
Get the Facts on
Information Availability:
How to Solve
Downtime Challenges
to Manufacturing and
Supply Chain Operations

Overview

Every manufacturer—from heavy-duty industrial and automotive to consumer products and packaged goods—faces one ongoing challenge: time. Time—all the delay and latency still remaining within your business processes—impacts every level of the organization, adds to your costs, saps your productivity and reduces profits. Ultimately, time reduces the value you can return to expectant shareholders.

Through relentless cost-cutting and deep investments in ERP, supply chain management and other technologies you've focused on achieving optimum performance—higher productivity and efficiencies to drive profit and value. But as you continue those strategies, do more with less and drive revenue growth, shareholders want evidence of new value-producing opportunities. Meanwhile, an unprecedented wave of new regulations and the heightened awareness of corporate governance standards demand attention and investment.

It's up to you to meet these expectations and find and deliver new value while dealing with the challenges of change. This white paper explores how the power of an information availability solution can unlock the latent potential of your IT environment and deliver new value for your organization. It can enable your organization to immediately tap into the unused value—downtime—that exists within your IT infrastructure.

Bottom line: If your organization can minimize or eliminate planned downtime, it can free up specific, measurable (currently unrealized) potential to immediately support your productivity and profitability strategies. It also delivers opportunities for revenue and asset growth, new competitive positioning opportunities, M&A plans and customer-facing initiatives.

The Power of Information Availability: Transform Planned Downtime

An information availability solution unleashes the potential locked inside *planned downtime*, those hours each day or week when business process technology and applications are brought offline for maintenance, backups or reporting activities. This downtime occurs regularly in every organization, yet delivers zero value to your business and adds nothing to your bottom line. Just as important, an information availability solution delivers the optimum level of business resiliency in the event of an *unplanned interruption* (such as application, system failure or other disaster), especially important if your organization faces the latest Federal compliance regulations.

Downtime interferes with and delays the rapid forward movement of your strategies and reduces your profitability and the return your shareholders expect. Most importantly, it prevents immediate action from your customers, employees and business partners.

For example, each of the hundreds—even thousands—of interlocking, dependent activities, components and decisions in the manufacturing process pose potential time delays. More than ever, these interlocking tasks depend on information technology to complete on schedule. A delay of even a few minutes at one stage will cascade into potential delays at other stages in the process. What if you could eliminate a one-hour cumulative delay each week, caused by application, database or server downtime? You could immediately release unrealized potential and cost savings and speed up every stage in the manufacturing process. How much value would that deliver to your bottom line and shareholders?

High Availability: Food Wholesaler

Situation: A leading Italian beef producer with four factories responsible for over half of Italy's beef exports, must maintain constant vigilance over 550,000 animals passing through its slaughter houses annually. Its food safety tracking systems are their highest priority. The operation can only sustain minimal interruptions to accommodate high and growing data volumes across a diverse IT environment and changes to systems to meet legislative reporting requirements. An information availability solution now provides near continuous uptime and on-demand, flexible information accessibility.

Results: Transparent, seamless uptime should any unplanned event occur; 100 percent data protection; continuous ability to meet service level agreements (SLAs) and government tracking regulations regardless of any planned or unplanned event.

An information availability solution can help you ensure that your IT processes become more closely aligned to your business goals. To that end, discussions with your IT executives should focus on finding the right combination of business and technical solutions to:

- Liberate the unrealized value of current downtime from critical information technology that supports your business and information processes.
- Minimize acceptable downtime and data loss for non-critical data and applications to deliver the maximum return for your organization.

Unleashing the Responsive, Real-Time Enterprise

Studies show that over the last three years nearly 89 percent of manufacturers have increased supply chain capabilities, enabling them to catch up rather quickly with the leading improvement-driven companies. The accelerating pace of this “catch-up” window means that leading-edge manufacturers need to uncover every performance advantage to sustain growth initiatives. Meanwhile, mid-sized players need to find new competitive advantages.

A study by Contingency Analyst Research shows that, on average, people or process failures directly cause 80 percent of mission-critical application service downtime.

An information availability solution can uncover and exploit unused value in your supply chain processes and throughout your organization. You’ll find these unused opportunities in the full range of your business and IT infrastructure, including: front and back offices, go-to-market processes, partner and channel operations, product development and information exchange and collaboration. Many manufacturers of all sizes and across the globe have already discovered that, because information availability solutions minimize or completely eliminate both planned and unplanned downtime, they immediately boost productivity, raise efficiency and make the organization more resilient, reliable and fully responsive no matter what happens.

Some manufacturers have been more adept at this alignment of interests than others. And more will be demanded in the next few years. Users always need more: more data, more data sharing, more applications, more processing time, more reports and more access. You need to demand more from your suppliers and seek more sourcing opportunities across the state, nation or globe. Customers want more choices, more convenience, more access points and more flexibility. Shareholders want to see more value, higher profits, greater efficiencies and more return for every dollar spent.

You need the ability to ensure that IT can and will continue to deliver on these goals with resilience and reliability. That’s why it’s important to make “information availability” a key issue in discussions with your IT executives.

Highly Available Products

Situation: An innovative plastics manufacturer with \$1 billion (US), 3,300 employees and 9 manufacturing plants on two continents, operates around the clock using a critical SAP application to meet customer orders, receive just-in-time raw materials and monitor essential processes throughout its operations. While data and applications need to undergo periodic reorganization, the business cannot afford to wait with downtime costs of \$125,000 (US) per hour. An information availability solution was able to bridge multiple servers for optimal resource management and near continuous uptime.

Results: Savings of (US) \$3 million annually in eliminated downtime; 100 percent data protection; transparent, seamless uptime should an unplanned event occur, which supports SLAs with customers.

Information Availability: Impact on Business Functions

As we’ve seen, liberating delays and eliminating latency from your business can positively impact your business strategies with currently unrealized value. Now, it’s time to explore how delays and latency affect specific business functions.

Tip: Your service level agreements (SLAs) with off-shore/outsource partners should include: required scheduled uptime and accessibility definitions, mandatory recovery time bench mark should an unplanned outage occur, and the minimum acceptable recovery point objective for critical data.

You'll want to discuss with key senior business executives where IT downtime impacts your business processes and where, once eliminated, that extra time could add more value. Ask them to identify opportunities where currently unused time can be leveraged for higher productivity, revenue growth, profitability, competitive advantage and information sharing.

- **Operations**—minimizing downtime and delays that impact critical processes throughout your operations, including ERP applications, production and assembly processes, supply chain, partner networks, shop floor, warehouse, logistics and customer retention.
- **Product lifecycle management**—accelerating the concept-to-customer process to generate new sources of revenue faster; using real-time, always available information to support product portfolio strategies, including planning, management and execution of every development phase; and driving out delays in the product lifecycle as your product teams create, modify, produce and service products before and after purchase.
- **Information optimization**—ensuring continuous, reliable information exchange; maximizing the collection and deployment of more granular real-time data to deliver faster better insight; minimizing downtime risks to the free-flow of electronic information between you and your partners throughout the supply chain; speeding up innovation, to enable better products and higher sales and customer service with faster, more granular decisions.
- **Compliance issues**—including meeting emerging regulatory and corporate governance mandates for your information, such as Sarbanes-Oxley, USA Patriot Act and EU mandates; identifying and reducing risks to the business from failure to comply; protecting data in order to meet compliance deadlines. For example, if an unplanned outage occurred during your compliance process, how much vital data and time would be lost as systems were recovered? Could you still meet your delivery deadline and avoid penalties?
- **Corporate infrastructures**—powering business infrastructure (HR, e-mail, etc.), data and physical security, as well as finance and accounting, audit, analysis and reporting functions; securing enterprise application and web services, networks, and security; enabling back office and core processing to scale for growth or to accommodate mergers and acquisitions without adding costs or impacting profitability.

Goods on the Go

Situation: A major \$38 billion (US) South American rail transportation company requires 24/7 operations to keep more than 6 million tons of goods rolling and 1,250 employees connected to information. Its IT infrastructure includes a mix of servers, databases, and operating systems to run and supply real-time data to the company's ERP solution suites—ensuring that it meets its service obligations to customers. An information availability solution now ensures uninterrupted business, continuous operations and rapid disaster recovery for critical applications.

Results: Uninterrupted business; zero data loss; 100 percent business resiliency; continuous access to critical data and applications; easy information exchange and access, regardless of application or format; seamless uptime should any unplanned event occur.

Action Worksheet

Your senior IT executives should be able to assure you that the reliability and resiliency of your technology investments—your applications, databases, servers and networks—can keep your business running, productive and profitable no matter what happens. That means ensuring that all of these technologies remain optimally available and accessible when and how they're needed both internally and externally.

24% of surveyed businesses said that downtime of under 8 hours would put the survival of their organizations at risk. — “Data Recovery Completes Disaster Recovery,” *Disaster Recovery Journal*

Ask your IT executives to identify where planned downtime—and the risk of unplanned downtime—can interrupt or prevent your operations and other business processes from achieving your goals. Also ask where planned downtime may be adding hidden costs to productivity and the bottom line. Assess the following areas:

- Go to market strategies*—including the ability to eliminate or minimize delays and latency from information access or accuracy; speeding up analyses and decisions in the product development cycle; refining target marketing processes; serving sales channels flexibly and effectively.
- Supply chain management*—including how downtime, information delay or inaccessibility may present obstacles to reducing inventory levels; creating a tighter, more flexible and responsive supply chain; tooling processes to deliver enhanced revenue generation through greater availability; using optimally available systems, applications and data to rapidly create and reconfigure supply chain elements in response to competitive or price pressures.
- ERP applications*—including the ability to reduce or eliminate the effects and potential costs of downtime on production processes, shop floor productivity, parts inventories, warehouse, delivery and transportation processes (see service level agreements below).
- Logistics*—including the risks that inaccessible applications pose to the deployment of optimally available and accessible information for continuous performance improvements; enabling new strategies like cross-docking and advanced warehousing management through information availability; squeezing further time and costs from the movement of products to market.

No Downtime = New Competitive Advantage

Situation: To meet vital delivery deadlines for the world's biggest auto manufacturers, this Belgium-based auto parts manufacturer with 500+ million annual revenues needed to eliminate downtime from its backup processes and sustain continuous information flow through its supply-chain applications. Reliance on information to keep its operations running posed risks to the firm's ability to meet stringent schedules. A loss of data could threaten customer relationships. A practical information availability solution offers fast, reliable data protection and improved recovery speed, eliminating weekly downtime.

Results: Increased data recovery point to less than 30 minutes to support service level agreements (SLAs); eliminated weekly backup downtime entirely and achieved optimum access to data and applications for critical supply chain systems; gained new sales opportunities from this competitive advantage.

Estimates indicate that each hour of downtime can cost a manufacturer up to \$1.5 million (US) in lost sales, employee productivity, supply chain disruption, service level penalties and damage to share value.

- *Collaboration*—including how to enable low-cost, simple, on-demand real-time exchange of information across disparate data, platforms, and business silos; using the free-flow of information (without additional programming) to enhance decision making among partners, customers and your managers, feed data warehouses or business intelligence applications and tighten relationships with customers and enhance brand loyalty.
- *After-market sales and service*—including how downtime impacts emerging after-market sales and service strategies that are designed to grow revenue, maximize long-term customer profitability, and deliver parts sales, service and support at lowest cost; how inaccessible internet-enabled applications and information impacts brand perception and loyalty.
- *Channels*—including how downtime or unintended delay affects sales and revenue and may put your brand at risk through the inability to fully leverage e-markets, online procurement, electronic auctions, business-to-business portals and partner extranets, etc.
- *Customer analysis*—including how optimally available information and applications can invigorate analytical CRM with real-time, on-demand accessibility; how data warehousing strategies could be more cost effective using simplified, on-demand enterprise-wide data sharing that is table-driven rather than programming driven; analyzing how downtime can imperil customer activity information and delay critical decision making and actions.
- *Service level agreements (SLAs)*—including ways to minimize potential downtime that can delay delivery or compliance with contractual deadlines; re-defining uptime for the business by decreasing the risks of business interruptions; adding the potential opportunity to create competitive advantage by being able to guarantee higher performance through an information availability solution; being able to require suppliers to meet higher standards by integrating information availability into their processes.
- *Sales force automation*—including the ability to reduce or eliminate the effects and costs of information inaccessibility and downtime in driving marketing and sales processes, such as developing real-time prospect and customer profiles, linking field sales and service with wireless access to real-time information, launching multi-tiered marketing campaigns faster, and gaining real-time reporting analysis.
- *New technologies*—including how the power of optimally available information can enable and enhance emerging technologies, such as wireless capabilities for the field force and RFID; continuous item-level tracking throughout the entire delivery process to reduce channel volumes, enhance forecasting and planning, support continuous replenishment, and reduce out of stock situations.
- *Off-shoring and outsourcing*—including how downtime, delays and latency impact external third-party suppliers wherever they may be; how off-shored cross-time zone operation of these functions pose distance and availability complexities; how downtime affects the service quality on either side of the partnership; how your organization can demand availability service level agreements from your off-shoring or outsourcing partners for greater confidence levels.

Conclusion

The power of an information availability solution lies in its ability to transform any non-productive, non-profitable *downtime* into the optimum level of *value-producing business uptime*. This squeezes out delays and latency from your business processes and speeds up the ability of your employees, customers and partners to *act*.

The power of information availability offers the opportunity for your business to break-through current productivity and profitability barriers. For the mid-sized business, it can be a significant competitive advantage. For the leading-edge manufacturer, it can unleash new levels of value for your shareholders.

By providing the optimum accessibility for your data and applications, you'll realize measurable results—and value—for your users, customers and partners. And that will deliver the greatest return for the manufacturing enterprise.

Easy. Affordable. Innovative. Vision Solutions.

Vision Solutions, Inc. is the world's leading provider of high availability, disaster recovery, and data management solutions for the IBM® System i market. With a portfolio that spans the industry's most innovative and trusted HA brands, Vision's iTera™, MIMIX®, and ORION™ solutions keep business-critical information continuously protected and available.

Affordable and easy to use, Vision products help to ensure business continuity, increase productivity, reduce operating costs, and satisfy compliance requirements. Vision also offers advanced cluster management, data management, and systems management solutions, and provides support for i5/OS®, Windows® and AIX® operating environments.

As IBM's largest high availability Premier Business Partner, Vision Solutions oversees a global network of business partners and services and certified support professionals to help our customers achieve their business goals. Privately held by Thoma Cressey Bravo, Inc., Vision Solutions is headquartered in Irvine, California with offices worldwide.

For more information call 801-799-0300 or toll free at 800-957-4511, or visit visionsolutions.com.



iTERA HA
MIMIX HA
ORION HA
