

7th International Conference on Information Quality (IQ-2002)

Building the Corporate IM Scorecard for Improving Quality in Information Management Services

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Executive Summary: This presentation proposes a conceptual framework for assessing the business effectiveness and quality of Information Management (IM) Services in organizations by using a Corporate Information Management scorecard. The presentation applies the 'Balanced Scorecard' tool used by organizations typically for management strategy and performance measurement in the area of Information Systems Management, Information Systems Delivery and Implementation.

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Presentation Outline

- Examine role of Information Management(IM) Services in the organization
- Brief overview on the Balanced Scorecard framework
- Present a Corporate IM Scorecard to measure the business effectiveness/impact of Information Management Services in the organization
- Implementing the Corporate IM scorecard in the IS organization
- Ensuring long-term success in the organization with the Corporate IM scorecard

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Information Management Services - The Balancing Act

In the corporate IS world, information managers have to continuously balance and align their quality objectives with the overall strategic objectives of their business.

How well are IS goals aligned with the strategic business objectives of the organization?

How good is the customer's information requirements fulfilled by the IS function?

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Role of Information Services in the organization

- A corporate function like Information Services(IS) should provide a competitive advantage for the business organization and help them to compete in the marketplace. This advantage can be provided when the IS organization differentiates its products/services with consistent quality, price and reliability.
- Consequently IS organizations, need to align their various quality initiatives by continuously evaluating and ensuring that their various efforts/initiatives are suitably aligned to support the parent company's overall business strategy.
- For information quality (IQ) initiatives to succeed in the the Corporate IT world, IQ assessment frameworks have to combine the technical aspects of Data/Information Quality with the underlying organizational processes and business considerations affecting the IS organizations.
- To combine these different aspects of Information Quality in the organization, a new approach is needed to assess and improve quality in IM services. This framework should balance the interests of the different stakeholders and bring consensus across the organization on strategic IS initiatives.

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Introduction to the Balanced Scorecard framework

The Balanced Scorecard is a framework to obtain and implement feedback on the effectiveness of the company's strategies employed by the top management within the organization.

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Overview of the Balanced Scorecard

- The Balanced Scorecard is a measurement system that converts an organization's value drivers (or broad strategic goals) to a series of pre-defined metrics.
- A well-defined Balanced Scorecard should translate the organization's business strategy into a linked set of strategic measures that define both the long-term strategic objectives as well as the mechanism for achieving those objectives.
- Under the BSC framework, in addition to looking at the financial metrics, IS organizations should also look at other factors to get a broader understanding. BSC measures success in organizational performance against 4 sets of measures related to
 - Customers perspective
 - Financial perspective
 - Internal Business Process perspective
 - Learning & Growth perspective
- Every measure selected should be part of a link of cause- and-effect relationships, ending in financial objectives that represents a strategic theme for the organization as a whole.

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Balanced Scorecard Framework - Key Terms & Definitions

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    graph TD
      SO[Strategic Objectives] --> SI[Strategic Initiatives]
      SI --> PD[Performance Drivers (Lag Indicators)]
      PD --> CO[Core Business Objectives (Lead Indicators)]
    
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- Strategic Objectives
- Strategic Initiatives
- Strategic measures
- Outcome measures or lag indicators
- Performance driver measures or lead indicators

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Linking the Balanced Scorecard measures

- Every strategic measure of a Balanced Scorecard should be an element to a chain of cause and effect relationships that communicate the business strategy of the organization.
- The strategic measures comprising a Balanced Scorecard should make the cause and effect relationships with measures in the other perspectives very clear and explicit.
- Finally all the measures of a scorecard should be linked to financial objectives, as lack of tangible payoffs could lead to lack of long-term interest.

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Corporate Applications of the Balanced Scorecard Framework

The Balanced Scorecard has been successfully applied in the corporate business environment by various Organizations. Typically, the scorecard has been used in the following situations:

- To clarify and gain consensus within the organization on a specific management strategy
- To set strategic targets to achieve the strategic objectives and implement plans
- To align important programs and organizational investments to the overall strategy of the organization (e.g Quality improvement initiatives, Organization change initiatives, etc.)
- To educate the organization on high-priority management initiatives
- To build a feedback system for top management

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Overall process for building the Corporate IM Scorecard

- Define Measurement Program Architecture for the IM scorecard
- Identify Strategic objectives for the organization
- Select and design the appropriate Strategic measures
- Build the implementation plan for integrating the IM Scorecard into the organization

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Building the Corporate IM Scorecard - Defining the overall architecture

- This phase is required to clarify the management vision for a corporate IS strategy into a clear set of objectives, easy to understand and easily communicated across the organization.
- The top management needs to set up an initial 'task group' to set-up the corporate scorecard and co-ordinate the initial efforts for the organization in the direction.
- The 'task group' develops the initial IM scorecard architecture after holding detailed discussions and receiving field inputs from the business units. The major areas finalized at this stage are the following:
 - Select appropriate organization unit
 - Identify SBU/corporate linkages

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Building the Corporate IM Scorecard - Identifying the Strategic Objectives

CUSTOMER FOCUS	FINANCIAL CONTRIBUTION
<p>Mission To be preferred supplier of information that help customers to maximize business opportunities with technology</p> <p>Objective</p> <ul style="list-style-type: none"> • Provide business value to Customer with differentiated IS services and innovative solutions • Increase Customer Satisfaction by providing IS services that consistently exceed customer expectations 	<p>Mission To obtain sustainable business financial contribution from investment in IS portfolio</p> <p>Objective</p> <ul style="list-style-type: none"> • Maximize IS revenue growth • Maximize IS cost reduction by eliminating redundant or consolidating IS development efforts • Maximize return from IS project investments
BUSINESS PROCESS	ORGANIZATIONAL GROWTH
<p>Mission Identify & deliver high quality information products/services efficiently</p> <p>Objective</p> <ul style="list-style-type: none"> • Design innovative IS solutions to meet unfulfilled business needs • Reduce IS application development cycle time & costs • Deliver high quality Information products/services to enhance customer satisfaction • Reduce ongoing IS costs through cross-functional synergies across IS • Improve responsiveness of IS organization to Customer requests • Ensure efficient IS operations & flexible implementation at competitive costs 	<p>Mission Develop opportunities to position IS to answer future challenges</p> <p>Objective</p> <ul style="list-style-type: none"> • Align Team Personal goals to organization growth • Develop internal systems to improve access to strategic information • Develop Employee Competencies to manage IS skills to support the business • Improve employee productivity/satisfaction

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Designing Strategic Measures for the Corporate IM Scorecard- Financial Contribution Perspective

Strategic Objectives	Strategic Measures	
	Core Outcome (Lag Indicators)	Performance Drivers (Lead Indicators)
Improve ROI on IS investments	<ul style="list-style-type: none"> Improved Return on IS investment (Payback/Internal rate of return) 	<ul style="list-style-type: none"> Improved Staff Asset Utilization(%) Improved IS Infrastructure Asset Utilization(%) Higher IS productivity
Increased IS Revenue Growth/Mix	<ul style="list-style-type: none"> Increased IS Revenue growth rate 	<ul style="list-style-type: none"> Improved IS Revenue Mix Revenue growth from new IS applications/customers Revenue growth from cross-selling IS services to external customers
Reduce IS Cost Structure	<ul style="list-style-type: none"> Reduced unit cost per unit of output/transaction Cost reduction vs. Plan Competitive Price Index/Unit IS Cost vs Competitor's cost 	<ul style="list-style-type: none"> Reduced IS development costs Reduction of operating expenses Elimination of redundant activities Reduced Scrap/Rework costs

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Designing Strategic Measures for the Corporate IM Scorecard- Customer Focus Perspective

Strategic Objectives	Strategic Measures	
	Core Outcome (Lag Indicators)	Performance Drivers (Lead Indicators)
Provide Business value to Customer with differentiated IS services and innovative solutions	<ul style="list-style-type: none"> Customer Profitability Customer Acquisition(%) 	<ul style="list-style-type: none"> Customer Growth (%)
Increase Customer Satisfaction by providing IS services that consistently exceed customer expectations	<ul style="list-style-type: none"> Customer retention (%) 	<ul style="list-style-type: none"> Customer Satisfaction Surveys SLA Compliance (%)

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Designing Strategic Measures for the Corporate IM Scorecard- Business Process Perspective

Strategic Objectives	Strategic Measures	
	Core Outcome (Lag Indicators)	Performance Drivers (Lead Indicators)
Design innovative IS solutions to meet unfulfilled business needs	<ul style="list-style-type: none"> New product revenue % - revenue from projects less than 2 years old Increased customer satisfaction 	<ul style="list-style-type: none"> Improved business understanding IS technology innovations
Reduce IS application development cycle cost/time	<ul style="list-style-type: none"> Reduced IS application development time Reduced IS development cost Increased customer satisfaction 	<ul style="list-style-type: none"> Release Management Process SLA Compliance trends
Deliver high quality information products to enhance customer satisfaction	<ul style="list-style-type: none"> Reduce IS Scrap/rework costs Increased customer satisfaction 	<ul style="list-style-type: none"> Establish Information Quality environment in organization with IS process improvement program Conduct regular IQ Audit
Reduce ongoing IS costs through cross-functional synergies across IS	<ul style="list-style-type: none"> Cost of IS operations per unit of service 	<ul style="list-style-type: none"> Eliminate redundant IS initiatives Shared asset utilization (%) Relevant Customer serving processes in IS organization
Improve responsiveness of IS organization to Customer requests	<ul style="list-style-type: none"> Reduced Customer Request fulfillment time Increased customer productivity & satisfaction Reduced Customer complaints 	<ul style="list-style-type: none"> IS Infrastructure downtime Reliability (defect/unit time)
Enable efficient IS operations and flawless implementation at competitive costs	<ul style="list-style-type: none"> Improved usage of IS service Reduced cost of operations/implementation Increased customer satisfaction 	

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Designing Strategic Measures for the Corporate IM Scorecard- Organization Growth/Learning Perspective

Strategic Objectives	Strategic Measures	
	Core Outcome (Lag Indicators)	Performance Drivers (Lead Indicators)
Align Team/Personal goals to organization growth	<ul style="list-style-type: none"> Employee Turnover/retention Higher Employee satisfaction 	<ul style="list-style-type: none"> Team/Personal goals alignment(%) Align employee reward structure to organization growth objectives
Develop Employee Competencies in strategic IS skills to support the business	<ul style="list-style-type: none"> Strategic job coverage ratio - (Staff Development vs. Plan) 	<ul style="list-style-type: none"> Upgrade in Employee Competencies Increase in rate of technology induction Increased employee training and retraining
Develop internal systems to improve access to strategic information	<ul style="list-style-type: none"> Strategic Information coverage ratio 	<ul style="list-style-type: none"> Creation of internal databases to facilitate knowledge management/sharing
Improve Employee Productivity/satisfaction	<ul style="list-style-type: none"> Increased Employee Productivity (Revenue/employee) Higher Employee Participation in organization growth 	<ul style="list-style-type: none"> Increased Employee Utilization(%) Increased Employee Morale

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Transforming the Corporate IM Scorecard into a Strategic Management System within the organization

- After the IM scorecard has laid out the strategy and specified the business drivers , companies need to focus on the most critical phase - Making the Corporate IM Scorecard deliver improved results in the organization
- Companies need to start this phase by identifying strategic initiatives that focus on
 - Continuous improvement programs
 - Re-engineering and transformation programs
- The strategic initiatives will close the gap between ambitious plans set forth in the scorecard and the current performance levels in the organization.
- The Corporate IM Scorecard needs to get integrated with other management systems / monitoring mechanisms in the organization (e.g. capital budgeting , resource allocation process). This will ensure alignment of future investment and discretionary spending plans to the strategic initiatives.

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Implementing the Corporate IM Scorecard

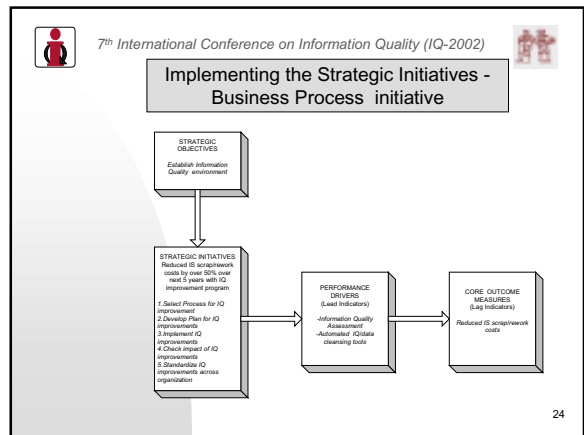
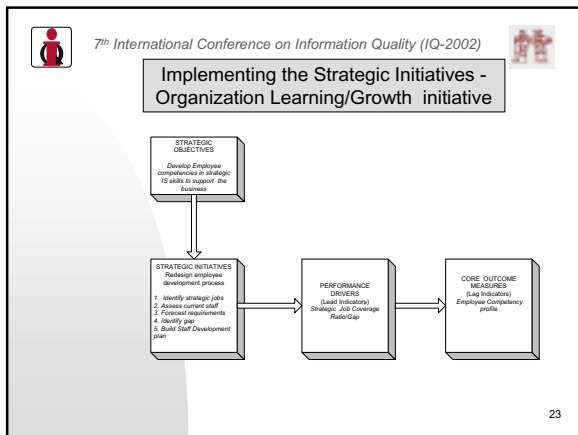
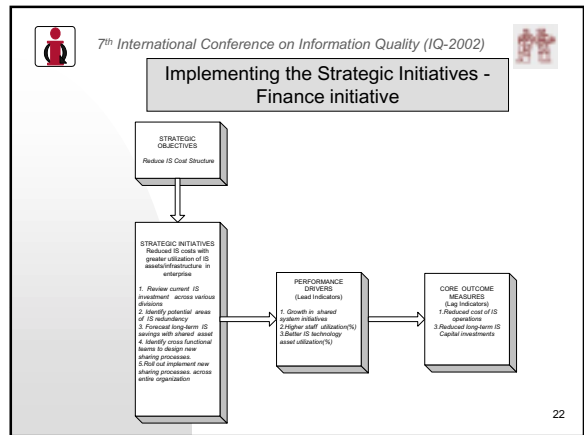
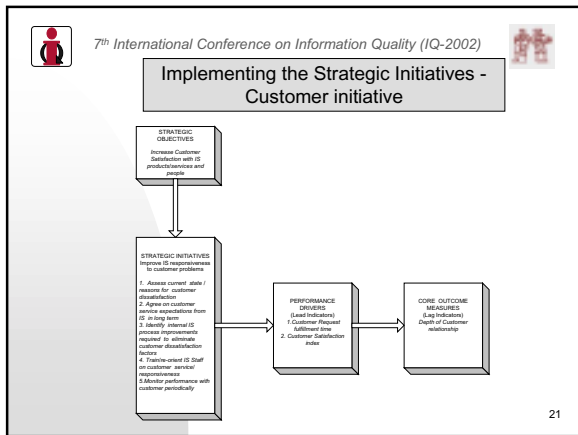
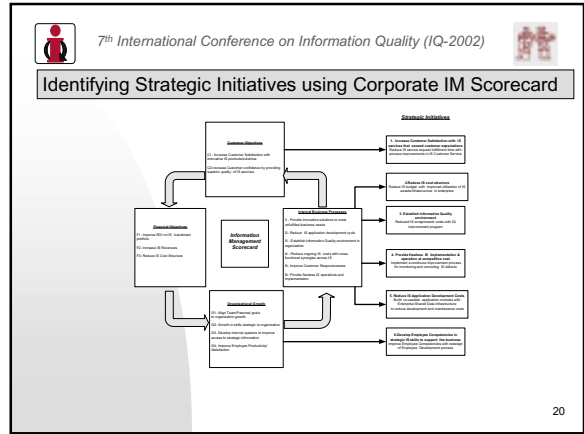
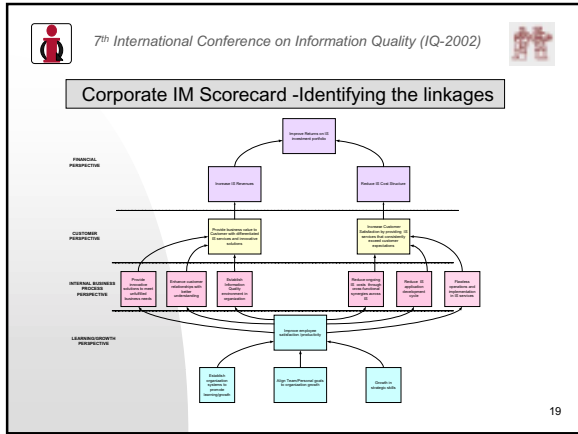
Strategic Level

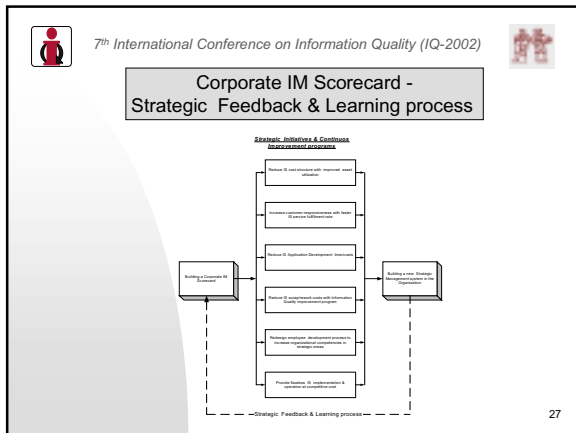
- Before starting implementation phase, review the corporate IM scorecard initially with top management
- Communicate the corporate IM scorecard to the management of individual Business Units/Divisions
- Establish individual performance objectives (for top layers of management)
- Update long range plan and budgets for the IS organization based on the IM scorecard measures

Operational Level

- Set stretch targets for individual business units (e.g increase ROI by 150% over the next 5 years)
- Identify strategic initiatives and eliminate non-strategic IS investments after determining how the IS initiatives support the company's overall strategy
- Review the scorecard periodically (monthly,quarterly and yearly) to assess and track benefits accrued from the new initiatives

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Strategic Feedback & Learning process with the Corporate IM Scorecard

- To ensure the long term success of the IM scorecard as a strategic management system, a feedback mechanism needs to be built by the organization after the Corporate IM Scorecard has been implemented.
- The strategic feedback system should be developed to test,validate and monitor the performance improvement resulting from the deployment of strategic initiatives identified in the IM scorecard. The cause-and-effect relationships between the various measures in the IM Scorecard enables the organization to embark on a strategic learning process.
- Often individuals in different parts of the organization can understand how their individual pieces fit together by understanding the correlation between two or more measures in the IM Scorecard. This enhances cross-functional 'systems' thinking for individual managers across divisions, and may lead to further performance improvements.
- The strategic feedback and learning process is a critical factor in determining the success of the IM Scorecard in the organization. Ultimately, the strategic feedback/learning mechanism helps the organization to adapt the information management strategy to emerging conditions in the business environment.

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Concluding observations

- Quality in Information Management Services has to be reviewed from multiple perspectives to reflect the diverse interests of stakeholders. The Corporate IM Scorecard provides an integrated framework for assessing and improving quality of Information Management Services.
- In the initial stages of its lifecycle, the Corporate IM Scorecard is a Shared Vision for a corporate IM strategy that the entire organization is trying to achieve. It is a Shared Strategic framework used for sharing 'best-practices' that facilitate synergies across the organization.
- However the shared vision is only the starting point since organizations can benefit only when the strategic initiatives identified by the IM scorecard are implemented.
- After the IM scorecard is implemented in the organization, subsequent analysis of the impact of the implementation needs to be conducted using a formal feedback/learning mechanism. This strategic feedback and learning process is a critical factor in determining the long-term success of the IM Scorecard in the organization.
- Corporate IM Scorecard should be viewed as a key component of the overall IS strategy and management process, that lead to an ongoing series of management processes to mobilize and redirect the organization strategically.

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