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Knowledge Management

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Knowledge Management

- *Lecture slideshows to accompany the textbook "Knowledge Management" by Brian Satterlee.*

Chapter Headings

- Ch 1. Principles of Knowledge Management (KM)
- Ch. 2 Organization Learning and Knowledge Management
- Ch 3. Knowledge Workers (KW)
- Ch 4. Enterprise Intelligence (EI)
- Ch 5. Basic Process Improvement (BPI)
- Ch 6. BPI Tools
- Ch 7. Business Intelligence Applications (BIA)
- Ch 8. Business Process Re-Engineering (BPR)



Chapter 1

PRINCIPLES OF KNOWLEDGE MANAGEMENT

Major Topics

- What is Knowledge Management (KM)?
- Origin of KM
- Knowledge Strategies
- Systematic Processes of KM
- Knowledge Worker
- Tacit Knowledge
- Knowledge Transfer
- Measure of Knowledge Management
- Benefits of KM

What is Knowledge Management?

- Knowledge Management Defined
 - The Knowledge Age
- Origin of Knowledge Management
 - Ancient Indications
 - The modern practice
 - Shapers of KM thought
- The purpose of Knowledge Management

Knowledge Worker

- Defined
 - Peter Drucker's contribution
- What is knowledge work?
- Knowledge Network

Technology

- What technology is available?
- How should a technical solution be used to solve a knowledge management issue?

Knowledge Strategies

- Foundational understanding of knowledge strategies
 - Understanding what knowledge is important to an organization
 - Knowing the business outcome
- Clear and explicit links to business strategy
- Implementing an effective knowledge Strategies
 - Knowledge framework
 - Knowledge environment
 - Knowledge initiative

Systematic processes of Knowledge Management

- Knowledge Capture
- Organization and Storage
- Knowledge Sharing
- Knowledge Application

Knowledge Transfer

- Understanding the value of sharing information
- Establishing an environment which promotes sharing of critical knowledge



Measurement of Knowledge Management

- Why measure?
- Measure performance
 - Stages in measurement
 - Measurement system
- Putting in place a system to measure progress
 - Input
 - Output

Information Architecture

- Core Principles
 - Metadata
 - Information Model
 - Data Semantic
- Integrity and Quality
 - Data Management
 - Data Integrity
 - Data Quality

Information Architecture Methodology

- Gather requirements
- Collect Metadata
- Construct Information
- Rationalize
- Deploy or Utilize

Integrating KM with existing technology

- Introducing Knowledge Management to an Organization
- Integrating Knowledge Management in an existing environment

Changing a Culture

- Introducing workers to knowledge management change
- Include workers from various group to be part of the design change

KM and its effect on the Economy

- Efficiently deal with growth
- Utilized KM to deal with economic fluctuations

Value Creation

- How does KM create value?
- How can it be measured?

Tracks of Knowledge Management

- People Track
- Object Track

What Benefits can companies expect from Knowledge Management?

- Intellectual Capital
 - What is IC?
 - What is Intellectual Property
 - Brands
 - Patents
- Intangible Assets

Knowledge Management initiatives

- Corporate Structure
- Corporate knowledge based systems
 - Expert Systems
- Knowledge Audits
- KM Training



Chapter 2

ORGANIZATION LEARNING AND KNOWLEDGE MANAGEMENT

Key Concepts

- What is Organizational Learning?
- *The Fifth Discipline*, by Peter Senge
- How does Organizational Learning relate to Individual Learning?
- Types and Stages of Learning
- Types of Knowledge
- Examples of Learning Organizations
- Case Studies and Real-World Application of OL
- OL Trends for the Future
- What is Knowledge Management?
- What is Knowledge Transfer?
- Knowledge transfer from an organizational perspective
- Business Strategies regarding Knowledge Management

- Introduction
- What is Organizational Learning?
 - What defines a learning organization?
 - What are the promises?
 - What are the pitfalls?

According to Peter Senge, *The Fifth Discipline*

- Systems Thinking
- Personal Mastery
- Mental Models
- Building Shared Vision
- Team Learning

- How does Organization Learning relate to Individual Learning
 - How do people learn?
 - Stages of Learning
 - Adaptive Learning
 - Proactive Learning

Knowledge

- Explicit Knowledge
- Tacit Knowledge



Trends for the Future

- Roles of IT in Organizational Learning
- Computer-based Training



What is Knowledge Management?

- What is Knowledge Transfer
 - Knowledge Transfer Challenges
 - Knowledge Transfer Process
- Knowledge transfer from an organizational perspective

Business Strategies regarding Knowledge Management

- Change Management
- Best Practices
- Risk Management
- Benchmarking



Chapter 3

Knowledge Workers

Major Topics

- Roles for Knowledge Workers
- Management of Knowledge Workers
- Improving Knowledge Worker Productivity
- Hiring the best Knowledge Workers
- Downsizing of Knowledge Workers
- Knowledge Network
- Knowledge Bases
- Tools to improve productivity
- Emotional Intelligence
- Knowledge Communities
- Knowledge Workers lack of “Knowledge”
- The Future of Knowledge Workers



Chapter 4

Enterprise Intelligence

Major Topics

- Leveraging Organizational “Know-How”
- Explicit versus Tacit Knowledge
- Cognitive Dimension of Tacit Knowledge
- Technical Dimension of Tacit Knowledge
- Four Modes of Knowledge derived from Explicit and Tacit Knowledge
- Sharing Knowledge
- Performance Support
- Success Stories
- Interacting with Operational Databases
- Bridging Structured and Unstructured Data
- Data Integration
- Building Expert Networks
- Commitment
- Motivation
- Building a Better Knowledge Trap

Leveraging Organizational Know-How

- Knowledge Defined
- Explicit versus Tacit Knowledge
- Two Dimensions of Tacit Knowledge
 - Cognitive Dimension
 - Technical Dimension
 - Socialization
 - Internalization
 - Externalization
 - Combination
- Sharing Knowledge

Performance Support

- What Is Performance Support
- Goals of Organizational Learning
- Case Study-Lennox International
- Success Stories



Interacting with Operational Databases

Bridging Structured and Unstructured Data

- Unstructured Data
- Structured Data
- Data Integration



Building Expert Networks

Building Systems

- Commitment
- Motivation
- Building A Better Knowledge Trap





Chapter 5

BASIC PROCESS IMPROVEMENT

Introduction

- Definition
- Who Owns Processes?
- What is Process Improvement?
- How Does Process Improvement Benefit the Organization?
- How Does an Organization Get Started on Process Improvement?

Basic Process Improvement Model

- Step 1: Select a Process and Establish the Process Improvement Objective
- Step 2: Organize the “Right” Team
- Step 3: Flowchart the Current Process

Steps, cont.

- Step 4: Simplify the Process and Make Changes
- Step 5: Develop a Data Collection Plan and Collect Baseline Data
- Step 6: Is the Process Stable?

Steps, cont.

- Step 7: Is the Process Capable?
- Step 8: Identify Root Causes for Lack of Capability
- Step 9: Plan to Implement the Process Change

Steps, cont.

- Step 10: Modify the Data Collection Plan
- Step 11: Test the Change and Collect Data
- Step 12: Is the Modified Process Stable?
- Step 13: Did the Process Improve?
- Step 14: Standardize the Process and Reduce the Frequency of Data Collection



Chapter 6

BASIC PROCESS IMPROVEMENT TOOLS

BPI Tools

- Affinity Diagram
- Cause and Effect Diagram
- Flowcharting
- Operational Definitions
- Brainstorming
- Team Decision-Making Tools
- Multivoting
- Nominal Group Technique



Chapter 7

Business Intelligence Applications

Major Topics

- Business intelligence applications
- Decision support systems
- Decision support in business
- Levels of managerial decision making
- Customer relationship management
- Supply chain management
- Information systems
- Business partner applications
- Information technologies
- Online analytical processes
- Knowledge and innovation management

■ Introduction to Business Intelligence Applications

- Definition
- Evolution



Decision Support Systems

- Trends
- Customized Applications
- Personalized Applications
- Web-Enabled Applications



Decision Support Systems in Business

Levels of Managerial Decision Making

- Strategic
- Tactical
- Operational



■ Customer Relationship Management

1. Application Components
2. Phases and Types
3. Business Value


Supply Chain Management

1. Application Components
2. Objectives and Roles
3. Life Cycle
4. Business Value

Information Systems

1. Executive (Management)
2. Enterprise
3. Geographic



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- Business Partner Applications
 - Information Technologies
 - Online Analytical Processes
 - Knowledge and Innovation Management



Chapter 8

Business Process Re-Engineering

Major Topics

- Origins of business process reengineering.
- Business process reengineering defined.
- Components of business process reengineering.
- How to implement business process reengineering.
- Three keys to successful business performance (when redesigning processes).
- The six-step reengineering project model (suggested graph).
- The role of measurement within redesign and successful implementation.
- Knowledge management defined.
- Components of knowledge management.
- Difference between data, information, and knowledge.
- Transforming data into knowledge.
- The six-laws of knowledge management (suggested chart).
- Selection of an IS systems to support knowledge management.
- Benefits of embracing knowledge management.
- How to facilitate the implementation of knowledge management.
- The role of the workplace environment on knowledge workers and company success.



- History of Business Process Reengineering (BPR)

- Origins of business process reengineering.

- What is BPR?

- Business process reengineering defined.

Components of BPR

- Components of business process reengineering.
- How to implement business process reengineering.
- Three keys to successful business performance (when redesigning processes).
- The six-step reengineering project model (suggested graph).

Principles of Knowledge Management

- Difference between data, information, and knowledge.
- Transforming data into knowledge.
- The six-laws of knowledge management (suggested chart).
- Selection of an IS systems to support knowledge management.
- Benefits of embracing knowledge management.
- How to facilitate the implementation of knowledge management.

■ Summary

- The role of the workplace environment on knowledge workers and company success.
- The relationship of Business Process Reengineering to Knowledge Management.
- The benefits businesses should expect when Business Process Reengineering supports Knowledge Management.
- How management supports Business Process Reengineering and Knowledge Management.