University of Pisa

MSc in Computer Engineering

# Systems for Strategic Management and Support

#### **LECTURE 18**

http://www.iet.unipi.it/m.cimino/ssms/

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### S443 Overall methodology

- Basic questions:
  - what is wrong with the way this process currently behaves (as-is)?
  - what will be better about it when we are done (to-be)?
- (i) **problems perception:** the case begins with a raw perception of the process issues or problems felt by each stakeholder.
- (ii) *as-is* process assessment: all parties help to understand the improvement goals for the process and to identify specific issues, determining causes and impacts.
- (iii) **to-be** process goals are determined for the future state, largely based on eliminating the problems identified in the *as-is* assessment.
- (iv) the **process differentiator** is determined, i.e., what aspect of the process differentiates it from alternatives (e.g. efficiency, flexibility)

• (v) the **enablers** of the process (workflow, IT, motivation and measurement,...) some general measures ("the numbers"), and some **most important factors** (missions, culture, core competencies) are considered.

#### Conduct initial AS-IS Process Assessment

- Step I) stakeholder assessment: collect problems, issues, unmet requirements cited by *each* (one at time) external (suppliers, regulators,...) and internal (process performers, supervisors, managers,...) stakeholders. Do it without getting into details.
- Step II) context: what changes in the environment, since the current process was implemented, have caused the above problems? E.g., a low-cost entrant changing market balance, a new technology changing business models in the field, the regulatory environment undergoing a shift, a multinational manufacturing company has become a publicly trade company, a media company multiplied by ten his business. For all this cases, people involved can say "it is not our fault".

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• Step III) Consequences of inaction: what will happen if no action is taken on the process. E.g., customer satisfaction will increase and company will fail. You need a credible and powerful motivator.

#### The to-be process goals

- The purpose of the *to-be* process goals is to provide incentive and direction early on and provide a base that can be refined as the project progresses.
- Where possible state an objective or quantitative side that defines how you will measure success. Use the "topic, target, timeframe" format.
- Example: "We will have the most responsive supplier onboarding process":
  - Topic: time from "decision to engage" to "ready to supply";
  - Target: 48 hours;
  - Timeframe: within 15 days of process launch

#### An example: Approve Customer Credit Request process.

## As-is process assessment

Our credit approval process has become a liability. We are now losing market share to our competitors because they can offer fast, hassle-free credit to new or growing customers. Our credit reps spend most of their time on applications from small customers, who generally pose no credit risk, and little time on large applications, where their expertise is really needed.

The specific failings of the current process are that approval takes far too long (up to seven elapsed days), we can't tell the customers where their application is in the process, we have to go back to the customers for additional information, and our most senior resources aren't used where they are needed most. These deficiencies stem from a paper-based workflow that involves many departments and many stops and starts, policies that force all applications through the same process, and incomplete initial data capture with the initial application.

Two changes beyond our control have caused these problems to surface. First, changes in the transportation industry mean that we now deal with a far higher number of independent owner-operators, whereas we used to deal with a small number of large carriers.

Our processes were designed for the high risk associated with large applications, not for the high volume of applications from owner-operators, who individually pose little risk. Second, all of our major competitors have recognized this situation, and implemented solutions to provide instant credit to small operators.

Unless this process is improved, our market share will continue to decline until we are forced to withdraw from the market.

#### To-be process goals

Small customers will receive instant credit approval, up to a predetermined limit, secured by a bank card. Further credit processing will take place after the customer has been set up to place orders. Applications involving higher credit limits will be handled within two days.

Automated support will be developed to provide improved communication with customers, track current applications, and provide supporting information.

Credit administration clerks will receive additional training to enable them to handle smaller applications in their entirety. Credit representatives will then be free to spend the majority of their time on applications from large customer and other high-value activities.

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All staff have indicated that they look forward to having more responsibility for and control over their work.

All customers seeking initial or additional credit, whether large and small, will perceive us as the most responsive supplier and the easiest to do business with.

- A list of stakeholder (people/gropus impacted by the process): customers (internal/external recipients), performers (empoloyees, contractors), owners, suppliers, government and regulatory agencies, industry bodies and trade associations, the general public or the community, the environment (physical world), others.
- Some good conversation starters for the customers:
  - Is it clear how to get started in the process?

(REMEMBER SOME OF THEM)

- Once underway, are there too many interactions?
- Do the rules and requirements seem reasonable?
- Do customer-contact personnel appear to suit your needs?
- Is information about your activity efficiently located in the process?

(REMEMBER SOME OF THEM)

• Some good conversation starters for the performers/employees:

- Does this process help you meet your goals or does it hamper you?
- What are your major sources of frustration?
- Are there steps regularly causing problems/serving wrong purpose?
- Are problems for you caused in out-of-control areas (upstream)?
- Does your workload vary wildly?
- Do you have sufficient authority to deal with issues that arise?
- Is a resource identified to assist you when cannot deal with issue?
- Have you been provided with appropriate tools and training?
- Are your performance measures appropriate?
- Is there a documented process?

S459

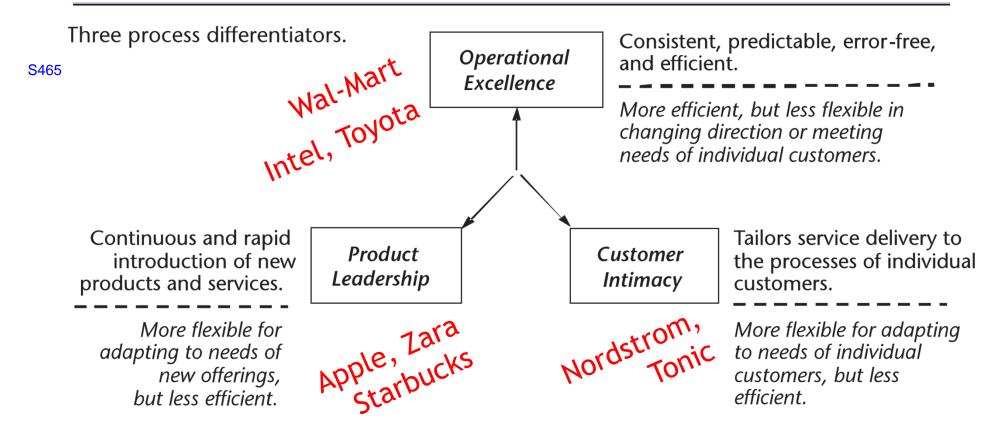
(REMEMBER SOME OF THEM)

- Some good conversation starters for the owners/managers:
  - Does the process consume resources that can be better allocated?
  - Does the process generate issue, for management, distracting from the important goals of the organizations?
  - Is this process contributing to your personal/ department/ enterprise goals?
  - Is it a net contributor or a source of problems?
  - Do issues within the process make it difficult to staff?
  - Does the process constrain growth or innovation?
  - Does the process provide information for managing it?
  - Does anyone understand the whole process?
  - Is the process manageable? Do you know how it is performing in aggregate and when specific instances are having difficulty?

- Some good conversation starters for the suppliers:
  - How easy is it to do business with us w.r.t. your other customers?
  - What errors or actions on our part cause difficulties for you?

#### **Process Differentiator**

- Basic question: Why customer choose us? A framework for selecting a differentiator.
- 54621. Operational excellence emphasizes consistent, predictable, error-free, and efficient operations. Processes will be more efficient but less flexible in changing direction or meeting the needs of individual customers.
- S463 2. *Product leadership* stresses the development of market-leading products that competitors must imitate or the ability to rapidly change the products and services offered. Processes will be less efficient overall, but more flexible in adapting to the needs of new offerings.
- 3. Customer intimacy tailors the delivery of products and services to the needs and processes of individual customers. Processes will be less efficient overall, but more flexible for the customer.



- S466 A frequent objection is "But we cannot ignore the other two!"
- Market leaders choose one differentiator to concentrate on and build around it.

8	The Three Disciplines Operational Excellence	Product Leadership	Customer Intimacy		
Core Business Processes that	Sharpen distribution systems and provide no-hassle service	Nurture ideas, translate them intor products, and market them successfully	Provide solutions and help customers run their business		
Structure that	Has strong, central authority and a finite level of empowerment	Act in an ad hoc, organic, loosely knit, and ever-changing way	Pushes empowerment close to the point of customer contact		
Management Systems that	Maintain standard operation procedures	Reward individuals' innovative capacity and new product successes	Measures the cost of providing service and of maintaining customer loyalty		
Culture that	Acts predictably and believes one size fits all	Experiments and thinks out of the box	Is flexible and thinks have it your way		

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• If you do excel in two disciplines, or even in all three (a very rare situation) it is probably costing a huge amount of resources and leaving you vulnerable to a competitor than can be just a bit better at one differentiator

## A real example

A large health care organization had embarked on a complete reengineering of its central Deliver Clinical Care process, only to realize after several months that the effort had stalled. All that was moving was large amounts of money to the major consulting firm leading the project. We were called in to help determine what caused the decided lack of progress on the project. The first day, suspecting conflicting goals were a factor, we took the project team through an explanation of the three disciplines and then asked, "Which of the three disciplines was your organization's historical focus?" There was unanimous agreement—product leadership. "Okay, what's the focus now?" Again, there was unanimous agreement the focus had to change as a result of market pressures, the commoditization of health care, and regulatory oversight, and the redesigned core process had to reflect the new focus. However, exactly half the team felt the new concentration should be operational excellence—provide standard health care as consistently and cost effectively as possible. The other half felt it should be customer intimacy—provide the most flexible, personalized health care for each individual group and member within the group.

As they say in the consulting business, "Sometimes you earn your pay the first day." Without further prodding, it was obvious to everyone why the project was stalled—every proposed feature of the new process seemed to yield a discussion that went around in circles, back and forth, over and under, but never reaching a decision because there was no overall direction. For instance, a suggestion that efficiencies be improved by opening certain types of clinics at fewer locations on fewer days but for longer hours sounded pretty good to the op ex folks. The customer intimacy side hated the idea. Conversely, the idea that mobile clinics be established that would visit the member's place of work sounded great to the customer intimacy set but utterly profligate to the others. You might find this example hard to believe (and also conclude that consulting must be a pretty easy line of work) but we've seen it again and again—if the overall direction (differentiator) isn't explicitly stated, project team members won't have a visible line in the sand to be on one side of or the other. They won't know that they're op ex or customer intimacy or product leadership. Once the idea of the differentiator is introduced, it's a real "aha" moment, and disagreements are suddenly put in context and understood.

#### S470 The Relevance of Differentiation

- Even if you are not operating in a competitive environment, where process customers do not have choice (e.g. internal and government processes), your project will have tensions if there is no clear differentiator stated.
- Actually there may be competing alternatives: both governments and corporations are increasingly outsourcing services, and then have to demonstrate how excels if they want to keep services.
- Moreover, when a process excels at one differentiator, it also seems to perform better at the other two than organizations that have made no clear choice or are struggling with all three (excellence breeds excellence and reduce friction)

• It is not possible to improve as much as possible in all dimensions. The figure is useful to represents this concept: if you get to 8 or 9 on all three dimension, there must be a decision on which one to push to 10.



Different versions of the same process achieving alternative differentiators.

- If excellence in multiple differentiators is a strategic necessity, perhaps because the enterprise deals with different market segments, sophisticated organizations establish entirely separate versions of the same process.
- Each version works toward a different strategic discipline, with separate point of entry, staff and facilities, to avoid interferences. E.g. if you pay for "platinum support" when you buy a new computer, you will have the privilege of dealing with a different process.
- A common mistake is assuming that the goal is to make the process faster and cheaper (i.e., lower costs, increase efficiency, reduce cycle time). For instance, you may need to fundamentally rethink what you are doing, not just how you are doing it. A process that does the wrong thing faster does not really help.

- Example: in two situations in the areas of legal and arbitration the goal was to increase cycle times. However, the think and cooling-off times were sensibly reduced. This escalated the dispute to the point that it actually took longer than before. All participants were less satisfied with the outcomes.
- Alternatives to faster and cheaper: (REMEMBER SOME OF THEM)
  - More flexible in meeting needs of individual customers;
  - Easier for an entry-level workforce to adopt with relatively little training and support;
  - Simultaneously support junior staff and provide guidance, while support expert staff and staying out of their way;
  - Fewer customer interactions;
  - Absolute auditability and adherence to applicable regulations;
  - accessible anytime, anywhere, via any medium;

- ...

- ...

- Easier to standardize and maintain at international locations;
- Less time and effort to integrate new suppliers or customers into the process;
- More suitable for support by COTS software;
- More suitable for SOA implementation and automation using a business process management system;

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• Different processes in an enterprise may have different differentiator. E.g. in a high-tech company, the processes in the product development area stressed the product leadership, but in their human resource processes the goal is customer intimacy to attract and retain scarce technical resources.

#### S482 Look at the process in terms of enablers

## Information Systems

• Look at IT currently installed and what it wrong with it, but also at what IT you are not taking advantage of.

#### Motivation and Measurements

- People do not pay attention to what management *says*; they pay attention to what management *measures*.
- The danger is when you start motivating individuals base on it. People will perform to the measure, not the process.

#### Human resources

- Are the right people, with the right skills and aptitude, in the right job, assigned to the appropriate activities?
- Some HR issues: people with no natural aptitude for the job they are in; scarce or overpaid resource with poor support work;

#### Policies and Rules

• Processes are usually guided by obsolete business rules and policies, implemented in systems or workflows in a not accessible form, whose changes become a nightmare because the code is increasingly complex. They degrade the process.

#### **Facilities**

 Look at lack of space, quiet, privacy, ability to avoid interruptions, which are key productivity enablers frequently ignored in modern office layouts, manufacturing and public spaces.

Approve Customer Credit Application										
Event		Result								
Credit Application Is submitted	Complete Application	Evaluate Application	Decid Applid		Inform Customer	Set Up Customer	Customer is notified, recorded, and enabled to place orders			
Assessment					Goals					
<ul> <li>Our paper-based workflow involves many starts and stops, and involves several departments and job functions</li> <li>We don't capture the right information on the application, so we need to go back to the Customer repeatedly</li> <li>We can't answer Customer queries about in-process apps</li> <li>The effort and delay aren't justified for small Customers who pose</li> </ul>					<ul> <li>Applications from large Customers will be handled in two days or less</li> <li>All staff will perform higher-value work, and have more authority - Credit Reps will focus on large clients, and Credit Admin Clerks will handle small applications completely</li> <li>Independent surveys will show that Customers perceive us as the Customer Service leader in our industry</li> <li>Once the new process is implemented, our market share decline will slow, and within one year we will again be growing at 12% per year</li> </ul>					
Participants Mechanisms		Measures								
<ul> <li>Applicant</li> <li>Sales Representative</li> <li>Credit Representative</li> <li>Credit Administration Clerk</li> <li>Credit Bureau</li> <li>Word Processing Clerk</li> <li>Marketing Administration Clerk</li> <li>Customer Data Maintenance Clerk</li> </ul>			<ul> <li>1 to 4 work hours and up to 7 elapsed days per app</li> <li>6 Credit Representatives</li> <li>150 applications per month, growing 10% per year</li> <li>75% approved, 25% declined</li> <li>85% of applications come from small Customers</li> <li>90% of our sales volume comes from 10% of Customers</li> <li>10 % of applications come from previously denied Applicants, and 10% from former Customers</li> <li>Small Customer bad debt write-offs are less than .2% of sales, and overall they are approximately 1% of sales</li> </ul>							

A "poster" summarizing the results of framing the process.