

2008

National Institute of Standards and Technology
Department of Commerce
Baldrige National Quality Program



Novel Connect Feedback Report

2008

National Institute of Standards and Technology
Department of Commerce
Baldrige National Quality Program



Novel Connect Feedback Report

The Novel Connect Feedback Report was prepared for use in the 2008 Malcolm Baldrige National Quality Award Examiner Preparation Course. A team of experienced Baldrige Examiners evaluated the Novel Connect Case Study, using the Independent and Consensus Review Process. The Novel Connect Case Study describes a fictitious manufacturing organization. There is no connection between the fictitious Novel Connect organization and any other organization, either named Novel Connect or otherwise. Other organizations cited in the case study also are fictitious, except for several national and government organizations. Because the case study is developed to train Baldrige Examiners and others and to provide an example of the possible content of a Baldrige application, there are areas in the case study where Criteria requirements are not addressed.

Novel Connect scored in band 4 for Process Items and band 5 for Results Items. An organization in band 4 for Process Items typically demonstrates effective, systematic approaches responsive to the overall requirements of the Criteria, but deployment may vary in some areas or work units. Key processes benefit from fact-based evaluation and improvement, and approaches are being aligned with organizational needs. For an organization that scores in band 5 for Results Items, results typically address most key customer/stakeholder, market, and process requirements, and they demonstrate areas of strength against relevant comparisons and/or benchmarks. Improvement trends and/or good performance are reported for most areas of importance to the Criteria requirements and the accomplishment of the organization's mission.

October 27, 2008

Ms. Maria Bell
CEO/President
Novel Connect, Inc.
414 Merlin Dr.
Rochester, NY 14602

Dear Ms. Bell:

Congratulations for taking the Baldrige challenge! We commend you for your commitment to performance excellence. This feedback report was prepared for your organization by members of the Board of Examiners in response to your application for the 2008 Malcolm Baldrige National Quality Award. It outlines the scoring for your organization and describes areas identified as strengths and opportunities for possible improvement. The report contains the Examiners' observations about your organization, although it is not intended to prescribe a specific course of action. Please refer to "Preparing to Read Your Feedback Report" for details on how to use the information in your feedback report.

We are eager to ensure that the comments in the report are clear to you so that you can incorporate the feedback into your planning process to continue to improve your organization. As direct communication between Examiners and applicants is not permitted, please contact me at (301) 975-2360 if you wish to clarify the meaning of any comment in your report. We will contact the Examiners for clarification and convey their intentions to you.

The feedback report is not your only source for ideas about organizational improvement. Current and previous Award recipients are potential resources on your continuing journey to performance excellence. A contact list for Award recipients is enclosed. The 2008 recipients will share their stories at the annual Quest for Excellence Conference, April 19–22, 2009. Current and previous recipients also participate in our regional conferences. Information about these events and other Baldrige-Program-related activities can be found on our Web site at www.nist.gov/baldrige.

As an applicant, you are uniquely qualified to evaluate the materials and processes we use in administering the Baldrige Program. In approximately 30 days, you will receive a customer satisfaction survey from the Panel of Judges. Please help us continue to improve the Program by completing and returning this survey.

Thank you for participating in the Baldrige Award process. Best wishes for continued success on your performance excellence journey.

Sincerely,

Harry S. Hertz, Director
Baldrige National Quality Program

Enclosures

Preparing to read your feedback report . . .

Your feedback report contains Baldrige Examiners' observations based on their understanding of your organization. The Examiner team has provided comments on your organization's strengths and opportunities for improvement relative to the Baldrige Criteria. The feedback is not intended to be comprehensive or prescriptive. It will tell you where Examiners think you have important strengths to celebrate and where they think key improvement opportunities exist. The feedback will not necessarily cover every requirement of the Criteria, nor will it say specifically how you should address these opportunities. You will decide what is most important to your organization and how best to address the opportunities.

If your organization has applied previously, you may notice a slight change in the report. Key themes, which serve as an overview or executive summary of the entire report, now comprise four sections rather than three: (a) Process Item strengths, (b) Process Item opportunities for improvement, (c) Results Item strengths, and (d) Results Item opportunities for improvement.

Applicant organizations understand and respond to feedback comments in different ways. To make the feedback most useful to you, we've gathered some tips and practices from prior applicants for you to consider:

- Take a deep breath and approach your Baldrige feedback with an open mind. You applied to get the feedback. Read it, take time to digest it, and read it again.
- Especially note comments in **boldface type**. These comments indicate observations that the Examiner team found particularly important—strengths or opportunities for improvement that the team felt had substantial impact on your organization's performance practices, capabilities, or results and, therefore, had more influence on the team's scoring of that particular Item.
- You know your organization better than the Examiners know it. If the Examiners have misread your application or misunderstood information contained in the application, don't discount the whole feedback report. Consider the other comments, and focus on the most important ones.
- Celebrate your strengths and build on them to achieve world-class performance and a competitive advantage. You've worked hard and should congratulate yourselves.
- Use your strength comments as a foundation to improve the things you do well. Sharing those things you do well with the rest of your organization can speed organizational learning.
- Prioritize your opportunities for improvement. You can't do everything at once. Think about what's most important for your organization at this time, and decide which things to work on first.
- Use the feedback as input to your strategic planning process. Focus on the strengths and opportunities for improvement that have an impact on your strategic goals and objectives.

KEY THEMES—PROCESS ITEMS

Novel Connect, Incorporated, scored in band 4 for Process Items (1.1–6.2) in the Consensus Review of written applications for the Malcolm Baldrige National Quality Award. For an explanation of the process scoring bands, please refer to Figure 6a, Process Scoring Band Descriptors.

An organization in band 4 for Process Items typically demonstrates effective, systematic approaches responsive to the overall requirements of the Criteria, but deployment may vary in some areas or work units. Key processes benefit from fact-based evaluation and improvement, and approaches are being aligned with organizational needs.

a. The most important strengths or outstanding practices (of potential value to other organizations) identified in Novel Connect’s response to Process Items are as follows:

- Novel Connect uses its Measuring Action and Performance (MAP) system to integrate its leadership, strategic planning, customer focus, and workforce focus systems and to enable management by fact. The MAP is made up of multiple databases: the Customer Complaint Database, the Knowledge Management Database, the Performance Improvement Database, the Process Improvement Database, and the Waste Event Database (Figure 4.1-2). All members of the workforce can access MAP and enter their own performance data directly, with some real-time data automatically uploaded and integrated into process scorecards. Routine performance reports are automatically generated from MAP, including supplier scorecards that are shared with key suppliers and partners and the Novel Compass Scorecard (Figure 4.1-1), which delineates overall organizational performance measures linked to Novel Connect’s strategic objectives, strategic advantages and challenges, and core values. In support of performance reviews for senior leaders, MAP also provides preprogrammed analyses, including trending, statistical process control charts, and Pareto charts. This integration of information management with other key systems and processes provides a potential method to address Novel Connect’s strategic challenges of communication and rapidly changing customer/market needs.
- Senior leaders demonstrate visionary leadership through their personal involvement in and use of systematic approaches to establish and deploy the organization’s mission, vision, and values, as well as integrate them with key processes. The mission, vision, and core values, which have undergone multiple cycles of refinement and are reviewed annually, are key elements of the Novel Path, which in turn is deployed to employees as part of the performance appraisal process (e.g., through the personal measuring of action and performance [PMap]). In addition, core values are an element in the partner selection process, and Senior Leader Team (SLT) members annually lead at least one project that exemplifies a core value and lead a weekly discussion of the core value with employees. In addition, to communicate with and engage the workforce, senior leaders have established multiple mechanisms (Figure 1.1-4), including weekly one-on-one meetings between employees and their supervisors, as well as weekly work-unit conference calls for employees and their supervisors. Further, senior leaders have established a foundation

that funds four types of causes in alignment with the core value to “sustain this world on the move”; they serve on national, regional, and local nonprofits with missions aligned with the core values; and they provide matching funds for employee donations and paid time off for community service.

- Novel Connect maintains a strong focus on its core value of innovation (Figure P.1-1) and leverages its core competency of “innovative niche product/feature design” (Figure 6.1-1) using a variety of methods. For example, all employees are expected to devote 10% of their time to innovation, and employees who secure patents are rewarded with bonuses of up to one year’s salary. To identify opportunities for innovation, the Marketing and Public Relations Team continuously conducts competitive product, service, and market analyses, and the Research and Development Team and Product Engineering and Design Team constantly scan for benchmark information through trade conferences and journals. In addition, the Process Improvement Process (PIP); the Design, Measure, Analyze, and Improve (DMAI) methodology (Figure 6.2-1); and the Performance Improvement Database support and facilitate the implementation of process innovation. Together, these methods encourage and promote idea generation to address Novel Connect’s rapidly changing market needs.
- Novel Connect’s workforce organization is integrated with its work system in a manner that builds on and reinforces its core competencies. For example, in support of its core competencies of communication and agility and rapid response, the workforce is organized and managed using a combination of matrix management and pod- and virtual team-based structures. Core competencies (Figure 6.1-1), which are reviewed during the Strategic Planning Process (SPP) and aligned with the Five Voices of the Customer (VOC, Figure 3.1-2), are in turn aligned with 15 key value creation processes and 19 value stream support processes that have identified requirements and metrics (Figure 6.1-2). Cross-functional Product, Feature, and Process Development (PFPD) teams design new products and processes to meet requirements, and process owners track and monitor processes to ensure that they meet key process requirements and to identify any needed improvements. Cross-functional teams are used again to implement the PIP if improvements are needed across several processes.

b. The most significant opportunities, concerns, or vulnerabilities identified in Novel Connect’s response to Process Items are as follows:

- Novel Connect’s strategy development and deployment processes appear to have gaps that may limit its ability to meet its strategic challenges and ensure organizational sustainability. For example, it is not clear how Novel Connect’s SPP (Figure 2.1-1) addresses long-term sustainability or major shifts in technology or competition. Additionally, it is not clear what steps and methods are used by the SLT-led teams to develop action plans to achieve key strategic objectives. Finally, no long-term action plans have been defined for two strategic objectives: (1) customer satisfaction and market position and (2) value creation.

- Systematic approaches are not evident in several key areas related to Novel Connect’s focus on its customers, markets, and workforce. For example, while Novel Connect has established multiple mechanisms to gather information on its markets and customers (Figure 3.1-2), the steps and methods for using this information to determine customer requirements, needs, and expectations are not described. Likewise, a systematic process is not apparent for determining customer contact requirements or for using Customer Advisory Groups (CAGs) and other mechanisms to build and maintain relationships with customers, to acquire customers, or to build customer loyalty. In addition, it is not apparent how Novel Connect’s various mechanisms that make information available (e.g., project and process scorecards, intranet reports) are used to systematically collect and transfer knowledge or best practices from and to its workforce, suppliers, and partners. The lack of systematic approaches in these areas may negatively affect Novel Connect’s ability to ensure the most effective use of its resources and support its principal success factor of controlling costs and/or optimizing process performance.
- Few systematic and fact-based approaches to evaluation and improvement are used for leadership, strategic planning, measurement and analysis, workforce engagement and environment, and process management methods. While the annual SPP (Figure 2.1-1) includes a routine fact-based review of the PFPD process (Figure 6.1-4), comparable mechanisms are not evident for most other key approaches. For example, there is little evidence of refinement or innovation for approaches to ensure ethical and legal behavior, to foster organizational sustainability, or to facilitate organization-wide communication; for the elements of MAP (Figure 4.1-2); for PMaps; or for the recruiting process. Without systematic evaluation and improvement of key approaches, Novel Connect may find it difficult to foster organizational learning as a key management tool.
- Although Novel Connect describes collaboration with suppliers and partners as a principal success factor, in many areas it appears that there are gaps in deployment of key processes to these entities. For example, it is not clear that Novel Connect’s Communication Methods (Figure 1.1-4) and the ethics investigation/resolution process are deployed to suppliers and partners. Also, it is unclear how Novel Connect determines which data and information are appropriate to share with suppliers and partners and how it ensures that they have timely access to the information that they need. Finally, it is not evident how input from Novel Connect’s suppliers and partners is used in the day-to-day management of key processes. Considering the integral roles of its key suppliers and partners (e.g., manufacturing companies in India and China, a network hub operations partner for its information technology infrastructure, and a carrier partner to deliver its products to the market), gaps in the deployment and integration of key processes to these entities could significantly jeopardize Novel Connect’s long-term success and viability.

KEY THEMES—RESULTS ITEMS

Novel Connect scored in band 5 for Results Items (7.1–7.6). For an explanation of the results scoring bands, please refer to Figure 6b, Results Scoring Band Descriptors.

For an organization in band 5 for Results Items, results typically address most key customer/stakeholder, market, and process requirements, and they demonstrate areas of strength against relevant comparisons and/or benchmarks. Improvement trends and/or good performance are reported for most areas of importance to the Criteria requirements and the accomplishment of the organization's mission.

c. Considering Novel Connect's key business/organization factors, the most significant strengths found in response to Results Items are as follows:

- Novel Connect reports good-to-excellent financial results with beneficial trends in many measures of importance to the organization. For example, Gross Revenue (Figure 7.3-1) shows an increase of 500% from 2003 to 2007, and Profit Before Tax (Figure 7.3-2) has been sustained at a level of at least 3% of sales over the same period. In addition, the average selling price per phone (Figure 7.3-1) has improved from 33% above industry average in 2003 to 3% below industry average in 2007. Revenue from Leading Niche Markets (Figure 7.3-7) has increased approximately 600% since 2003 and represents approximately 56% of total sales. These results illustrate that Novel Connect is achieving its sustainability goal for profit (Figure 4.1-1).
- Novel Connect demonstrates good-to-excellent performance levels and beneficial trends from 2003 to 2007 for its product and service outcomes and customer-focused outcomes. Several product results related to the key customer requirement of reliability (Figures 7.1-1a, 7.1-2a, 7.1-2b, 7.1-2d, 7.1-2e, and 7.1-6b) show improvement from 2001 to 2007 and are outperforming equivalent competitors' products in most areas. Likewise, product results related to customer requirements associated with high power for walkie-talkies (Figures 7.1-5a and 7.1-5b) demonstrate very-good-to-excellent levels and beneficial trends and have been performing better than competitors' products since 2004. In addition, overall customer satisfaction levels, as indicated by the Allegiance Survey Results (Figure 7.2-1), have improved from 4.32 to 4.61 on the five-point Likert scale from 2003 to 2007 and have outperformed the best competitor over the last five years. The 2007 Allegiance Survey results also indicate that Novel Connect is outperforming its closest competitor in 10 of 11 customer requirement dimensions (Figure 7.2-11) and that all seven of the surveyed customer niche groups feel Novel Connect has a stronger relative competitive position (Figure 7.2-12). In combination, these results indicate developing leadership in Novel Connect's niche market segments.
- Most measures of workforce engagement and satisfaction demonstrate good performance levels and beneficial trends, and several show favorable comparisons. From 2005 to 2007, Trot Engage 14 survey results (Figure 7.4-2) show an increase in overall workforce satisfaction from 3.9 to 4.4, as well as improvement for all of the 13 subarea questions. In 2007, performance levels compare to the Trot organization 90th-percentile level for overall workforce satisfaction and for 9 of the 13 subarea questions. In addition, several other indicators of workforce engagement and satisfaction, including Employee Participation in PIPs (Figure 7.4-3) and the Voluntary Turnover Rate (Figure 7.4-4), show a beneficial trend for at least the past three years. Also, several workforce

capability and capacity results have demonstrated beneficial trends over the past four years, including the Advanced Proficiency Training Completion Rate (Figure 7.4-5), which increased from 0% to 61%, and Job Vacancies Filled From Within or by Employee Referrals (Figure 7.4-6). These results indicate that Novel Connect is successfully demonstrating its core value of valuing employees, which, in the long-term, may help it address its strategic challenge of the availability of a highly skilled workforce.

- Results for social responsibility demonstrate sustained good performance levels and beneficial trends. In the area of Organizational Citizenship Results (Figure 7.6-5), from 2003 to 2007, the percentage of employees contributing 16 or more hours to nonprofits increased from 61% to 89%, foundation contributions increased from \$24.1 million to \$47.9 million, and the annual percentage of noncarbon-based energy used increased from 6% to 11%. Results related to Regulatory and Legal Compliance (Figure 7.6-4) demonstrate three-year beneficial trends and/or sustained good performance levels in nine of ten regulatory areas, meeting or exceeding Novel Connect's goals in each of those areas. For example, from 2005 to 2007, the amount of electronic equipment recycled increased from 32% to 37%, well above the industry standard of 20%, and Environmental Protection Agency (EPA) reduction in hazardous waste improved by 30% annually, decreasing from 314 to 244 during that time period. These results indicate success in achieving Novel Connect's core value of citizenship.

d. Considering Novel Connect's key business/organization factors, the most significant opportunities, vulnerabilities, and/or gaps (related to data, comparisons, linkages) found in its response to Results Items are as follows:

- Many results do not include competitive or comparative data. For example, no comparisons are provided for leadership results or for most financial results, including Return on Long-Term Investments, Manufacturing vs. Distribution Ratio, Short-Term vs. Long-Term Investment Ratio, and Ratio of Liquid Assets (Figures 7.3-3–7.3-6). In addition, comparisons are missing for many of the reported process effectiveness outcomes, such as Customer Satisfaction With Carrier (Figure 7.5-1), Supplier Performance Index (Figure 7.5-2), Quality System Performance (Figure 7.5-7), People Utilization Ratio (Figure 7.5-8), Emergency Preparedness Effectiveness (Figure 7.5-9), Assembly Process Effectiveness (Figure 7.5-10), Defect and Return Rates (Figure 7.5-13), and Process Improvement Effectiveness (Figure 7.5-18). Likewise, comparisons are not provided for some workforce-focused outcomes, including workforce capability and capacity results such as Advanced Proficiency Training Completion (Figure 7.4-5) and Job Vacancies Filled Within or by Employee Referrals (Figure 7.4-6). Additionally, when comparisons are used, it is not always clear if Novel Connect is comparing itself to its key competitors, industry leaders, or benchmarks. Without relevant comparisons, Novel Connect may have difficulty effectively evaluating and managing its performance in a rapidly changing, competitive marketplace.
- Results are not provided for some measures important to Novel Connect. For example, while financial outcomes do include the return on long-term investments, they do not include the return on short-term investments, which represent over 70% of every

investment dollar. Additionally, workforce-focused outcomes do not include staffing levels and trends or results related to leadership development or workforce security, services, and benefits. Finally, process effectiveness outcomes do not include results for security breaches, challenge tests, the relationship management of carriers and distributors, or the cycle time and productivity of key processes. These gaps may make it difficult for Novel Connect's SLT to track progress toward the accomplishment of related strategic objectives and to effectively target areas in need of improvement.

- Many results lack segmented data. For example, no results for process effectiveness are segmented by product types, locations, or market segments. Workforce satisfaction and engagement results such as the Trot Engage 14 survey scores (Figure 7.4-2), Employee Participation in PIPs (Figure 7.4-3), and the Voluntary Turnover Rate (Figure 7.4-4) are not segmented by employee groups or sites. Similarly, workforce climate measures such as Days Away/Restricted Time (Figure 7.4-7), Total Recordable Rate (Figure 7.4-8), Repetitive Motion Injuries (Figure 7.4-9), and Employee Participation in Wellness Programs (Figure 7.4-10) are not segmented to reflect Novel Connect's dispersed and diverse workforce. Results segmented by customer group are missing for some important measures, including Percentage of Repeat Customers (Figure 7.2-9) and Customers Willing to Be Contacted (Figure 7.2-10). Finally, most financial results are missing segmentation (e.g., by Novel Connect's major market segments or subsegments or by its diverse customer groups), and process effectiveness outcomes are not segmented by any dimension. Without segmented results, Novel Connect may not fully understand the underlying contribution of various groups or segments to overall performance and therefore may have difficulty translating performance information into improvement actions.

DETAILS OF STRENGTHS AND OPPORTUNITIES FOR IMPROVEMENT

Category 1 Leadership

1.1 Senior Leadership

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

STRENGTHS

- In 1994, Novel Connect’s Senior Leadership Team (SLT) conducted brainstorming and planning sessions to establish the organization’s vision and core values, which were refined in 1996, 2000, and 2002 and, along with the organization’s mission, have undergone an annual review since 2003. SLT members lead at least one project each year that exemplifies a core value and also lead weekly discussions to explore the core value with employees. The Novel Path (Figure 1.1-1) depicts the organization’s leadership system, performance management process, and organizational reviews and includes the mission, vision, and core values. It is deployed to employees as part of the performance appraisal process (e.g., through the personal measuring of action and performance [PMap]) and to customers and stakeholders through marketing materials, funding events, and surveys. Partners are required to demonstrate the core values as part of the partner selection process. In addition, the Novel Path is integrated with the strategic planning and communication processes.
- Senior leaders promote an ethical environment through numerous approaches, including requiring employees to sign a Code of Ethical Compliance annually, assigning a rotating Chief Ethics Officer from the SLT to investigate and solve ethical concerns, and developing Ethics Examples that are discussed with all employees and key suppliers/partners during monthly meetings. Written Ethics Examples are followed up with monthly ethics videos showing senior leaders discussing the issue and conveying which response would most closely align with the Novel Path.
- Senior leaders create an environment for organizational performance improvement and the accomplishment of the organization’s mission and objectives through several systematic approaches, such as the Performance Improvement Process (PIP), which includes the continuous improvement cycle of Design, Measure, Analyze, and Improve (DMAI, Figure 6.2-1); mobile monthly meetings (Triple-Ms); weekly operational reviews; and the deployment of objectives and action plans to the workforce, suppliers, and partners. Innovation is encouraged through the expectation for employees to spend 10% of their time on innovation, the use of the Innovation Process to develop and select ideas, and rewards and recognition for innovative ideas and acquisition of patents (e.g., the Pathways Innovation Award and Bright Idea Award). In addition, as part of Novel Connect’s sustainability approaches (Figure 1.1-2), the Novel Path is integrated into all leadership and workforce practices and decisions, and formal succession plans identify three potential leaders for all leadership positions.

- Senior leaders use a wide variety of communication mechanisms (Figure 1.1-4) to communicate with and engage the workforce. Two levels of communication (with the supervisor only and with the supervisor and work unit) occur each week for employees, and each communication approach provides ways for employees to ask questions and suggest other topics. Leaders have the primary responsibility for communicating with employees, including sharing information on decisions and the rationale behind them.

OPPORTUNITIES FOR IMPROVEMENT

- While senior leaders annually select up to three areas to improve in the leadership system, it is not clear whether these include a systematic review and improvement of key leadership approaches, such as processes to ensure ethical and legal behavior, to foster organizational sustainability, and to facilitate organization-wide communication. Without systematic evaluation and improvement in these areas, it may be difficult for Novel Connect to ensure it is meeting its expectations of continuous improvement in all of its key processes, including how senior leaders guide and sustain the organization.
- It is not evident that communication methods are effectively deployed to all employees and to all suppliers and partners, including overseas partners. For example, Spanish-speaking employees are able to enter their ideas in Spanish into an entry screen in the company's Measuring Action and Performance (MAP) database, but it is not clear whether meetings, newsletters, daily e-mails, and video discussions are conducted in multiple languages for the 20% of the workforce who consider English a second language, as well as for overseas suppliers in China and India. This may inhibit Novel Connect from effectively addressing its key strategic challenge and core competency regarding communication.

1.2 Governance and Social Responsibilities

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

STRENGTHS

- Novel Connect evaluates the performance of all senior leaders. The Board of Directors (BOD) reviews the CEO/President annually, and she in turn consults with the BOD Executive Governance Committee to review SLT performance. All leaders must participate in a 360-degree feedback process, which provides the basis for behavior reviews. The BOD conducts annual self-evaluations with feedback from the SLT and in 2007 initiated an approach to obtain shareholder feedback at its annual meeting. Using that feedback, the BOD selects up to two improvement areas annually. Senior leaders use these reviews to improve their leadership effectiveness through the use of PMaps. In addition, the SLT reviews an aggregate summary of all of its performance reviews and selects up to three initiatives annually that are aimed at improving the leadership system.
- Novel Connect promotes and helps ensure ethical behavior in its interactions through multiple approaches, including reissuing the ethics policy annually, requiring employees and suppliers to sign the Code of Ethical Compliance, maintaining an ethics hotline, discussing Ethics Examples scenarios at monthly meetings, terminating employment for ethical violations, and rotating the position of Chief Ethics Officer among SLT members, a practice that has been featured in both industry and national publications. These approaches assist Novel Connect in meeting its workforce requirement of connection with the company's values.
- **Novel Connect actively supports its key communities through numerous approaches, including a foundation established in 2002. The foundation provides funds for four primary causes (i.e., mobility, environment, education, safety) that are aligned to the core value of sustainability. Foundation processes are evaluated annually, and recipients must prove the efficacy of their efforts. Other approaches include matching funds for employees' charitable donations and 16 hours of paid time off annually for community service. In addition, senior leaders are expected to serve leadership roles in at least one national and two regional or local nonprofit organizations that focus on work aligned with Novel Connect's core values.**

OPPORTUNITIES FOR IMPROVEMENT

- While SLT members participate in process improvement and operational performance reviews, it is unknown how they systematically review and achieve fiscal accountability. For example, systematic approaches are not described for achieving Sarbanes-Oxley Act (SOX) and Securities and Exchange Commission (SEC) compliance, and it is not clear what financial data are reviewed in monthly and weekly meetings beyond the two profit-specific measures in the Novel Compass Scorecard. The lack of an effective process and tracking

measures may make it difficult for Novel Connect to ensure the protection of stakeholder and stockholder interests.

- It is unclear how Novel Connect addresses the adverse impacts on society from partners' and suppliers' operations associated with Novel Connect's products and services. For example, it is not apparent that the resource-sustaining approaches used in the U.S. manufacturing facility are also used in the manufacturing plants in China and India. Additionally, there is no evidence of systematic review and improvement of Novel Connect's resource-sustaining processes, including the key processes for addressing risks associated with its products, services, and operations (e.g., Go-Green/Grow-Green and Customer Advisory Groups [CAGs]).
- Some of the approaches used to ensure ethical and legal behavior do not appear to be well deployed and/or systematically improved. For example, while Novel Connect reviews relationships and transactions in offshore facilities to ensure they comply with U.S. laws and align with the Novel Path, it is unclear if the ethics investigation/resolution process is deployed to all suppliers and partners. In addition, there is no evidence of reviews of or improvements in ethics-related approaches, including the ethics hotline, the Code of Ethical Compliance, and ethics scenarios and follow-up discussions.

Category 2 Strategic Planning

2.1 Strategy Development

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

STRENGTHS

- An annual, systematic Strategic Planning Process (SPP, Figure 2.1-1) involves participation from the SLT, representatives from higher education partners, the BOD, and members of local workforce boards, as well as carrier representatives, key customers, manufacturing and other key partners (including offshore suppliers), and niche market subject-matter experts. The process begins with a review and validation of the organization’s mission, vision, core values, core competencies, Novel Path, and goals. After information is gathered from many sources (e.g., from markets, customers, the carrier, the industry, and manufacturing and higher education partners), the SLT analyzes and aligns the data with the organization’s mission, vision, core competencies, and goals, and it delineates Novel Connect’s objectives, goals, and risks. Following a review of internal requirements, action plans are created and assigned to members of the SLT. Balanced scorecard metrics are established, and MAP database reports are reviewed at monthly Triple-M meetings by the SLT.
- Novel Connect has defined five key strategic objectives (profit; customer satisfaction and market position; innovation, agility, and rapid response; value creation; and workforce satisfaction) and established related goals, implementation profiles, and measures, as well as relationships to strategic advantages and challenges (Figure 2.1-2). The implementation profiles are manufacturing; new products; enhancements; value creation; customer satisfaction; changing customer demands; rapid response to changes; technology and resources; new customer requirements; relationships with the carrier, suppliers, and partners; new pod locations; and maintenance of virtual workforce guidelines. Collectively, these planning elements provide a systematic approach to help ensure that the identified needs of stakeholders are balanced.

OPPORTUNITIES FOR IMPROVEMENT

- Although Novel Connect notes that it identifies key strategic challenges as part of the SPP, a systematic process is not described for determining strategic challenges, strategic advantages, or time horizons. Without a systematic approach for determining these planning elements, Novel Connect’s action plans may not be fully aligned with improving overall organizational effectiveness and capability in the rapidly changing cell phone industry.
- While the SPP includes a review of internal requirements to help ensure Novel Connect’s ability to execute the strategic plan, it is not apparent that the SPP addresses and includes the analysis of data specific to opportunities, major shifts in technology or competition, and long-term sustainability. Without a plan for addressing these considerations, Novel Connect may find it difficult to meet its strategic challenge of volatility in niche markets.

- There is little evidence that Novel Connect uses a fact-based approach to evaluate and improve its SPP. Without such a mechanism, Novel Connect may find it difficult to ensure that the process remains current with market and business needs. This may be especially important given Novel Connect's strategic challenge of market volatility and the rate of growth in its gross revenue, as depicted in Figure 7.3-1.

2.2 Strategy Deployment

Your score in this Criteria Item for the Consensus Review is in the 30–45 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

STRENGTHS

- Action plans are developed by a team that is assembled and led by a member of the SLT who has been assigned responsibility for a strategic objective. The plans are then reviewed and ratified by the full SLT. The responsible senior leader assigns strategies for deploying the plans to key partners and suppliers, as well as to appropriate work groups, sites, or individuals. The SLT conducts monthly virtual Triple-M meetings to review MAP data and modify action plans if necessary. Adjustments in action plans and goals are communicated to the work areas, project leaders, and other individuals by senior leaders in weekly one-on-one meetings and/or weekly work group meetings with pod leaders.
- Novel Connect has developed ten short-term action plans with deployment strategies, measures, and goals (Figure 2.2-1a) and seven longer-term action plans, also with deployment strategies, measures, and goals (Figure 2.2-1b). The action plans are aligned with measures on the Novel Compass Scorecard (Figure 4.1-1) through key strategic objectives: profit; customer satisfaction and market position; innovation, agility, and rapid response; value creation; and workforce satisfaction.
- Novel Connect has defined its performance projections and comparisons for quantitative measures (Figure 2.2-2) that are associated with its strategic objectives and most of its related short- and long-term action plans. Performance projections are defined by measures through 2011, and performance comparisons are identified for the current year. “Get-Better-Quick” (GBQ) plans are put in place when measures do not meet benchmark or projected performance.

OPPORTUNITIES FOR IMPROVEMENT

- **It is not clear what steps or methods are used by the SLT-led teams to develop action plans for key strategic objectives. Without a systematic process to develop action plans, Novel Connect’s ability to effectively use these plans to accomplish its strategic objectives and reach its goals may be impaired. This may be significant given the volatility of the environment and the strategic challenge of rapidly changing customer/market needs.**
- Novel Connect maintains a 70/30 resource split between short- and long-term action plans to increase the focus on short-term goals. It is not clear, however, how this ensures that adequate financial and other resources are available and allocated to accomplish its plans. It also is not apparent how this approach assesses and addresses financial and other risks associated with Novel Connect’s plans, potential impacts on people, changes to workforce capability and capacity needs, or changes to strategic challenges. Without these linkages, Novel Connect may find it difficult to ensure the desired outcomes from its Activities

Promoting Sustainability (Figure 1.1-2) and may be missing an opportunity to enhance its core competency of agility.

- No long-term action plans have been defined for the strategic objectives of customer satisfaction and market position or value creation. Without long-term plans for these strategic objectives, Novel Connect may find it difficult to achieve the associated 2011 performance projections (Figure 2.2-2).

Category 3 Customer and Market Focus

3.1 Customer and Market Knowledge

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

STRENGTHS

- During the SPP, the Marketing and Public Relations Team reviews existing market segments and identifies new segments. The team has identified seven key niche customer groups (Figure 3.1-1) that are subsegments of the three main market segments (personal, business, and government consumers). Market data and information are provided to Novel Connect's Product Engineering and Design Team to develop new products/features. A cycle of improvement resulted in reversing the sequence of incorporating customer input into the process; information from customers and potential customers is now considered before identifying potential products and product features.
- To gather information on customer requirements, needs, and changing expectations, Novel Connect has established Five Voices of the Customer (VOC, Figure 3.1-2): customer complaints, market research, customer surveys, customer relationship management, and customer advisory group communications. These mechanisms vary in their methods, locations, and frequency of use.
- VOC data are available to all employees in the MAP database for use in process improvements and are provided to the Customer Service Team, which oversees the call center. VOC data are sent to retailers and the carrier on a quarterly basis. All customer data and information are analyzed and used as inputs to the SPP and to the Product, Feature, and Process Development (PFPD) Process.
- To help keep its VOC methods current, the Marketing and Public Relations Team reviews them annually during the PIP that precedes the SPP. In addition, the Allegiance Survey, which is reviewed at the annual Improvement Day, includes a question about ways to improve listening and learning methods.

OPPORTUNITIES FOR IMPROVEMENT

- While plans are in place to seek information from customers of competitors, it is unclear how Novel Connect currently includes customers of competitors and other potential customers and markets in its determination of customer groups and market segments. Without considering the requirements and expectations of all customer groups, Novel Connect may not succeed in fulfilling the requirements of all of its target customers and markets and may miss opportunities to penetrate new niche markets with innovative products.
- **While Novel Connect uses the Five Voices of the Customer (Figure 3.1-2) to gather information from and about customers, a systematic process is not described for using**

this information to determine customer requirements, needs, and expectations or to determine needed improvements in its work systems and processes. Without such a systematic process, Novel Connect may not be able to fully understand its customers' purchasing decisions, achieve customer loyalty, or build customer relationships.

- **It is not clear how Novel Connect's listening and learning methods include former customers or vary for its customers, customer groups, and market segments. The absence of a systematic process to tailor its listening and learning methods for its diverse customers (which range from preteens to the Department of Homeland Security) or to most effectively use the information gathered from its numerous sources may make it difficult for Novel Connect to address customer requirements and achieve its vision to be the most innovative company for mobile communication in the world.**

3.2 Customer Relationships and Satisfaction

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

STRENGTHS

- Novel Connect has established multiple mechanisms to interact with and gather information from customers. CAGs, the principal mechanism, consist of geographically diverse leading-edge users. They meet quarterly at pods and enable Novel Connect to stay in close contact with customers around the country. Other mechanisms include permission marketing, a 24/7 call center, virtual focus groups that meet via the Web and video phones, viral marketing, blogs, and the use of celebrity and action sports events for promotion.
- Novel Connect's key access mechanisms for customers to seek information, conduct business, and make complaints include call centers, retailers, and the Internet. Call center, carrier, and retail employees are cross-trained to handle the technical and commercial aspects of customer needs.
- Through the Customer Complaint Handling Process (CCHP), complaints are systematically segmented, categorized, logged, tracked, resolved, and revisited with follow-up by the Customer Service Team to ensure closure. VOC data, including customer complaints, are systematically shared with retailers and the cell carrier on a quarterly basis for their use in planning and improvements. This process is used to manage complaints received through the customer service staff, the company Web site, the call center, CAG meetings, and surveys. All employees are trained in the process and receive annual follow-up training. The CCHP has a data analysis module, and complaint data are used as inputs for the SPP and the PFPD Process.
- Novel Connect uses four of its five VOC processes (Figure 3.1-2) to determine customer satisfaction, dissatisfaction, and loyalty and to follow up with customers. The four processes used are surveys (the Won Business Survey for new customers, Pulse Survey for real-time information, and annual Allegiance Survey), CAGs (quarterly), customer relationship management (a process to gather loyalty information from the carrier, the call center, social networking, and sponsored events), and customer complaints. All data are analyzed and fed into the SPP, the PFPD Process, and the MAP system. Market research (the fifth VOC process) and Allegiance Survey data are used to determine satisfaction relative to competitors, and Competitive Position Charts compare Novel Connect to competitors on eleven dimensions.

OPPORTUNITIES FOR IMPROVEMENT

- While Novel Connect has several mechanisms to interact with customers and promote the company, a systematic process is not described for using these mechanisms to build and maintain relationships with customers, to acquire customers, to exceed their expectations, or to build customer loyalty. The absence of a systematic approach to build customer loyalty

may negatively impact Novel Connect's emphasis on repeat purchases and the maintenance of market share.

- Although Novel Connect states that customer contact requirements have been gathered over time from customer surveys, focus groups, and benchmarking, a systematic process is not evident for determining these requirements from the information gathered via these mechanisms. In view of Novel Connect's distribution channels, failure to fully accommodate the contact requirements of customer groups may affect Novel Connect's ability to succeed with its niche strategy, especially given its strategic advantage to rapidly respond to changing market niche requirements.
- Novel Connect states that keeping current its multiple mechanisms to interact with customers and to provide customer access is embedded in its culture and that the CAGs facilitate this process. However, the steps and methods to evaluate these mechanisms, improve them, or keep them current with business needs and directions are not described. Without a systematic process in this area, Novel Connect may have difficulty addressing its strategic challenge of rapidly changing customer/market needs.

Category 4 Measurement, Analysis, and Knowledge Management

4.1 Measurement, Analysis, and Improvement of Organizational Performance

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

STRENGTHS

- **The SLT is responsible for selecting data and information for tracking overall organizational performance. As part of the SPP, the SLT chooses performance measures and ensures the measures address all principal success factors. The MAP data warehousing software is used to collect and manage the performance data. All members of the workforce can access MAP and enter their own performance data directly, with some real-time data automatically uploaded and integrated into process scorecards. Routine performance reports are automatically generated from MAP, including supplier scorecards that are shared with key suppliers and partners. Twenty-two key operational and strategic performance measures, with associated performance goals and comparisons, are presented in the organizational scorecard (Figure 4.1-1). These measures are linked to Novel Connect’s strategic objectives, strategic advantages and challenges, and core values, and they provide the potential for the integration of strategic planning, operations, decisions, and actions.**
- Key organizational comparisons are selected from a variety of sources as part of the annual SPP. The Chief Workforce Officer selects comparative workforce data semiannually, and process-level and supplier performance comparisons are selected by the appropriate team leader at each pod. Comparative data are used regularly at Triple-M review meetings to help drive improvement. Additional information is provided by the Marketing and Public Relations Team, the Research and Development Team, and the Product Engineering and Design Team, who perform analyses and scan for benchmark data at trade conferences, in journals, and during continuing education classes.
- The SLT reviews organizational performance at monthly Triple-M meetings, using the scorecard and supporting summary reports. For senior leaders, the MAP database provides preprogrammed analyses, which include trending, statistical process control charts, and Pareto charts, in support of performance reviews. Subcommittees of the SLT also review progress on specific action plan projects in their areas of responsibility, and individual leaders, other subcommittees, and process leaders may conduct additional analyses as needed. Triple-M meetings are used to adjust resource deployment, make changes in action plans, and address gaps in organizational performance. Any changes to performance measures are completed in MAP by the Information Technology and Internal Communications (IT/IC) Team.
- The SLT uses its review of the Novel Compass Scorecard and supporting analyses to determine where opportunities for innovation and/or improvement exist. The SLT establishes the scope of changes, which then are cascaded to appropriate process leads, who develop final plans for deploying the changes. If changes involve suppliers and partners, these

changes are communicated by the Chief Operations Officer (COO) and Distribution and Supply Chain Management Team or the Chief Innovation Officer (CIO) and Channel/Retail Sales and Customer Service Team, as appropriate. Leaders' weekly meetings with their teams help ensure any changes are sustained.

OPPORTUNITIES FOR IMPROVEMENT

- It is unclear how Novel Connect's organizational performance reviews are used to assess its ability to respond to rapidly changing organizational needs and challenges in the operating environment. These considerations may be important for Novel Connect due to its heavy reliance on data for decision making, heavy reliance on technology within the business, dispersed workforce, and strategic challenge of rapidly changing customer and market needs in niche markets.
- While Novel Connect conducts monthly organizational performance reviews, a systematic process is not evident for ensuring that the conclusions drawn from these reviews are valid. In addition, although a review of scorecard data and various analyses are used to identify opportunities for improvement and innovation, a systematic process for prioritizing these findings is not described. Without systematic processes in these areas, Novel Connect may have difficulty ensuring that its conclusions and resulting decisions most effectively address organizational needs.
- Although selected performance metrics are reviewed for effectiveness in monthly Triple-M meetings, there is little evidence of systematic improvements to Novel Connect's approaches for measuring, analyzing, and improving organizational performance. For example, it is unclear how Novel Connect uses the industry standard measures and comparisons from its TL 9000 and QuEST Forum certification to continuously improve its approaches to measurement. Without a systematic process for reviewing and improving measurement and analysis approaches, Novel Connect may miss opportunities to improve its effectiveness.

4.2 Management of Information, Information Technology, and Knowledge

Your score in this Criteria Item for the Consensus Review is in the 30–45 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

STRENGTHS

- Novel Connect uses a variety of methods to make data and information available and easily accessible. All employees have assigned levels of access to desktop systems and MAP data appropriate to their responsibilities. Pod and process leaders share summary results with suppliers, partners, and customers. A dedicated IT/IC Team has responsibility for ensuring that hardware and software are reliable, and the Process Engineering Team works with the IT/IC Team to make sure hardware and software on the plant floor are performing. The contracted hub-provider, Hubs-R-Us, Inc. (HRU), conducts a semiannual survey to assess the system’s user-friendliness, and the IT/IC Team reviews help desk calls after training is completed to assess user-friendliness.
- HRU maintains a high-bandwidth, high-access broadband data network with availability ensured through planned redundancy. To help ensure system continuity in the event of emergencies, daily backups of all data on every device connected to the servers are performed by the hub provider. The backup files are stored offsite, and replacement hardware is stored at Novel Connect’s technology center and support nodes. The hardware can be shipped to any site within one or two days. Continued availability of systems, information, and data is key to successfully addressing many of Novel Connect’s success factors, such as time to market with new products, process performance, supply chain management, and collaborations with key suppliers and partners.
- Organizational knowledge is made available through a variety of mechanisms, including project and process scorecards accessible to all employees involved, daily informational e-mails, regular meetings with leadership, Improvement Reports that are available on the intranet, and a weekly intranet newsletter highlighting innovations and improvements. The IT/IC Team tracks “hits” on the intranet, as well as MAP log-on times and access durations, to evaluate whether employees are using these internal learning approaches. Externally, relevant information is made available to partners through cross-sharing of technology roadmaps.

OPPORTUNITIES FOR IMPROVEMENT

- A fully deployed, systematic approach is not evident for ensuring the security of hardware and software or the security and accuracy of organizational data, information, and knowledge. While HRU helps maintain system security by locating network servers off-site and by controlling access through passwords, it is unclear how security is maintained on those systems the hub provider does not operate. For example, the internal MAP system, process logic controller (PLC) software, and interfaces at the manufacturing facility are all managed by the IT/IC Team, and how the security of these systems is maintained is not addressed. In addition, other than expecting those who enter data to be responsible for its accuracy, it is unclear how Novel Connect ensures that manual data entries are free of errors.

These issues may be important due to Novel Connect’s strategic challenge of protecting intellectual property, the widely dispersed workforce, and Novel Connect’s extensive use of data in its organizational performance reviews and decision making.

- **While Novel Connect has a variety of mechanisms for making organizational knowledge available to its workforce, suppliers, and partners, it is not clear how it uses these mechanisms to systematically collect and transfer knowledge or best practices. For example, it is unclear if Improvement Reports enable rapid sharing and implementation of best practices since they rely on users accessing them. Technology roadmaps and supplier scorecard results are shared with key partners, but there is little evidence of a systematic approach to transferring relevant knowledge from and to suppliers and partners. Additionally, it is unclear how Novel Connect determines which data and information are appropriate to share with suppliers and partners, or how it ensures that suppliers and partners have timely access to information that they need. Systematic approaches to ensure appropriate and timely transfer of knowledge may be important in light of Novel Connect’s principal success factors of rapid response to marketplace changes, supply chain management, and collaborations with key suppliers and partners.**
- Although HRU conducts a semiannual survey to assess the system’s user-friendliness and the IT/IC Team tracks “hits” and access durations to help assess employees’ use of these internal learning resources, there is limited evidence of a systematic approach to evaluation and improvement of key processes related to management of information resources and knowledge systems.

Category 5 Workforce Focus

5.1 Workforce Engagement

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

STRENGTHS

- To assess workforce engagement and satisfaction, Novel Connect uses the annual Trot Engage 14 survey, which comprises an overall satisfaction measure and 13 other measurement dimensions (Figure 7.4-1). The survey is augmented with other measures and indicators, including the percentage of employees participating on cross-functional teams, the voluntary turnover rate, the percentage of employees completing advanced proficiency training, the percentage of positions filled internally or through employee referrals, and safety at the manufacturing facility. The survey results, statistical analyses from the survey vendor, and other indicators are reviewed by a cross-functional Workforce Development Team with representation from each job classification. The team prepares analyses resulting in recommendations for improving workforce engagement and adjustments to key factors that affect workforce engagement. The team's analysis and recommendations are communicated to the Chief Workforce Officer and then used as input to the SPP.
- In order to foster a culture conducive to high performance and a motivated workforce, Novel Connect uses a systematic process to select and hire employees who have the potential to be successful in Novel Connect's virtual workplace environment. The process includes the use of a formal instrument to screen candidates for team and communication skills, initiative, innovation, and creativity. The instrument also helps determine personality types, which supervisors use after hiring to leverage diverse personalities on teams. To reinforce the desired culture, the performance management system (Figure 5.1-1) provides incentives for team participation, and all employees are expected to dedicate 10% of their time to generating innovative ideas.
- Novel Connect uses PMaps to establish professional development plans and to set individual performance goals that support the achievement of organizational action plans. Leadership development plans have a specific focus on projects based on core values. The PMaps are supplemented with a variety of methods to support career progression for all employees; for example, mentors are assigned to and training is available for all employees. Succession plans are used for all key individual contributor and leadership positions.

OPPORTUNITIES FOR IMPROVEMENT

- Many of the methods Novel Connect uses to promote and assess workforce engagement show little evidence of refinement and improvement. These include the process for screening potential employees, the use of a cross-functional Workforce Development Team to analyze employee survey results, the workforce survey instrument, the methods used to determine the effectiveness of workforce and leader development systems, the Knowledge Management Database and its supporting processes, and the performance management system. Without

- Novel Connect’s workforce development and learning system does not appear to be fully aligned with organizational needs. For example, it is unclear how the workforce development and learning system is linked to and addresses organizational performance improvement. Additionally, while Novel Connect uses a Knowledge Management Database, it is unclear how this technology ensures the transfer of knowledge from departing workers or how it reinforces new knowledge and skills on the job. It also is unclear how the development and learning system for leaders and their implementation of projects based on core values addresses the development of needed organizational knowledge. Further, while PMaps are adjusted each year to “tie back” to Novel Connect’s core competencies, strategic challenges, and goals, a process is not described for leaders to use these plans to enhance core competencies, address strategic challenges, or contribute to the accomplishment of action plans.
- Novel Connect demonstrates little evidence of a systematic approach to evaluate the effectiveness of its workforce and leader development and learning systems. For example, it is unclear who performs the analyses of performance metrics and training feedback sheets to determine the effectiveness of the systems, what methods are used to perform such analyses, or how the determinations are used to identify opportunities for system improvements.
- Beyond the statistical analysis received from the Trot organization, it is unclear what method the Workforce Development Team uses to relate results from the Trot survey and other measures of workforce engagement (e.g., the voluntary turnover rate and training data) to key business results. Further, a systematic process is not evident for using the survey and other results to improve both workforce engagement and business results. Without a systematic approach to the analysis and identification of needed improvements, Novel Connect may find that the input provided by the team to the SPP may be insufficient to enable effective strategic capability and capacity planning that addresses the availability of a highly skilled workforce, a strategic challenge.

5.2 Workforce Environment

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

STRENGTHS

- To assess workforce capability, the Chief Workforce Officer uses reports generated by the IT/IC Team that are developed from the aggregation of PMaps and information in the Knowledge Management Database. This information also is used during the SPP to determine the development of target capacity levels (Figure 2.1-1). Collectively, these approaches provide a method to assess workforce capability and capacity.
- To recruit and hire new employees, Novel Connect uses a nine-step recruitment process (Figure 5.2-1) that preferentially uses internal sources of candidates and referrals from employees, workforce boards, and partners, as well as from national and local rehabilitation centers. Candidates are screened for team and communication skills, initiative, innovation, and creativity. A Workforce Development Team reviews hiring demographics, and, if a gap appears in the diversity analysis, a PIP Team is formed to develop and deploy improvement plans. To help ensure retention, new hires are supported by mentors, employee referral bonuses are due on a new hire's six-month anniversary, and the screening tool includes a personality type determination to assist supervisors in leveraging the diversity of the workforce after the hiring process is complete. Collectively, these methods provide a systematic approach to recruit, hire, and retain a highly skilled workforce, addressing one of Novel Connect's strategic challenges.
- Novel Connect uses a combination of matrix management and a pod- and team-based structure to organize and manage its workforce. Teams are used for product development, product support, process management, process improvement, and resolution of cross-functional issues. Teams can be formed by either employees or the senior leadership, they have charters and assigned leaders, and they can meet either in person or virtually. Rewards for performance and innovation are used at both the team and individual levels to reinforce the work of the organization. This approach to the organization and management of work reinforces Novel Connect's core competencies of communication and agility, which are the center of its organizational culture.
- Novel Connect uses a variety of methods, with related measures and goals (Figure 5.2-2), to help ensure workplace health and safety. To address office safety, Novel Connect uses third-party ergonomic assessments, individual office equipment allocations, and a special-needs fund for disabled employees. Manufacturing safety is addressed through a safety team that meets monthly, conducts safety audits, reviews results, and develops and deploys appropriate corrective actions. Efforts from these two environmentally specific approaches are augmented with employee safety training and a voluntary employee wellness program. Safety and health issues and data are integrated and reviewed by a companywide, cross-functional, national safety team that reports results and makes recommendations to the SLT.

OPPORTUNITIES FOR IMPROVEMENT

- A systematic, well-deployed process is not apparent for preparing the workforce for changing capability and capacity needs. For example, it is unclear how workforce capability and capacity assessments are translated into training and development actions that are then deployed across the organization in the event of changing needs. Without a well-deployed approach to capability and capacity planning that is linked to effective workforce preparation, Novel Connect may find it difficult to achieve its strategic objectives and to successfully address market volatility issues, one of its strategic challenges.
- There is little evidence of fact-based methods that lead to systematic improvements for several of the processes used by Novel Connect to build an effective workforce environment. For example, there is no evidence of refinement or innovation for PMaps, for the SPP target capacity determination, or for the recruiting process. Without approaches to learning that reliably lead to improvement cycles for the processes used to build an effective workforce environment, Novel Connect may find it difficult to sustain its core competencies of communication and agility.
- It is not clear what approaches are used to ensure workplace security or how they are deployed to Novel Connect's various workforce segments and sites. Without an effective, well-deployed approach, Novel Connect may find it difficult to address its identified workforce requirement of personal security, especially since the majority of Novel Connect's workforce is physically located outside of the organization's facilities. Additionally, without physical security ensured, Novel Connect may find that its information security methods are insufficient to protect its intellectual property, a strategic challenge.

Category 6 Process Management

6.1 Work Systems Design

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

STRENGTHS

- **Novel Connect’s four core competencies (Figure 6.1-1) were established during a two-day workshop in 2000, and they have been reviewed annually since 2002. Review inputs include data from customer focus groups, surveys, sales trend analysis, and call center data. The data are integrated and validated using a quality function deployment (QFD) matrix. The reviews are conducted as part of the SPP cycle, and the process aligns with the voice of the customer, which helps ensure that the core competencies evolve with changing customer needs. Further, the QFD matrix is used as part of the analysis to determine if processes remain internal or use external resources. The analysis determines correlations among process performance, customer satisfaction, and a current competency.**
- Key work process requirements are initially defined in individual process flow diagrams by process owners using a standard approach that includes collecting requirements from both internal and external customers. These process requirements are maintained by the respective process owners, who use an annual evaluation and update process to assess how well the process is meeting the requirements. For example, through this process, improvements were made to the Internet order fulfillment process and the returns process. Requirements for all value creation and value stream support processes are identified in Figure 6.1-2.
- Novel Connect uses the PFPD Process (Figure 6.1-4) to design new products, features, and process options. The PFPD Process is used to transform data and requirements into sample products and to test production runs. The resulting challenge tests are performed by a sample group of internal or external customers.
- As part of Novel Connect’s Emergency Preparedness Process (EPP), a formal risk assessment for all physical operations and daily process activities is conducted annually by a Risk Assessment Team (RAT), and results are entered into a risk management matrix. These assessments are augmented with job safety analyses, monthly safety training, and annual drills. The RAT’s list of contingent actions for medium- and high-level risk items is compared against the current process, and revisions are made as appropriate. In 2005, the process was improved to include the technology infrastructure. The EPP supports Novel Connect’s core values of valuing employees/partners and sustainability.

OPPORTUNITIES FOR IMPROVEMENT

- The SLT uses performance information related to meeting customer expectations, coupled with a process synergy map (Figure 6.1-3), to design and innovate the overall work system. However, it is not clear (1) whether the steps and methods used by the SLT are systematic or

(2) whether they are integrated with establishing the roles of the workforce, suppliers, and partners in producing and delivering products and services. The lack of a systematic approach to designing the overall work system may limit Novel Connect's ability to realize its success factors of responding rapidly to marketplace changes with new products and optimizing process performance to maintain strong margins.

- While Novel Connect uses input from customers to define and maintain process requirements, it is not evident that input from key suppliers and partners is sought and used in this process. Without such input, Novel Connect may have difficulty ensuring that its processes are responsive to all stakeholders, including critical partners such as its cell carrier and retailers, and Novel Connect may not be able to fully leverage its strategic advantage of lowered costs from offshore suppliers.
- It is not clear how the PFPD Process (Figure 6.1-4) systematically incorporates all key requirements, agility, new technology, and organizational knowledge, as well as cycle time, productivity, cost control, and other efficiency/effectiveness factors, into process design. Without a systematic approach for consideration of these factors, Novel Connect may have difficulty ensuring that its processes are optimized, which may in turn impact its ability to address the strategic challenge of volatility in niche markets.

6.2 Work Process Management and Improvement

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5a, Scoring Guidelines for Process Items.)

STRENGTHS

- To help ensure that work processes meet key design and process requirements, process owners (identified for all key processes) monitor key process data and performance daily. In-process metrics (Figure 6.1-2) include safety, quality, staffing, cost, and cycle-time indicators. Indicators such as cycle times and error rates for processes are tracked and trended to help ensure that daily operations meet key process requirements. Key process diagrams are reviewed and updated annually. Alignment with stakeholders is facilitated through the annual Improvement Day, which is led by the respective process owners. Outputs are maintained in MAP, allowing integration with Novel Connect's other performance management system areas.
- To help prevent defects, service errors, and rework, process owners are required to share significant beneficial or adverse trends determined from their daily monitoring, as well as improvement efforts. This information can in turn be used to generate preventive actions. The information is stored in a database and is shared during daily process owner meetings, which last five to ten minutes and may be conducted virtually. In addition, the PFPD Process includes a formal challenge test step that may identify defects that could lead to service errors, rework, and warranty costs.
- The PIP (Figure 6.2-1) is used to improve process performance. Components include annual process reviews, the annual Improvement Day with stakeholders, and the use of cross-functional teams where necessary. Trends and improvement efforts are shared at Triple-M meetings and are stored in the PIP database, which internal and external customers, the carrier, and outsourcing partners can access and use to input ideas. A recent refinement led to process improvement expectations being built into process owners' job descriptions. Quality tools associated with the Lean and Six Sigma methodologies are in the early stages of deployment.

OPPORTUNITIES FOR IMPROVEMENT

- It is unclear how input from suppliers and partners is used in the day-to-day management of key processes. While these groups can provide input to the PIP database, how such input is effectively linked to day-to-day process operations is not evident. Without such linkage, Novel Connect may be missing an opportunity to understand and integrate requirements from key suppliers such as its cell carrier and offshore manufacturing partners.
- It is not clear what approaches Novel Connect uses to minimize the cost of inspections, tests, or audits as appropriate. For example, it is unclear how daily process performance monitoring systematically reduces the cost of inspections. Without an approach to target this specific cost of quality, Novel Connect may have difficulty leveraging its strategic advantage of lowered costs from offshore suppliers.

- While Novel Connect uses the PIP to improve the performance of its work processes, it is not clear that a systematic approach is in place to keep its work processes current with business needs and directions. In addition, a systematic approach to improve the effectiveness and efficiency of the PIP (Figure 6.2-1) is not evident, nor are repeated cycles of refinement apparent for the process. Without fact-based systematic processes in these areas, Novel Connect may not be able to maximize its potential for improvement, which may in turn impact its ability to address the challenge of rapidly changing customer and market needs.

Category 7 Results

7.1 Product and Service Outcomes

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5b, Scoring Guidelines for Results Items.)

STRENGTHS

- Reliability, a key requirement for all of Novel Connect’s customers, is demonstrated in five areas. Phone and Transmission Hardware Failure Rates (Figure 7.1-1a), Reliability of Social Networking Applications (Figure 7.1-2a), Reliability of Business/Government Software (Figure 7.1-2b), and Reliability of Accuracy Software (Figure 7.1-2d) show long-term beneficial trends, with results improving by at least 30% between 2001 and 2007 for four of five products (the fifth product was launched in 2007). For most of these results, the Novel Bug (launched in 2007) and Novel Complete products outperformed equivalent competitors’ products. Results for the Reliability of Audio-to-Text Software (Figure 7.1-2e), unique to the NovelAid product, improved from approximately 96.5% in 2001 to about 99.8% in 2007, comparing favorably to a PC-based application from 2004 to 2007.
- Survey results related to convenience (a requirement for personal consumers) and ease of use (important to all customer segments) show very good performance levels and beneficial trends. For example, results for “I can call anywhere, anytime” (Figure 7.1-4a) show an increase of 150% from a baseline of 31% of customers who strongly agreed in 2002 to approximately 79% who strongly agreed in 2007. In addition, from 2002 to 2007, results related to multitasking (Figure 7.1-4b) show that the percentage of surveyed customers who strongly agreed that multitasking on Novel Connect’s phones was easier than on others increased approximately 100% from a baseline of 41%, while the percentage who strongly agreed that multitasking on Novel Connect’s phones had become easier increased approximately 36% from a baseline of 24%. Results for Ease of Use (Figure 7.1-4c) show that the percentage of available features used each day increased from about 10% in 2001 to approximately 42% in 2007 across all products. This level of use has remained higher than that of the competitor’s products since 2005.
- Results for two measures of business/government customers’ requirements related to high power demonstrate very-good-to-excellent performance levels and beneficial trends. Results for Walkie-Talkie Component Transmission Distance (Figure 7.1-5a) show that the percentage of transmissions that reach $\frac{3}{4}$ of a mile improved from approximately 98.89% in 2001 to about 99.99% in 2007. In addition, on a scale of 0 (worst) to 2 (best), Walkie-Talkie Transmission Clarity (Figure 7.1-5b) improved from 1.55 in 2001 to 2.00 in 2007. Both results have been better than the performance results of the competitor’s products since 2004.
- Results for two measures of secure communication show very-good-to-excellent performance and beneficial trends. Security Protocol Compliance (Figure 7.1-6a) improved across all three types of data (personal, on-board, and transmission), from 99.9% or better in 2001 to 100% compliance in 2007, performing better than the competitor’s products since 2005. Similarly, Encryption Reliability results (Figure 7.1-6b) for on-board and transmission

data improved from 99.95% or better in 2001 to 100% for both types of data in 2006 and 2007, performing better than the competitor's products since 2001.

OPPORTUNITIES FOR IMPROVEMENT

- Limited comparative data are provided for some results. For example, results related to reliability (Figures 7.1-1a through 7.1-2d) contain comparisons for only two out of five products. Additionally, it is unclear if Novel Connect is comparing itself to its key competitors, industry leaders, or benchmarks. A lack of relevant comparative data may keep Novel Connect from effectively assessing the competitive position of its products and services.
- Results are not provided for measures related to several key customer requirements. For example, no results are provided related to the personal consumers' customer requirement of trendiness. In addition, while customers' perception of ruggedness is reported in Figure 7.2-6 (Allegiance Survey Results—Ruggedness), no data on the performance of Novel Connect's products relative to ruggedness are reported in Item 7.1. This gap may be important to Novel Connect, considering that these requirements are relevant to approximately 50% of Novel Connect's customers (Figure 3.1-1, Customer Groups).
- Although Battery Life Under Average User Workloads (Figure 7.1-1b) improved between 2001 and 2007 for three products, the performance level for NovelAid phones is very low relative to other products and declined to approximately 1.5 hours in 2007. No comparisons are provided for this product, so it is unclear if the level of performance is competitive. This result may be of particular significance to Novel Connect considering that the NovelAid product is targeted at the elderly and disabled, and their requirements include a long-life battery (Figure 3.1-1, Customer Groups). In addition, the Novel Bug battery life is approximately 10 hours, less than other product lines and the competitor's product.

7.2 Customer-Focused Outcomes

Your score in this Criteria Item for the Consensus Review is in the 70–85 percentage range. (Please refer to Figure 5b, Scoring Guidelines for Results Items.)

STRENGTHS

- **Results for several measures of customer satisfaction and dissatisfaction demonstrate good-to-excellent performance levels, beneficial trends, and favorable comparisons. Allegiance Survey results for overall satisfaction (Figure 7.2-1), agility/response time (Figure 7.2-2), and ruggedness (Figure 7.2-6)—show levels higher than 4 out of 5 on the Likert scale from 2003 to 2007, with overall satisfaction improving from about 4.32 to 4.61. In addition, performance levels for overall satisfaction, as well as for all customer segments for agility/response and ruggedness, exceeded those of the best competitor during this period. Further, the Ratio of Problem Calls to Positive Calls/Inquiries (Figure 7.2-5) improved from about 0.32 in 2003 to approximately 0.26 in 2007, comparing favorably to the best competitor’s ratio of approximately 0.34.**
- Pulse Survey Results—Overall Satisfaction (Figure 7.2-3) shows a beneficial trend, climbing from below 4.0 on the Likert scale in January 2005 to about 4.5 in December 2007. In addition, Customer Complaints (Figure 7.2-4) show a generally beneficial trend, with the number of complaints from all customer segments declining from 2003 to 2007.
- Several indicators of customer-perceived value and loyalty demonstrate good-to-excellent levels and beneficial trends from 2004 through 2007. During this period, Allegiance Survey results for value (Figure 7.2-7) and likelihood to refer (Figure 7.2-8) show levels higher than 4 out of 5 on the Likert scale for all customer segments. In addition, all segments outperformed the levels of the best competitor. Further, the percentage of Customers Willing to Be Contacted (Figure 7.2-10) increased from 55% in 2003 to approximately 75% in 2007.
- The 2007 Allegiance Survey results show that Novel Connect’s performance exceeds that of its closest competitor in 10 of 11 customer requirement dimensions (Figure 7.2-11) and that all 7 niche groups feel Novel Connect has a stronger relative competitive position than its closest competitor (Figure 7.2-12). In addition, in 2007, 86% of Novel Connect’s government and business customers who responded to surveys indicated that they plan to repeat business with the company.

OPPORTUNITIES FOR IMPROVEMENT

- Several results of importance to Novel Connect do not include data on customer segments. For example, results for the Percentage of Repeat Customers (a key indicator of customer loyalty) and Customers Willing to Be Contacted (Figures 7.2-9 and 7.2-10, respectively) do not include any segmented data. A lack of customer segmentation may be a particularly significant gap for Novel Connect, given its diverse customer groups (e.g., students, celebrities, truckers, and the Department of Homeland Security).

- While Novel Connect offers a variety of products, including diverse cell phones, accessories, and ringtones, no results presented in Item 7.2 are segmented by product line. Also, no results are provided for the Won Business Survey, which is described in Novel Connect's response to Item 3.1. The lack of information about customer satisfaction and perceived value related to its specific products and services and to won business may limit Novel Connect's ability to effectively identify and target needed improvements in building relationships and maintaining market share.

7.3 Financial and Market Outcomes

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5b, Scoring Guidelines for Results Items.)

STRENGTHS

- **Novel Connect demonstrates beneficial trends and excellent performance levels in key financial results, with revenues and profits increasing by more than 500% since 2003. For example, from 2003 to 2007, Gross Revenue (Figure 7.3-1) increased from \$0.6 billion to \$3.3 billion and Profit Before Tax (Figure 7.3-2) showed sustained results of at least 3% of sales (in alignment with the organization’s sustainability goal for profit [Figure 4.1-1]). In addition, Novel Connect’s average selling price per phone (Figure 7.3-1) improved from 33% above industry average to 3% below industry average during the same period.**
- Results for Return on Long-Term Investments (Figure 7.3-3) show beneficial trends from 2003 to 2007, with overall returns improving from 20% to 23%, associated revenue improving from \$320 million to nearly \$1.9 billion, and profit improving from \$12.2 million to \$70.7 million. The Short-Term vs. Long-Term Investment Ratio (Figure 7.3-5) has been maintained near the 70/30 target from 2003 to 2007, with overall short-term investments increasing from \$5 million to \$39.2 million and overall long-term investments increasing from \$2.5 million to \$16.6 million. In addition, the Ratio of Liquid Assets (Figure 7.3-6), currently at 4.71, has grown 334% since 2003.
- **Revenue from Leading Niche Markets (Figure 7.3-7), derived from the Phashion and Novel Secure 1 product lines, has increased approximately 600% since 2003 and currently represents approximately 56% of total sales. This result indicates Novel Connect’s success in achieving its profit strategic objective (Figure 2.1-2).**

OPPORTUNITIES FOR IMPROVEMENT

- Results for the Manufacturing vs. Distribution Ratio (Figure 7.3-4) show an unfavorable change from 65% in 2006 to 67% in 2007. This 2% cost variance may present challenges to Novel Connect in its efforts to meet its cost reduction goal of 15% per year while also achieving its annual profit goal of 3%–4% of revenue.
- While Novel Connect provides results on the Return on Long-Term Investments (Figure 7.3-3), no results are presented for the return on short-term investments, which represent over 70% of every investment dollar. Additionally, with the exception of results for Revenue from Leading Niche Markets (Figure 7.3-7), the financial results do not include segmented data. Specifically, they are not segmented by Novel Connect’s three major market segments (personal consumers, business consumers, and government consumers) and subsegments (e.g., business/government consumers) or by its diverse customer groups (e.g., students, celebrities, the elderly, truckers, emergency service workers, the Department of Homeland Security). With gaps in financial results and related segmentation, Novel Connect’s BOD and SLT may find it difficult to ensure fiscal accountability.

- Most financial results do not include comparative or competitive data. For example, no comparisons are provided for Return on Long-Term Investments (Figure 7.3-3), Manufacturing vs. Distribution Ratio (Figure 7.3-4), Short-Term vs. Long-Term Investment Ratio (Figure 7.3-5), or Ratio of Liquid Assets (Figure 7.3-6). Without understanding the investment and cost management performance of competitors, Novel Connect may find it difficult to ensure organizational sustainability.

7.4 Workforce-Focused Outcomes

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5b, Scoring Guidelines for Results Items.)

STRENGTHS

- Workforce engagement and satisfaction results demonstrate beneficial changes, signs of developing beneficial trends, and some favorable comparisons. Trot survey results (Figure 7.4-2) indicate that overall workforce satisfaction has improved from approximately 3.9 to about 4.4 from 2005 to 2007, and all of the 13 subarea questions also show improvement over that period. In 2007, Novel Connect's performance was better than the vendor-measured 90th-percentile level for overall satisfaction and for 9 of the 13 subarea questions. In addition, from the second quarter of 2004 to the fourth quarter of 2007, Employee Participation in PIPs (Figure 7.4-3) improved from 3% to about 28%. The Voluntary Turnover Rate (Figure 7.4-4), while showing fluctuation, improved overall from 2.5% to 1.6% from the first quarter of 2005 to the fourth quarter of 2007.
- Beneficial trends are evident in several workforce capability and capacity results. The Advanced Proficiency Training Completion Rate (Figure 7.4-5) improved from 0% to 61% from the first quarter of 2003 to the fourth quarter of 2007. During that same period, the number of job vacancies filled from within increased from approximately 4% to about 30%, and job vacancies filled by employee referrals improved from 0% to about 26% (Figure 7.4-6).
- Workforce climate results demonstrate beneficial trends and some sustained favorable comparisons. Results for Days Away/Restricted Time (Figure 7.4-7) show an improvement for the manufacturing environment from a high of 6 days in the first quarter of 2004 to about 2 days in the fourth quarter of 2007 and for the office/pod environment from nearly 3 days in the first quarter of 2003 to close to 0 in the first quarter of 2007, with both environments performing better than the national 80th percentile since the second quarter of 2006. Likewise, the Total Recordable Rate (Figure 7.4-8) of Occupational Safety and Health Administration-reportable employee injuries and illnesses per 100 full-time employees improved for the manufacturing environment from 8 in the first quarter of 2005 to 3 in the fourth quarter of 2007 and for the office environment from slightly more than 3 in the first quarter of 2003 to approximately 1 in the fourth quarter of 2007. Also, with one exception (manufacturing, first quarter 2007), both environments have outperformed the national 80th percentile since the second quarter of 2005. Further, results for Repetitive Motion Injuries (Figure 7.4-9) for office/pod workers demonstrate a beneficial trend from 2004 to 2007, and Employee Participation in Wellness Programs (Figure 7.4-10) improved for office/pod workers from 0% to 54% and for manufacturing workers from 0% to 34% from the first quarter of 2005 to the fourth quarter of 2007.

OPPORTUNITIES FOR IMPROVEMENT

- Some workforce-focused outcomes, including workforce satisfaction and engagement results, are not segmented by work site or workforce group. These include the Trot Engage 14 survey scores (Figure 7.4-2), Employee Participation in PIPs (Figure 7.4-3), and the Voluntary Turnover Rate (Figure 7.4-4). Similarly, workforce climate measures such as Days Away/Restricted Time (Figure 7.4-7), the Total Recordable Rate (Figure 7.4-8), Repetitive Motion Injuries (Figure 7.4-9), and Employee Participation in Wellness Programs (Figure 7.4-10) are not segmented by employee groups (i.e., innovation, operations, and administration and other support services [P.1a(3)]). Without the segmentation of workforce-focused outcomes, Novel Connect’s senior leaders may find it difficult to determine what improvement actions are key to workforce retention.
- Comparisons are not given for some workforce-focused outcomes. For example, workforce capability and capacity results such as the Advanced Proficiency Training Completion Rate (Figure 7.4-5) and Job Vacancies Filled From Within or by Employee Referrals (Figure 7.4-6) do not include comparative or competitive data. Similarly, no comparisons are provided for two of the workforce climate results: Repetitive Motion Injuries (Figure 7.4-9) and Employee Participation in Wellness Programs (Figure 7.4-10). Without appropriate comparisons, Novel Connect’s senior leaders may find it difficult to evaluate the effectiveness of the organization’s workforce engagement and environmental management processes and systems.
- Results are not provided for several key areas of workforce-focused performance. For example, no results are presented for staffing levels and trends or for leadership development. Additionally, no results are presented for workforce security, workforce services, or workforce benefits. Without such information, Novel Connect may find it difficult to ensure that the Activities Promoting Sustainability (Figure 1.1-2) are resulting in needed performance.

7.5 Process Effectiveness Outcomes

Your score in this Criteria Item for the Consensus Review is in the 50–65 percentage range. (Please refer to Figure 5b, Scoring Guidelines for Results Items.)

STRENGTHS

- Many results for measures of work system performance show good-to-excellent levels and beneficial trends from 2003 to 2007. For example, during this period, results for the Supplier Performance Index (Figure 7.5-2) improved by approximately one point for all four factors measured: pricing value, on-time delivery, order accuracy, and material quality. Likewise, Value Creation Results (Figure 7.5-4), which measure revenue from new products released, improved from 35% to 56%, performing better than the recognized global leader benchmark since 2006. In addition, the carrier's Data Transmission Rates (Figure 7.5-5) improved by 50% for download speed and by >400% for upload speed, and they outperformed the carrier's best competitor. Further, the Value Stream Effectiveness Index (Figure 7.5-6) increased from 250 to 325 points, nearing the American Production and Inventory Control Society (APICS) benchmark value of 350. Quality System Performance (Figure 7.5-7) shows improvement in the annual quality system audit score from 456 points to 570 points, a reduction in findings per audit from 17.3 to 14.7, an increase in the monthly audit score average from 96.5 to 98.9, and a reduction in the average cost of a challenge test from \$789 to \$756.
- Several results for measures of key work process performance show good-to-excellent levels and beneficial trends from 2003 to 2007. For example, during those years, defects per 1,000 units produced (Figure 7.5-13) improved from 2.8 to 2.1, while results for Intranet and Carrier System Uptime (Figure 7.5-14) improved by 54% and 38%, respectively, and currently are approaching benchmark levels. During this period, Help Desk Satisfaction (Figure 7.5-15) also improved, increasing from approximately 73% to 85% and currently approaching the Help Desk Institute (HDI) benchmark value of 87%. In addition, call center results (Figure 7.5-17) indicate that the call abandonment rate improved from 8% to 4% and that first-call resolution improved from 90% to 94%; 2007 rates approach the Yellowbird Call Solutions benchmark used.
- Results related to the effectiveness of Novel Connect's PIP (Figure 7.5-18) show that from 2003 to 2007 the number of ideas submitted per employee each year improved from 2.1 to 4.0, comparing favorably to the level of 2.5 per year demonstrated by a Baldrige Award recipient. In addition, the number of ideas implemented improved from 0.7 to 1.4. The backlog of ideas has increased from 128 to 150 over the same period.

OPPORTUNITIES FOR IMPROVEMENT

- Comparisons and benchmarks are missing for many of the reported process effectiveness outcomes. For example, no comparative or competitive data are provided for Customer Satisfaction With Carrier (Figure 7.5-1), the Supplier Performance Index (Figure 7.5-2), Quality System Performance (Figure 7.5-7), the People Utilization Ratio (Figure 7.5-8), Emergency Preparedness Effectiveness (Figure 7.5-9), Assembly Process Effectiveness

(Figure 7.5-10), Packaging Process Effectiveness (Figure 7.5-11), Defect and Return Rates (Figure 7.5-13), Maintenance Process Effectiveness (Figure 7.5-16), or Process Improvement Effectiveness (Figure 7.5-18). Without comparative data, Novel Connect may find it difficult to assess its relative performance and set achievable goals as it strives to realize its vision to be the most innovative company for mobile communication in the world.

- Results for 3 of the 18 process performance indicators have unfavorable trends. For example, results for Product Quality: Defect and Return Rates (Figure 7.5-13) show that returns per 1,000 units shipped changed unfavorably from a low of about 20 in 2004 to 21 in 2007 and peaked in 2006 at 22 units. Also, results for Maintenance Process Effectiveness (Figure 7.5-16) show that from 2003 to 2007 the equipment uptime percentage declined from about 98% to approximately 93.5%, and the work order backlog changed unfavorably from 100 to about 124. Problems in product quality and service delivery may unfavorably affect customers' experiences with reliability and convenience, two key customer requirements.
- The results provided for process effectiveness do not include any segmented data. For example, while results are presented for several specific processes (e.g., the PIP, assembly, packaging, maintenance), results are not segmented by product types, locations, or market segments. This lack of segmented data may limit Novel Connect's ability to assess its progress relative to the competition and market, and it may obscure opportunities for improvement that would be apparent with segmented results.
- Results are not provided for several indicators of process effectiveness important to Novel Connect. For example, no results are reported for security breaches, the challenge tests, relationship management of the carrier and distributors, or cycle time and productivity for key processes, as appropriate. In addition, no results are provided to indicate the effectiveness of processes related to the ringtone and accessory business lines, worth more than \$200 million per year. The lack of results for these indicators of process effectiveness may inhibit Novel Connect's ability to assess its work systems and make improvements as needed.

7.6 Leadership Outcomes

Your score in this Criteria Item for the Consensus Review is in the 30–45 percentage range. (Please refer to Figure 5b, Scoring Guidelines for Results Items.)

STRENGTHS

- Strategy and Action Plan Results (Figure 7.6-1) show good progress on both short- and long-term action plans. Novel Connect has accomplished 100% of last year's short-term action plans for four of its strategic objectives (profit; customer satisfaction and market position; innovation, agility, and rapid response; and workforce satisfaction), and it has completed 89% of the short-term plans for its fifth objective, value creation. In addition, the current rate of completion for long-term action plans ranges from 60% (for plans related to workforce satisfaction) to 100% (for plans related to profit).
- Results for several measures related to ethical behavior and trust in leadership show high performance levels and/or beneficial trends from 2005 to 2007 (Figure 7.6-2). For example, 100% of ethics hotline issues were resolved within 14 days in each of these years; ethics tips resulting in confirmed violations declined from 2 to 0 during this period; and, in 2007, 100% of employees, partners, and suppliers returned the Code of Ethical Compliance. Also, the 2007 performance levels for these measures met the assigned goals. In addition, employee survey results regarding satisfaction and trust in leaders increased from 81% to 87%, and satisfaction with communication rose from 66% to 84%.
- Results for Regulatory and Legal Compliance (Figure 7.6-4) demonstrate three-year beneficial trends and/or sustained high performance levels in nine of ten regulatory areas, meeting or exceeding Novel Connect's goals in each of those areas for the past three years. Areas of sustained performance include 100% Wireless Telecommunications Bureau (WTB) accessibility, HDI certification, and QuEST Forum certification, as well as zero incidents of noncompliance or nonconformance in Sarbanes-Oxley Act and IPC-A-610 implementations. In addition, from 2005 to 2007, the amount of electronic equipment recycled increased from 32% to 37% (well above the industry standard of 20%), and EPA reduction in hazardous waste improved by 30% annually, decreasing from 314 to 244.
- Novel Connect reports several favorable results related to organizational citizenship (Figure 7.6-5). From 2003 to 2007, foundation contributions increased each year, rising from \$24.1 million to \$47.9 million, and the percentage of employees contributing 16 or more hours to nonprofits increased from 61% to 89%. In addition, Novel Connect's use of noncarbon-based energy increased from 6% in 2003 to 11% in 2007, exceeding the goal of a 10% annual increase for the past three years. Novel Connect also has received numerous local and national recognitions for environmental and social responsibility. These results support Novel Connect's commitment to community involvement and its value of sustainability.

OPPORTUNITIES FOR IMPROVEMENT

- **No comparative or competitive data are included in the results provided for leadership, including Ethics: Measures and Results (Figure 7.6-2), Regulatory and Legal**

Compliance (Figure 7.6-4), and Organizational Citizenship Results (Figure 7.6-5). Comparing its performance relative to benchmarks, competitors, or other organizations may assist Novel Connect in better evaluating its results in these areas, as well as in setting goals and identifying areas for improvement.

- Results are limited or missing for many areas identified by Novel Connect as important to leadership outcomes. For example, limited results are reported for fiscal accountability; while Novel Connect states that internal audit report findings are resolved within 30 days, the actual findings from these audits are not provided. In addition, results for breaches of ethical behavior are limited to those related to ethics tips (Figure 7.6-2), and no results are provided on the impact of foundation contributions—a requirement for recipient organizations (1.2[c]).
- The results provided for leadership do not include any data segmented by organizational unit. For example, results for ethical behavior or stakeholder trust are not segmented by manufacturing plant or pod units and include no information related to the ethical compliance of offshore partners/suppliers, identified in 1.2b(2) as a particular focus of the SLT. In addition, organizational citizenship results do not include information on the specific community support causes (mobility, environment, education, and safety) identified in 1.2c. Without appropriate segmentation, Novel Connect may not be able to target areas for improvement, eliminate gaps, and measure its success in all locations and with all stakeholder groups.

APPENDIX

By submitting a Baldrige application, you have differentiated yourself from most U.S. organizations. The Board of Examiners has evaluated your application for the Malcolm Baldrige National Quality Award. Strict confidentiality is observed at all times and in every aspect of the application review and feedback.

This feedback report contains the Examiners' findings, including a summary of the key themes of the evaluation, a detailed listing of strengths and opportunities for improvement, and scoring information. Background information on the examination process is provided below.

APPLICATION REVIEW

Independent Review

Following receipt of the Award applications, the Award process review cycle (shown in Figure 1) begins with the Independent Review, in which members of the Board of Examiners are assigned to each of the applications. Examiners are assigned based on their areas of expertise and with attention to avoiding potential conflicts of interest. Each application is evaluated independently by the Examiners, who write observations relating to the Scoring System described beginning on page 63 of the *Criteria for Performance Excellence*.

Award Process Review Cycle

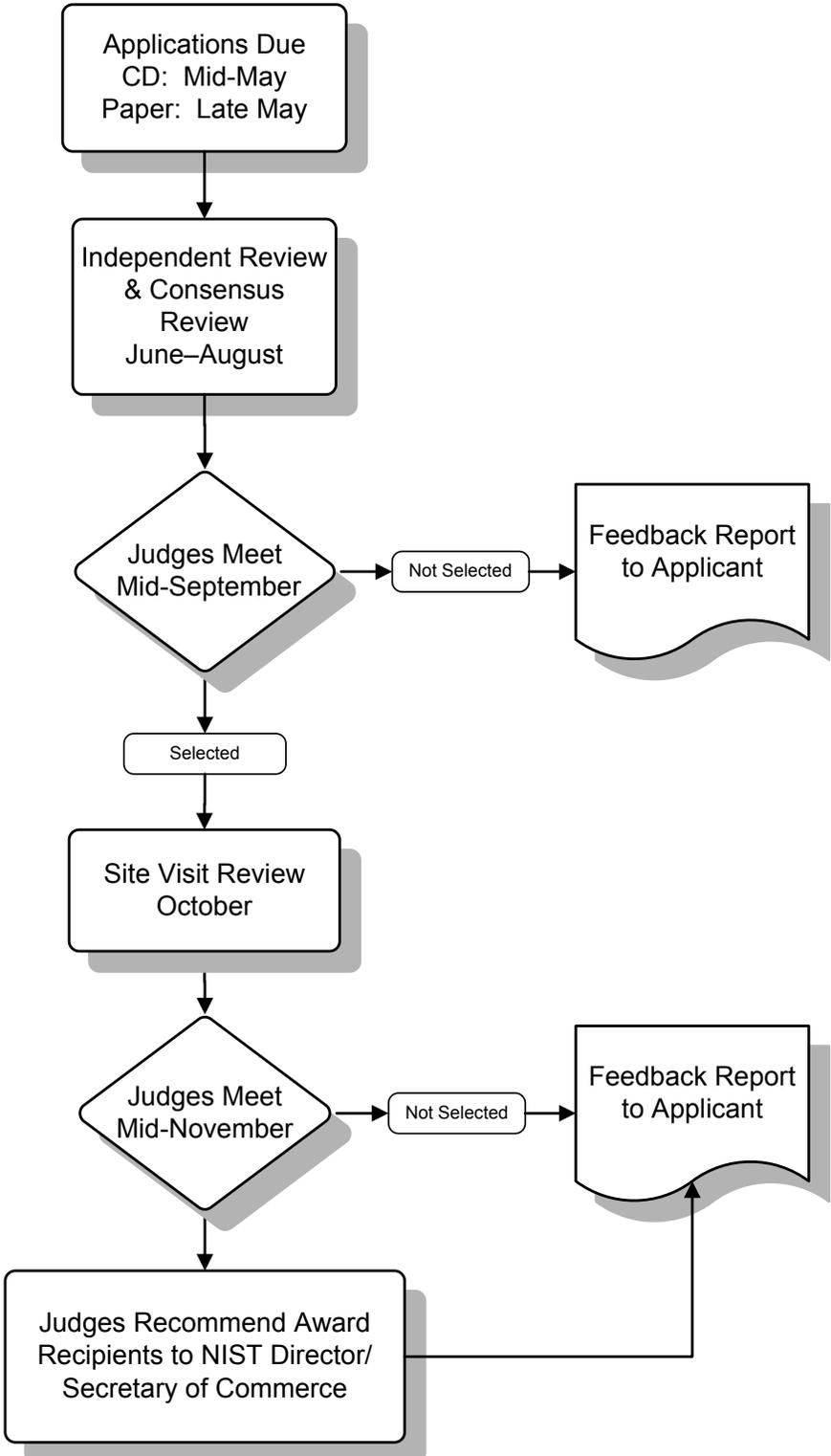


Figure 1—Award Process Review Cycle

Consensus Review

In Consensus Review (see Figure 2), a team of Examiners, led by a Senior Examiner, conducts a series of reviews, first managed virtually through a secure Web site and eventually concluded through a focused conference call. The purpose of this series of reviews is for the team to reach consensus on comments and scores that capture the team’s collective view of the applicant’s strengths and opportunities for improvement. The team documents its comments and scores in a Consensus Scorebook.

Step 1 Consensus Planning	Step 2 Virtual Consensus	Step 3 Consensus Calls	Step 4 Post-Consensus Call Activities
<ul style="list-style-type: none"> • Clarify the timeline for the team to complete its work • Assign Category/Item discussion leaders • Discuss key business/organization factors 	<ul style="list-style-type: none"> • Review all Independent Review evaluations—draft consensus comments and propose scores • Post Consensus Review worksheets for the team to review • Address feedback, incorporate inputs, and propose a resolution of differences on each worksheet • Review updated comments and scores 	<ul style="list-style-type: none"> • Discuss a limited number of issues related to specific comments or scores, and discuss all key themes • Achieve consensus on comments and scores 	<ul style="list-style-type: none"> • Revise comments and scores to reflect consensus decisions • Prepare final Consensus Scorebook • Prepare feedback report

Figure 2—Consensus Review

Site Visit Review

After Consensus Review, the Panel of Judges selects applicants to receive site visits based on the scoring profiles. If an applicant is not selected for Site Visit Review, one of the Examiners on the consensus team edits the final Consensus Scorebook, which becomes the feedback report.

Site visits are conducted for the highest-scoring applicants to clarify any uncertainty or confusion the Examiners may have regarding the written application and to verify that the

information in the application is correct (see Figure 3 for the Site Visit Review process). After the site visit, the team of Examiners prepares a final Site Visit Scorebook.

Step 1 Team Preparation	Step 2 Site Visit	Step 3 Post-Site Visit Activities
<ul style="list-style-type: none"> • Review consensus findings • Develop site visit issues • Plan site visit 	<ul style="list-style-type: none"> • Make/receive presentations • Conduct interviews • Record observations • Review records 	<ul style="list-style-type: none"> • Resolve issues • Summarize findings • Finalize comments • Prepare final Site Visit Scorebook • Prepare feedback report

Figure 3—Site Visit Review

Applications, Consensus Scorebooks, and Site Visit Scorebooks for all applicants receiving site visits are forwarded to the Panel of Judges for review (see Figure 4). The Judges recommend which applicants should receive the Award. The Judges discuss applications in each of the six Award categories separately, and then they vote to keep or eliminate each applicant. Next, the Judges decide whether each of the top applicants should be recommended as an Award recipient based on an “absolute” standard: the overall excellence of the applicant and the appropriateness of the applicant as a national role model. The process is repeated for each Award category.

Step 1 Panel of Judges’ Review	Step 2 Evaluation by Category	Step 3 Assessment of Top Organizations
<ul style="list-style-type: none"> • Applications • Consensus Scorebooks • Site Visit Scorebooks 	<ul style="list-style-type: none"> • Manufacturing • Service • Small business • Education • Health care • Nonprofit 	<ul style="list-style-type: none"> • Overall strengths/opportunities for improvement • Appropriateness as national model of performance excellence

Figure 4—Judges’ Review

Judges do not participate in discussions or vote on applications from organizations in which they have a competing or conflicting interest or in which they have a private or special interest, such as an employment or a client relationship, a financial interest, or a personal or family relationship. All conflicts are reviewed and discussed so that Judges are aware of their own and others’ limitations on access to information and participation in discussions and voting.

Following the Judges’ review and recommendation of Award recipients, the Site Visit Team Leader edits the final Site Visit Scorebook, which becomes the feedback report.

SCORING

The scoring system used to score each Item is designed to differentiate the applicants in the various stages of review and to facilitate feedback. As seen in the Scoring Guidelines (Figures 5a and 5b), the scoring of responses to Criteria Items is based on two evaluation dimensions: Process and Results. The four factors used to evaluate process (Categories 1–6) are Approach (A), Deployment (D), Learning (L), and Integration (I), and the four factors used to evaluate results (Items 7.1–7.6) are Levels (Le), Trends (T), Comparisons (C), and Integration (I).

In the feedback report, the applicant receives a percentage range score for each Item. The range is based on the Scoring Guidelines, which describe the characteristics typically associated with specific percentage ranges.

As shown in Figures 6a and 6b, the applicant's overall scores for Process Items and Results Items each fall into one of eight scoring bands. Each band score has a corresponding descriptor of attributes associated with that band. In addition, the figures show the percentage of applicants scoring in each band at Consensus Review. Scoring adjustments resulting from Site Visit Review are not reflected in the distribution.

SCORE	PROCESS (For Use With Categories 1–6)
0% or 5%	<ul style="list-style-type: none"> ▪ No systematic approach to Item requirements is evident; information is anecdotal. (A) ▪ Little or no deployment of any systematic approach is evident. (D) ▪ An improvement orientation is not evident; improvement is achieved through reacting to problems. (L) ▪ No organizational alignment is evident; individual areas or work units operate independently. (I)
10%, 15%, 20%, or 25%	<ul style="list-style-type: none"> ▪ The beginning of a systematic approach to the basic requirements of the Item is evident. (A) ▪ The approach is in the early stages of deployment in most areas or work units, inhibiting progress in achieving the basic requirements of the Item. (D) ▪ Early stages of a transition from reacting to problems to a general improvement orientation are evident. (L) ▪ The approach is aligned with other areas or work units largely through joint problem solving. (I)
30%, 35%, 40%, or 45%	<ul style="list-style-type: none"> ▪ An effective, systematic approach, responsive to the basic requirements of the Item, is evident. (A) ▪ The approach is deployed, although some areas or work units are in early stages of deployment. (D) ▪ The beginning of a systematic approach to evaluation and improvement of key processes is evident. (L) ▪ The approach is in the early stages of alignment with your basic organizational needs identified in response to the Organizational Profile and other Process Items. (I)
50%, 55%, 60%, or 65%	<ul style="list-style-type: none"> ▪ An effective, systematic approach, responsive to the overall requirements of the Item, is evident. (A) ▪ The approach is well deployed, although deployment may vary in some areas or work units. (D) ▪ A fact-based, systematic evaluation and improvement process and some organizational learning, including innovation, are in place for improving the efficiency and effectiveness of key processes. (L) ▪ The approach is aligned with your organizational needs identified in response to the Organizational Profile and other Process Items. (I)
70%, 75%, 80%, or 85%	<ul style="list-style-type: none"> ▪ An effective, systematic approach, responsive to the multiple requirements of the Item, is evident. (A) ▪ The approach is well deployed, with no significant gaps. (D) ▪ Fact-based, systematic evaluation and improvement and organizational learning, including innovation, are key management tools; there is clear evidence of refinement as a result of organizational-level analysis and sharing. (L) ▪ The approach is integrated with your organizational needs identified in response to the Organizational Profile and other Process Items. (I)
90%, 95%, or 100%	<ul style="list-style-type: none"> ▪ An effective, systematic approach, fully responsive to the multiple requirements of the Item, is evident. (A) ▪ The approach is fully deployed without significant weaknesses or gaps in any areas or work units. (D) ▪ Fact-based, systematic evaluation and improvement and organizational learning through innovation are key organization-wide tools; refinement and innovation, backed by analysis and sharing, are evident throughout the organization. (L) ▪ The approach is well integrated with your organizational needs identified in response to the Organizational Profile and other Process Items. (I)

Figure 5a—Scoring Guidelines for Process Items in the Criteria for Performance Excellence

SCORE	RESULTS (For Use With Category 7)
0% or 5%	<ul style="list-style-type: none"> ▪ There are no organizational performance results and/or poor results in areas reported. (Le) ▪ Trend data either are not reported or show mainly adverse trends. (T) ▪ Comparative information is not reported. (C) ▪ Results are not reported for any areas of importance to the accomplishment of your organization's mission. (I)
10%, 15%, 20%, or 25%	<ul style="list-style-type: none"> ▪ A few organizational performance results are reported, and early good performance levels are evident in a few areas. (Le) ▪ Some trend data are reported, with some adverse trends evident. (T) ▪ Little or no comparative information is reported. (C) ▪ Results are reported for a few areas of importance to the accomplishment of your organization's mission. (I)
30%, 35%, 40%, or 45%	<ul style="list-style-type: none"> ▪ Good organizational performance levels are reported for some areas of importance to the Item requirements. (Le) ▪ Some trend data are reported, and a majority of the trends presented are beneficial. (T) ▪ Early stages of obtaining comparative information are evident. (C) ▪ Results are reported for many areas of importance to the accomplishment of your organization's mission. (I)
50%, 55%, 60%, or 65%	<ul style="list-style-type: none"> ▪ Good organizational performance levels are reported for most areas of importance to the Item requirements. (Le) ▪ Beneficial trends are evident in areas of importance to the accomplishment of your organization's mission. (T) ▪ Some current performance levels have been evaluated against relevant comparisons and/or benchmarks and show areas of good relative performance. (C) ▪ Organizational performance results are reported for most key customer, market, and process requirements. (I)
70%, 75%, 80%, or 85%	<ul style="list-style-type: none"> ▪ Good to excellent organizational performance levels are reported for most areas of importance to the Item requirements. (Le) ▪ Beneficial trends have been sustained over time in most areas of importance to the accomplishment of your organization's mission. (T) ▪ Many to most trends and current performance levels have been evaluated against relevant comparisons and/or benchmarks and show areas of leadership and very good relative performance. (C) ▪ Organizational performance results are reported for most key customer, market, process, and action plan requirements, and they include some projections of your future performance. (I)
90%, 95%, or 100%	<ul style="list-style-type: none"> ▪ Excellent organizational performance levels are reported for most areas of importance to the Item requirements. (Le) ▪ Beneficial trends have been sustained over time in all areas of importance to the accomplishment of your organization's mission. (T) ▪ Evidence of industry and benchmark leadership is demonstrated in many areas. (C) ▪ Organizational performance results fully address key customer, market, process, and action plan requirements, and they include projections of your future performance. (I)

Figure 5b—Scoring Guidelines for Results Items in the Criteria for Performance Excellence

Band Score	Band Number	% Applicants in Band ¹	PROCESS Scoring Band Descriptors
0–150	1	X	The organization demonstrates early stages of developing and implementing approaches to the basic Criteria requirements, with deployment lagging and inhibiting progress. Improvement efforts are a combination of problem solving and an early general improvement orientation.
151–200	2	X	The organization demonstrates effective, systematic approaches responsive to the basic requirements of the Criteria, but some areas or work units are in the early stages of deployment. The organization has developed a general improvement orientation that is forward-looking.
201–260	3	X	The organization demonstrates effective, systematic approaches responsive to the basic requirements of most Criteria Items, although there are still areas or work units in the early stages of deployment. Key processes are beginning to be systematically evaluated and improved.
261–320	4	X	The organization demonstrates effective, systematic approaches responsive to the overall requirements of the Criteria, but deployment may vary in some areas or work units. Key processes benefit from fact-based evaluation and improvement, and approaches are being aligned with organizational needs.
321–370	5	X	The organization demonstrates effective, systematic, well-deployed approaches responsive to the overall requirements of most Criteria Items. The organization demonstrates a fact-based, systematic evaluation and improvement process and organizational learning, including innovation, that result in improving the effectiveness and efficiency of key processes.
371–430	6	X	The organization demonstrates refined approaches responsive to the multiple requirements of the Criteria. These approaches are characterized by the use of key measures, good deployment, and evidence of innovation in most areas. Organizational learning, including innovation and sharing of best practices, is a key management tool, and integration of approaches with organizational needs is evident.
431–480	7	X	The organization demonstrates refined approaches responsive to the multiple requirements of the Criteria Items. It also demonstrates innovation, excellent deployment, and good-to-excellent use of measures in most areas. Good-to-excellent integration is evident, with organizational analysis, learning through innovation, and sharing of best practices as key management strategies.
481–550	8	X	The organization demonstrates outstanding approaches focused on innovation. Approaches are fully deployed and demonstrate excellent, sustained use of measures. There is excellent integration of approaches with organizational needs. Organizational analysis, learning through innovation, and sharing of best practices are pervasive.

¹Percentages are based on scores from Consensus Review.

Figure 6a—Process Scoring Band Descriptors

Band Score	Band Number	% Applicants in Band ¹	RESULTS Scoring Band Descriptors
0–125	1	X	Results are reported for a few areas of importance to the accomplishment of the organization’s mission, but they generally lack trend and comparative data.
126–170	2	X	Results are reported for several areas of importance to the Criteria requirements and the accomplishment of the organization’s mission. Some of these results demonstrate good performance levels. The use of comparative and trend data is in the early stages.
171–210	3	X	Results address many areas of importance to the accomplishment of the organization’s mission, with good performance being achieved. Comparative and trend data are available for some of these important results areas, and some beneficial trends are evident.
211–255	4	X	Results address some key customer/stakeholder, market, and process requirements, and they demonstrate good relative performance against relevant comparisons. There are no patterns of adverse trends or poor performance in areas of importance to the Criteria requirements and the accomplishment of the organization’s mission.
256–300	5	X	Results address most key customer/stakeholder, market, and process requirements, and they demonstrate areas of strength against relevant comparisons and/or benchmarks. Improvement trends and/or good performance are reported for most areas of importance to the Criteria requirements and the accomplishment of the organization’s mission.
301–345	6	X	Results address most key customer/stakeholder, market, and process requirements, as well as many action plan requirements. Results demonstrate beneficial trends in most areas of importance to the Criteria requirements and the accomplishment of the organization’s mission, and the organization is an industry ² leader in some results areas.
346–390	7	X	Results address most key customer/stakeholder, market, process, and action plan requirements and include projections of future performance. Results demonstrate excellent organizational performance levels and some industry ² leadership. Results demonstrate sustained beneficial trends in most areas of importance to the Criteria requirements and the accomplishment of the organization’s mission.
391–450	8	X	Results fully address key customer/stakeholder, market, process, and action plan requirements and include projections of future performance. Results demonstrate excellent organizational performance levels, as well as national and world leadership. Results demonstrate sustained beneficial trends in all areas of importance to the Criteria requirements and the accomplishment of the organization’s mission.

¹Percentages are based on scores from Consensus Review.

²“Industry” refers to other organizations performing substantially the same functions, thereby facilitating direct comparisons.

Figure 6b—Results Scoring Band Descriptors

Baldrige National Quality Program
National Institute of Standards and Technology
United States Department of Commerce
Administration Building, Room A600
100 Bureau Drive, Stop 1020
Gaithersburg, MD 20899-1020

The National Institute of Standards and Technology (NIST), an agency of the U.S. Department of Commerce, manages the Baldrige National Quality Program (BNQP). For more than a century, NIST has helped to lay the foundation for the innovation, economic growth, and quality of life that Americans have come to expect. NIST promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life. Through a network of nearly 400 assistance centers that serve all 50 states and Puerto Rico, NIST provides technical and business assistance to help smaller manufacturers overcome barriers to productivity and competitiveness.

Call BNQP or visit our Web site for

- information on improving the performance of your organization
- information on eligibility requirements for the Baldrige Award
- information on applying for the Baldrige Award
- information on becoming a Baldrige Examiner
- information on the Baldrige Award recipients
- individual copies of the Criteria for Performance Excellence—Business/Nonprofit, Education, and Health Care
- information on BNQP educational materials
- case studies

Telephone: (301) 975-2036; Fax: (301) 948-3716; E-mail: nqp@nist.gov
Web site: www.baldrige.nist.gov

American Society for Quality
600 North Plankinton Avenue
P.O. Box 3005
Milwaukee, WI 53201-3005

By making quality a global priority, an organizational imperative, and a personal ethic, the American Society for Quality (ASQ) becomes the community for all who seek quality technology, concepts, or tools to improve themselves and their world. ASQ administers the Malcolm Baldrige National Quality Award under contract to NIST.

Call ASQ to order

- bulk copies of the Criteria
- Award recipients DVD

Telephone: (800) 248-1946; Fax: (414) 272-1734; E-mail: asq@asq.org
Web site: www.asq.org