Article Response and Interview with Ted Bowman

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In his 2008 interview with Harvard Business Review, John Chambers discussed his methods for recognizing the market transitions that open up new business opportunities and the strategy of collaborative management he developed to position Cisco to respond rapidly and effectively to those opportunities. It's a fascinating and ironic coincidence that the very week we are analyzing his strategy for improving corporate management by a policy of extended collaboration immediately follows the week that Cisco announced a dramatic revision of that policy (Cisco Announces Streamlined Operating Model).

Chambers argued that a large corporation may not necessarily be best managed by its five or ten top senior executives. Instead he advocated for management by a system of cross functional highly collaborative boards and councils, where members with different backgrounds and skill sets merge their knowledge and talent to develop and advance corporate initiatives and projects. He argued that such a system (which he had already put in place at Cisco) conferred several advantages. Specifically, he cited the ability to manage more simultaneous initiatives across the breadth of the Corporation, the ability to use resources more efficiently and accomplish projects with less total resource investment, the ability to react to market trends more rapidly, and the ability to foster a sense of ownership where each group member felt fully responsible for the success of the project.

While attractive in theory, these ideas were difficult to execute in practice. They resulted in many senior managers spending as much as one third of their time in committee meetings. Eventually Wall Street analysts, former employees, and investors begin to feel that the Cisco bureaucracy actually slowed decision-making, led to the departure of senior executives who were unable to transition to the collaborative model, and decreased market share (Cisco's Chambers Ditches Sales Target Amid Strategy Change). Since the bottom of the dot com bust, Cisco's

share value has actually tracked or lately even lagged the NASDAQ index, leading to a strong demand that the management model be changed (The Truth About Cisco: John Chambers Has Failed). Last week Cisco consolidated its management and decreased its number of boards from 42 to 15 and its number of councils (the highest level of collaborative management) from 9 to 3.

A number of Chambers' other forecasts were only partially correct. We do have companies that leverage the infrastructure of the Internet to provide free (think Skype or Google Voice) or low cost (think MagicJack or Vonage) VoIP telephone calls, but these companies have had much less effect on the telecoms' core business than Mr. Chambers predicted. The free flavors of such services are inconvenient, requiring both caller and recipient to be on line and logged in to make a call. While they all also offer low cost options that remove these burdens, the major telecommunications carriers have leveraged economies of scale to lower prices and remain competitive in this market. Because the VoIP companies have not found a way to derive major revenues from their models, these competitors have not produced either devices or services compelling enough to attract large numbers of consumers away from the traditional telephone companies. Microsoft just bought Skype for 8.5 billion dollars, and it will be interesting to see if MS can successfully monetize Skype's expertise in internet voice transmission.

Mr. Chambers also predicted that the centralized management of video screens at athletic stadiums and other venues would lead to the delivery of targeted advertising based on a consumer's location and preferences. While systems to deliver targeted advertising are still very much in development, user pushback because of security and privacy concerns will significantly delay this process for the foreseeable future. Finally, I wonder if some of Mr. Chambers' enthusiasm for the collaborative model resulted from his ability to use Cisco high-definition

Telepresence equipment to conduct his meetings. Most organizations cannot afford either the electronics or the bandwidth to do this, and their experience with meetings conducted among staff in different locations has been much less satisfactory. Note that even the synchronous sessions for our class have used standard wired and cellular telephone for audio rather than VoIP because of problems with bandwidth and with the function of the full Adobe Connect system. Some of these ideas may just be ahead of their time, but it remains to be seen exactly how many of them will be widely adopted.

I work at Boone Hospital Center, a 350 bed community hospital which serves as a secondary care referral center for 27 counties in mid-Missouri and at Missouri Cancer Associates, a community cancer center which is a member of USOncology, a network of 1300 practicing medical and radiation oncologists in 38 states. The driving force shifting our industry is the federal government mandate that all physicians and hospitals demonstrate meaningful use of electronic medical records (EMR) and computerized physician order entry (CPOE) systems by 2015. Failure to do this will result in very significant penalties applied to total Medicare reimbursements. In theory the use of such systems should decrease medical errors, encourage quality and best practices, improve the cost efficiency of medical care, and collect clinical practice outcome data in a structured form that allows easier derivation of next generation best practices. Just as with the Cisco collaborative management model, this federal program has significant difficulties translating theory into practice. The timeframe allowed is so short that it disrupts normal market competition mechanisms. Once an organization starts developing EMR/CPOE with one vendor, there isn't time to change to another, even if the products being presented are unsatisfactory. This removes any incentive for EMR vendors to do a good job. The EMR and CPOE products offered by our vendor so far were clearly written with insufficient

input from practicing clinicians. As constituted at the moment, these programs impede physician workflow, decrease physician efficiency, and conflict with legacy electronic systems in ways that have the potential to increase rather than decrease medical errors. We need people with training and expertise to serve as translators at the interface between practicing clinicians and the information technology professionals who build our electronic medical systems. That's one key reason why I enrolled in the MMI program, and I'm trying to form a committee to serve that role at our hospital.

Interview with an IT Professional

Ted Bowman is the Senior Technical Specialist responsible for the operation of all network infrastructure equipment at our hospital and the associated campus of four medical office buildings. Our campus is entirely "Cisco-centric" with almost 100% of our networking equipment purchased from that manufacturer. Ted attributed this to the fact that despite its recent troubles, Cisco remains the dominant player in the network switching and routing market. Just as no one ever got fired for buying IBM hardware in the 1980s, no one ever gets fired for buying Cisco hardware for their network system today. However, he also pointed out a downside to this. Some of Cisco's competitors (he mentioned Juniper and Brocade) are often more innovative and "cutting edge" with their features and equipment, but incompatibilities with the installed base of Cisco equipment prevent him from using or even evaluating equipment from other companies. He has actually wondered if Cisco intentionally designs its equipment to only be fully operational with other Cisco equipment. The fact that Cisco has developed and supported its own proprietary internal dynamic routing protocol (EIGRP) is consistent with this idea (Panko, 2008).

Our parent organization, the BJC community hospital network, is indeed working towards a Cisco unified communications strategy in the long run. They feel that a one wire solution which integrates voice, video, and data in a single digital system should be able to provide significant efficiency gains and cost savings compared other systems. Locally we are in the early stages of the process, and most of our phones are still traditional PBX wire lines. All of our BJC network sister hospitals are in St. Louis as are the network servers. Here in Columbia, MO we are on a geographically isolated limb of the network, and this gives Ted some extra problems including longer latency than any of the other hospitals and more problems planning for network backup in case of emergency. If that one wire is broken by some natural event or human-induced physical accident, our ability to carry out any of our work activities would be severely impaired. Ted has been working hard to lease a backup dark fiber running from Columbia to St. Louis by an alternate geographic route, so we will still have a data conduit if the primary fiber is damaged. He also has an old AS/400 set up to replicate some of the most critical server functions locally, as a last-ditch backup if we lose all communications out of Columbia. Ted and members of his local IT staff use video teleconferencing to meet with their colleagues or superiors in St. Louis an average of two to four times a week. They don't use the type of high-definition Telepresence equipment described by Mr. Chambers in the HBR article (too expensive), but lower resolution equipment seems to get the job done, especially when the alternative is a two-hour drive each way.

Interestingly, Ted told me that he feels the patients are his main customers, and that all the work he does with the medical staff and other employees is really for their benefit. The BJC hospital system has approximately 22,000 total employees supported by approximately 600 information technology staff members. The help desk for immediate problems will have about

12 staff members on a typical day, nine in St. Louis and three in Columbia. The two locations can share each other's phone calls and obviously try to solve as many issues as possible by phone, but at least we do have some "boots on the ground" locally for very complicated problems. At the moment senior management at very high levels (hospital CEO and hospital network executive VP) are serving as the sponsors and proponents for our two largest ongoing IT projects. These include the unification of all network hardware and software so that it is uniform throughout our eight community hospitals and the installation and activation of EMR and CPOE systems that comply with Medicare regulations.

Our organization does have a security policy and a security team. There are major firewalls between the Internet and our ISP and between the ISP and our servers. Each individual building on our campus has its own small firewall. Our local team in Columbia has three certified security professionals who carry out network intrusion detection and monitoring, network probes, and security policy enforcement. One important recent initiative is establishing a system of RSA security tokens that all physicians and employees will have to use when they access the network from off campus locations. These can be implemented as independent hardware “key fob” devices or as soft token apps run on smartphones. The staff are also trying to better integrate security measures between the hospital and the physician offices across the street, since combining these two areas into a single security zone would improve physician workflow.

References

Panko, R. (2008). *Business Data Networks and Telecommunications, 7th Edition.* Upper Saddle River, NJ: Pearson Prentice Hall, p. 336.