into the marketing plan.”
Two interviewed companies, both startups, leveraged the customer feedback obtained via BetaSphere to recalibrate their entire marketing strategies, including positioning and target markets. In each case, the tested product was originally aimed at the consumer space. The customer acceptance testing indicated that the product might be more successful in the enterprise space. By quickly receiving formal customer feedback, each company was able to refocus their marketing strategies on more valuable segments. Another interviewee, a product manager for a global networking company, used customer feedback elicited by BetaSphere to help develop market acceptance forecasts. BetaSphere was also employed in post-launch market tests to enhance marketing effectiveness. These tests could include competitive comparisons, customer satisfaction assessments, or quality assurance tests. For example, one product manager for a computing peripheral product used BetaSphere to compare the performance of her product versus a competitor's in the field. This provided "real world" data from real customers that could subsequently be used in marketing collateral.

Another valuable application of customer acceptance testing might involve pricing analysis. Two study participants commented on receiving valuable feedback from customers via BetaSphere related to product pricing and customer pricing sensitivities, helping them refine their pricing strategies.

Several interviewees, including those who did not use BetaSphere to solicit marketing-oriented feedback, agreed that BetaSphere's application could be powerfully employed for this purpose in the future and thus enhance their marketing effectiveness.

**[5. Improved Time to Market for Subsequent Versions of Product]**

**Challenges**

Speed to market is a common imperative for many new product development projects. Product teams are constantly seeking improvements to their processes that may allow them to get quality products to market faster. A critical first step in the NPD process is customer requirements definition. Although the methods of customer requirements gathering and prioritization may vary, many companies use informal, ad-hoc processes and discussions with a limited number of their "best" customers in the field to complete this activity. The result may be substantial requirements definition upfront, causing project teams to engage in costly or time-consuming redesigns or reworks down the line in order to better align products with customer needs. In turn, this may slow the development cycle and increase time to market. At the other end of the NPD process, customer acceptance testing is sometimes conducted at phases when product features have been mostly "locked" or frozen. As a result, customer input does not strongly influence the features or the cycle speed for the current, new product. Beta testing is an example of such a situation. Beta cycles are sometimes too short to allow engineers to resolve less important issues or modify or add any but the most crucial product features. Many interviewees, especially those with relatively short beta cycles (3–8 weeks) suggested that the beta phase was "too late" to make much use of customer feedback other than the identification of critical issues. They viewed beta as a "validation" phase. In addition, since beta tests occur so late in the process and are typically shorter than customers would prefer, it is considered rare for beta testing, regardless of how efficiently run, to decrease time to market for the current project.

When beta tests return compelling feedback about potential feature improvements, these suggestions are often recorded so that they may be implemented in future development cycles. However, without adequate prioritization and reporting of these suggestions, implementation in the next version takes place much less efficiently and minimizes gains in terms of time to market for subsequent versions.

**BetaSphere Benefits**

Several benefits of BetaSphere already discussed feed into yet another business outcome that customers believe BetaSphere enabled: faster time to market for subsequent versions of their products. By enabling customers to acquire high quality, prioritized feedback rapidly, BetaSphere helped them create a foundation for customer requirements development for future products. This feedback, although not typically actionable in the current product release, was viewed by several interviewees as a "jumpstart" on the next version of their products. Prioritized feature requirements and issues, aesthetic preferences, and innovative ideas allowed product teams to immediately focus on customer-driven priorities for the next release or product version. As such, interviewees agreed that future development cycles would be shortened, enabling faster time to market for the next product.

One product marketing director for a consumer device company believes that the feedback generated from BetaSphere will help his team "prioritize future product requirements. It will also help us plan future products." In fact, this marketing director believes that his team will be able to decrease the time to market of the next version of the product by one month. He also noted, "This one month can be a lot when you're trying to hit a market window, like the Christmas selling season." One program manager suggested that BetaSphere would help reduce development cycle time for subsequent products because engineers already knew where to focus. A hardware engineering manager for a large networking company praised BetaSphere's customer feedback reports. His business unit used the reports to identify tangible action items for subsequent product development, giving them a jumpstart on the next development cycle. Another interviewee, a program manager at a medium-sized software company, concurred. He claimed that the benefits of obtaining the tabulated, registered feedback reports were "significant in shortening development cycle times for the next product cycle."
[6. Enabled Customer-Driven Innovation and Differentiation]

Challenges

In competitive marketplaces, product innovation and differentiation is often essential to a company’s success. However, in the rush to develop and launch truly new concepts, product teams often incorporate little or no customer feedback into the process. “Innovation” is often driven in-house, based on the latest internal technologies or capabilities, exclusive of customers’ input or needs. Without an external focus on customer needs and competitive differentiation, companies risk launching the “wrong” product and thus not gaining market acceptance. The challenge many companies face is in combining their needs to be efficient and fast with a need to innovate and differentiate. In general, the companies interviewed do not use customer acceptance testing to gain significant insight into potential innovation. This is generally the case because they do not have the time, resources, tools, or foresight to design and execute customer tests with this objective.

BetaSphere Benefits

BetaSphere’s solution motivates evaluators to provide suggestions and ideas for improvement for the products they evaluating. As such, product teams may receive valuable, tabulated suggestions directly from their customers. If merited, these unique ideas can be incorporated into future products to help differentiate from competitors and better address buyer values.

Take Away

BetaSphere may usefully serve as a means to solicit and capture innovative ideas and suggestions that help companies differentiate and refine their value propositions.

Several of the interviewees received a number of useful suggestions that they intended to investigate further. In general, although most of the interviewees did not solicit and/or exploit product ideas and suggestions from evaluators, they did agree that this could be a useful application of the BetaSphere solution in the future.

[Benefits Substantiation—Conclusion]

The anecdotes, data, and examples obtained from the eighteen interviewees supported the existence of a number of benefits areas for BetaSphere. Although the interviewees’ perceptions of benefits varied, there was enough general agreement to support the key benefits areas presented. In reviewing the business outcomes that customers believed were enabled by BetaSphere, it is interesting to note their correlation to the four NPD imperatives previously presented in this paper (Figure 19). In essence, by enabling companies to achieve customer-centric product development by effectively incorporating customer feedback into the development process, BetaSphere may also help new product development teams satisfy their key imperatives.

[Summary]

New product development teams are faced with an array of challenges combined with unfavorable odds in their efforts to successfully launch new products. Rapidly changing technology, increasing competition, higher customer expectations, and internal resource constraints make the challenges of achieving new product success formidable. One method to increase the odds of market acceptance is through timely and effective customer involvement in the development process. Formal customer feedback can be usefully injected at several points throughout the new product development process, ranging from requirements development through beta testing to post-launch market acceptance. The incorporation of customer feedback can allow development teams to prioritize product features, diagnose and resolve problems in a timely manner, evolve requirements to meet changing market needs, competitively position or differentiate products, and even decrease time to market. Importantly, by listening to and responding to the voice of the customer, development teams can achieve superior speed to market acceptance.

To effectively compete in the future, product development teams will likely need to become increasingly customer-centric. Companies can no longer afford to risk losing business to competitors, customer attrition, high customer support costs, or a damaged reputation resulting from launching the wrong products—with products that are not aligned with customer needs. The risks are great, as expressed by one interviewer: “First impressions mean everything. If you release a sub-optimal product, you can develop a bad reputation in the market that can take several years to turn around. The product must be delivered with the utmost quality and stability.” Today and in the future, these risks can be mitigated and probabilities of product success improved through the use of effective and efficient means, such as the BetaSphere solution, to incorporate customer feedback into the development process and enable customer-centric product development.

Figure 19: Correlation of BetaSphere Benefits with NPD Imperatives

<table>
<thead>
<tr>
<th>BetaSphere Outcome Enabled</th>
<th>NPD Imperative Enabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Enhanced Resource Efficiency and Productivity</td>
<td>Increased Time to Market for Subsequent Products</td>
</tr>
<tr>
<td>2 Improved Quality and Reduced Risk</td>
<td>Improved Market Acceptance</td>
</tr>
<tr>
<td>3 Improved Market Acceptance</td>
<td>Decreased Time to Market for Subsequent Products</td>
</tr>
<tr>
<td>4 Enhanced Marketing Effectiveness</td>
<td>Enhanced Customer-Driven Innovation</td>
</tr>
<tr>
<td>5 Better Alignment with Customer Values</td>
<td>Greater Development Speed and Agility</td>
</tr>
<tr>
<td>6 Better Alignment with Customer Values</td>
<td>Improved Quality and Reduced Risk</td>
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<td>7 Better Alignment with Customer Values</td>
<td>Improved Quality and Reduced Risk</td>
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<tr>
<td>8 Better Alignment with Customer Values</td>
<td>Improved Quality and Reduced Risk</td>
</tr>
<tr>
<td>9 Better Alignment with Customer Values</td>
<td>Improved Quality and Reduced Risk</td>
</tr>
</tbody>
</table>

To achieve customer-centric product development.
Case Study – Large Global Networking Company

This case study describes how BetaSphere helped a major business unit of a leading global networking company refine and launch a stable, state-of-the-art product to its high-end customers. After realizing the value of BetaSphere, this business unit signed an annual contract with BetaSphere to provide software and services for managing the majority of their field trials.

[Customer Profile]

Major business unit of a leading global networking company

SRBU (not the real name) is a major hardware-centric business unit of a leading global networking company. Their products – hardware platforms with embedded software – are used by large corporations and service providers for mission critical activities. The development of a new product, which generates millions of dollars in sales per customer, requires a substantial investment of money, resources, and time. SRBU has been growing steadily for many years and is responsible for a considerable percentage of the parent company’s overall sales.

[Situation and Challenges]

An imperative to release the most stable, state-of-the-art product with limited resources and time

In the Spring of 2000, SRBU was developing their latest platform for market release, dubbed Project Mercury. In preparing for Mercury’s launch, SRBU faced a number of challenges, both external and internal, in ensuring product quality, performance, and value.

Two primary external dynamics affected SRBU’s product development efforts with Project Mercury. First, SRBU’s products had grown more technologically complex and feature-rich. At the same time, the number of new environments, configurations, and user types at their enterprise customer sites was expanding. To address this increased diversity of demand and product complexity, SRBU needed to ensure that “real world” customer testing was as comprehensive as possible. The second external challenge facing SRBU stemmed from the rising expectations of its customer base – a limited population of technically savvy professionals making major investment decisions for mission critical enterprise systems. Given that customer requirements for quality, performance, and service were exceptionally high, SRBU needed to gain an intimate understanding of customer values in order to provide the highest performing, most compelling product and service.

SRBU also faced two key internal challenges in their product development efforts. First, while their internal quality assurance testing was rigorous, SRBU lacked the team resources, time, and expertise to execute an equally rigorous customer testing program. For Project Mercury, SRBU could not spare the hundreds of man-hours required to execute a customer feedback program, as they needed the project team to focus on issue resolution and launch priorities. However, SRBU still required formal, robust customer feedback prior to market launch, both to fulfill ISO 9001 requirements and to ensure that they released the best, most stable product to meet customers’ high standards. The second internal challenge SRBU faced was a history of relatively ineffective, inefficient internally conducted customer testing. Recruiting high quality, enthusiastic evaluators was challenging, and response rates were low. For example, in the program before Mercury, SRBU sent out ten very costly, confidential new products for testing and received only two responses! The internal effort and opportunity cost associated with solicitation of this small amount of feedback was significant: hundreds of man-hours were spent by engineers, beta coordinators, program managers, and the product manager in conducting customer testing program management activities rather than concentrating on their efforts to make and launch the best product.

In sum, these challenges created several imperatives for SRBU’s Project Mercury:

- Increase customer satisfaction and demand by releasing a product well-aligned with customer values
- Mitigate risk of post-launch performance defects or failure through rigorous testing and issue resolution in as many environments and user permutations as possible
- Maximize productivity of internal resources to help deliver the most stable, state-of-the-art product

[BetaSphere Solution]

A full-service solution to help SRBU conduct the most effective and fruitful external testing while maximizing internal resource efficiency

Two primary factors influenced SRBU’s decision to proceed with BetaSphere’s turnkey services for their customer acceptance testing needs. First, BetaSphere had a positive reputation from successfully conducting programs elsewhere in the parent company and in the industry. Second, SRBU’s limited resources and high testing standards implied the need for a solution that packaged deep expertise in customer acceptance testing with proven software tools for managing customer feedback.

BetaSphere acquired and qualified evaluators to meet SRBU’s target characteristiscs: over 20 evaluators from 10 customer sites with global coverage, broad environment and feature coverage, and strategic account coverage. The four-month program was designed to rigorously test for bugs of all severities; assess ease of use, stability, quality, performance, and documentation quality; and collect product enhancement suggestions and testimonials.

The BetaSphere solution provided an intuitive application, the Feedback Management Server™, along with all of the services required to enable customer-centric product development and manage a seamless and effective feedback program. BetaSphere managed evaluator recruitment and qualifications, proactive and frequent communication with each site, design and execution of online evaluator surveys and tasks, management of product updates and patches, and construction of call reports and weekly program status reports for the product team.
[Results and Value Delivered]

Helped SRBU acquire the immediate, high-value feedback needed to develop a more stable customer-aligned product, resulting in increased customer satisfaction, new account conversions, and excellent market reputation.

Through the Mercury Customer Acceptance Testing Program, BetaSphere helped SRBU address many challenges and satisfy their key imperatives:

**Outcome**

- More stable, higher quality product resulting in less launch risk and higher customer satisfaction
- Product more aligned with customer values, driving higher market acceptance and sales conversions
- Increased internal resource efficiency and productivity, allowing the team to focus on their core competencies
- Enhanced sales conversions and effectiveness
- Increased customer support efficiency
- Enhanced market planning

**Drivers**

- Increased response rate from 20 percent to 100 percent, helping to maximize exposure to unique customer environments, scenarios and permutations.
- Accelerated evaluator feedback, maximizing the time window before launch when SRBU engineers could resolve issues and refine or add features. Five features were fixed or enhanced as a result of BetaSphere’s ability to produce early feedback.
- Tabulated and prioritized the extensive feedback, allowing the project team to immediately focus on addressing the highest priority, highest value issues and features.
- Identified and enabled the addition of five new features. The immediacy of prioritized feedback allowed the team to add five new customer-centric features to the current development phase that would have otherwise been incorporated in the next phase. This “definitely improved market acceptance” (Sr Prod Mgr).
- Provided feedback on the basis of market acceptance, enabling the product manager to create more accurate, supportable market forecasts.

In light of the many qualitative and quantitative benefits delivered by BetaSphere, it is apparent that SRBU realized a tremendous return on their investment. Not only did BetaSphere enable SRBU to save valuable time and resources, it helped them launch a product commanding immediate demand by current and prospective customers. SRBU was so satisfied with the results that they signed a one-year contract with BetaSphere to provide outsourced software and services for managing customer acceptance testing for all of their major product releases.
RelevApps’ VP of Program Management had used BetaSphere’s products and services at another company with great success. Given RelevApps’ urgent time constraints, limited resources, and need for rapid, high quality feedback, she thought BetaSphere was an ideal solution. Based on this input, the executive sponsors and project team agreed to move forward with the BetaSphere offering, which included both the intuitive Feedback Management Server™ software as well as a full range of program management services. In conducting the customer acceptance testing, RelevApps’ goals were to maximize the breadth and quality of the evaluators, to ensure that the feedback was comprehensive enough to identify all key issues, and to refine customer requirements for the final product.

AlphaSphere was able to use its evaluator database to quickly screen and recruit the targeted 50 evaluators that met RelevApps’ user and environment profiles. The selected pool of evaluators was located throughout the U.S. and consisted of two-thirds novice users and one-third intermediate-advanced users. BetaSphere managed the implementation and execution of the nearly three month program, including the qualification of evaluators, distribution and installation of product, design of evaluations, regular proactive contact with evaluators, responsive site support and information management, call reporting, bug tracking and sorting, product suggestion tracking, analysis and prioritization of feedback by category, and reporting. BetaSphere’s full service solution made the process seamless, efficient, and productive, with limited resources required from RelevApps.

[Results and Value Delivered]

RelevApps’ decision to use BetaSphere for their customer acceptance testing needs proved invaluable in a number of respects:

1. Decreased time to market acceptance

Helping RelevApps develop the right product faster may translate into millions of dollars of additional revenue potential and higher probability of market success.

The broad, rapid, and insightful feedback enabled RelevApps to quickly prioritize and refine customer requirements, including what customers liked and did not like, what they understood and what they found confusing, what they found more appealing and valuable, and what they did not value. RelevApps was able to leverage this feedback to revise their flagship product, including a simplification of the user interface and improvement of their value proposition. RelevApps also leveraged this feedback in communicating their product benefits to potential business partners.

The resulting realignment of RelevApps’ development efforts actually enabled them to accelerate time to market acceptance of the flagship product by more than three months by avoiding the significant time and effort that would have otherwise been spent developing a product that did not
address the target customer’s needs. This three-month savings could result in millions of dollars in additional revenue and incalculable benefits of being first-to-market.

2. Higher product quality and reduced risk of failure

Enabling RelevApps to deliver a stable, high-quality product may increase customer satisfaction, diminish the risk and hefty costs of failure, and decrease post-launch support costs.

Through its broad coverage of evaluators, BetaSphere enabled RelevApps to expose their product to a wide array of environments, configurations, equipment, and user permutations. As a result, the evaluators were able to identify and specify the severity of dozens of unique bugs and usability issues during the program, about half of which were not previously discovered in RelevApps' thorough internal testing efforts. Because of this rapid, prioritized issue identification, the development team was able to rectify important bugs and create a more stable, higher-quality product before release. Enhanced product quality may yield higher customer satisfaction, as well as improved market acceptance and loyalty.

The higher quality may significantly reduce post-launch support costs, stemming from an overall reduction in the number of calls and faster resolution times for the pre-identified issues. In the case of RelevApps, one or two of the identified bugs were critical enough to be considered “showstoppers” if launched — potentially leading to costly reworks or revisions, significantly higher customer support costs, and brand erosion. Fortunately, the early identification of these bugs helped RelevApps avert a potential disaster.

3. Increased Marketing Effectiveness

Helped RelevApps refine their value proposition, sharpen their marketing messages, and collect compelling testimonials from reputable users.

Feedback from the customer testing program extended well beyond just bug identification. RelevApps received significant input on their value proposition to consumers, suggestions and prioritization for new and existing features, innovative ideas for improvements, and valuable testimonials from reputable users. In fact, RelevApps executives have used the compelling results of the program to promote their product with Venture Capitalists and partners. In addition, RelevApps may leverage the compelling testimonials for press releases and marketing collateral.

4. Resource efficiency and productivity

Enabled RelevApps, with limited resources, to execute an extremely effective and efficient feedback program, allowing their staff to focus on their core jobs and critical initiatives.

As a small startup, RelevApps did not have the resources, expertise, or ability to quickly grow an internal test team to develop and manage an effective customer acceptance testing program. The use of BetaSphere made a lot of sense. To staff such a program on their own, RelevApps would have had to hire an entire department of quality assurance testers and managers — costing at least $300,000 per year. Additional costs would have included training, equipment, space, and overhead to support these employees, along with the learning curve associated with executing such programs and the decision of how to deploy these resources between beta test programs.

Not only did BetaSphere eliminate the need to add staff, but it helped reduce the time spent by current resources on the program management, logistics, and data analysis tasks associated with customer testing programs. In fact, BetaSphere helped decrease the labor hours that RelevApps would have spent on spent on customer testing by engineering, the product manager, the release manager, support team, and the beta coordinator by approximately 50 percent. This allowed the project team to increase their productivity on core tasks such as development, resolving product development issues, and preparing for product launch.

RelevApps believed it’s return on its BetaSphere investment was tremendous. By enabling customer-centric product development through an effective and efficient customer testing program, BetaSphere helped this small, fast-moving company increase its probability of customer acceptance and ultimately, of market success.

The real value is the identification of the one or two KILLER BUGS that would have been showstoppers for product launch, and meaningful validation of the likely market response to the product once launched.

— VP Program Mgmt

When you have the experts from BetaSphere working for you, it’s like having the results from a full team for the cost of one person on staff.

— VP Program Mgmt

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— VP Program Mgmt
Case Study – Mobile Computing Peripherals Company

This case study illustrates how BetaSphere helped a medium-sized mobile computing peripherals company increase the probability of delivering a superior, highly valued product into the consumer market with the launch of a personal information management device.

[Customer Overview]

Leading mobile computing peripherals company with new consumer product offering

Zephyr, Inc. (not the real name), a global company with several thousand employees and several hundred million dollars in annual revenue, develops a range of mobile communications products and solutions aimed primarily at enterprise customers. In addition, Zephyr offers a personal information management device that targets consumers who seek portability, access, and information management solutions. The device includes an embedded operating system, applications, and access to downloadable content from the product website.

[Situation and Challenges]

Initial product entry into the intensely competitive consumer space engenders greater complexity and risk for a fast-moving project team with limited resources

Diversity of Requirements and Environments Associated with Consumer Market

With a new consumer product introduction, Zephyr faced a number of major challenges. The greatest challenge stemmed from the scope and diversity of the potential user population. With a target market encompassing millions of worldwide users, Zephyr needed to consider a multitude of complicating variables such as: user technical sophistication, buyer values and requirements, and innumerable environmental configurations including PCs, operating systems, configurations, applications, and access devices. As such, it was essential that Zephyr conduct comprehensive customer testing to ensure adequate exposure to and understanding of consumer values, experiences, usability, and environments.

Increased Complexity and Scope of Products

The complexity of this consumer device was far greater than Zephyr’s previous products, which were primarily hardware-based and typically operated in more homogenous environments. The new product’s many hardware features and software components, coupled with the enormous range of possible user environments created many opportunities for stability, installation, or usability issues. This implied the need for rigorous customer testing to provide exposure to as many permutations as possible.

Intensely Competitive Market

To attract market demand and build a reputation in the intensely competitive personal information management space, Zephyr needed to deliver the most compelling, high quality product the first time around. In this crowded market, early quality or user experience issues could have resulted in significant damage to product demand, corporate reputation, and future market potential.

Limited Internal Resources

As with most product teams nearing the end of their development cycle, headcount and time were two things in short supply at Zephyr. It was mandatory that the core team focus on refining and preparing the product for launch. The team recognized the importance of customer testing, but could not spare the hundreds of hours required to conduct it in an effective and timely manner.

History of Low Yield Beta Testing

In the past, Zephyr had managed beta testing themselves. They found it challenging to recruit high quality evaluators, and their response rate rarely exceeded 30 percent. Often, the feedback they did receive was not of the format or caliber that made it actionable or valuable for the team. It was decided that they needed a more efficient and effective approach.

[BetaSphere Solution]

Turnkey services to help the product team obtain prioritized, high quality feedback for product improvement before launch

Based on BetaSphere’s history of success with several previous programs in Zephyr’s enterprise product space, Zephyr decided to proceed with BetaSphere’s turnkey solution. Factors influencing the purchase decision included BetaSphere’s proprietary pool of pre-screened consumer evaluators, their Feedback Management Server™ software, and their formalized, proven feedback methodology.

The feedback objectives for the program included collection of qualitative and quantitative feedback on product stability and the overall user experience. The program targeted 150 evaluators worldwide, 50 percent of whom already owned other types of personal information management devices. The testing program lasted just over two months. After recruiting and screening the evaluators, BetaSphere provided the beta consumer devices to the evaluators for their daily use. BetaSphere conducted online surveys and phone interviews to gather user feedback on installation, documentation, ease of use, overall quality, out of box experience, and the product website.

BetaSphere helped improve customer satisfaction by enabling us to test the product in the real world, to a greater extent than we can do on our own. It also reduced our risk of shipping a product that’s not ready for the market.

-Director, Product Marketing

BetaSphere’s turnkey solution included BetaSphere’s proprietary pool of pre-screened consumer evaluators, their Feedback Management Server™ software, and their formalized, proven feedback methodology. Zephyr also included an additional 72 Zephyr employees in the testing during the last several weeks of the program. Of the 222 total evaluators, BetaSphere actively managed (phone, email, and online) 100 of them, and “e-managed” (email and online) the others. BetaSphere’s team also produced insightful call reports and status reports communicating prioritized and actionable customer feedback.

BetaSphere helped improve customer satisfaction by enabling us to test the product in the real world, to a greater extent than we can do on our own. It also reduced our risk of shipping a product that’s not ready for the market.

-Director, Product Marketing
Ensured that Zephyr had the broadest environmental exposure and most useful feedback in this new market by recruiting 150 high quality consumer evaluators from around the world.

Increased response rate from approximately 30 percent to 90 percent, ensuring that the necessary quantity and quality of feedback was received.

Accelerated and prioritized the evaluator feedback, effectively maximizing productivity in the time window before launch during which Zephyr could improve the product.

Helped identify range of important technical and usability issues, both newly and previously identified, helping Zephyr focus on resolution before launch.

Saved hundreds of man-hours and resources that would have otherwise been spent developing test infrastructure and soliciting, collecting, and tabulating data.

Removed burden and worry of customer testing, enabling the team members to focus on improving product performance and value.

Increased productivity of testing program manager and enabled him to manage multiple projects by removing the time-intensive burden of evaluator recruiting, screening, and support.

Helped identify range of important technical and usability issues, both newly and previously identified, helping Zephyr focus on resolution before launch.

Increased productivity of testing program manager and enabled him to manage multiple projects by removing the time-intensive burden of evaluator recruiting, screening, and support.

Helped recalibrate feature priorities and website content to better serve customers, by soliciting significant feedback regarding the user experience with the product and usability of the product website.

Helped quickly identify bugs and other issues that were most "annoying" to customers so that Zephyr could address the matters most likely to affect customer satisfaction.

Helped validate strongest buyer values through prioritized consumer feedback, enabling Zephyr to better understand their positioning and value vis-à-vis competitors.

Enabled Zephyr to proactively address customer issues before launch. For example, to avert a flood of customer support calls regarding a particular user issue identified during testing by BetaSphere, flyers were placed in every box instructing users how to navigate the issue.

Will reduce future customer support costs, as Zephyr plans to educate the support staff regarding known issues and "work arounds," effectively increasing resolution time. Will also use self-service, FAQs, and documentation to eliminate customers' need to call.

Increased product stability and quality, resulting in less risk of market failure or reputation damage.

Increased Team Productivity and Focus, allowing Zephyr to deliver a better product in the same time frame.

Enhanced Customer Satisfaction, resulting in higher market acceptance.

Lowered Customer Support Costs, by preventing a flood of calls for a known issue.

Likely Decreased Time to Market for Subsequent Product Version.

Improved Marketing Effectiveness.