

MARKETING INFORMATION SYSTEMS: PART 5

COURSE CODE: PV250

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TOPICS

MKIS concepts

**Marketing planning, process modelling and decision making by using
MKIS. Tools & software, lab work: *Marketing plan Pro planning template***

MKIS design (structure and processes)

INTERRELATIONSHIP OF MIS, MKIS AND IT CONCEPTS


Marketing IS concepts	Management IS creation concepts (O'Brien, 1990)	IT concepts (O'Brien, 1990), Zikmund et al 2003)
1 Integration of functional modules	Management operations processing	Transactional processing
2 Project and campaign	Creating strategic advantage ERP (enterprise resource planning) CRM	Analytic applications, EAI (enterprise application integration), CRM
3 Value chain system		
4 Competitive system		
5 End-user „ad hoc“ support		
6 Support for marketing management processes	Decision making support (DSS) Expert systems (ES) Executive information systems (EIS) Business intelligence systems (BI)	data warehouses, data mining, OLAP (online analytical processing)
7 Marketing intelligence system		
8 Multidimensional MkIS		

MARKETING IS CONCEPTS

- **1 Integration of functional modules**
- **2 Project and campaign**
- **3 Value chain system**
- **4 Competitive system**
- **5 End-user „ad hoc“ support**
- **6 Support for marketing management processes**
- **7 Marketing intelligence system**
- **8 Multidimensional MkIS**

1 INTEGRATION OF FUNCTIONAL MODULES

This concept is the most prevailing.

- **MkIS modules are composed by creating collection of functional modules, each of them designed for specialized marketing-related function.**
 - **The concept correspond to the theoretical works which present marketing function of the enterprise as list of activities and personal responsibilities**
 - **The input information for each module is different and related to functions (e.g. sales, customer service, advertisement)**
 - **Output- standardized reports and analytical possibilities**
- 

EXAMPLE : SAP INTEGRATED SYSTEM:


System modules are composed of various functional blocks.

mySAP Customer Relationship Management - Enterprise

	Marketing Planning	Customer Segmentation	Campaign Management	Trade Promotion Management	Lead Management	Person		
	Sales Planning & Forecasting	Territory Management	Account & Contact Management	Activity Management	Opportunity Management	Quotation & Order Management	Contract Management & Leasing	In
	Service Planning & Forecasting	Customer Service & Support	Resource Planning & Optimization	Service Operations Management	Profession			
	Customer Analytics	Product Analytics	Marketing Analytics	Sales Analytics	Service Analytics	Interacti	An	

2 PROJECT AND CAMPAIGN

This concept corresponds to the idea that marketing lacks structure and rules.

- **Each marketing activity is organized in an unique and original way; unexpected and innovative solutions created competitive advantage.**
 - **It includes creating marketing campaigns, surveys of loyalty and satisfaction are organized by applying project management principles**
 - **Such type of systems have mainly general functionality (not necessarily related to marketing).**
 - **Examples- Microstrategy 3-step campaign module (pre-campaign, during and post-campaign activities); marketing 4P mix search**
 - **This concept involves matching information and goal**
- 

http://csf-dev-2/eCRMdemo/Html/frame/home_frame.asp - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit

Address http://csf-dev-2/eCRMdemo/Html/frame/home_frame.asp Go Links >>

megastore
www.megastore.com

home customers campaigns web traffic channels

Logout Friday, April 21, 2000

eCampaign

- Pre_Campaign Guide
 - Documents
 - Subscriptions
- Current_Campaign
- Post_Campaign

Campaign Design - Step 2 of 4 1 2 3 4 [Subscribe](#)

Market Basket Analysis can further aid in determining which products or product groups to offer as part of a special promotion. This type of report identifies all products that sell with a selected product (the study product). It also identifies how frequently each item was sold with the study product. By determining which products sell well together, it is easier to select items to include in a promotional campaign.

Report: Market Basket Analysis

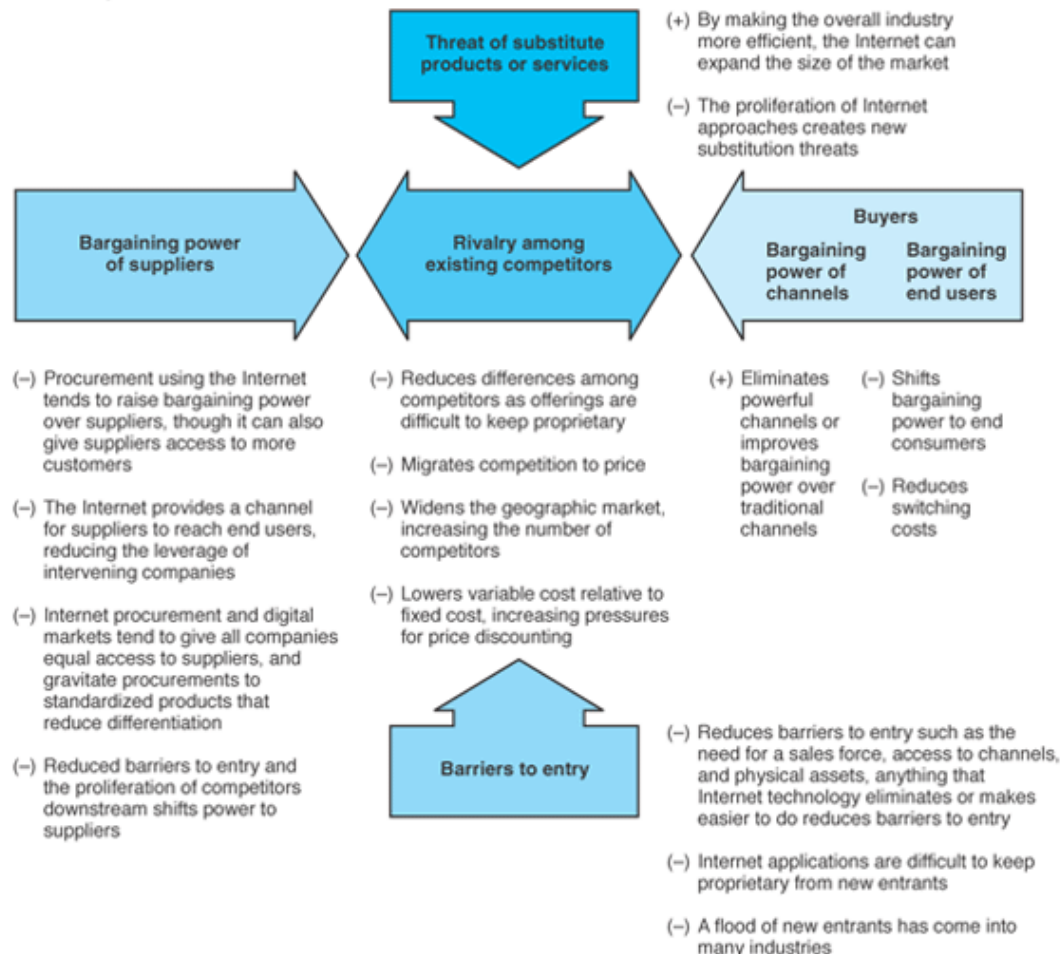
Study Product Group	Measures	Attachment Rate (%)
Pop	Art & Architecture	
	Business	
	Literature	
	Miscellaneous	
	Science & Technology	
	Sports & Health	
	Audio Equipment	
	Cameras	
	Computers	
	Miscellaneous	
	TV's	
	Video Equipment	
	Action	32%
	Comedy	22%
	Drama	16%
	Horror	20%

Print
Open in Excel
Outline Mode
Totals
Sort Ascending Descending
Details
Scroll Row Headings
Restore
Attachment Rate (%) Properties...
AutoFormat...
About MicroStrategy Grid

Study Product Group: ^ Pop < 44 >
Month: ^ Jul-1999 < 199907 >

PORTER'S FIVE COMPETITIVE FORCES MODEL

Exhibit 2.9 Porter's Competitive Forces Model: How the Internet Influences Industry Structure



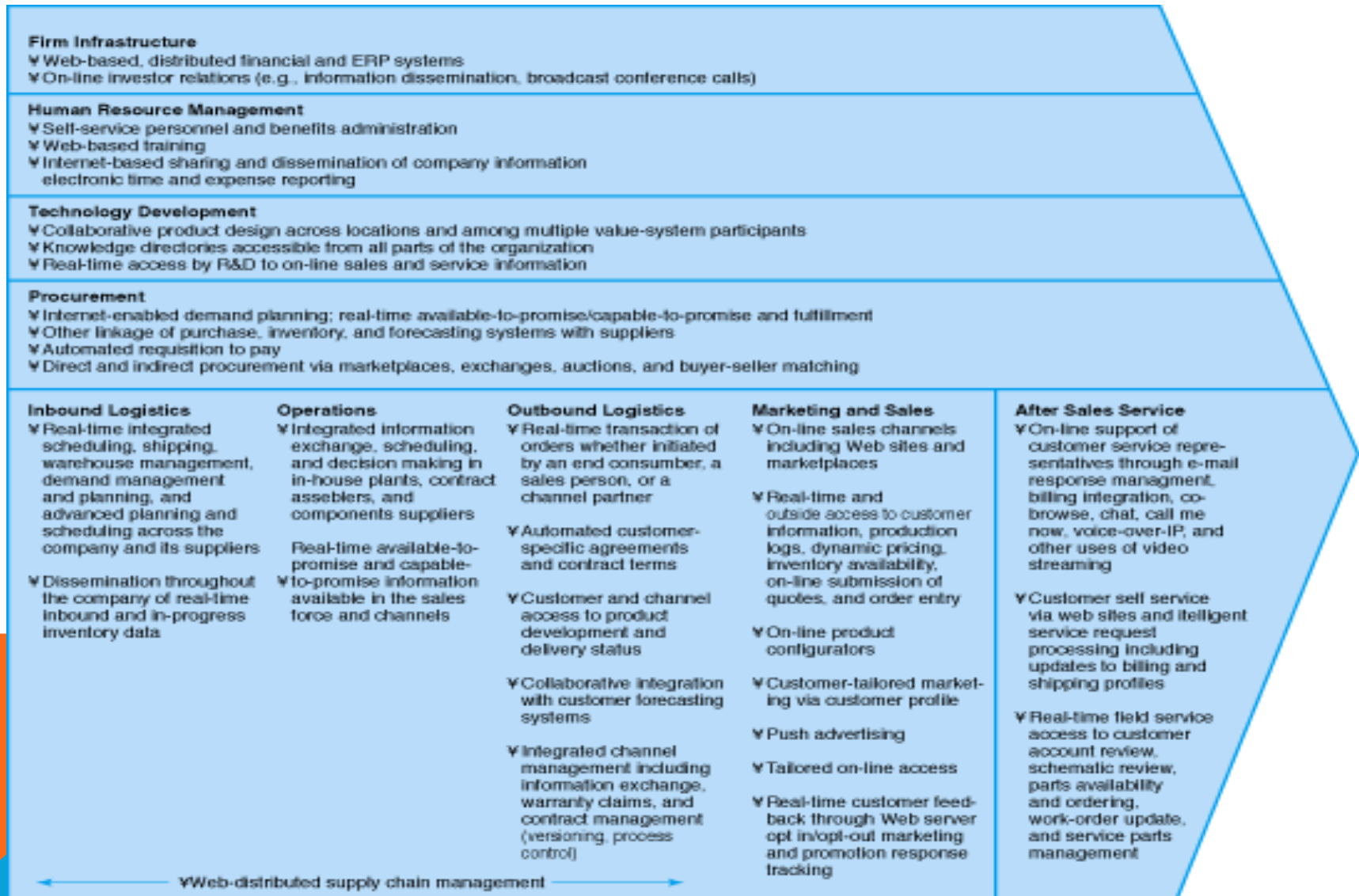
Source: Reprinted by permission of *Harvard Business Review*. From "Strategy and the Internet" by Michael E. Porter, *Harvard Business Review*, March 2001. Copyright ©2001 by the Harvard Business School Publishing Corporation; all rights reserved.

3 VALUE CHAIN SYSTEM

These are MkIS aiming effective supply of marketing department by information from various sources emanating in the enterprise value chain: warehouses, point of sales terminals, mobile communications, call centres, etc

- Information from various sources is stored in data warehouses for further analysis

THE VALUE CHAIN FRAMEWORK (M.PORTER)



4 COMPETITIVE SYSTEM

MkIS system has functionality which creates barrier for competitors to entry.

- **Functions are specialized for business**
- **Airline reservation (Smart Amadeus, SABRE), pharmacy (Microstrategy Inc., SAP), parcel sending services (UPS; TNT; DHL)**

5 END-USER „AD HOC“ SUPPORT

Information supply for the“ad hoc” needs of the user (high level , mid level managers)

- Include expert, executive information, rule based procedures.
- Mainly are related to dashboards

6 SUPPORT FOR MARKETING MANAGEMENT PROCESSES

MkIS modules for planning, control, audit, accounting methods

- Information sources and methodology is selected by the marketing specialist
- E.g. marketing planning software

7 MARKETING INTELLIGENCE SYSTEM

Marketing knowledge and intelligence management

- **Includes methods and functions for capturing information (surveys, social network, transaction)**
- **Data mining methods, computational intelligence for detecting hidden relationships**

8 MULTIDIMENSIONAL MKIS

Multidimensional MkIS is defined as a system, created for providing information for marketing management processes (decision support, planning, control, organizing marketing activities), where the input information, describing the marketing-related phenomena, is transformed into multidimensional space, and analysed along the following dimensions:

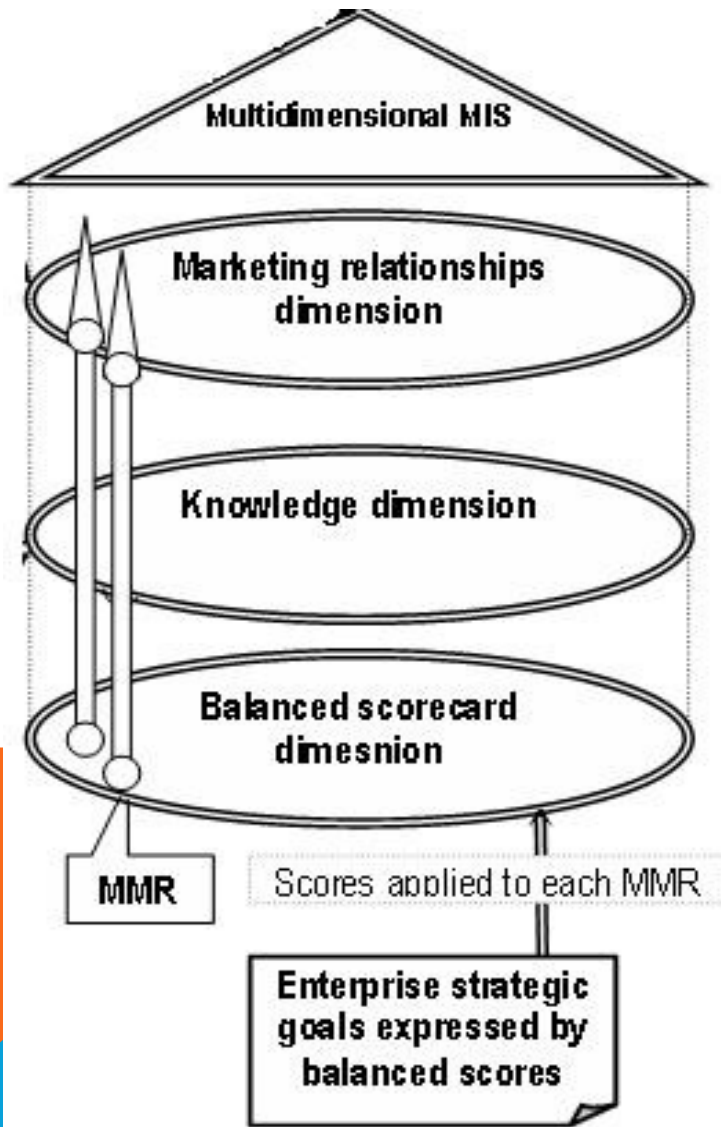
- marketing relationships,
- knowledge and
- balanced scorecard

THE LEVELS OF ANALYSIS IN MKIS

The analyzed MkIS can be applied for one or two levels of analysis and only for partial presentation of situation and dynamics.

- The most advanced systems from the multidimensional point of view are the CRM systems, created for enterprise relationships. They present possibility to map customer relationships, connected with related information created in various functional modules of the integrated system or ERP (MS Axapta, Microstrategy, SAP).
- The software for control by interrelated indicators (e.g. balanced scorecard, KPI, Six Sigma, etc.) is implemented in several certified integrated systems .
- The control modules exist separately and cannot express the marketing processes, situation and development in enterprise, however they present possibility for their conceptual integration into multidimensional MkIS. 20

STRUCTURE AND FUNCTIONING OF MULTIDIMENSIONAL MKIS



The marketing relationships dimension the chart of main marketing relationships gives logical view of enterprise marketing structure.

The knowledge dimension of MkIS is formed by attaching sources of information related by context to the marketing relationships.

The balanced scorecard dimension implements the goals level, created for feedback and control of the MkIS.

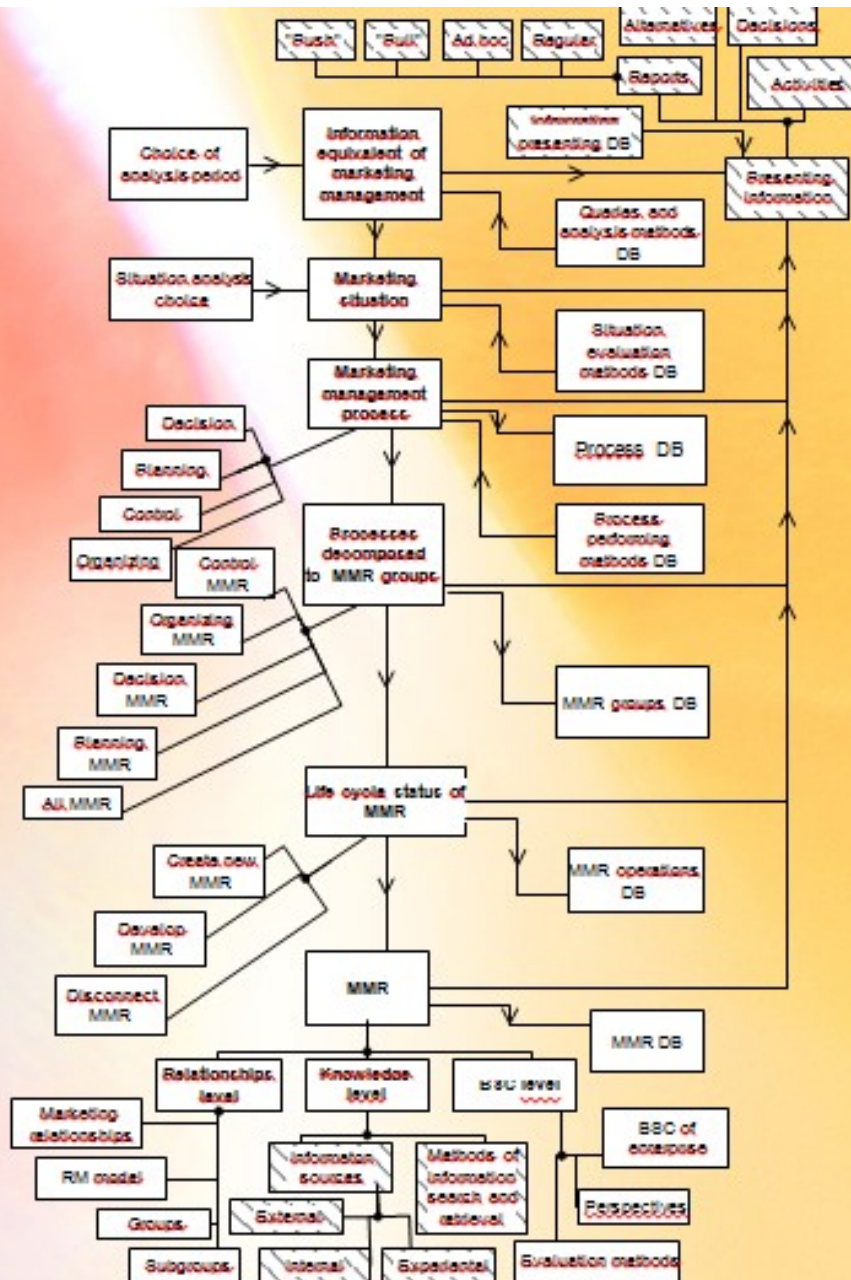
One conceptual element of MkIS structure is the multidimensional marketing relationship (MMR). It is formed and parameterized at the three dimensions of MkIS (Kriksciuniene, D. 2004).

STRUCTURE AND FUNCTIONING OF MULTIDIMENSIONAL MKIS

The understanding of vertical MkIS structure, consisting of the set of multidimensional marketing relationships, which can be formed and adapted for each enterprise .

This structure is used instead of traditional horizontal MkIS structure, combined of operational modules of various functionality.

The functioning of MkIS is based on the decomposing principle, where all the marketing processes and activities are represented as groups of related MMR



The multidimensional MkIS structure

The existing MkIS can be mapped as parts of the presented system view

MKIS EXAMPLES

IBM tools for marketing (Video)

http://ibmtvdemo.edgesuite.net/software/analytics/cognos/videos/launch_oct2012

MKIS EXAMPLES

<http://www-03.ibm.com/software/products/en/category/SWX00?lnk=msoST-emma-usen>

<http://www-01.ibm.com/software/marketing-solutions/launch-fr13/index.html>

Enterprise Marketing Management Solutions

All Solutions

Real-time Marketing Solution

eMail Marketing Solution

All Solutions

Real-time Marketing Solution

eMail Marketing Solution

Interactive Marketing Solution

Event based Marketing Solution

Marketing Operations Solution

Personalization Solution

Pricing and Merchandising Solution

Lifecycle Price Management Solution

Advertising Solution

Retargeting Solution

Targeted Recommendations Solution

Social Media Marketing Solution

Mobile Marketing Solution

Search Marketing Solution

Customer case studies

A "Day in the Life" with IBM Solutions for Marketers, Merchandisers and eCommerce Pros

1. Omni-Channel Commerce & Product Recommendations

Prepare a new microsite using Websphere Commerce and include automated cross-sell via IBM Product Recommendations in a Websphere e-spot (just a few clicks thanks to pre-built integration)



2. Pricing, Promotion & Product Mix Optimization

Use IBM DemandTec, e.g. to determine optimal promotions to extend to top target customers



6. Marketing Performance Optimization

Use marketing attribution analytics, e.g. to understand which efforts to continue vs. discontinue

5. Cross-Channel Marketing Optimization

Retarget clients who experienced struggle with promo codes e.g. by importing a list from IBM Tealeaf and prompting call-center agents to offer help when clients call in



4. Customer Experience Management

Use IBM Tealeaf, e.g. to identify when customers experience struggle with promo codes so that you can resolve the issues quickly. Tealeaf deployment is easy on any site but now is even more automatic on Websphere Commerce sites and mobile applications built with IBM Worklight



3. Digital Marketing Optimization

Use IBM Marketing Center, e.g. to extend personal promo codes to target audience via triggered, intra-day email

MKIS IN REAL ENTERPRISES

The empirical survey results (Study materials)



MKIS STRUCTURES IN THEORETICAL WORKS

Ph.Kotler

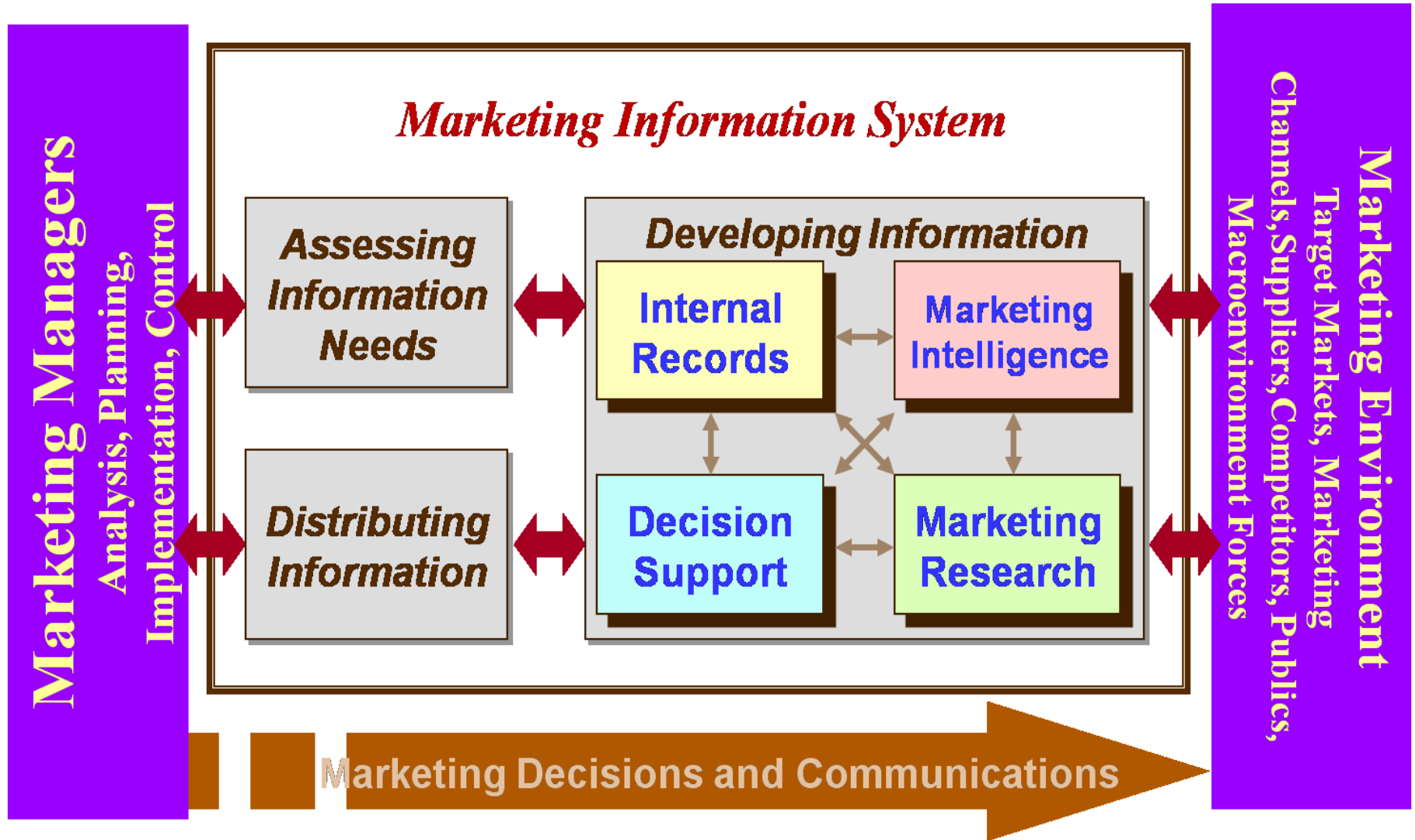
McCarthy

Brandaid

Etc. modified structurograms



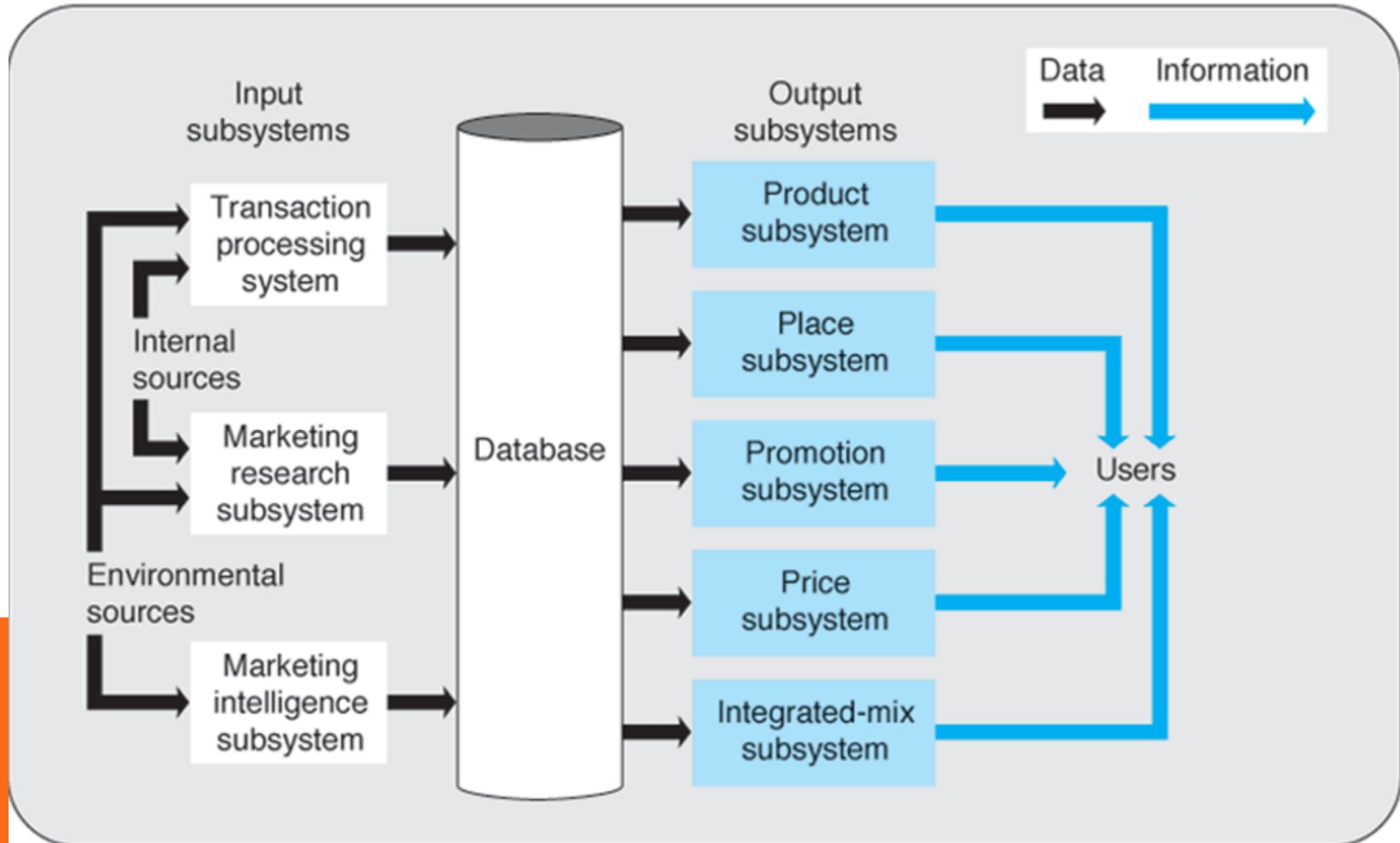
THE MKIS MODEL (SUBSYSTEMS)



THE MKIS MODEL (MCCARTHY)

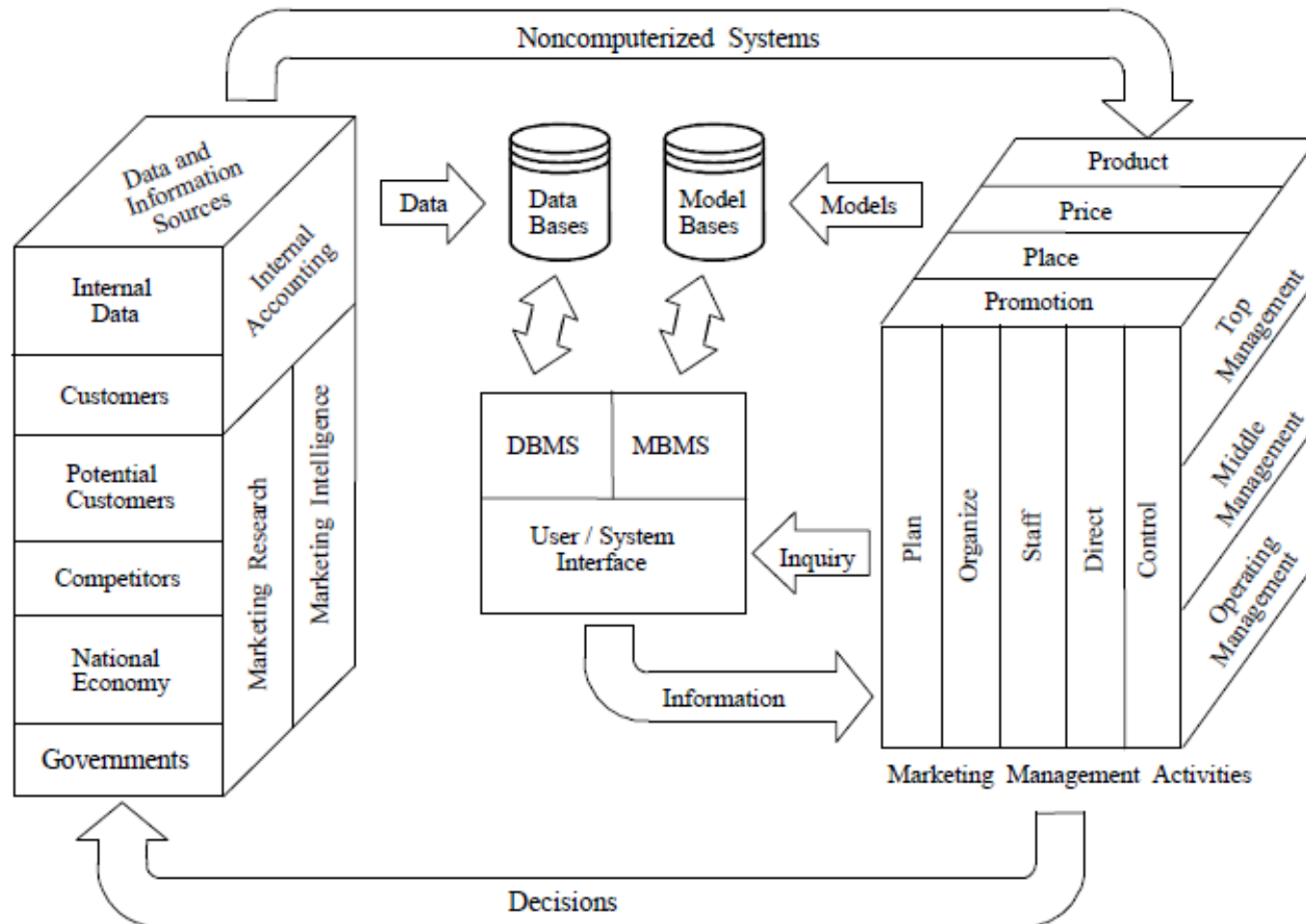


The MkIS Brandaid model (4P)



The MkIS in empirical research :

Marketing Information Systems in the Top U.S. Companies: A Longitudinal Analysis



ASSIGNMENT 3

By using template for marketing planning (Marketing Plan Pro 6), make design for the MkIS of the enterprise

The sample enterprise- your own idea or your enterprise developed by CESIM simulation