



Marketing Information Systems: part 1

Course code: PV250

Dalia Kriksciuniene, PhD

Faculty of Informatics, Lasaris lab.,
ERCIM research program



Syllabus 1

- ∞ Marketing domain area
- ∞ The user' requirements for the information content, inputs, retrieval and presentation
- ∞ Definitions, functions, requirements for the marketing information systems (MKIS).
- ∞ MkIS structure and concepts
- ∞ Investigation of the theoretical and experimental research in MkIS area in the scientific literature.

Marketing as a domain area

Many definitions of marketing- different accents
(AMA-American marketing association defines)

Marketing is a social process by which individuals and groups obtain what they **need** and **want** through creating and exchanging **products** and **value** with others (Kotler, Turner, 1985)

Keywords:

Needs, wants, demands

Products

Values and satisfaction

Exchange and transactions

Markets



Needs, wants, demands

Need is a state of felt deprivation of some basic satisfaction

- E.g. food, clothing –things of survival. These needs are not created by society or marketers, they exist in human biology

Wants are desires for specific satisfiers of deeper needs.

- They are different in various societies: a person needs food and wants oyster, needs clothing and wants a Chanel outfit, needs esteem and wants fancy necklace. Wants are continuously reshaped by social forces and communities (families, schools, church, etc.)



Needs, wants, demands

Demands are wants for specific products that are backed up by an ability and willingness to obtain them by exchange.

Wants become demands when backed up by purchasing power.

Companies have to measure not only how many people want their product but how many would actually be willing and able to buy it.

Needs, wants, demands

These distinctions answer frequent critics for marketing “marketers create needs” or “marketers get people to buy things they don’t want”.

Marketers do not create needs- they preexist marketers. E.g. marketers do not create need for social status.

Along with other influential forces marketers influence wants. They suggest to consumers or try to point out how particular product would satisfy need (e.g. BMW car or Parker pen for satisfying need for social status)

Marketers try to influence demand by making product attractive, affordable, available



Products

Broad understanding of product : anything that can be offered to someone to satisfy a need or want.

Product as a physical object serves as a vehicle for getting service (e.g. car for riding it). Services are carried by other vehicles such as persons, places, activities, organizations, ideas. Product covers all vehicles that are capable of delivering satisfaction of a want or need

Tangible and intangible products. Other terms for product: offer, satisfier, resource.

Values and satisfaction

How do consumers choose among the products that might satisfy a given need ?

E.g. how can we travel ? By foot, roller skates, bicycle, car, plane or cruise ship.

The list makes a choice set.

According it we make a product set

The goal set which we want to satisfy in need for traveling, e.g. speed, cost, ease. Each product has difference capacity to satisfy goals.

What is the ideal product ?

Product space is the rating of products by customer perception how far is is from ideal. Value (or utility) is greater if product is nearer to ideal

Exchange and transactions

Marketing exists when people decide to satisfy needs and wants in way we call exchange.

Four ways of exchange:

Self production (e.g. relieve hunger by fishing) - no marketing, as there is no interaction

Coercion (e.g. wrest food from other) – no benefit is offered to other party

Begging (e.g. approach other)- no tangible to offer, except gratitude

Exchange (offer resource in exchange for good: money, another good, service)- marketing arises from this approach

Exchange and transactions

Exchange is the defining concept underlying marketing- the act of obtaining desired product from someone offering something in return

Terms for exchange: leave them both better or not worse, that's why exchange is a value creating process

Exchange has to be seen as a process not event (two parties finding each other, negotiating, moving towards agreement)

If the agreement is reached, transaction occurs.



Markets

Economist view: market is the place where buyers and sellers gather

Marketers view: market consists of all potential customers sharing a particular need or want, able for exchange to satisfy it.

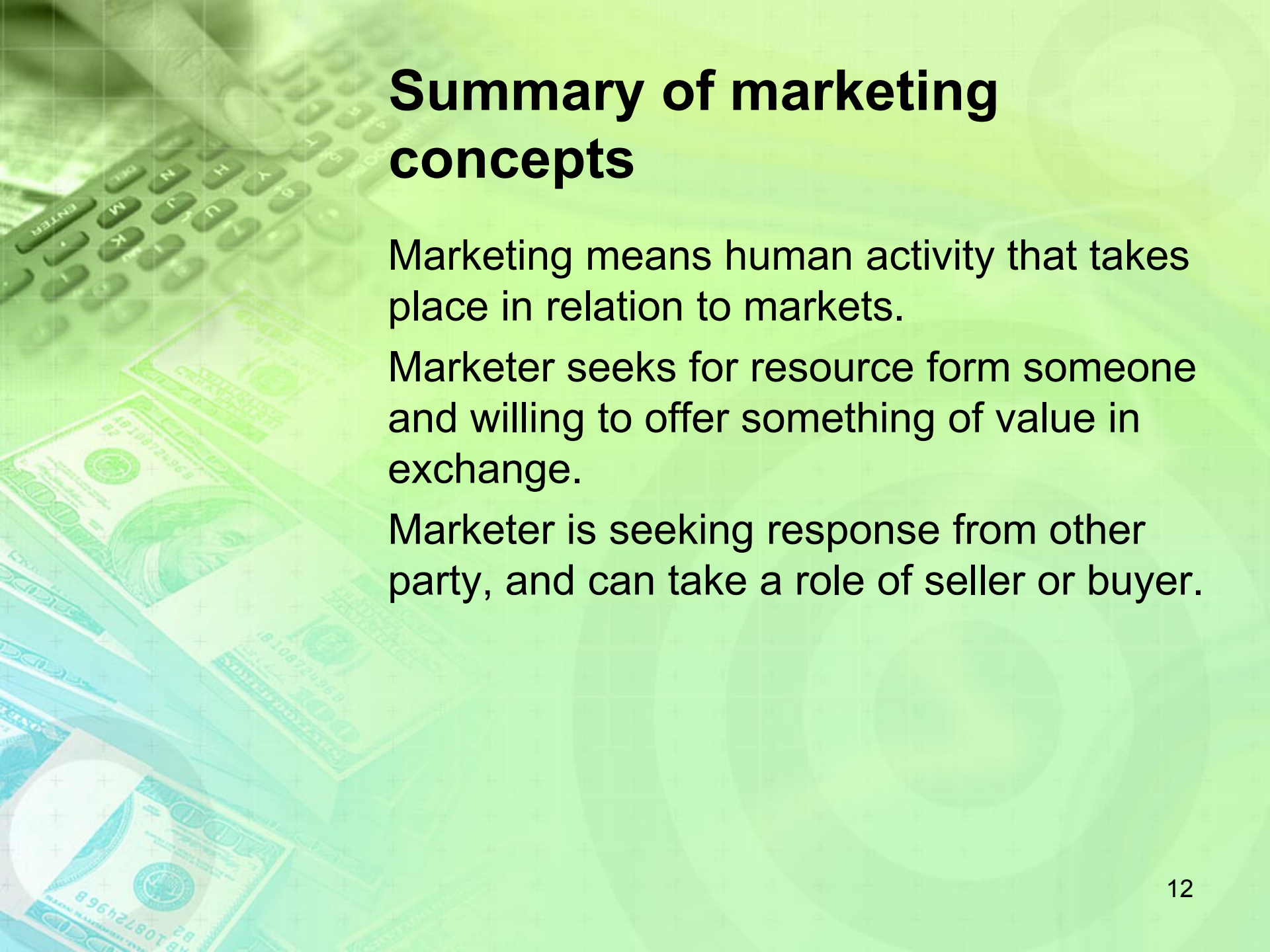
Market are seen as buyers (their groupings), the sellers-as industry. They are connected with flows:

- Communication

- Products (goods/services)

- Money

- Information



Summary of marketing concepts

Marketing means human activity that takes place in relation to markets.

Marketer seeks for resource from someone and willing to offer something of value in exchange.

Marketer is seeking response from other party, and can take a role of seller or buyer.

Marketing management

It is the analysis, planning, implementation and control of programs

designed to create, build, and maintain beneficial exchanges and relationships with target markets

for the purpose of achieving organizational objectives

The organization forms the idea of a desired level of transactions with the target market. It has a task of influencing the level, timing, composition of demand according to goals.

States of demand to cope: negative absent, latent, falling, irregular, full, overfull, unwholesome demand

Marketing management concepts

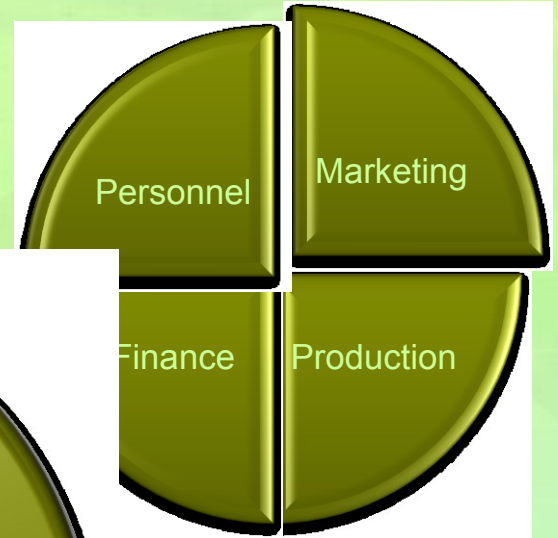
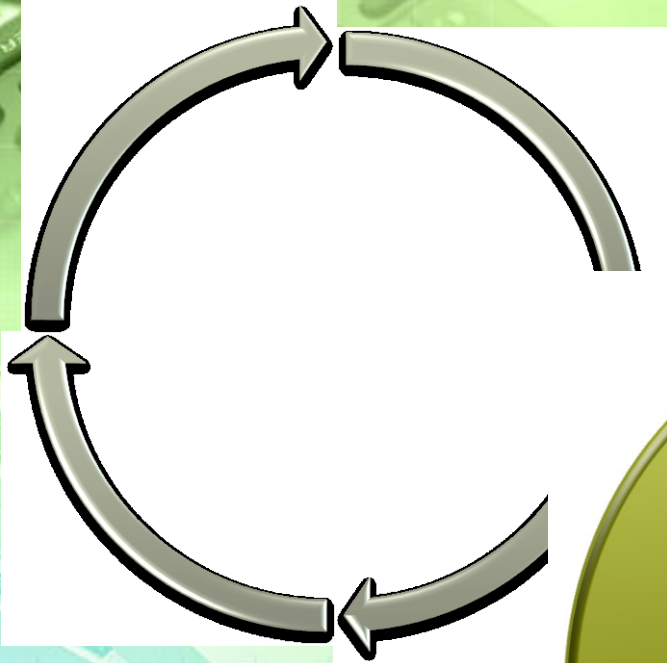
| Marketing orientation | Focus | Means | Ends |
|----------------------------|---|---|--|
| Production concept | Mass production lowering costs and price | High production efficiency and wide distribution coverage | Sell what is produced. Leads to impersonality of consumer |
| Product concept | Consumer favors only products that offer most quality, performance and features | Make good products and improve them over time | Sell what producers "love" cause marketing "myopia" losing sight what customer wants |
| Selling concept | Product | Selling and promotion | Profits through sales volume |
| Marketing concept | Meet customer needs | Integrated marketing | Profits through customer satisfaction. |
| Societal marketing concept | Determine customer needs | Deliver needs fulfillment better than competitors | Preserve and ensure long-run society welfare |



Marketing's role in a company

- Equal function or primary four: marketing, production, finance, personnel
- More important function
- Central major function
- Customer –central function for controlling 4 primary functions
- Customer as controlling, marketing and integrative function in the centre

Marketing's role in a company



Marketing theories

Most prevailing theory is 4P (McCarthy, 1968)-
marketing mix (customer, markets, etc. missing here).

Extension by Kotler (megamarketing) 4+2P

Booms&Bitner (Service marketing) 4+3P

Baumgartner (1991) – 15P

The mix concept was initially developed by Neil Burden (1964) derived from Culliton (1948) : marketing is a mix of ingredients (12 elements +4 forces) (Product planning, pricing, branding, channels of distribution, personal selling, advertising, promotions, packaging, display, servicing, physical handling, fact finding and analysis) + (behavior of : consumers buying, trades' (ret.wh), competitors and their position, governmental

Search for suitable set of ingredients for each transaction with customer.

4P – marketing mix components



Marketing theories evolution

| 4Ps McCarthy (1960) | 5Ps Judd (1987) | 6Ps Kotler (1984) | 7Ps Booms and Bitner (1981) | 15Ps Baumgartner (1991) |
|---------------------------|-----------------------|--------------------------|-----------------------------------|-------------------------------|
| Product | Product | Product | Product | Product/service |
| Price | Price | Price | Price | Price |
| Promotion | Promotion | Promotion | Promotion | Promotion |
| Place | Place | Place | Place | Place |
| | People | Political power | Participants | People |
| | | Public opinion formation | Physical evidence | Politics |
| | | | Process | Public relations |
| | | | | Probe |
| | | | | Partition |
| | | | | Prioritize |
| | | | | Position |
| | | | | Profit |
| | | | | Plan |
| | | | | Performance |
| | | | | Positive implementations |

Source: Gummesson (1994)

Marketing theories

Relationship marketing theory (Gronroos 1996, Gummesson, 1999 and USA “school”).

Christopher, Payne, Ballantyne (1991) Six markets


Kotler (1992) Ten players

Morgan, Hunt (1994) Ten partnerships

Gummesson 30R :classical relationships (3), special (14), mega (6), nano (7)

Relationship history of communication with customer leads to future activities including transactions.

Relationship processes can be considered as tangible, as they use resources and can be measured by quantitative indicators. They have life cycle. (Gronroos, 1996).

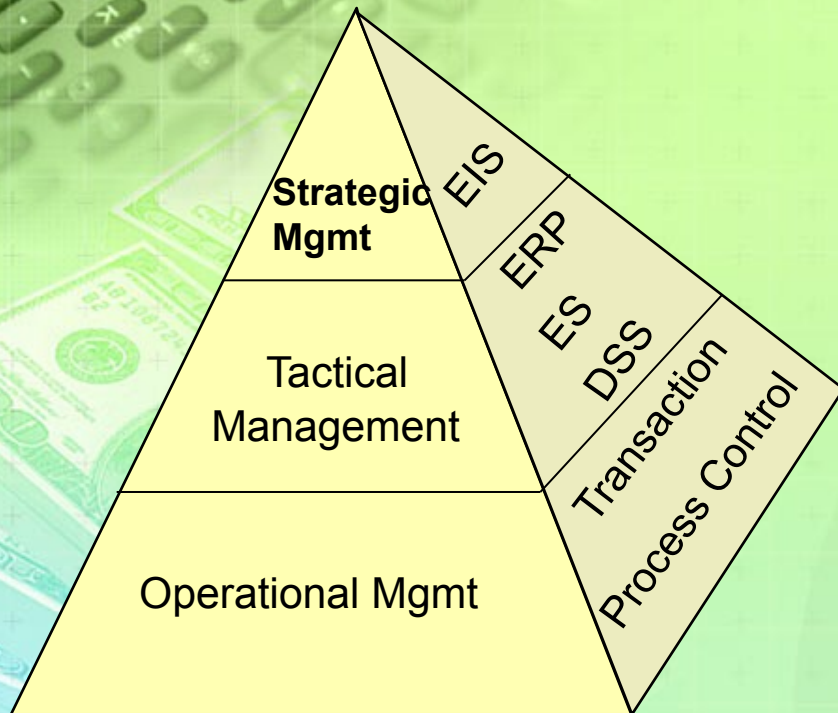


Marketing and management processes (functions)

- 5 Key Functions of Management
 - ∞ Plan
 - ∞ Organise
 - ∞ Make decisions (Command)
 - ∞ Co-ordinate
 - ∞ Control

If the specialist does not perform any of these functions, he cannot be considered as manager.

MIS & Related Organisational Functions (Lucey, T.)



Strategic Management:

Provides an organisation with overall direction and guidance – mission and vision (e.g. presidents, vice-prez.)

Tactical Management:

Develops the goals and strategies outlined by Strategic Management (e.g. Head of marketing department)

Operational Management

Manages and directs the day-to-day operations and implementations of the goals and strategies, e.g. sales manager

Non – Management employees:

Producing goods and services – serving customers, order processing.

Marketing work and careers

- Sales manager
- Sale representative
- Advertising and promotion manager
- Marketing researcher
- Customer service manager
- Product manager
- Market manager
- Marketing vice-president

Extensive career specifications exist in enterprises

Marketing work and careers (e.g. certification)

Identify information and research requirements for business and marketing decisions.

Manage the acquisition of information and the Marketing Information System (MkIS).

Contribute information and ideas for business and marketing decisions.

Create a competitive operational marketing plan appropriate to the organization's context.

Integrate appropriate marketing mix tools and manage them to achieve the effective implementation of plans

Marketing work and careers (e.g.certification)

Define and use appropriate measures to evaluate the effectiveness of marketing plans and activities.

Create an effective communications plan for a specific campaign.

Manage marketing communications activities.

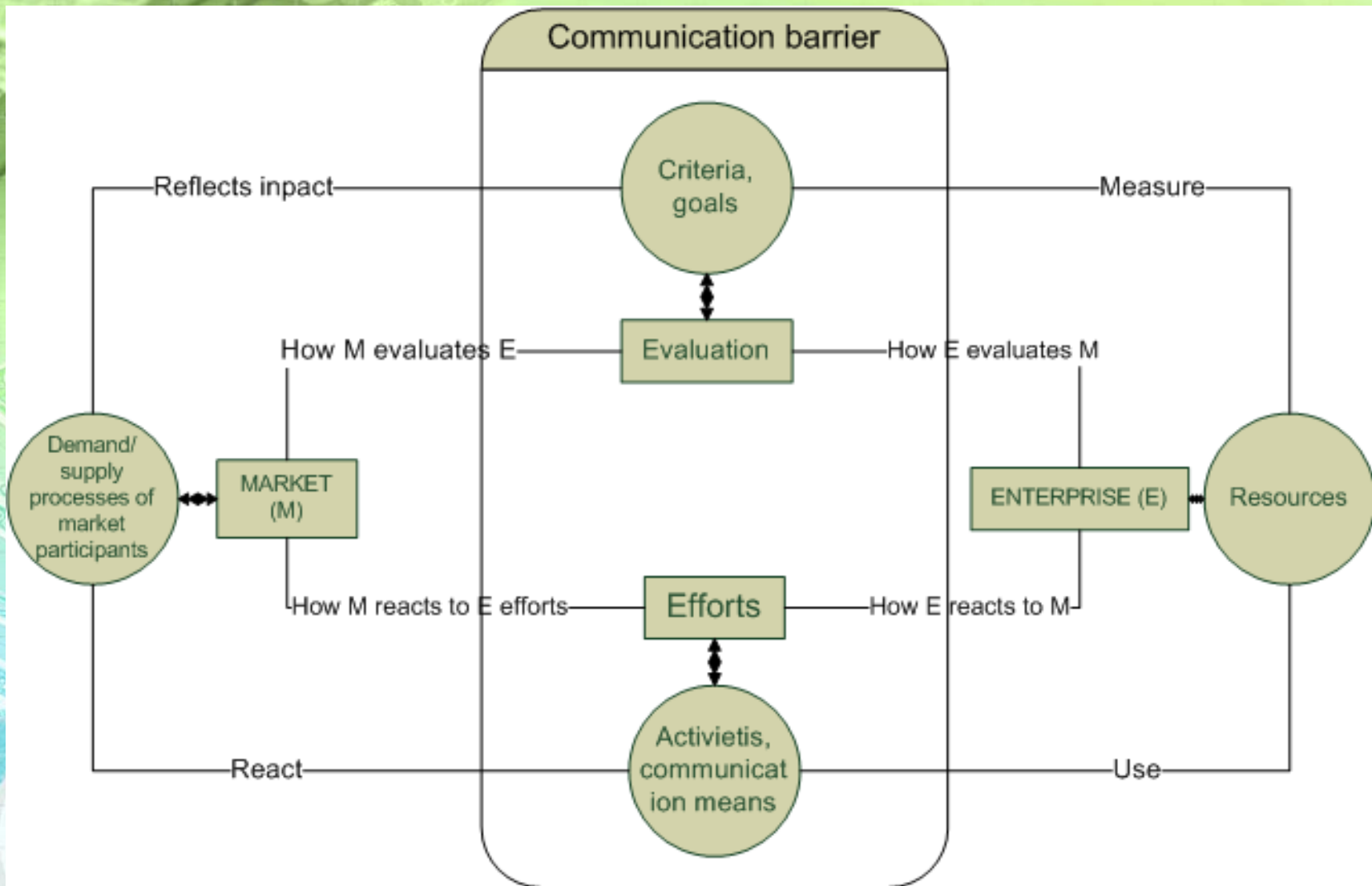
Develop and manage support to customers and members of marketing channels.

Plan a marketing project.

Manage a team for marketing project or tasks.

Make recommendations for changes and innovations to the marketing process for value enhancement

“Battlefield” for performing marketing tasks



MkIS as information equivalent of marketing management of the enterprise

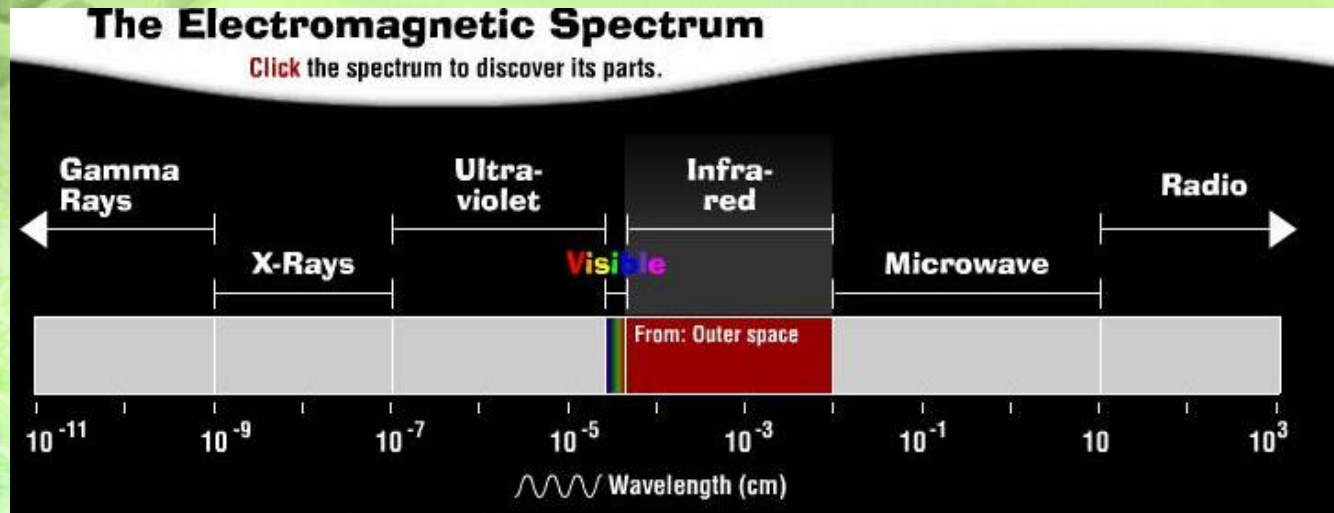
Management information systems have to reflect reality. By looking at the system we should be aware of structure and dynamics of processes of the entire scope of marketing.

E.g. accounting system of the enterprise consists of chart of accounts interrelated by double entry principle.

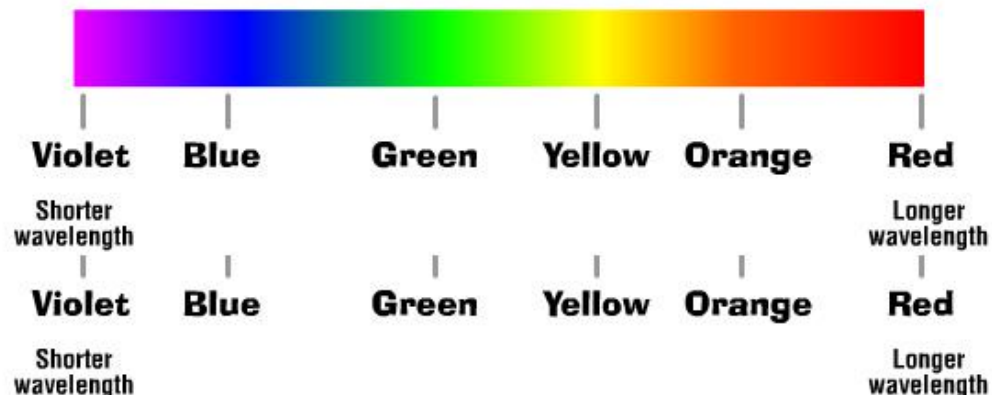
What are the components of marketing system, can we consider their entirety as information equivalent of marketing?



MkIS and marketing of the enterprise. What entirety we understand as system ?



The Visible Spectrum



Definitions of MkIS

MIS may be defined as a set of procedures and methods for the regular, planned collection, analysis, and presentation of information for use in making marketing decisions(Cox &Good, 1967)

MkIS comprises all computer and non-computer systems, which assist the marketing function to operate effectively. MkIS include many systems, which are not generally thought of in marketing terms, e.g. general ledger or production-planning systems.(O'Connor & Galvin 1997)

Marketing information systems are people, equipment, and procedures to gather, sort, analyze, evaluate, and distribute needed, timely, and accurate information to marketing decision makers (Armstrong & Kotler, 2007)

.. there are many more authors and definitions..

Requirements for MkIS by definitions

Requirements for MIS creation

| MIS quality | Requirement to MIS quality: description and author |
|--|--|
| MIS goal | <ul style="list-style-type: none">▪ Gather , sort, distribute, analyse, evaluate pertinent, timely and accurate information (Cox and Good, 1968; McCarthy <i>et.al.</i>, 1985; Marshall and LaMotte, 1992; Kelley, 1965)▪ Information for making effective decisions to improve planning, implementation and control (Kotler, 2001) |
| MIS structure | <ul style="list-style-type: none">▪ Set of procedures and methods(Cox and Good, 1968)▪ Combination of procedures, human and computerised resources (Kotler, 1985; Kelley, 1965; O'Connor and Galvin, 1999)▪ Formal system for creating organized information flow (Lucey, 1991, Marshall and LaMotte,1992)▪ Structure is freely composed of functional subsystems (Uhl, 1974) |
| Sources of information processed by MIS | <ul style="list-style-type: none">▪ External, internal, research information (McCarthy <i>et.al.</i>, 1989; Kotler, 2001)▪ Planning, control, research information (Smith <i>et al.</i>, 1968) |



MkIS definition summary

- ∞ The essence of a modern MkIS is people,
- ∞ who take part in the processes of marketing management
- ∞ by using the most recent achievements of IT.
- ∞ These processes are based on the flow of information,
- ∞ which enables to solve encountered decision problems
- ∞ and generate adequate marketing decisions.

MkIS definition summary

- ∞ MkIS definitions echo the management information system, no specific marketing-related features are presented.
- ∞ The marketing manager is mentioned in the definitions without distinguishing between various types of activities, marketing tasks or hierarchical level.
- ∞ MkIS is not defined as a general type of system (I-O-F), rather it is composed of computerized and non-computerized elements assisting marketing management processes.
- ∞ The MkiS structure is not stable, due to changing needs in each stage of marketing processes, availability of information technologies and data, risk, uncertainty.

MkIS definition summary

- ∞ The managers become part of group which plans information needs and implementation of MkIS. That makes MkIS unique in each enterprise.
- ∞ The qualification of managers is related to information quality. Improvement of information quality characteristics should go in tune with increasing skills.
- ∞ The changing environment for marketing decisions requires flexibility of inclusion required information sources.
- ∞ It means that the process of creating MkIS can become ongoing, its structure composed in a flexible way from various subsystems, and corresponds to subjective needs of the managers.

Influence of marketing theories to MkIS

Marketing is planned according to the 4P, it is implemented by performing different specialized tasks (market analysis, advertising, sales, customer service, etc.), it is controlled by applying historical financial indicators, although all marketing activities aim to bring changes in future.

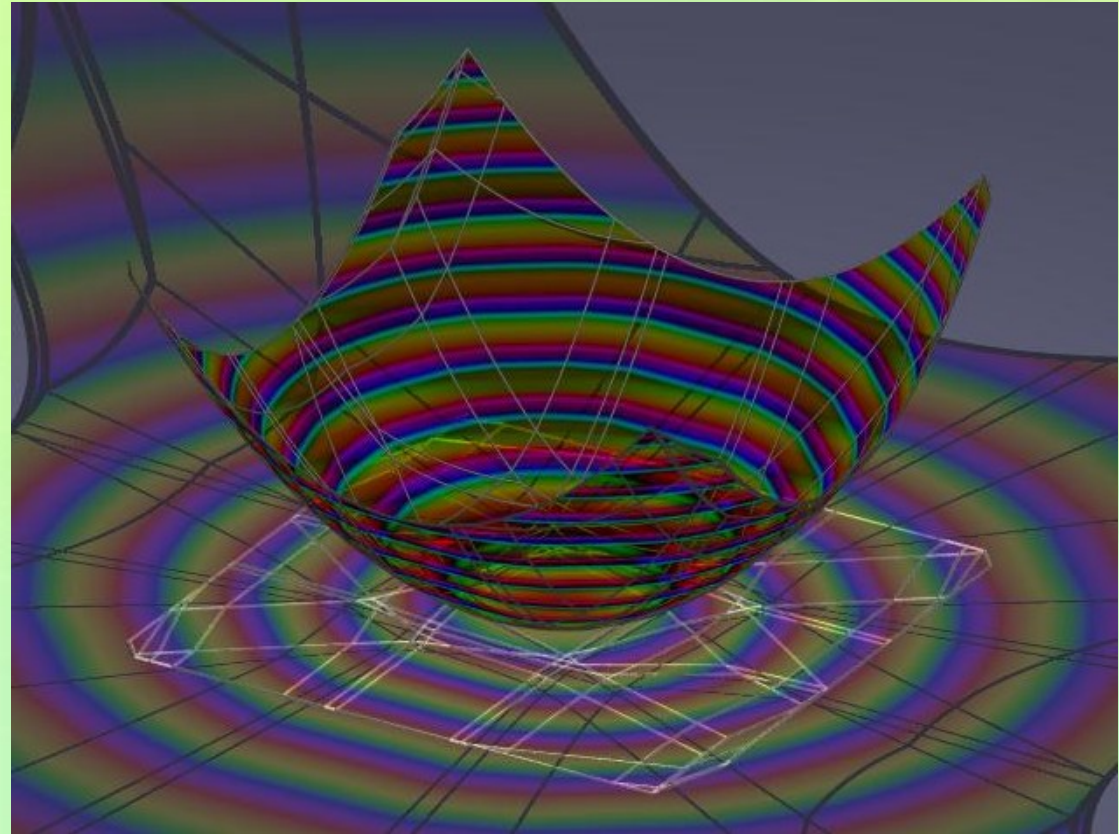
Relationship marketing suggests describing marketing of the enterprise by its set of relationships and their dynamics.

Therefore in contrary to “4P” , the RM can serve as basis for information equivalent of the enterprise.

4P marketing is implemented by special department, and in RM all employees ar considered as “*part-time marketers*” (Gummesson, 1999)

MkIS and marketing of the enterprise. What entirety makes the model of MkIS system ?

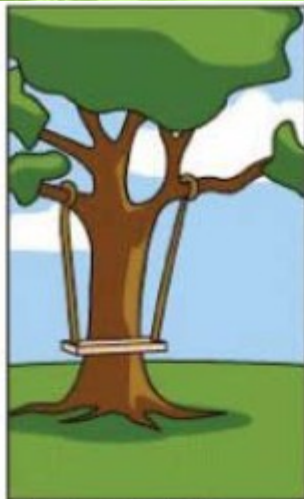
- ∞ Structure of the model
- ∞ Dynamics of the processes
- ∞ Information describing the processes
- ∞ Evaluation of the performance (measures)
- ∞ Different levels of MkIS representation suggest of its multidimensional origin



Importance of MkIS concept and model as adequate information equivalent of marketing



How the customer explained it



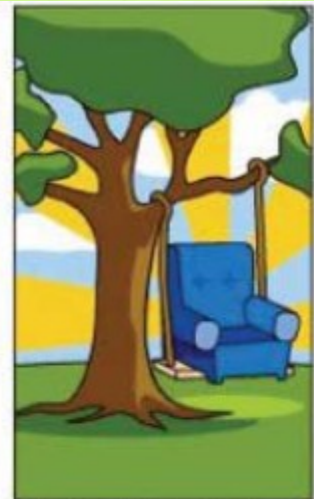
How the Project Leader understood it



How the Analyst designed it



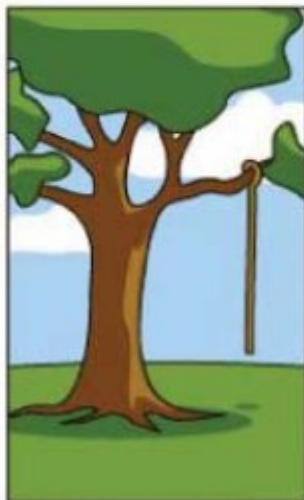
How the Programmer wrote it



How the Business Consultant described it



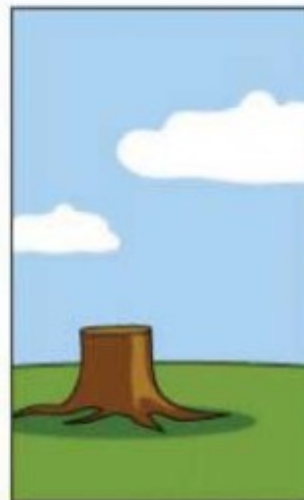
How the project was documented



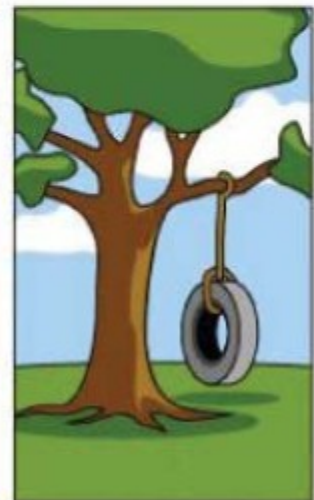
What operations installed



How the customer was billed



How it was supported



What the customer really needed

Marketing information system concepts

- IS as a **mirror** of organization processes
- IS as digital transformation of business
- IS as disruptive innovation for building new business models

Digital marketing tools

ESSENTIAL DIGITAL MARKETING TOOLS 2017

ARE YOU MAKING THE MOST OF ALL OF THESE INSIGHT AND MANAGEMENT TOOLS?



As marketers today, we're fortunate to have a huge number of free and low-cost tools to give us insight about our customers, competitors and market. They also help us compete by delivering automated relevant, real-time communications integrated across desktop and mobile and digital plus traditional marketing channels!

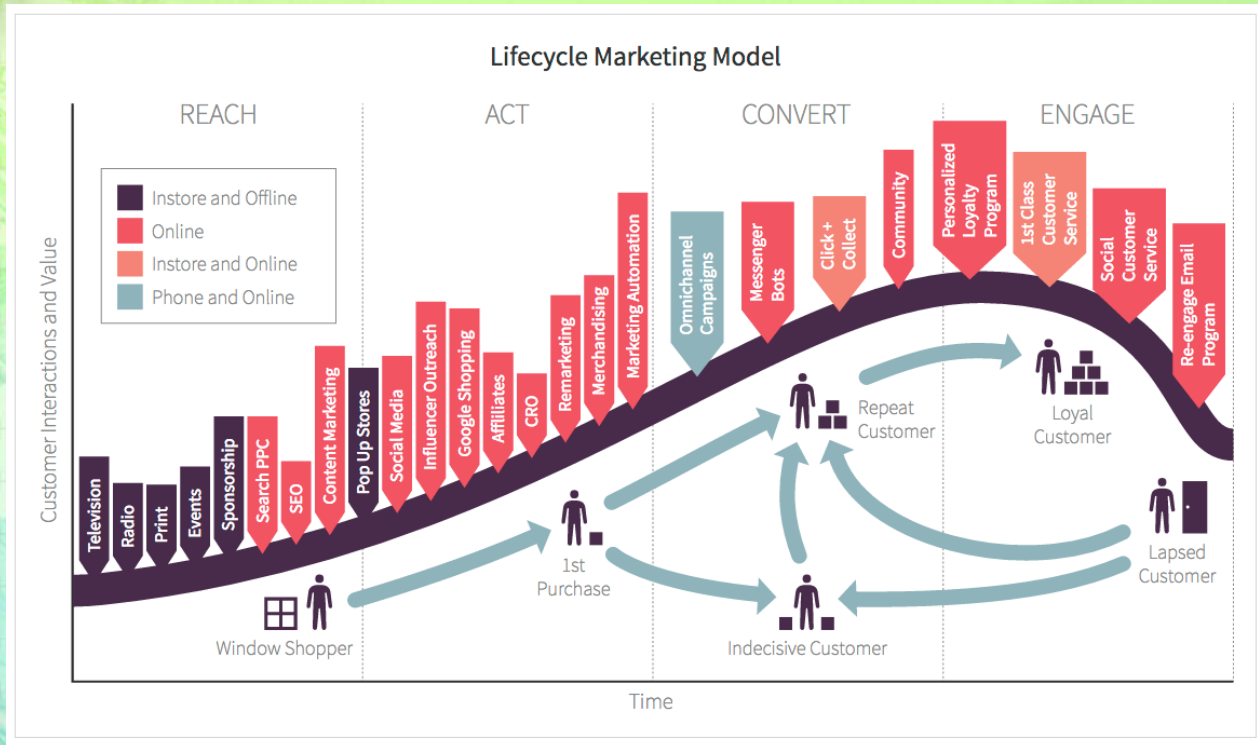
Yet, there's also the huge challenge of the sheer number of tools which vary enormously in cost and quality and new challenger tools can often do a better job than the established tools.

To help highlight the range of great options available, our infographic and download recommend the categories of tools and the most popular. We've grouped them across the Smart Insights RACE Planning framework for managing digital marketing so you can review where you could make better use of the tools across the customer lifecycle.



Download our free guide recommending the best-of-the-best digital marketing tools at: <http://bit.ly/smartdigitaltools>

Complexity of marketing tasks



Marketing and technologies

