

According to one member, "Techcentric architects tend to be seen as police officers . . . there to enforce the law." It is better to have a businesscentric architect who can entertain business solutions that violate the preferred technology direction in light of increased technology risk (i.e., the risk of doing it) and business risk (i.e., the risk of not doing it) and arrive at a decision that best suits the business. The difference in approach is one of accommodation, as opposed to denial and prevention.

At one company the IT group did not want to ever have to "tell a business unit that they could not buy a specific package." The trade-off was to let the business specify the application's requirements and to let IT choose the product. Another firm tackled this problem by charging the business for the additional costs of a noncompliant application, such as extra in-house skills, application integration, conversions, and interfacing software. The overriding goal in all these firms was to achieve optimal decisions for the business, not rigid adherence to a technology roadmap.

A repository can be an aid to tracking decisions as well as a means of listing assigned responsibilities. At one company this "architecture library" lists all technology domains (e.g., hardware, applications, etc.) and all products within each domain. Product metadata include the following:

- Status (i.e., emerging, contained, mainstream, declining, retirement, obsolete)
- Proposed replacement product
- Name of product steward, subdomain architect, and architect
- Business impact analysis
- Interdependencies
- Total cost of ownership

Knowing that a specific product is "declining," who the product steward is, the name of the replacement product, and the business impact analysis demonstrating exactly where and how this product affects business processes all provide extremely valuable information to the organization. Such a resource requires a significant amount of work to build but, once built, greatly reduces the complexity of maintaining and evolving a technology roadmap.

FIVE (5) PRACTICAL STEPS FOR DEVELOPING A TECHNOLOGY ROADMAP

As part of the meeting, focus group members were asked the following question: If you were a 'roadmap consultant,' what advice would you offer to management?" When their suggestions were combined and analyzed, the collective wisdom reduced to the following five recommendations. Interestingly, this advice would arguably apply to many, if not most, IT initiatives.

1. Be bold and innovative when planning the roadmap

- What you have done should not be the gauge by which you determine what you should do.
- Innovation is key; start with a blank piece of paper.
- Invent your future. Inspire others to help you build it.

2. Align technology with the business

- Determine what role technology will play in satisfying the business vision.

- Focus on using technology to solve business problems and deliver business value.
- Know when it is appropriate to choose leading-edge technology over being a late adopter/quick second.
- Ensure that the roadmap is flexible, extensible, and attainable to change with the business.
- Ensure that the organizational structure supports the delivery of a technology roadmap.

3. Secure support for the roadmap.

- Ensure that the funding model supports a technology roadmap.
- A migration strategy and roadmap require an executive sponsor, ownership, and accountability. Ensure that strategic decisions are made at the right level.
- Stay the course!

4. Don't forget the people

- Every technology change requires changes in people's skills.
- Map new technologies to required skill acquisition.
- Take steps to ensure that IT personnel understand the technology roadmap and its logic, ramifications, and time frame.

5. Control, measure, and communicate progress.

- Measure progress along the way; use leading indicators.
- A successful roadmap must be measurable and updated at appropriate checkpoints.
- Communication of the roadmap is essential to success.
- Establish a governance process to manage technology and vendor choices.

Conclusion

The purpose of a technology roadmap is to guide the development of technology in an organization. But as pointed out in this chapter, it serves a much greater purpose for a business. It communicates the role that technology will play in advancing business goals. It outlines the explicit assumptions on which the roadmap is based and describes how these assumptions directly affect the rate and order of attainment of goals. It suggests the impact of future technology on the set of required

in-house skills for the IT department. And it provides a vehicle for explaining the logic of technology-related decisions to business managers who otherwise interpret such decisions as overly rigid and unproductive. As such, a technology roadmap should be viewed as an important opportunity for IT to engage the business in meaningful and productive dialogue focused on furthering business goals. To limit this activity to simply forecasting technology is to miss a significant opportunity.

References

Carroll, L. *Alice's Adventures in Wonderland*. London: MacMillan & Co., 1865.
 Mangurian, G. E. *Alternative to Replacing Obsolete Systems*. Cambridge, MA: Index Systems Inc., 1985.

McKeen, J. D., and H. A. Smith. *Making IT Happen*. Chichester, England: John Wiley & Sons, 2003.