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Build the Future, not Architecture

Michael J. Czuchnicki

Perspectives

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Corporations must periodically re-invent themselves to live forever. Reborn, they need new nervous and circulatory systems – their information technology and communications infrastructure. How to achieve their replacement is the enterprise-level problem for the CIO who must avoid a piecemeal approach while fostering continuous improvement. An architectural approach is essential, but it has rules as well as limitations.

Like living organisms, “legal entities” face competition in the wild (market); questions of morality (social responsibility); and life-style (procedures). They need know where they are going or will needlessly suffer. The architect-surgeon must remember that “The Business” is not “How it is done”. The goal is not to build architecture, but to deliver benefit from one.

Young firms are energetic and have growth spurts, but arteries harden – processes lose flexibility and corporate memories fade. Nimbleness youngsters with state-of-the-art facilities wrest markets from those with yesterday’s investments. They then age; endure surgery (upgrades); and suffer religious strife (Windows vs. Linux). They may marry, and couples must talk, but non business-centric communications can lead to dysfunction, even divorce. There is thus continual pressure on the technical team to use the lingua franca to stay abreast of business changes.

Money problems worsen relationships, so the past years’ have strained the bond between business and technology executives. With the recovery, they are now trying to reconcile and exploit new opportunities. The fundamental questions should be where, and how? Unfortunately many CEOs are hearing “building a ‘Service Oriented Architecture’, a ‘Transaction ... Architecture’, or lately, a ‘Compliance ...’” These technical answers are misdirected. The only perspective that is viable is one that is directly oriented towards business benefit. Rather than “building architecture” it should be “a foundation for tomorrow’s business that will allow...”

Architecture is the plan for guiding the creation of a building, ship, or solution. It is limited because you cannot architect what is not envisioned. Specificity matters: for a building, whether library, store – or dwelling: hotel, home – or house of God: chapel, mosque – or cathedral: modern... Architecture defines the building blocks; internal and external relationships; and assembly directions.

The next generation of customer, supplier, and staff initiatives is now at hand, again pitting large-scale breakthroughs against the pragmatic meeting of “our firm’s needs.” Achieving business growth demands that management be aligned. Only then can they address the new market conditions, regulatory complexity, and ever-changing

technology. Only together can they achieve success through quality, cost, and competitive initiatives. They must use the same play-book.

Transformation programs dominated during the bubble to profit from enterprise re-engineering, the “Net”, and “solutions” like Customer Relationship Management (CRM). Recession, accounting scandals and terrorism then shifted priorities towards risk, compliance, and security. All these initiatives are still relevant, and are being joined by new market and material, structure and storage, processing and process ones.

Architecture has emerged as a critical element in their balancing, but to succeed the architect must juggle many elements. Chief executives’ growth and profitability goals vie with problematic margins, markets, and partners. Operations’ quality, efficiency and flexibility await lagging “enterprise” implementations. The financial impact of evolving regulations continues, as does the development of hard technologies: grid computing, wireless access, and converged services.

Five rules must be followed for progress to be achieved:

- Maintain a business focus at all times. Cost pressures urging the transfer of expertise offshore; or projects with a never-before-faced scale do not change the business, only how it is done.
- Examine evolving technology for business benefit. The scope of the transformations forecast by the new web-enabling, search, and what-ever tools must not obscure practical business benefit.
- Architect with room to grow. Design for what you know. Plan for expansion, change, and attrition. Recognize that a radically different paradigm has totally new requirements and requires a new architecture.
- Apply architecture only where appropriate. While creating an amalgam from isolated elements, enterprise architectures cannot completely span widely differing requirements, e.g. Investment Banks and Credit Cards.
- Lastly, one size does not fit all. You must acknowledge that your business is as individual as are Moscow, Toronto, and New York. Differences mean that your direction, solutions, and defining architecture are each uniquely yours.

The future rests on an architected foundation, or it collapses. But creating requires diverse knowledge and expertise. It is difficult to meld a common approach from isolated elements. Disciplined effort is needed to span disparate views, to link business units, support groups, and management. The broad view must be taken down to a narrow focus. We have coined such environments “Strategy & Tactics – Analysis & Response (*STAR*) rooms”©.

You want everyone to look in the same direction at the same picture and know that *this* is what they should be doing. Vision, planning, execution, and team buy-in are all connected, and these connections need to be emphasized. Vague statements must be replaced by specific ones; concepts must be implement-able; architecture “orientations” must be business specific. This is hard to do. Remember that COBOL stands for Common Business Oriented Language.

Imagine your business depicted on one wall, technology on another. Itemize and prioritize the problems, opportunities, and gaps. Draw the future. Visualization tools simplify and increase accuracy. Operations, processes, and visions are spanned to develop perspective. Critique is invited. Executives, management, and expert staff review the priorities, problems, and alternatives; discern mistakes; and offer improvements.

STAR environments help business and IT to communicate, so plans become highly realistic; more importantly consensus is achieved as trust is reinforced, with swirling political currents bridged. Visualization narrows gaps and shrinks obstacles. Expert facilitators stop naysayers from draining the energy from the project and move it forward. The organization can focus on subsequent decisions, critical success factors, alternatives, costs and time-lines. The couple is back together, as a motivated, highly-focused team that analyzes, creates, and drives plans through to execution. A governance policy supported by tools might keep them there, too.

Realizing the potential from both the re-invention and evolutionary models is critical. Virtualized organizations linking suppliers, processes, and customers span the globe and are stressed by many factors: merger, competition, and regulation. Assumptions, experience, and direction must be appropriate to their changing environments. Change is constant, with merger, competition, and regulation; so assumptions, lessons drawn and directions set must be continuously re-assessed.

While we share common experiences and pressures, decisions affecting your organization's health and survival are unique to it. Generic "Best Practices" do not apply in all situations. Begin from a sound understanding of your resources, operations and competitive posture. Add layers, broad and deep. Develop alternatives. You can now begin to answer: "What is right for your organization?"

That answer is not "any sort of architecture", but rather something specific to your business. The challenge is to build something today that delivers benefit; and also supports the future. The components include information, infrastructure, processes, and products. Don't get lost in an architecture jungle with its discussions of standards; component re-usability; and products' strengths, overlaps, and gaps. Focus on delivering real solutions to real problems. Plan, architect, and then implement successfully. Remember that reality is the ultimate judge. Don't just pursue the "architecture de jour", or you will only reach "A Future". Build *your* future.

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Biography

Michael J. Czuchnicki's career included stints as the head of communications at AIG, and of trading floor systems at the American Stock Exchange. For the past decade, his firm has consulted to a world-wide clientele. They led the creation of the Financial Industry Networked Security Consortium (**FINSeC**), bringing University R&D expertise to the Financial Industry. His book "Strategy & Tactics – Analysis & Response (**STAR**)" will soon be published.