Information Systems Management – Module 5
[Unknown Speaker]

Slide #: 1
Slide Title: Module 5

Module 5
Information Systems and Changing Business Processes

Audio:
Recall we saw business processes in the business diamond back in Module 2. Business processes are the steps or procedures laid out by an organization to attain their desired outcomes. Efforts such as Total Quality management (TQM) and Business Process Reengineering (BPR) are a key way of changing organizations to gain desired outcomes and revolve around reconstructing business processes to attain outcomes that meet objectives.

Slide #: 2
Slide Title: BPR

- Cemex, a concrete company located in Mexico, needed to “transform” the way they did business.
  - After 16 years they changed their customer key processes.
  - The CEO did this by challenging management to address the processes that caused late shipments and unforeseeable demand.
  - Cemexnet was built to link all of the plants together and to keep them up to date on supply and demand issues.
  - GPS system was implemented to help manage their fleet of trucks.
  - They also created a set of global processes that enabled customers, suppliers, and distributors to manage their orders.
- Dramatic results occurred due to this transformation.
  - Delivery windows went from 3 hours to 20 minutes with a 98% rate.
  - Sales increased 19% in the first quarter.
  - Their reputation was greatly enhanced.
- Cemex reset the bar for all others in the industry with their customer-orientation, use of technology and process redesign.

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Audio:
Here we see details of Cemex that used information systems to change their business processes. The success at Cemex had an immediate positive effect on the organization that placed pressure on competitors forcing them to make changes to remain competitive. As is often the case, the new information system allowed Cemex to change the way they did
Audio:
The concept of silos in business has been equated with a lack of flexibility, communication, and common goals between groups within a business. The vertical lines here labeled as “Functions” can be thought of as silos. Business processes on the other hand can be viewed as processes that require activities across some, and often all, of the functions. In the silo mentality each department has direct control over the people within its functional area and projects may be hung up simply because one function prioritizes the project lower than others and hangs the project up. So a product may be ready, the marketing team is set to go, yet the operations people haven’t determined the logistics needed to get the product to the customer. In such a case the operations silo is out of step with the rest of the organization and holding up the entire process. Such issues sometimes lead to the matrix structure that was mentioned earlier where an employee may have a supervisor in the operations functional area, but also report to the manager of one or more of the business processes. In this way project or business process managers gain some level of managerial control over the people they need to complete tasks.
operations, finance, and so on turns inputs into outputs

<table>
<thead>
<tr>
<th>Focus</th>
<th>Functional</th>
<th>Cross-functional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal Accomplishment</td>
<td>Optimizes on functional goals, which might be a suboptimal organizational goal.</td>
<td>Optimizes on organizational goals, or “big picture’</td>
</tr>
<tr>
<td>Benefits</td>
<td>Highlighting and developing core competencies; Functional efficiencies</td>
<td>Avoiding work duplication and cross-functional communication gaps; organizational effectiveness</td>
</tr>
</tbody>
</table>

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Audio:
Here we see that the business process perspective is not always best. In fact, effective leadership may lead to very strong agreement on priorities and desired outcomes between functional groups leading to little, if any, suboptimization. However, as the goals and priorities differ between groups, then business processes may suffer. It’s important to note in the slide that a benefit of the silo perspective is a greater ability to develop competencies and functional efficiencies. As noted in the previous slide, the tradeoff between efficiency and effectiveness vs. organizational flexibility and nimbleness often drives the decision to use a hierarchical vs. matrix structure in the organization. It is not uncommon for an organization to use a matrix structure when the organization is growing rapidly, or the business finds itself in a turbulent and fast changing industry and then move toward a hierarchical form when the industry stabilizes and efficiency becomes the preeminent driver.

Slide #: 5
Slide Title: Tools for Change

- Total Quality Management
  - A tool for change that uses small incremental changes often preferred by personnel within the organization
- Six Sigma
  - Continuous efforts to achieve stable and predictable process results are of vital importance to business success
  - Seeks to eliminate all defects and is commonly used in manufacturing environments
- Business Process Reengineering
  - Radical change management tool that seeks to make a rapid, breakthrough impact on key metrics

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There are multiple tools that can be used to bring about organizational change and selecting the right tool, or combination of tools, is critically important. An in depth understanding of the organization, its employees, and the surrounding industry are needed to decide how to bring about organizational change. Even having selected the “best” change management tools there’s no guarantee that the personnel within the organization will choose to follow the path laid out. Strong leadership is required to create a new and better vision for the organization’s future. This step is perhaps the most difficult to execute.