Focusing on Managing Complexity

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I learned early in my professional career that the adage "The more you know the less you know" was true. It seems that soon as I left the comfort of my silo at the bank there was a lot to understand. As a product manager and IT Manager I got to look budgets from all the departments that went into a product cost, but there was no process to understand or manage those costs across the enterprise as often these were not true costs but allocations based on all sorts of methodologies. Even worse, few if any operational metrics existed. I had to reduce the complexity to understand the complexity. I decided to "forget more" and focus on the fewer things that matter. So what are those fewer things, anyway? I found by looking at simple measures of complexity it allowed me and my peers to get to the bottom of such key questions such as:

- What are my biggest opportunities for reducing product, process, and organizational complexity? How can I identity the interdependencies that make up those costs?
- How can I see results quickly by taking specific actions to lever down those costs?
- How can our organization monitor those costs and control them?

Answering those questions allowed for shared understanding of the opportunity for better costs, customer service, and even launch a few new hit products. I also came to understand that while silos have their benefits- the comfort they bring also can also inhibit beneficial change. The information needed to understand complexity is usually very available – not requiring a large study or task force and can usually be gathered quite quickly. Here are some questions I use to help a management understand their complexity and what can be done to help:

1) Are you using Lean methods in your IT shop for applications maintenance and in the datacenter? Is your staff aligned to the most important emerging needs and being effective? Often in a silo work is assigned first in first out. I found by segmenting the teams in the datacenter and development by type of task there is often a 30-50% increase in productivity. (See my May 2010 White Paper.)
2) % of datacenter capacity utilized (CPU/ Disk Storage)- How much of the datacenter is really being used? When I first implemented virtualization in 1998, our datacenter was less than 10% average CPU and 25% disk utilization and after virtualization 50% CPU and 50% disk. We were thrilled after migrating over 100 servers to 12. That was great then- but I am still wasting 50% of my capacity. Is that okay? Can I do something with that?

3) % of data utilized daily – We always need more data storage capacity. Right? Maybe? How much is really needed- 90% of data a company really uses has been created within the last 30 days, 98.5% in the prior 12 months. So why do we need to keep so much data on line? Can we design applications around business and data management needs to reduce what we need to manage on a day to day basis. How much data is kept "on-line" that is not used "daily"? Databases run faster with less data. Backups cost less, etc. Can you archive old data from your applications? I got some interesting answers- so will you.
4) How many "data calls" per month? What is our Cost per "data call"? This cost is a baked in to the cost structure. Firms do this every day- customers, audit, and compliance among others ask for information or reports. Staff is assigned, research is performed, and reports are created. In the government these can cost $100,000's of dollars to get one spreadsheet of numbers.
5) How many Applications hired vs. fired? Are you getting more complex or simpler?
6) How much money spent on custom development on COTS software? Is it growing or shrinking? Custom development on COTS usually means variance from standard business process.
7) How many of new product pilots (Days from idea to pilot), per quarter-this measures agility and flexibility of your organization. Failing or succeeding fast better than doing both slow.
8) How many "security" or any code reviews performed? This is the lowest cost highest benefit work that an (IT) organization can do to protect its reputation. What is your shop doing?
9) How fast can you pull together your business recovery plans, assure that all the right people have it and can start to execute it? It's a time question. Think Japan.

And finally some simple Customer metrics which I chose a specific business that requires high touch and high tech but the ideas are straightforward:

10) Time to onboard new Wealth Management Client. Can you get your clients to you product fast, because that's when revenue will accrue? In one organization I worked for, 6 months was considered "good" when our competition was moving them over in less than 90. Something wrong?
11) Number or % of customers lost? That number is harder to get that you think since customers stop doing business with you or reduce assets before they leave.
12) New business cross-sold. How many new products services sold to existing clients?

Now of course, every organization is different, and the above questions are representative. Simple questions that require little ambiguous information help an entire organization focus on the things that do matter to improve. Data shows that companies that lead their sector in reducing complexity usually have the highest margins and client satisfaction. Not all complexity is bad, but if something is hard for you to understand it is probably hard for your organization and customers also. When organizations create the Anti-complexity Office – I think I just might join up. ☺