

Are Traditional Industrial Automation, Power & Control Players Ready for Pervasive?

The Advent of Smart Factories & Plants

In the industrial world, downtime is extremely costly and competition is high; the ability to address problems quickly will provide a crucial edge. Suppliers will have to help industrial adopters monitor machine health and energy use. Device networking will give plant managers the ability to continuously monitor machine activity, and provide updated online information on facility health. The information that is tracked can be compared with past reports, allowing managers to better analyze many aspects of plant operations and easily understand what needs to change in order to optimize production. Keeping plant managers better informed of problems can decrease expensive equipment downtime and avoid environmental problems.

Companies like Siemens, Honeywell, ABB, Emerson, Eaton, Schneider, Rockwell, Siemens, Invensys, Mitsubishi, and Omron have much to gain, and just as much (or more) to lose if they don't position themselves properly. They already have equipment and systems in a wide range of factories and process plants. They have also created software and services that run and automate complex environments. Ultimately they could be the community best-positioned to break ahead of the pack—if they don't become their own worst enemies.

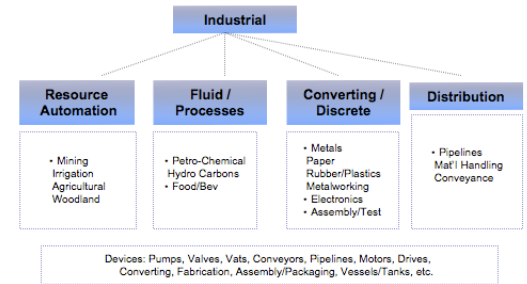
Harbor Venue Coverage

Venues and markets we address in our Pervasive & M2M research and analysis include:

- Energy & Power
- Industrial Systems
- Retail
- Smart Homes & Buildings
- Healthcare
- Physical Security
- Transportation
- IT & Comms Systems

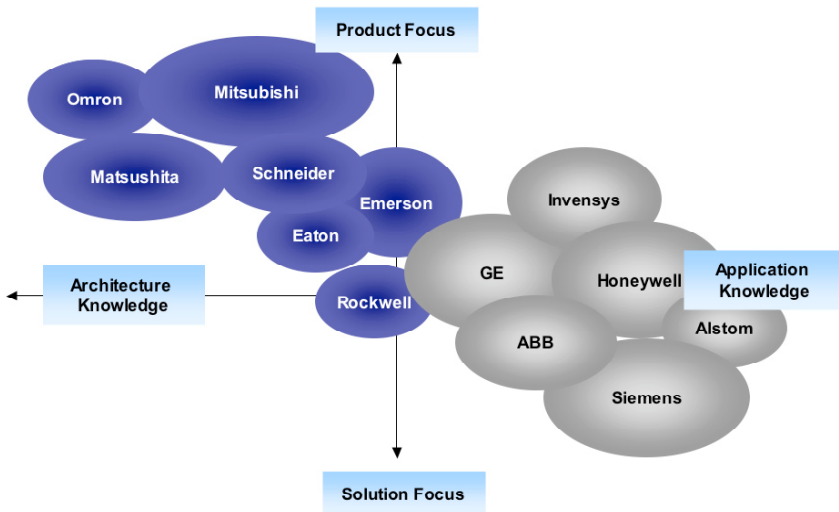
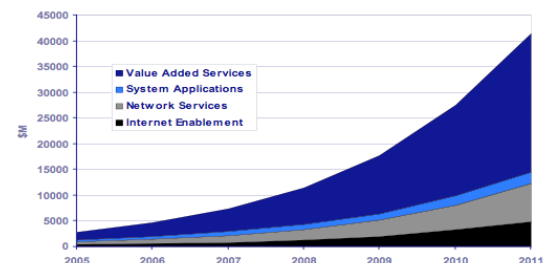
Industrial Venue Segmentation

The Industrial Venue includes applications in resource automation such as mining, bulk & fluid process, converting and discrete part and assembly users. Virtually all industrial end users are driven by systems uptime & availability.



Venue Scale & Growth Potential

Power & control suppliers in the industrial venue are positioned to be involved on both the physical and virtual side of the Pervasive opportunity. If one adds up the revenues related to both their core power and control businesses, as well as new revenue enabled by pervasive technologies, the total potential opportunity easily passes \$250 billion. Value added, managed services within the Industrial venue alone could grow to as much as \$28 billion by 2012.

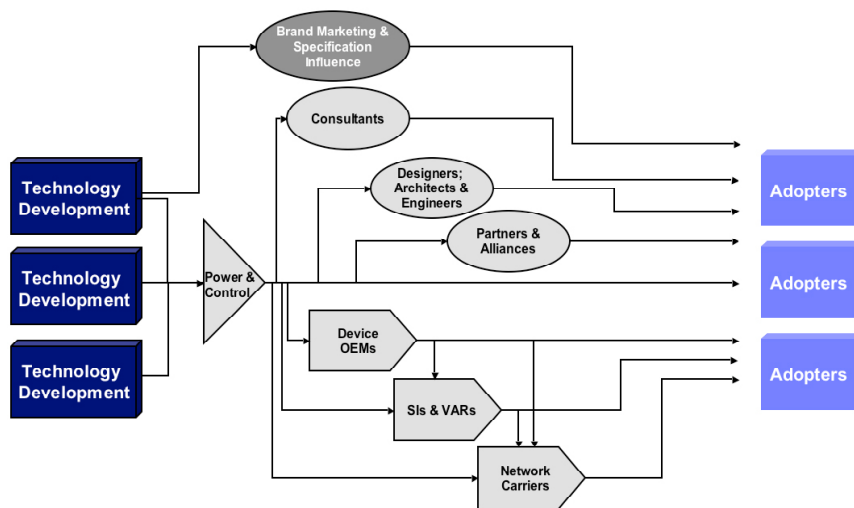


Key Forces & Trends

Internet connectivity is a major disruptor in the industrial venue, and the rapid evolution and interplay of digital power, automation and pervasive systems is initiating a new era where networked intelligence will be embedded in virtually all real-world devices.

New digital power and control technologies are replacing vast quantities of electro-mechanical systems - they are essential to everything Pervasive. Internet-connected devices enable companies to deliver value-added services. Many companies have realized that for every dollar of goods sold, there can be anywhere from \$1 to \$5 of associated services and follow-on products, often at much higher margins.

As OEMs pursue services, the need to automate the highly manual processes related to service delivery becomes a major incentive to use networked devices. Today, the gathering and dissemination of data from distributed assets tends to be a manual, labor-intensive process. This process will become much improved when any device or asset, regardless of physical position, is as close as a URL away. These new abilities will only have an impact when the existing base of players come to understand how skills and capabilities need to evolve in the market delivery structure to gain the full measure of the opportunity.



The industrial market remains highly fragmented and competitive. Industrial customers are prudent adopters, driven by implementation costs and ROI. The benefits of IP networking have become very clear and this combined with an increasing number of industry-specific information standards have accelerated the pace of adoption. Moreover, crossover from other venues is likely. For example, RFID activity in the Retail venue will likely speed the development of information standards as well as lower the costs of tags and readers for application in the industrial venue.

While some progress has been made there is still a need to improve interoperability among product solutions and their integration into the operations of end-users. Ultimately, the addition of Pervasive Internet technologies enables better remote diagnostics and upgradeability and real-time problem notification. In many industrial applications, wireless sensors and networks offer the promise of minimal installation cost with extreme flexibility.

We Clarify the Business Value

We understand that most potential adopters see the M2M / Pervasive Internet world as a daunting terra incognita. The technologies are difficult, the standards are constantly evolving, and the vendor landscape can seem fragmented and bewildering.

We make industry knowledge a key element of our toolkit. In order to keep ourselves fully up-to-date we perform continual analysis and research into specific markets and the maneuvers and strategies of the best performers. Our ongoing research gives us a rich context in which to view each client's opportunities and challenges.

We have direct consulting experience with virtually all the supply side and adopter segments within the over buildings arena

About Harbor Research

Harbor Research, Inc. has been providing strategic consulting and research services to leaders in communications, computing, control, equipment and content since 1983. Harbor's keen eye toward market results is manifest in all of our processes and tools, providing clients with the perspective they need to make best-informed decisions. We emphasize interactive analyses, the incorporation of outside perspectives, time-efficient workshops, and action-oriented decisions. Our multifaceted approach, ranging from the research we publish to the fully customized consulting engagement, provides optimal value to our clients and has also allowed us to develop important advantages as a firm.

Contact Us For More Perspective

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