Il ruolo delle Tecnologie Informatiche in azienda

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Contenuti

✧ Introduzione alla Business Strategy

✧ L'azienda e le nuove sfide

✧ Il ruolo dell'IT in azienda in relazione a tali sfide

Glossario

Glossario dei termini principali

◇ **Architettura**
  ¤ "L'architettura di un sistema IT è la struttura o le strutture del sistema, comprensive delle componenti hardware e software, le proprietà esternamente visibili di tali componenti, e le relazioni fra essi." (da Bass, Clements and Kazman, 1998)

◇ **Linee Guida**
  ¤ Indicazione generale di carattere non obbligatorio. Simili al "Principio" ma senza motivazioni e implicazioni.

◇ **Infrastruttura**
  ¤ Una piattaforma di supporto o di fondazione, di una organizzazione o di un sistema.

◇ **Politica (Policy)**
  ¤ Indicazione di carattere generale su come gestire e organizzare determinate attività alle quali la politica fa riferimento (obiettivi, finalità, responsabilità, metodi da utilizzare)

◇ **Principio**
  ¤ Regole che un'organizzazione applica per l'uso di tutte le risorse e gli asset di business e IT a livello di impresa
  ¤ I principi dovrebbero contenere sempre le motivazioni (benefici attesi) e le implicazioni (attività, risorse e costi presunti)

◇ **Processo**
  ¤ Un insieme di **risorse** e **attività** correlate che trasformano un input in un output con l'obiettivo di aggiungere valore. (ISO 8402)

◇ **Programma**
  ¤ Gruppo di progetti correlati e di altre attività gestite in maniera coordinata per raggiungere un obiettivo comune.

◇ **Progetto**
  ¤ Un processo, consistente in un insieme di attività coordinate e controllate con date di inizio e fine, avviato per raggiungere un obiettivo conforme a specifici requisiti, inclusivi di vincoli temporali, di costo e di risorse utilizzate (ISO 10006)

◇ **Stakeholder**
  ¤ Individui o organizzazioni che sono coinvolto o possono essere impattati da determinate attività.

◇ **Sistema IT**
  ¤ Un sistema IT è una combinazione di hardware, software e documentazione che implementa e descrive una soluzione di business.

◇ **Time box**
  ¤ Approccio all'esecuzione di un'attività che è vincolata dalla durata (o data di termine), e lascia flessibilità soltanto sull'ambito e le risorse da utilizzare.

Systems Management

◇ **Change Control**
  ¤ Change Control è il meccanismo per la gestione del flusso dei cambiamenti nel ciclo di vita dell'applicazione con l'obiettivo di ridurre l'intorduzione di errori migliorando la stabilità e qualità dell'applicazione.

◇ **Configuration Management**
  ¤ Configuration Management si riferisce al processo di identificazione e sincronizzazione dell'hardware associato all'architettura.

◇ **Data Administration**
  ¤ Data Administration è responsabile della gestione del patrimonio costituito dai dati di rilevanza aziendale.

◇ **Database Administration**
  ¤ Database Administration fornisce le politiche, procedure e tecnologie per gestire le basi di dati fisiche dell'azienda.

◇ **Operations Management**
  ¤ Operations Management fornisce le politiche, procedure e strumenti per coordinare e gestire sistemi e reti di tutta l'azienda.

◇ **Problem Management**
  ¤ Problem Management comprende le politiche, procedure e strumenti per raccogliere, gestire, diagnosticare e risolvere i problemi dell'Architettura.

◇ **Recovery Management**
  ¤ Recovery Management fornisce le politiche, procedure e tecnologie per ripristinare l'esercizio dei sistemi.

◇ **Security Management**
  ¤ Security Management fornisce le politiche, procedure e tecnologie per proteggere l'Architettura dall'accesso e dall'utilizzo non autorizzati.

◇ **Software Distribution Management**
  ¤ Software Distribution Management fornisce il veicolo per la distribuzione elettronica degli eseguibili delle applicazioni alle piattaforme di tutta l'azienda.

◇ **Version Management**
  ¤ Version Management fornisce la capacità di mantenere copie multiple di collaudo e produzione delle applicazioni, dei loro dati e delle loro specifiche, incluse (ma non solo), le specifiche di sistema

Introduction to business strategy

IBM's Business Strategy framework will be used to discuss enterprise structure and capabilities and the role of IT

WHAT

STRATEGY

Strategy Analysis

Strategy Formulation

Strategy Decomposition

Business Case

Leading Change

Enterprise Capabilities

ORGANIZATION

Organization Design

VALUE

Value Capture

Enterprise Processes

Enterprise Knowledge

Enterprise Technology

DESIGN

HOW

◇ From a client's perspective:
  ¤ Business Strategy is a professional service that provides advice and counsel to an organization's senior management team and line managers about the strategic direction and operational capability of the business, marketplace and partners.

◇ From a professional services company perspective:
  ¤ Business Strategy is a set of capabilities, applied to assist clients as they identify or clarify problems, issues, opportunities; and determine the capabilities required in their marketplace to compete, operate and win.

The VALUE a company creates is measured by the amount that buyers are willing to pay for their products/services
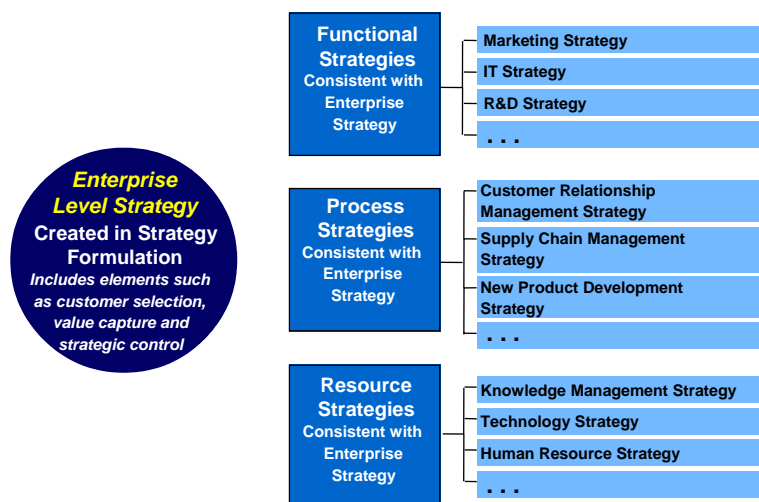
Strategy is:
The formulation and execution of an integrated set of choices

◇ Based on customer needs   *Customer selection*

◇ Identifies the essential positioning, competitive advantages, and configuration of activities   *Positioning*

◇ Necessary to create and sustain value superior to the competition   *Value Capture*

◇ Required to generate superior financial returns in a dynamic environment
Strategic Control:
WTO, China, Ikea

An enterprise – level strategy decomposes into a number of lower level strategies

Functional Strategies
Consistent with Enterprise Strategy
- Marketing Strategy
- IT Strategy
- R&D Strategy
- . . .

Enterprise Level Strategy
Created in Strategy Formulation
Includes elements such as customer selection, value capture and strategic control

Process Strategies
Consistent with Enterprise Strategy
- Customer Relationship Management Strategy
- Supply Chain Management Strategy
- New Product Development Strategy
- . . .

Resource Strategies
Consistent with Enterprise Strategy
- Knowledge Management Strategy
- Technology Strategy
- Human Resource Strategy
- . . .

The movement from the conceptual to the practical also drives Business Strategy's integrated framework of four disciplines

*Statements of **benefits**, both tangible and intangible, that are delivered to internal or external recipients expressed from an **external view***

*Ability to perform a certain business function described in terms of **what must be done**, not how it is done. Provide an internal view.*

*What a company **needs to have** in order to perform the capabilities. Tangible and intangible assets of the company.*

Value Proposition

Capabilities

Resources

STRATEGY

ORGANIZATION

VALUE

DESIGN
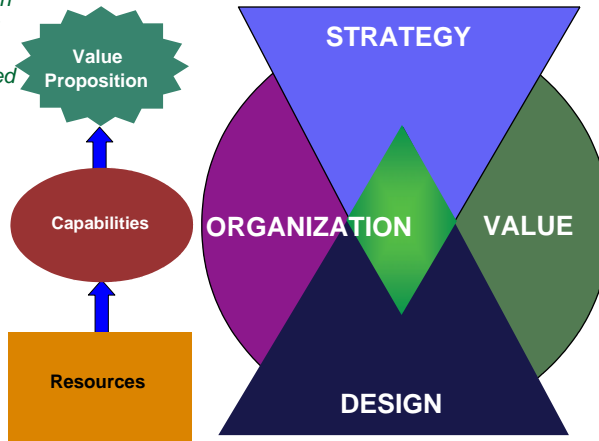
All four disciplines converge in Enterprise Capabilities – in the diamond at the center of the integrated framework

STRATEGY addresses the question:
How should the organization create, capture, and sustain value?

ORGANIZATION addresses the questions:
What kind of organization do we need to have?
How do we get there?

VALUE addresses the questions:
How do we determine the value of initiatives?
How do we measure and manage the value captured?

STRATEGY

ORGANIZATION

VALUE

DESIGN

DESIGN addresses the question:
What should be built so the organization delivers the desired value?

The four disciplines comprise eleven interrelated analysis

Strategy Analysis
Analyze players and possibilities, as well as identify the implications of specific environmental conditions and uncertainties on the client's strategy decisions

Strategy Formulation
Document a client's existing strategy and business model, as well as identifying potentially attractive market segments

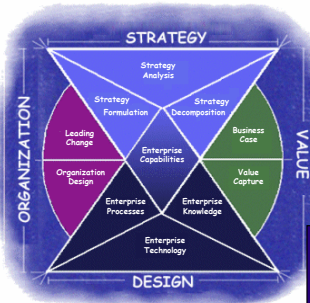**Strategy Decomposition**
Identify and document audience wants and needs and understand their role in preparing to build more detailed strategies

Business Case
Develop a Business Case to provide a client with the information to make different types of business investment decisions. Information may be in the form of compelling reasons for change, prioritized initiatives, or key information to make a final go or no-go decision on a proposed initiative.

Value Capture
Manage the value created and captured in order to sustain the client's competitive position in the marketplace. Focus the client on establishing performance metrics and implementing a sustainable management system that assesses value created and captured.

Leading Change
Develop and execute on an Organization Transition Plan, which incorporates projects to implement the required organization, job and performance to achieve the selected business strategy

Organization Design
Analyze the alignment of the client's existing organization structures, behaviors and enablers with the business strategy and capabilities. Design the organization, jobs and performance requirements to align with the selected business strategy and capabilities.

Enterprise Capabilities
Assess a client's current capabilities (knowledge, process, organization and technology) needed to achieve the desired strategic Capability Model, which describes the high-level capabilities required to support the selected business strategy.

Enterprise Processes
Document and assess the client's enterprise processes and current capabilities to identify value-creating processes and those that require improvement.

Enterprise Knowledge
Develop a strategy and roadmap of strategic initiatives and how a client might use knowledge and knowledge management to achieve their business goals.

Enterprise Technology
Assess the current I/T environment in sufficient detail to identify areas of strength, weakness and major issues. Define a future vision of the desired I/T environment necessary to support the desired business capabilities.

The External Environment module focuses on the client's external environment, and the forces acting upon it

¤ Identify the relevant <u>value net players</u> and their relationships to the firm's business and to adjacent value nets

¤ Analyze the firm's <u>industry structure</u>, including competitive forces, strategic groups, the degree of concentration and the ability of players to capture value

¤ Know how and when to incorporate a <u>Technology Scan and/or a Leading Practices Analysis</u>

¤ <u>Summarize the threats and opportunities</u> posed by a firm's external environment

A Company's Value Chain is a system of interdependent activities, which are connected by linkages

Linkages exist when the way in which an activity is performed affects the cost or effectiveness of other activities

Firm Infrastructure					
Human Resource Management					
Technology Development					
Procurement					

Support Activities

Inbound Logistics	Operations	Outbound Logistics	Marketing & Sales	Services

Primary Activities

Margin
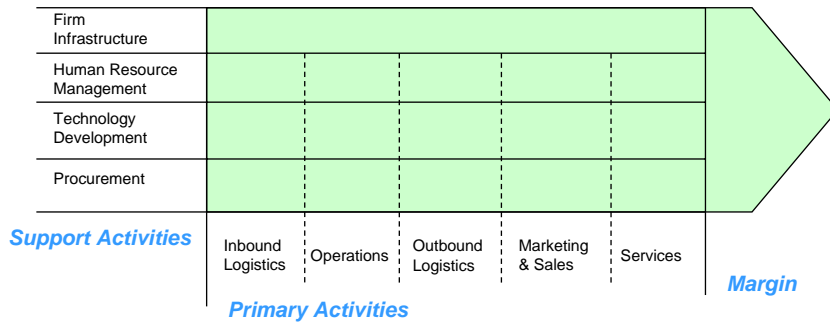
A more costly product design can reduce post-sales services costs. A company must resolve such trade-offs in accordance to its enterprise strategy to achieve competitive advantage

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An example: the Traditional Software Development Value Chain

INFRASTRUCTURE MANAGEMENT ~ **7**

HUMAN RESOURCE MANAGEMENT ~ **3**

TECHNOLOGY DEVELOPMENT ~ **3**

PROJECT MANAGEMENT ~ **7**

QUALITY ASSURANCE + CONF. MANAGEMENT ~ **5**

REWORK ~ 30 %

INBOUND LOGISTICS

DEPLOYMENT

REQUIREMENTS	PRELIMINARY DESIGN	DETAILED DESIGN	CODE AND UNIT TEST	INTEGRA- TION AND TEST
1 4	3 7	5 11	8 9	13 7

Slide 17
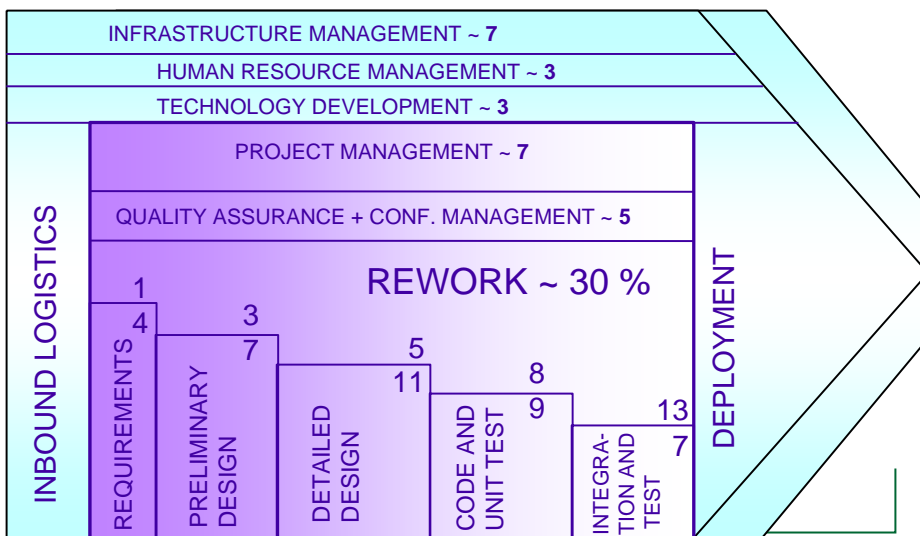
Value Net analysis enables greater understanding of the client's position within the industry and of the relationships and activities that affect the client's strategic decision-making

- ◇ A Value Net:
  - ¤ Describes the client's position relative to other players
  - ¤ Provides an inside-out perspective of the client's business and industry
  - ¤ Incorporates cooperative or complementary players into the view of the industry
- ◇ Insights derived from using Value Nets include understanding:
  - ¤ How players and activities along the client's value chain as well as complementor and substitutor relationships affect strategic decision-making
  - ¤ Linking company behavior to the industry environment
  - ¤ How manipulation of the environment may result in greater competitive advantage and creation and capture of value

Substitutors

Suppliers

Slide 18

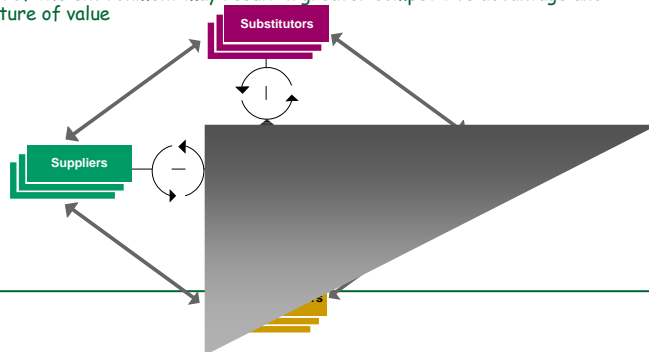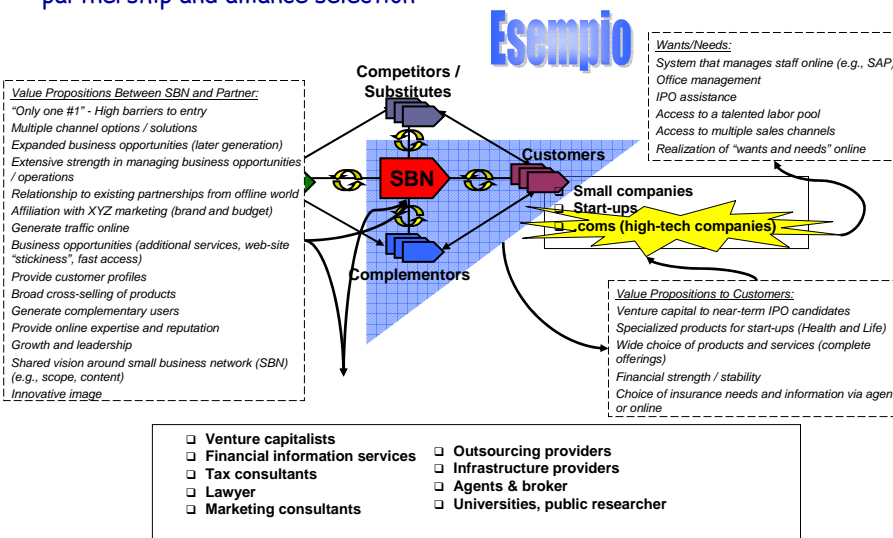**At a large European-based insurance company, a Value Net, player wants/needs, and value proposition assessment were used to drive partnership and alliance selection**

Esempio

Competitors / Substitutes

Customers

SBN

Complementors

Wants/Needs:
System that manages staff online (e.g., SAP)
Office management
IPO assistance
Access to a talented labor pool
Access to multiple sales channels
Realization of "wants and needs" online

- Small companies
- Start-ups
- coms (high-tech companies)

Value Propositions Between SBN and Partner:
"Only one #1" - High barriers to entry
Multiple channel options / solutions
Expanded business opportunities (later generation)
Extensive strength in managing business opportunities / operations
Relationship to existing partnerships from offline world
Affiliation with XYZ marketing (brand and budget)
Generate traffic online
Business opportunities (additional services, web-site "stickiness", fast access)
Provide customer profiles
Broad cross-selling of products
Generate complementary users
Provide online expertise and reputation
Growth and leadership
Shared vision around small business network (SBN) (e.g., scope, content)
Innovative image

Value Propositions to Customers:
Venture capital to near-term IPO candidates
Specialized products for start-ups (Health and Life)
Wide choice of products and services (complete offerings)
Financial strength / stability
Choice of insurance needs and information via agent or online

❑ Venture capitalists	❑ Outsourcing providers
❑ Financial information services	❑ Infrastructure providers
❑ Tax consultants	❑ Agents & broker
❑ Lawyer	❑ Universities, public researcher
❑ Marketing consultants	

A telecommunications firm used multiple Value Nets to understand the external environment for various roles the business might play

Esempio

Substitutors

Competitors--Web Hosting (e.g. LoudCloud, QCS, Digex)
Substitutes (Internally managed servers, IT Outsourcing Providers)

Web Hoster

Suppliers

NSP: (e.g., AT&T, Qwest, Sprint, WorldCom)
Hardware: (e.g., Cisco, Lucent, IBM, Sun)

Customers

Two customer segments -- ASPs & corporate web sites/e-mail
Two offerings -- (co-location & managed servers)

Complementors

Communication providers
(bundle communication services, data, internet, & voice, with web-hosting offering)

- Global Crossing
- Qwest
- Level 3
  - Teligent
  - MCI Worldcom
  - Sprint
- RBOCs
- Williams Communications

Substitutors

ABS Basic Services

Suppliers
- Cisco
- Lucent
- Ericsson
- Nortel
- Toshiba

Customers
- SMEs
- Enterprise
- CLECs

Complementors
- CLECs
- Exodus
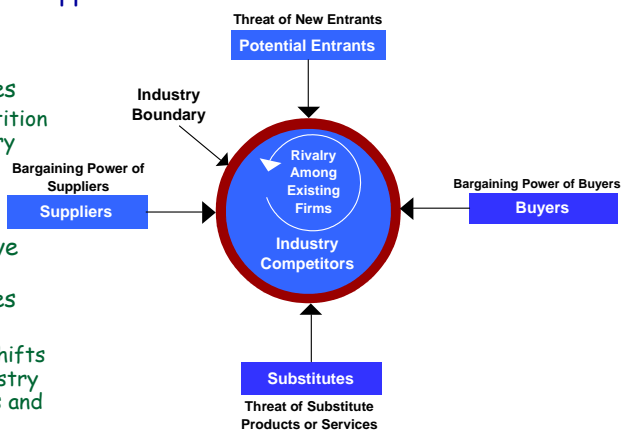- Allied Riser

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Porter's Five Forces provides an external view of industry competition as well as insights into the relative power of industry players and potential opportunities and threats

◇ Porter's Five Forces
  ¤ Describes competition within the industry from an external perspective

◇ Insights that derive from the use of Porter's Five Forces include
  ¤ Potential power shifts between the industry and its customers and suppliers
  ¤ Potential threats from new entrants or substitutors

Threat of New Entrants

Potential Entrants

Industry Boundary

Bargaining Power of Suppliers

Suppliers

Rivalry Among Existing Firms

Industry Competitors

Bargaining Power of Buyers

Buyers

Substitutes

**Threat of Substitute Products or Services**

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The use of additional tools and techniques provides insights into the myriad external forces that influence the firm's decisions and success

◇Industry trends, issues, and uncertainties explored by the analysis fall into a variety of categories, regardless of the tools and techniques employed

◇STEEP

  ¤ **Social** – social, demographic changes

  ¤ **Technological** – relevant emerging technologies, use of technology

  ¤ **Economic** – overall economic environment (GDP, market growth rates, interest rates)

  ¤ **Environmental** – physical environment concerns

  ¤ **Political** – regulatory, political, legal concerns

Business Model & Value Proposition focuse on documenting and understanding the client's strategy
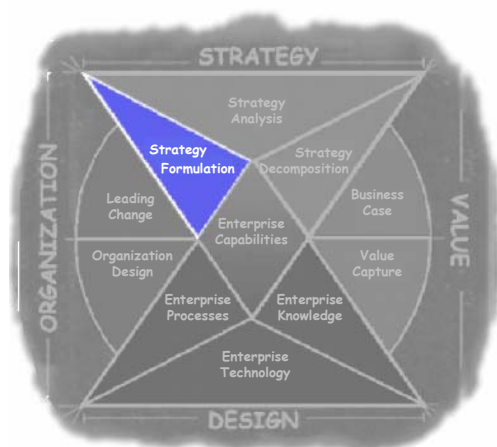
- Document the key elements of a firm's business strategy
- Identify the major elements of the firm's business model, linked to their strategy
- Identify the success measures that the firm uses to evaluate their strategy
- Interpret the significance of environmental characteristics, relative to the firm's strategy

A business strategy and business model should be clearly stated in a structured format

The primary elements of a strategic statement include:

- ¤ <u>Vision</u> – a statement of the desired state of the business, to set a clear direction for the business
- ¤ <u>Mission</u> – a description of why the business exists
- ¤ <u>Business goals</u> – high-level business objectives that measure achievement of the desired vision
- ¤ <u>Critical success factors</u> – the set of things that must go right to achieve the vision (I.e., outcomes), limited to those that are collectively necessary and sufficient to ensure success
- ¤ <u>Key tactics</u> – a description of the game plays or major thrusts that are being undertaken to achieve the vision

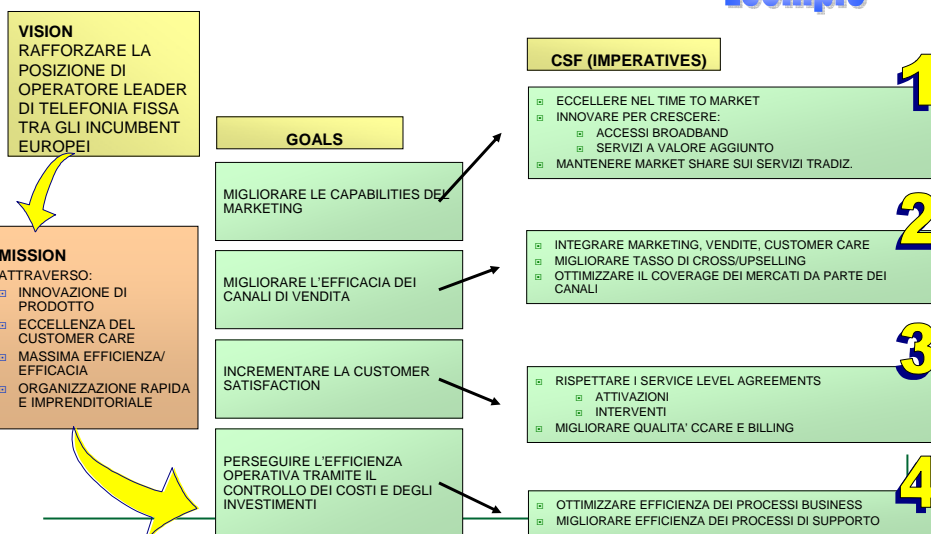The business model describes choices that have been made for:

- ¤ <u>Customer selection</u> – choice of customer (and other external value net players) segments involved in the business model
- ¤ <u>Value proposition(s)</u> – firm-level value propositions made to those customer and other player segments, described in terms of satisfying the recipient's wants or needs
- ¤ <u>Value capture</u> – value captured by the firm from these segments in return for the value propositions, expressed as profit (or enhancements to capabilities that will generate future profits)
- ¤ <u>Competitive differentiation</u> – description of what makes the client different from its direct competitors and other substitutors
- ¤ <u>Strategic control</u> – description of a company's ability to protect its profit stream
- ¤ <u>Scope of activities performed</u> – description of core capabilities, unique assets, and the firm's structure, which is responsible for creating/delivering the value propositions offered by the firm

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L'esempio Telecom Italia 2003 estratto dal bilancio

Esempio

VISION
RAFFORZARE LA POSIZIONE DI OPERATORE LEADER DI TELEFONIA FISSA TRA GLI INCUMBENT EUROPEI

MISSION
ATTRAVERSO:
- ⊞ INNOVAZIONE DI PRODOTTO
- ⊞ ECCELLENZA DEL CUSTOMER CARE
- ⊞ MASSIMA EFFICIENZA/ EFFICACIA
- ⊞ ORGANIZZAZIONE RAPIDA E IMPRENDITORIALE

GOALS
- MIGLIORARE LE CAPABILITIES DEL MARKETING
- MIGLIORARE L'EFFICACIA DEI CANALI DI VENDITA
- INCREMENTARE LA CUSTOMER SATISFACTION
- PERSEGUIRE L'EFFICIENZA OPERATIVA TRAMITE IL CONTROLLO DEI COSTI E DEGLI INVESTIMENTI

CSF (IMPERATIVES)

1
- ⊞ ECCELLERE NEL TIME TO MARKET
- ⊞ INNOVARE PER CRESCERE:
    - ⊞ ACCESSI BROADBAND
    - ⊞ SERVIZI A VALORE AGGIUNTO
- ⊞ MANTENERE MARKET SHARE SUI SERVIZI TRADIZ.

2
- ⊞ INTEGRARE MARKETING, VENDITE, CUSTOMER CARE
- ⊞ MIGLIORARE TASSO DI CROSS/UPSELLING
- ⊞ OTTIMIZZARE IL COVERAGE DEI MERCATI DA PARTE DEI CANALI

3
- ⊞ RISPETTARE I SERVICE LEVEL AGREEMENTS
    - ⊞ ATTIVAZIONI
    - ⊞ INTERVENTI
- ⊞ MIGLIORARE QUALITA' CCARE E BILLING

4
- ⊞ OTTIMIZZARE EFFICIENZA DEI PROCESSI BUSINESS
- ⊞ MIGLIORARE EFFICIENZA DEI PROCESSI DI SUPPORTO

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A business model achieves sustainable competitive advantage when it reflects the strategy and is able to take advantage of the environment and quickly adapt to threats

◇ The business model of a firm is comprised of a set of controllable attributes . . .
  ¤ Choices made by the firm in regards to customer selection, value propositions, value capture, scope of activities, competitive differentiation and strategic control

Value Nets — *Select*
Change **Competitive Forces** — *Focus*
Impact **Target Position** — *Craft*
Optimize **Comparative Advantage**

Overall Environmental Analysis

Positioning and Detailed Environmental Analysis

◇ . . . which interact with uncontrollable contextual internal and external elements . . .
  ¤ External context elements *(environmental, industry or firm)* and internal context elements *(firm culture, corporate values and principles)* are key determinants of the success or failure of the business model
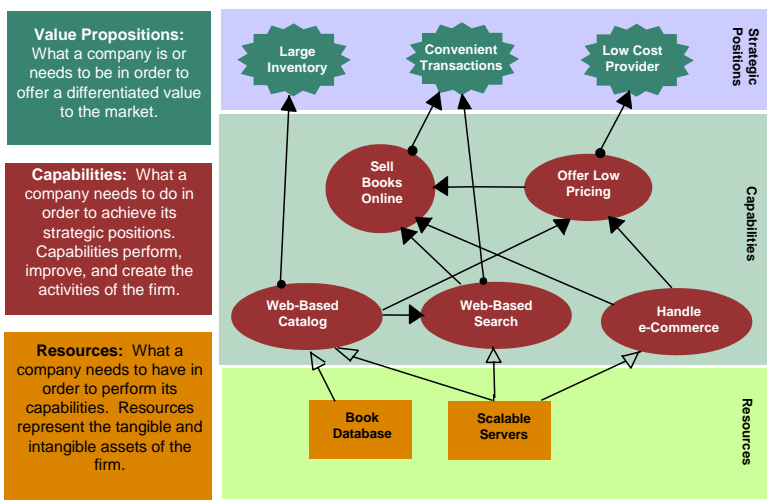
◇ . . . and is measured by performance attributes
  ¤ Metrics are used to determine the success of the business model in achieving the company's strategic objectives
  ¤ In order to adequately describe value propositions and their relationship to value capture, competitive differentiation and strategic control, we must quantify (where possible) the revenues and other benefits that they deliver to the client
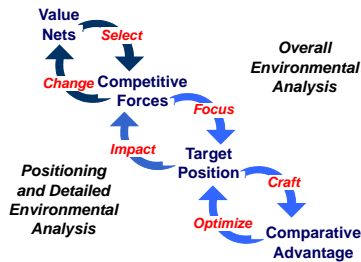

Value propositions identified in the business model link to capabilities and resources in the Strategic Capability Network

Value Propositions: What a company is or needs to be in order to offer a differentiated value to the market.

Capabilities: What a company needs to do in order to achieve its strategic positions. Capabilities perform, improve, and create the activities of the firm.

Resources: What a company needs to have in order to perform its capabilities. Resources represent the tangible and intangible assets of the firm.

Strategic Positions: Large Inventory · Convenient Transactions · Low Cost Provider

Capabilities: Sell Books Online · Offer Low Pricing · Web-Based Catalog · Web-Based Search · Handle e-Commerce

Resources: Book Database · Scalable Servers

## Capabilities are clusters of resources that directly or indirectly deliver specific value propositions

Capability is any combination of process, knowledge, organization, and technology that enables a firm to deliver a specific value proposition *directly* to a defined segment of stakeholders, e.g., customer segment or supplier segment, or *indirectly* through the support of other capabilities
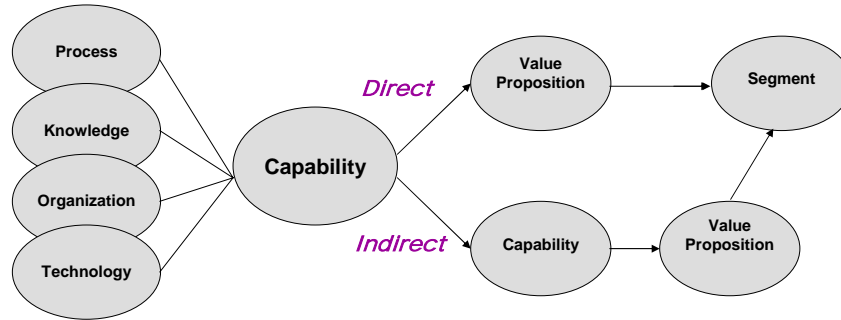
30 Maggio 2005   27
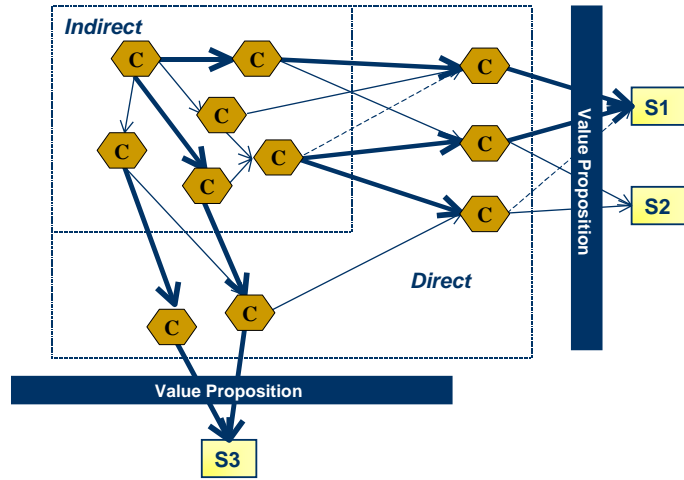

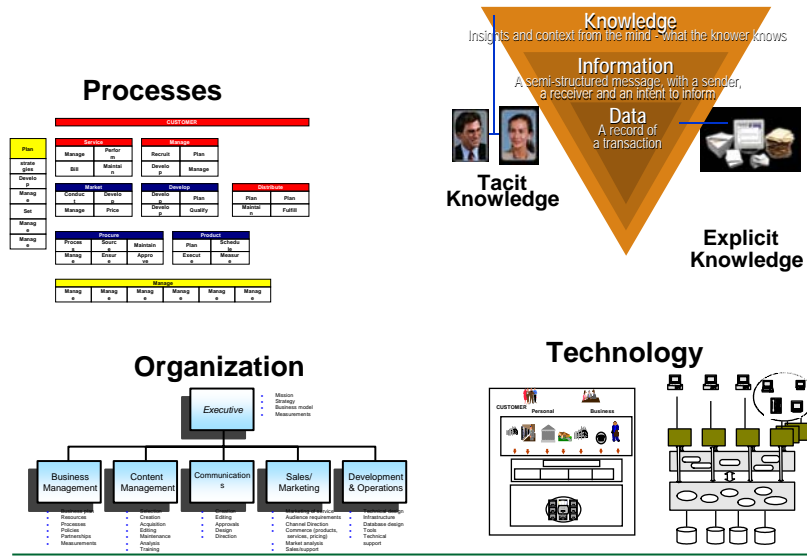## The Capability Model links direct and indirect capabilities to value net players

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Slide 29
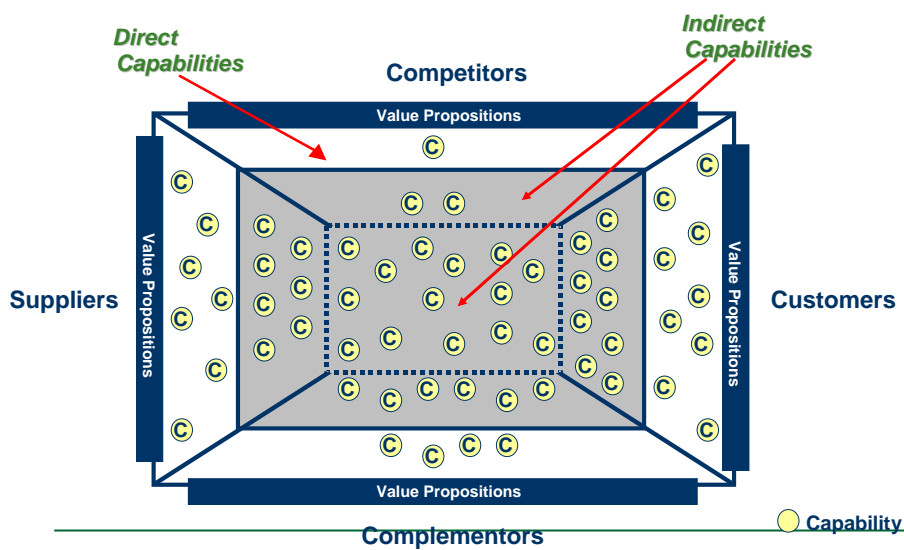
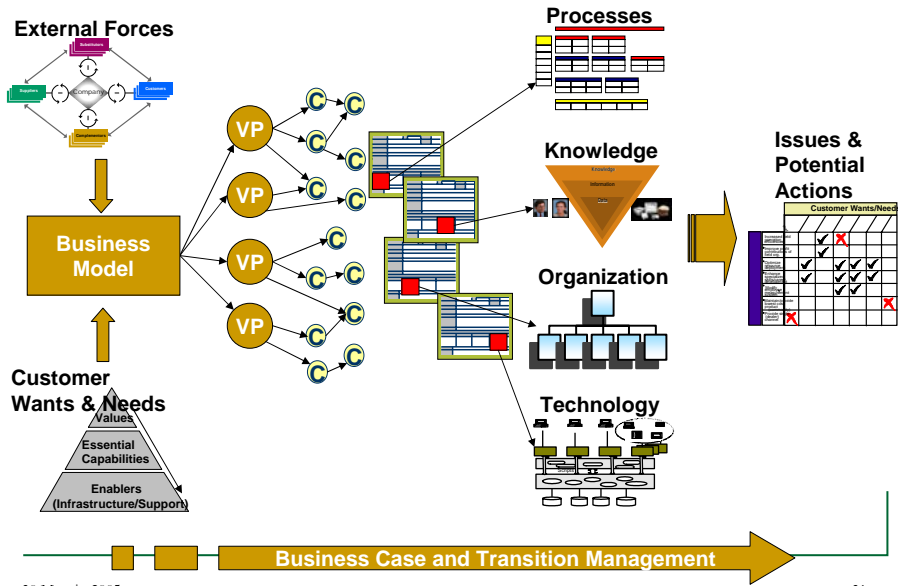Capability assessment involves identifying and evaluating linkages between capabilities and value net segments

Indirect

C → C → C → S1

C

C → C → C → S2

C C → C

Value Proposition

Direct

C C

Value Proposition

S3

Slide 30

There are four types of resources: Process, Knowledge, Organization, and Technology

Processes

Knowledge
Insights and context from the mind – what the knower knows

Information
A semi-structured message, with a sender, a receiver and an intent to inform

Data
A record of a transaction

Tacit Knowledge

Explicit Knowledge

CUSTOMER

Service		Manage	
Manage	Perfor m	Recruit	Plan
Bill	Maintai n	Develo p	Manage

Plan strategies Develop Manag e Set Manag e Manag e

Market		Develop	
Conduc t	Develo e	Develo p	Plan
Manage	Price		Quality

Distribute	
Plan	Plan
Maintai n	Fulfill

Procure			Product	
Process	Sourc e	Maintain	Plan	Schedu le
Manag e	Ensur e	Appro ve	Execut e	Measur e

Manage				
Manag e	Manag e	Manag e	Manag e	Manag e

Organization

Executive

Mission
Strategy
Business model
Measurements

Business Management | Content Management | Communication s | Sales/ Marketing | Development & Operations

- Resources
- Processes
- Policies
- Partnerships
- Measurements

- Creation
- Acquisition
- Editing
- Maintenance
- Analysis
- Training

- Editing
- Approvals
- Design
- Direction

- Audience requirements
- Channel Direction
- Commerce (products, services, pricing)
- Market analysis
- Sales/support

- Infrastructure
- Database design
- Tools
- Technical support

Technology

CUSTOMER   Personal   Business

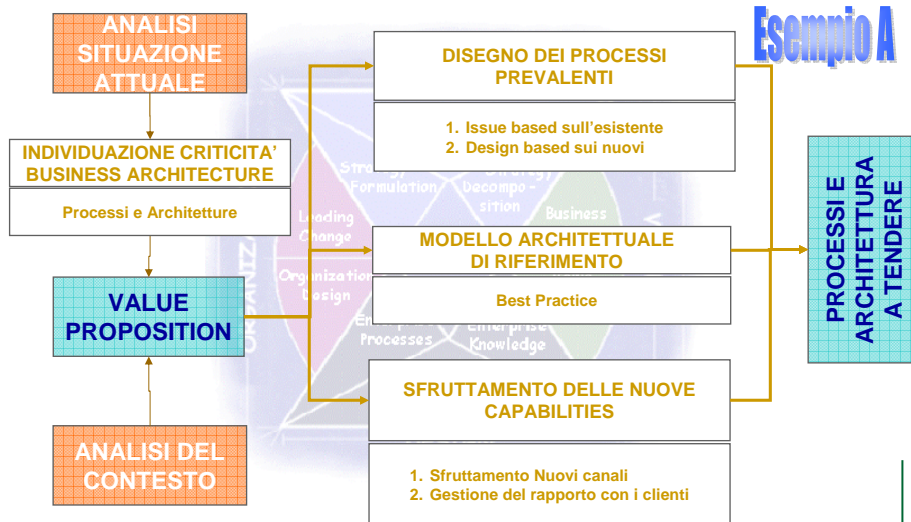## An overall view of the enterprise design and the role of IT

Il progetto è stato concepito con l'obiettivo di definire un modello per <cliente> del processo di creazione e gestione dei contenuti digitali multimediali.

Esempio A

- ✧ Il focus progettuale è stato orientato alla definizione dei processi e alla creazione della struttura di un Centro di Competenza Digital Media <cliente> , considerato la naturale evoluzione della missione e competenza di ICT,
  - ¤ ICT ha la responsabilità a livello Corporate dei sistemi e servizi a supporto del core business aziendale, con l'obiettivo dell'allineamento alle tendenze più aggiornate in termini di architettura dei sistemi, modelli di utilizzo e sviluppo
- ✧ Le principali criticità del processo, interne o esterne, erano già state preliminarmente rilevate sulle seguenti direttrici fondamentali:
  - ¤ Riduzione e/o eliminazione di attività ridondanti o comunque non efficaci allo svolgimento delle attività.
  - ¤ Ottimizzazione dell'utilizzo delle risorse attraverso il ridisegno dei processi.
  - ¤ Verifica per una eventuale riduzione dei costi, per ciascuna criticità, analizzandone la natura e valutando possibili alternative di rimozione.
  - ¤ Verifica per una eventuale opportunità di business aggiuntivo, analizzando l'aumento di efficacia verso i clienti interni <cliente> (Reti e Testate) ed esterni.
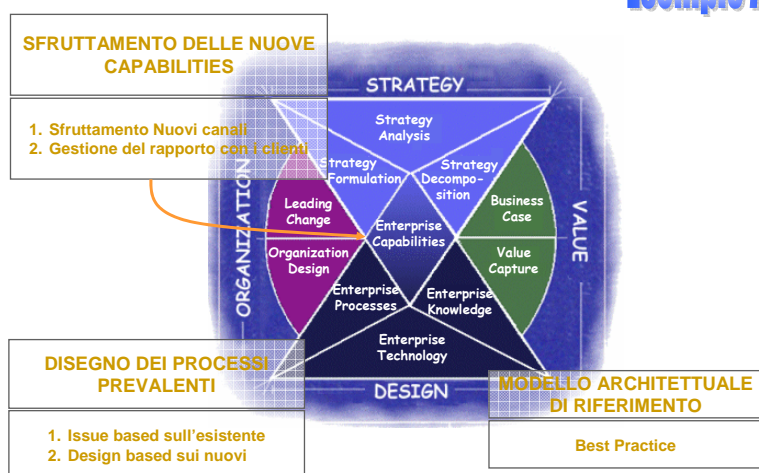
Slide 33

L'impostazione progettuale finalizzata alla definizione di processi e architettura a tendere del Media Asset Management (MAM) si è basata sull'analisi del contesto di mercato e della situazione attuale.

Esempio A

- **ANALISI SITUAZIONE ATTUALE**
- **INDIVIDUAZIONE CRITICITA' BUSINESS ARCHITECTURE**
  - Processi e Architetture
- **VALUE PROPOSITION**
- **ANALISI DEL CONTESTO**

- **DISEGNO DEI PROCESSI PREVALENTI**
  1. Issue based sull'esistente
  2. Design based sui nuovi
- **MODELLO ARCHITETTUALE DI RIFERIMENTO**
  - Best Practice
- **SFRUTTAMENTO DELLE NUOVE CAPABILITIES**
  1. Sfruttamento Nuovi canali
  2. Gestione del rapporto con i clienti

- **PROCESSI E ARCHITETTURA A TENDERE**

Slide 34

L'approccio metodologico si è basato sul "*Business Strategy Framework*" di IBM, con particolare riferimento alla disciplina "*DESIGN*".
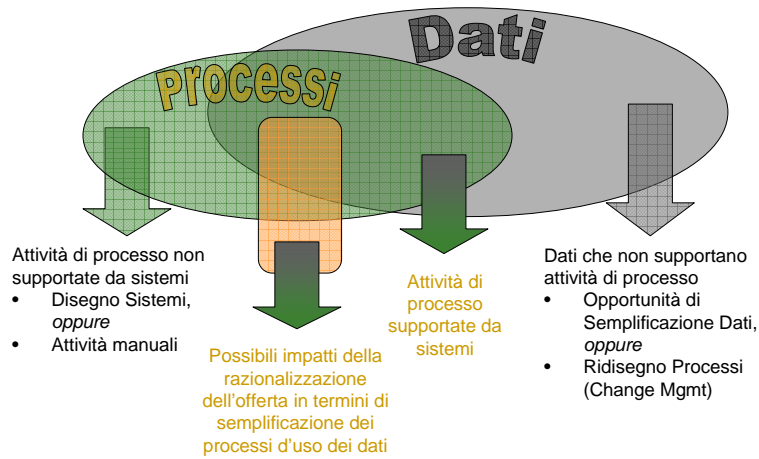
Esempio A

- **SFRUTTAMENTO DELLE NUOVE CAPABILITIES**
  1. Sfruttamento Nuovi canali
  2. Gestione del rapporto con i clienti

STRATEGY
- Strategy Analysis
- Strategy Formulation
- Strategy Decomposition
- Business Case
- Value Capture
- Leading Change
- Organization Design
- Enterprise Capabilities
- Enterprise Processes
- Enterprise Knowledge
- Enterprise Technology
- ORGANIZATION
- VALUE
- DESIGN

- **DISEGNO DEI PROCESSI PREVALENTI**
  1. Issue based sull'esistente
  2. Design based sui nuovi
- **MODELLO ARCHITETTUALE DI RIFERIMENTO**
  - Best Practice

L'allineamento dati-processi è sempre un tema molto delicato

Esempio B

Processi

Dati

Attività di processo non
supportate da sistemi
- Disegno Sistemi,
  oppure
- Attività manuali

Possibili impatti della
razionalizzazione
dell'offerta in termini di
semplificazione dei
processi d'uso dei dati

Attività di
processo
supportate da
sistemi

Dati che non supportano
attività di processo
- Opportunità di
  Semplificazione Dati,
  oppure
- Ridisegno Processi
  (Change Mgmt)

The challenges for the business

Globalization, more demanding financial markets, technology proliferation; how they translate in challenges for the business ?

Differentiation	Responsiveness	Efficiency
CEO perspective Over 64% of CEOs globally believe **new products and services** will lead their enterprises' growth	CEOs find that growth can come by **increasing the customer voice** in product development while **reducing cycle time**	Two-thirds of CEOs indicate that **cost reduction will remain a major focus area**, making it a not-too-distant second place to sales growth

Simultaneously

	Differentiation	Responsiveness	Efficiency
Company examples	**JetBlue** • Better customer experience • Underserved airport locations • Simplified flight patterns	**Zara** • Rapidly introduces new designs • Dynamically adapts to demand • Local decisioning • Limited runs reduce oversupply	**Wal-Mart** • Low corporate overhead • Tightly integrated suppliers • Leverages scale economies • Leadership in technology use

Source: "Your Turn: The Global CEO Study 2004" IBM Business Consulting Services, 2004; IBM Institute for Business Value.

In a recent global study, more than 450 CEOs responded about their most critical imperatives tu achieve success in today's economy. Their top responses:
- **strong, differentiated value propositions are critical for growth and profitability;**
- **organizations must be able to sense and respond rapidly to customer and marketplace changes;**
- **cost structures and business processes must be adapted in a flexible manner to maintain productivity and reduce risk**

Today's enterprises can increasingly "program" the business by selecting from a variety of established modules or disparate components

Global connectivity platform

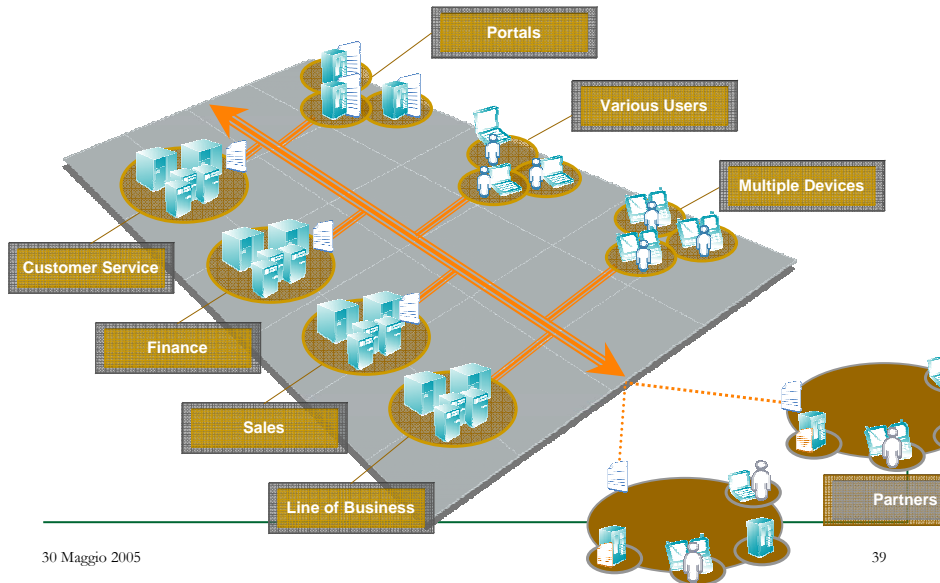Communication networks — Information technology — Open standards

◇ Over the last five years, a number of diverse business and technology architectures have matured and converged to form a global connectivity platform that supports widespread collaboration.

◇ By slashing the cost of coordination both within the firm and externally, with partners, this new platform represents a de facto weakening of traditional business structures and boundaries.

Mutually reinforcing

◇ First, communication networks, specifically broadband and wireless technologies, have made digital connectivity faster and more affordable.

◇ Second, information technology has evolved. With the consolidation of the enterprise software market and the proliferation of business integration software, companies now have a common platform upon which broader and better functionality can be built.

◇ Third, open standards – both technology and business – are optimizing interoperability and creating the potential for truly modularized infrastructures.
  ¤ On the technology side, XML has been adopted by 25 percent of companies and is currently being rolled out in another 33 percent.
  ¤ On the business side, the increasing ability of enterprises to define common processes and activities is simplifying day-to-day commerce and improving work flow.
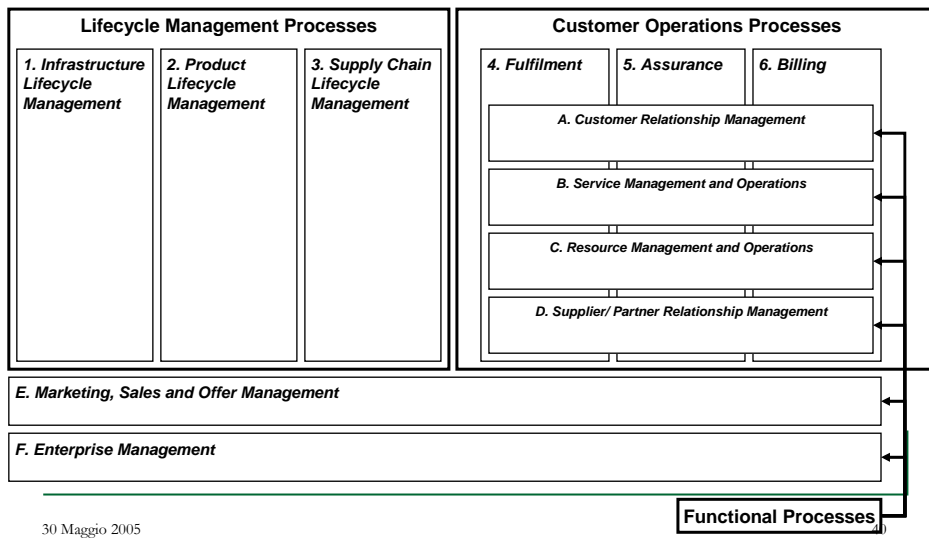
Web Services is a standards-based approach to "componentising" applications and allowing those components to be inter-connected

Portals

Various Users

Multiple Devices

Customer Service
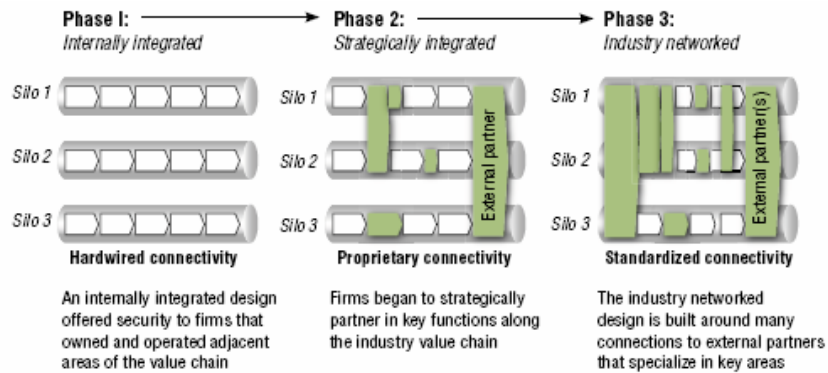
Finance

Sales

Line of Business

Partners

At the highest level, eTOM defines a set of Process Areas for the Service Provider grouped into "vertical" end-to-end processes and "horizontal" functional processes

LEVEL 0 PROCESS MODEL

Lifecycle Management Processes			Customer Operations Processes		
1. Infrastructure Lifecycle Management	*2. Product Lifecycle Management*	*3. Supply Chain Lifecycle Management*	*4. Fulfilment*	*5. Assurance*	*6. Billing*
			A. Customer Relationship Management		
			B. Service Management and Operations		
			C. Resource Management and Operations		
			D. Supplier/ Partner Relationship Management		

E. Marketing, Sales and Offer Management

F. Enterprise Management

Functional Processes

As standards-driven internal specialization matures, firms gain the ability to leverage the benefits of lower transaction costs by engaging with partners through collaborative industry networks.

Phase I:
Internally integrated

Phase 2:
Strategically integrated

Phase 3:
Industry networked

Hardwired connectivity — An internally integrated design offered security to firms that owned and operated adjacent areas of the value chain

Proprietary connectivity — Firms began to strategically partner in key functions along the industry value chain

Standardized connectivity — The industry networked design is built around many connections to external partners that specialize in key areas

Source: IBM Institute for Business Value.

La caduta dei costi di transazione modifica le regole del gioco
Necessità di ripensare la Value Net in ottica di "business specialization"

Changes in interaction costs can cause entire industries to reorganize rapidly and dramatically.

◇ As business interactions move on to electronic networks such as the Internet, basic assumptions about corporate organization will be overturned

◇ Activities that companies have always believed to be central to their businesses will suddenly be offered by new, specialized competitors that can do those activities better, faster, and more efficiently. Executives will be forced to ask the most basic and discom-fiting question about their companies: what business are we really in?

    ¤ Developing a capability in-house confers no differentiation if an outside specialist can provide the same more effectively or efficiently

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One company, three businesses

◇ Beneath the surface of most companies are three kinds of businesses
  ¤ a customer relationship business
  ¤ a product innovation business
  ¤ and an infrastructure business.
◇ Although organizationally intertwined, these businesses differ a great deal

Rethinking the traditional organization

	Customer relationship	Product innovation	Infrastructure
Economics	High cost of customer acquisition makes it imperative to gain large wallet share; economies of scope are the key	Early market entry allows for a premium price and large market share; speed is the key	High fixed costs make large volumes essential to achieve low unit costs; economies of scale are the key
Competition	Battle for scope; rapid consolidation; a few big players dominate	Battle for talent; low barriers to entry; many small players thrive	Battle for scale; rapid consolidation; a few big players dominate
Culture	Highly service oriented; customer-comes-first mentality	Employee centered; coddling the creative stars	Cost focused; stress standardization, predictability, and efficiency

Telecom Italia (beside Economics row, Customer relationship column)

H3G (beside Economics row, Infrastructure column)

Actual business challenges in several industries
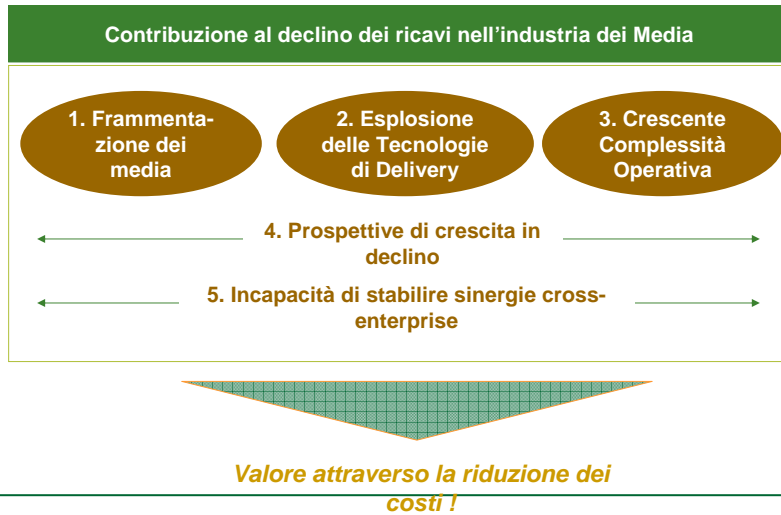
◇ Telecommunications
  ¤ Positioning in the broadband business model
    * Wireline carriers need to recover the voice revenues flowing to Wireless operators
    * Wireless carriers, in an increasingly competitive environment, need to grow voice revenues and introduce value added services for transitioning to 3rd gen networks
    * Broadband drives convergence of Telecom and Media (triple play)
      * Value chains become more complex driving new architectural challenges
  ¤ Next Generation Networks (NGN)
    * Voice-over-IP and Value Added Services propel the move to NGN
    * Dual challenge of rejuvenating network services while managing down legacy networks
◇ Utilities
  ¤ Consolidation of local utilities still under way; liberalization slowly taking place
  ¤ Intelligent network and AMM
    * Regulatory policy change, network performance pressures and increasing infrastructure and upgrade costs are 'pain points', which drive the need for transformation to the 'Intelligent Network' to improve operating performance and service levels, while optimizing costs
    * Automated Meter Management (AMM) is a major enabler of the intelligent network implementation
◇ Media & Entertainment
  ¤ The Media Value Chain fractures under Web pressure
    * New entrants are getting pieces of the value chain
  ¤ Digital Media Asset Management
    * For exploitation of broadband and digital interactive terrestrial TV

La combinazione dei 5 fattori indicati crea un urgente bisogno di creare valore attraverso la riduzione dei costi

Esempio A

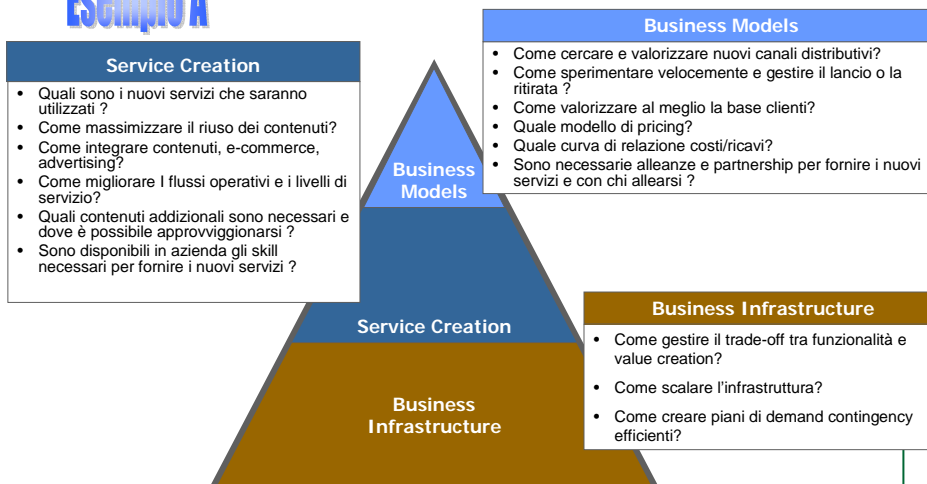**Contribuzione al declino dei ricavi nell'industria dei Media**

- **1. Frammenta-zione dei media**
- **2. Esplosione delle Tecnologie di Delivery**
- **3. Crescente Complessità Operativa**

4. Prospettive di crescita in declino

5. Incapacità di stabilire sinergie cross-enterprise

Valore attraverso la riduzione dei costi !

Le società dei Media hanno chiara la necessità di sfruttare le nuove opportunità di ricavo, ma le modalità sono ancora incerte richiedendo un ripensamento profondo del modello di business
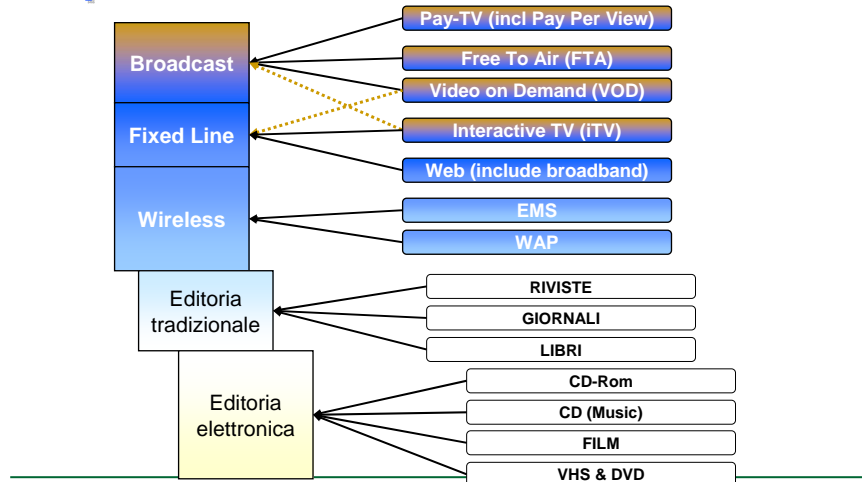
Esempio A

Service Creation
- Quali sono i nuovi servizi che saranno utilizzati ?
- Come massimizzare il riuso dei contenuti?
- Come integrare contenuti, e-commerce, advertising?
- Come migliorare I flussi operativi e i livelli di servizio?
- Quali contenuti addizionali sono necessari e dove è possibile approvviggionarsi ?
- Sono disponibili in azienda gli skill necessari per fornire i nuovi servizi ?

Business Models
- Come cercare e valorizzare nuovi canali distributivi?
- Come sperimentare velocemente e gestire il lancio o la ritirata ?
- Come valorizzare al meglio la base clienti?
- Quale modello di pricing?
- Quale curva di relazione costi/ricavi?
- Sono necessarie alleanze e partnership per fornire i nuovi servizi e con chi allearsi ?

Business Models

Service Creation

Business Infrastructure

Business Infrastructure
- Come gestire il trade-off tra funzionalità e value creation?
- Come scalare l'infrastruttura?
- Come creare piani di demand contingency efficienti?

Slide 47

L'analisi dei canali di distribuzione tradizionali e di quelli digitali emergenti sul mercato, associata alla valutazione …

Esempio A

- Broadcast
- Fixed Line
- Wireless

Canali:
- Pay-TV (incl Pay Per View)
- Free To Air (FTA)
- Video on Demand (VOD)
- Interactive TV (iTV)
- Web (include broadband)
- EMS
- WAP

- Editoria tradizionale
  - RIVISTE
  - GIORNALI
  - LIBRI
- Editoria elettronica
  - CD-Rom
  - CD (Music)
  - FILM
  - VHS & DVD

Slide 48

… delle posizioni competitive attuali dei diversi attori sulla catena del valore, mette in evidenza il rischio di marginalizzazione della posizione dei broadcaster.

Esempio A

La posizione competitiva dei broadcaster rischia di diventare marginale nell'ambito della Value Chain estesa

	Content Creation / Production	Aggregation	Distribution / Delivery	Customer Access
Pay-TV	Sports, Studios	Pay-TV ops	SES, Eutelsat	Pay-TV ops, cable
FTA/Radio	Inhouse	Broadcaster	Broadcaster	---
VOD	Sports, Studios	Telco, pay-TV	Telco, Inhouse	Telco, pay-TV
iTV	Retailers	Telco, Open	Telco, satellite	Open
Web	Anyone	Portals	ISP, Telco	ISP
EMS	Users	---	Telco	Telco
WAP	Anyone	Portals	Telco	Telco

In rosso i "*pinch point*": punti della value chain dove la struttura del mercato e/o del business model permette ad un'azienda di catturare la maggior parte del valore
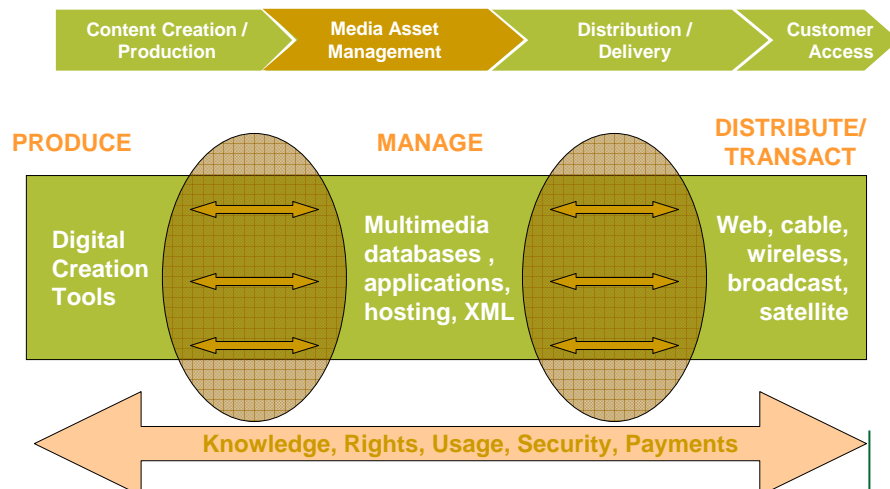
Gli attuali workflow sono inefficienti e duplicati per ciascun canale di distribuzione. Il "corto-circuito" esistente fra produzione e distribuzione impedisce una gestione efficiente dei contenuti

Content Creation / Production	Aggregation	Distribution / Delivery	Customer Access

Digital Creation Tools

Web, cable, wireless, broadcast, satellite

Esempio A

Driver di Cambiamento	OGGI	DOMANI	Driver di "peggioramento"
Maggiore frammentazione	• Diversi workflow manuali e inefficienti	• Stessi problemi per ogni nuovo canale di distribuzione	Crescente varietà di media
Canali di distribuzione crescenti	• Danneggiamenti e perdite di media asset	• Personalizzazione	Crescente volume degli asset
Versioni dei contenuti crescenti	• Difficoltà nella gestione dei metadati	• Integrazione di contenuti, merci, servizi e transazioni commerciali	Crescente numero di partner
Costi di produzione crescenti			Necessità di link complessi

Convergenza Digitalizzazione

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Operare in maniera efficiente in un contesto di crescente complessità di contenuti e molteplicità di canali, richiede di _disaccoppiare_ la produzione dalla distribuzione.

Esempio A

Content Creation / Production	Media Asset Management	Distribution / Delivery	Customer Access

PRODUCE **MANAGE** **DISTRIBUTE/ TRANSACT**

Digital Creation Tools

Multimedia databases, applications, hosting, XML

Web, cable, wireless, broadcast, satellite

Knowledge, Rights, Usage, Security, Payments

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Slide 1

Nel Video on Demand, accanto al modello tradizionale basato su wired broadband, si vanno sviluppando modelli che sfruttano il broadcast tradizionale insieme a capacità di memorizzazione locale (LVOD)

Esempio A

	Interattività locale	Interattività remota
Video poor	TELETEXT	On-line
		WEB-TV
	CD-ROM	iTV
Video rich		VOD
	VHS/DVD	LVOD
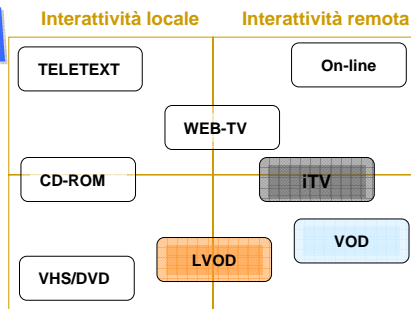
◇ Il modello classico VOD richiede un video server centrale che invia i contenuti allo spettatore in maniera interattiva sfruttando un collegamento punto punto via cavo.

◇ Recentemente l'arrivo della tecnologia DSL con l'associata riduzione dei costi di banda, e la riduzione dei costi della capacità dei server ha condotto a un rinnovato interesse nel modello VOD

◇ Tuttavia il modello VOD presenta ancora molti problemi di cui il modello LVOD non risente

Caratteristiche di rilievo	VOD	LVOD
Costi dell'infrastruttura di delivery (scalabilità)	Proporzionali al numero di clienti (> 600 $ per stream)	Indipendenti dal numero di clienti
Costi di accesso alla rete	Rete ADSL ad almeno 2 Mbit/s Costi Alti	Rete broadcast
Universalità di accesso	Limitata ai punti raggiunti da rete di qualità adeguata	Rete broadcast

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Slide 2

Lo catena del valore in un contesto LVOD può mutare significativamente così come i punti da cui estrarre valore

Esempio A

Value chain tradizionale senza PVR
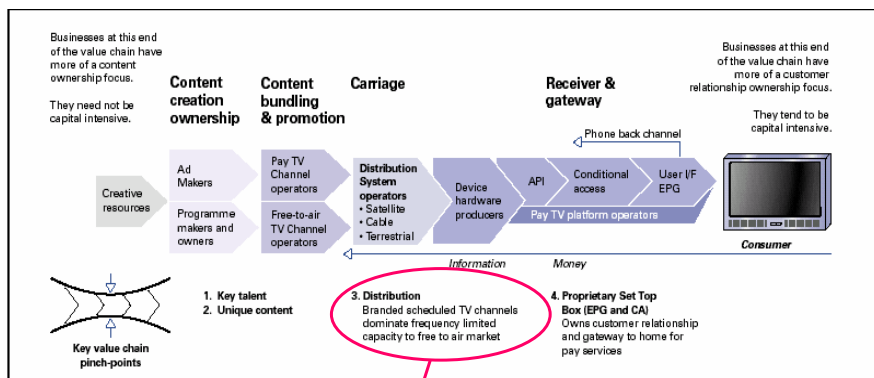
Questa sezione tende a perdere valore in un contesto LVOD nel quale il contenuto è dominante rispetto al palinsesto

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La focalizzazione competitiva si concentrerà su disponibilità dei contenuti, relazione con il cliente e controllo delle guide elettroniche ai programmi (EPG = Electronic Programming Guide)

Value chain futura in un contesto LVOD

Esempio A
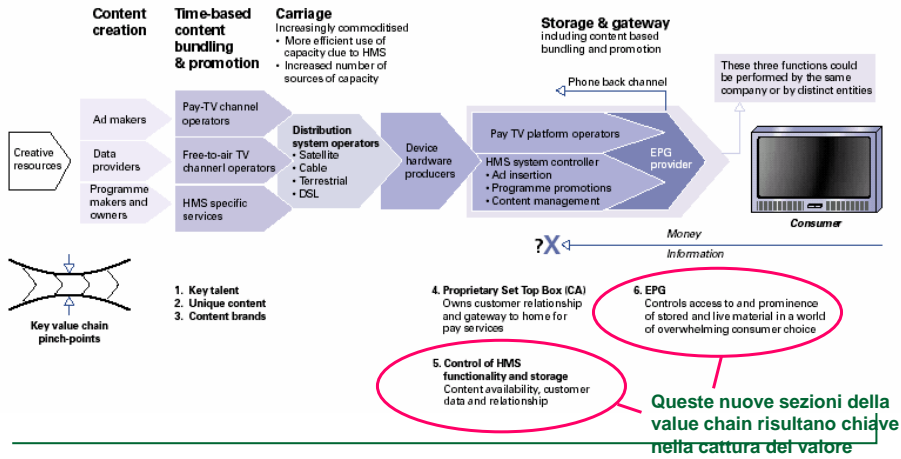
IT role in the challenged business

27

The need to change for the business has been triggered by the challenges we have discussed so far

Successful companies do not just sell what they make, but they make what the customers want and they make faster at the right price

Old paradigm (mechanic)
- Hierarchical
- Control focus
- Mgmt drives

New paradigm (organic)
- Networks
- Loose / Flexible
- Customers drive

Competitive advantage:
- Economies of scale
- Specialization

Competitive advantage:
- Differentiation
- Responsiveness
- Efficiency

Cross the gap by:
- *Focus on Specialization and continuous innovation*
- *Empowering all levels and make them accountable*
- *Streamline processes*

The situation where we are starting from

Divergent Model

Business Architecture
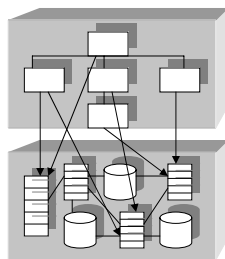
IT Archtecture

✧ **PAINS**:
- ¤ Enterprise Business develops on his own way
- ¤ IT infrastructure follows in reactive mode
- ¤ No processes lead to mess resources and systems to solve single problem
- ¤ Multiple single point of views (silos), no global vision

✧ **IMPERATIVES**:
- ¤ Coordinate and align IT goals vs. business mission
- ¤ Business integration flexibility

The quest to create value with IT

◇ First, develop technological innovations and the complementary managerial innovations in tandem.
◇ Second, focus technology investments on cutting the interaction costs that most affect productivity.
  ¤ These interaction costs are quite specific to a given vertical industry, and the investments of most IT leaders have a strong vertical focus.
◇ Third, clearly understand the specific productivity levers of the sectors (and subsectors) in which you do business.
  ¤ Focus IT investments on programs that have the highest possible impact on those levers— and thus an impact on the top and bottom lines.
◇ Fourth, make their investments in the right order, to build IT capabilities in sequence over time.
◇ Finally, retool the business processes and transform the organization to leverage the managerial innovations and IT capabilities

3 - Different economic sectors have unique performance drivers that are based on the products they sell, the customers they sell to, and the costs associated with conducting business in that sector
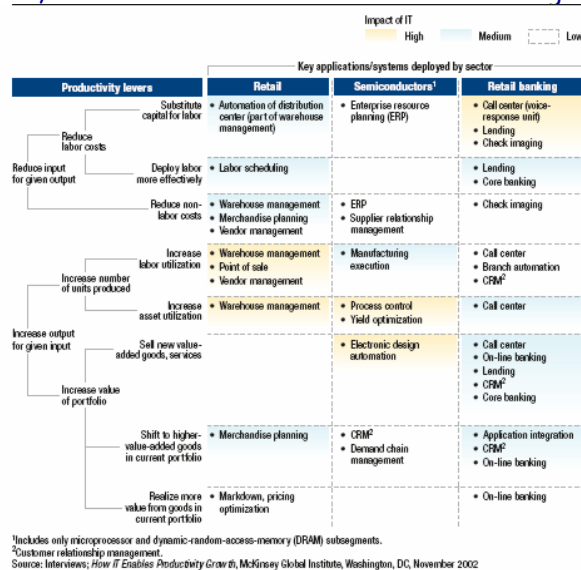
Companies that deploy IT successfully not only clearly understand the productivity levers important to their sectors but also use technology to achieve step-change improvements in these levers

4 - Getting the sequence right: Securities
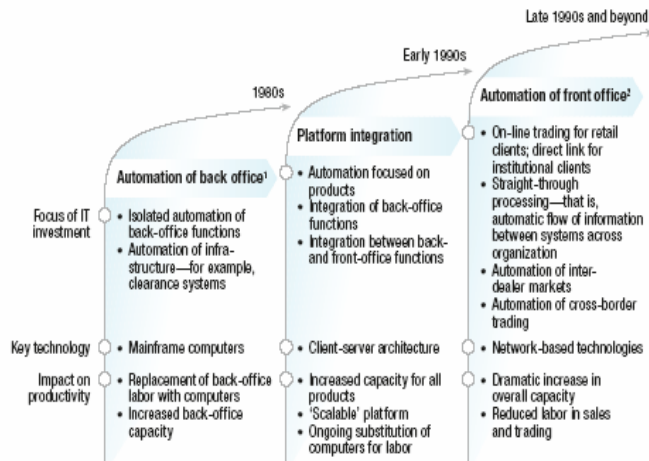
The focus of the company's IT investment moved from back-office automation to platform integration to front-office automation—all with an escalating effect on productivity gains.

[1] Such as payments, settlements, accounting.
[2] Such as sales, dealing, trading.
Source: Interviews; *US Productivity Growth 1995-2000*, McKinsey Global Institute, Washington, DC, October 2001