

WEBSITES QUALITY EVALUATION – CRITERIA AND TOOLS

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Nicolae-George DRAGULANESCU, Ph.D, MQM, PhD.

Visiting Professor – Chung Ang University, Seoul, South Korea

Fulbright Scholar – University of Pittsburgh, USA

Professor, University POLYTECHNICS of Bucharest, Romania

Faculty of Electronics, Telecommunications and

Information Technology,

Chair of Applied Electronics and Information Engineering

e-mail: nicudrag@yahoo.com

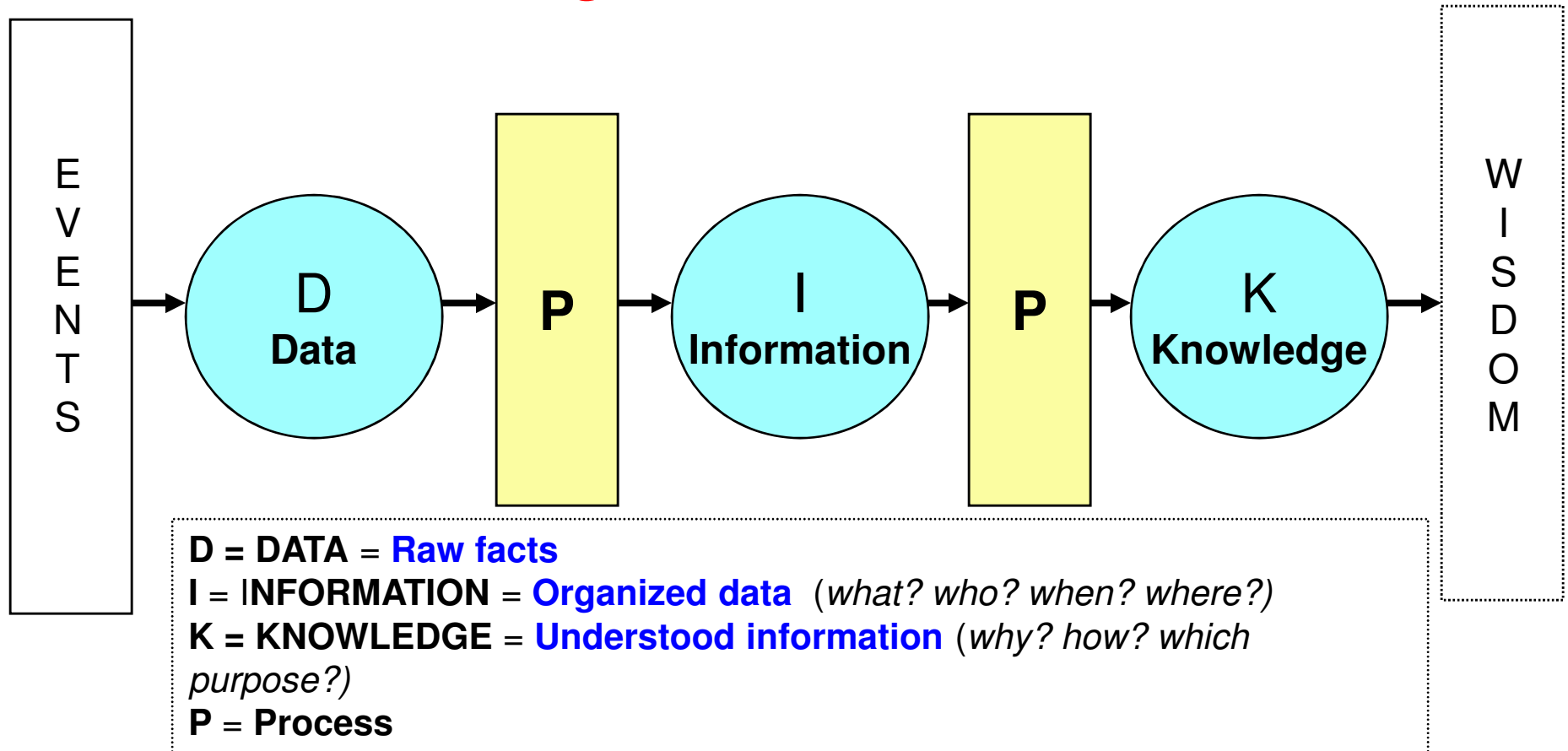
Introduction

- The quantity of information distributed today on the Internet, especially through the World Wide Web, **is rising much more quickly** than the quantity of information available through other mass media.
- Just as we do not like or believe everything we *read* in the newspapers, *see* on TV, or *hear* on the radio, **we cannot like or believe everything on the Internet.**
- Consequently, it is necessary **to critically assess the quality of websites and to determine the extent to which they meet our needs/ requirements.**
- Both notions of “**information**” and “**quality**” have become broader and broader over the years.

What is <information> ?

- **<Information>** – “...as a concept employed by various disciplines - has been a blend of *ambiguous, polyvalent, unclear expressions despite its considerable heuristics value*” [3]. The term **<information>** is used today in different contexts, i.e. <information> may be seen as *energy, as communications, as facts, as data, as knowledge, etc.*
- Let's define <information> simply as “**organized data**”.
- **<Information>** (as texts, sounds, static/ dynamic images) may be also considered as ***an immaterial product, a commodity possessing economic value,*** which is *produced/ generated, can be stored, sold, purchased, exchanged, etc. and, finally, used and reused.*

From <Data> to <Knowledge> and from EVENTS to WISDOM, through <Information>

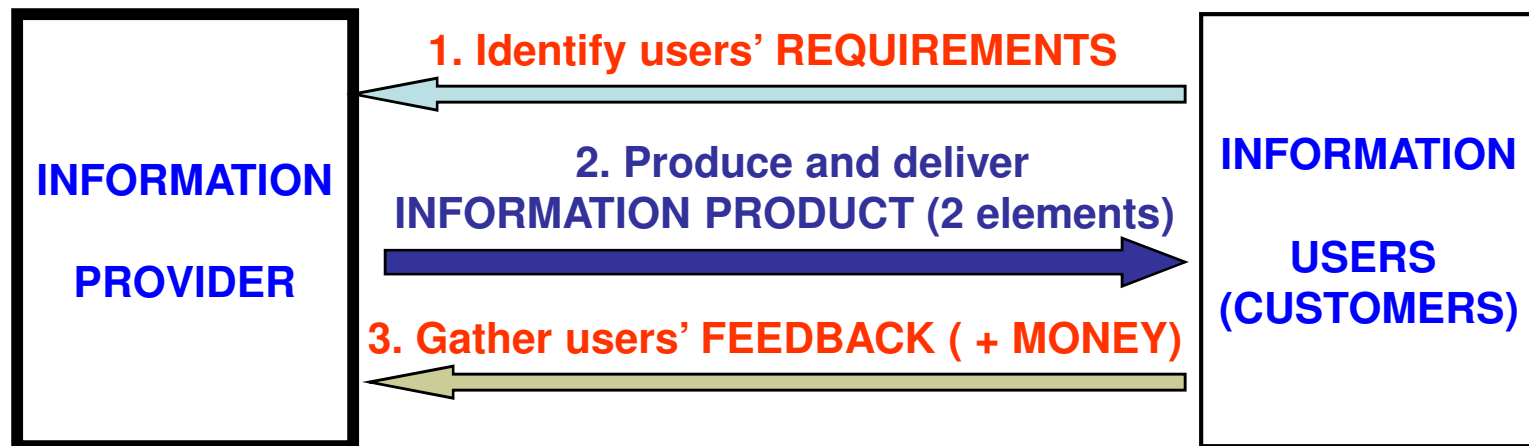


What is <quality> ?

- **<Quality>** is “*the degree to which a set of inherent characteristics fulfils requirements*”
(EN ISO 9000:2000)
- **Notes:**
 1. The term “quality” can be used with adjectives such as *poor, good, or excellent*
 2. “Inherent” as opposed to “assigned” means *existing in something, especially as permanent characteristics*
- **Non standardized definitions of <quality> :**
 - “*Doing things right and doing right things*”
 - “*Fitness for use*”

Model and Virtuous Cycle of <Customer – Provider Relationship>

Numbers 1, 2 and 3 represent the sequence of actions to be achieved in order **to obtain and improve continuously *the quality*** of both material and immaterial components of an ***information product***
(→ VIRTUOUS CYCLE)



INFORMATION PRODUCT does include 2 complementary basic elements:

- **Information** - as immaterial product
- **Information carrier** – as material carrier (i.e. *paper/ documents*) or immaterial carriers (i.e. *electrical or optical signals*)

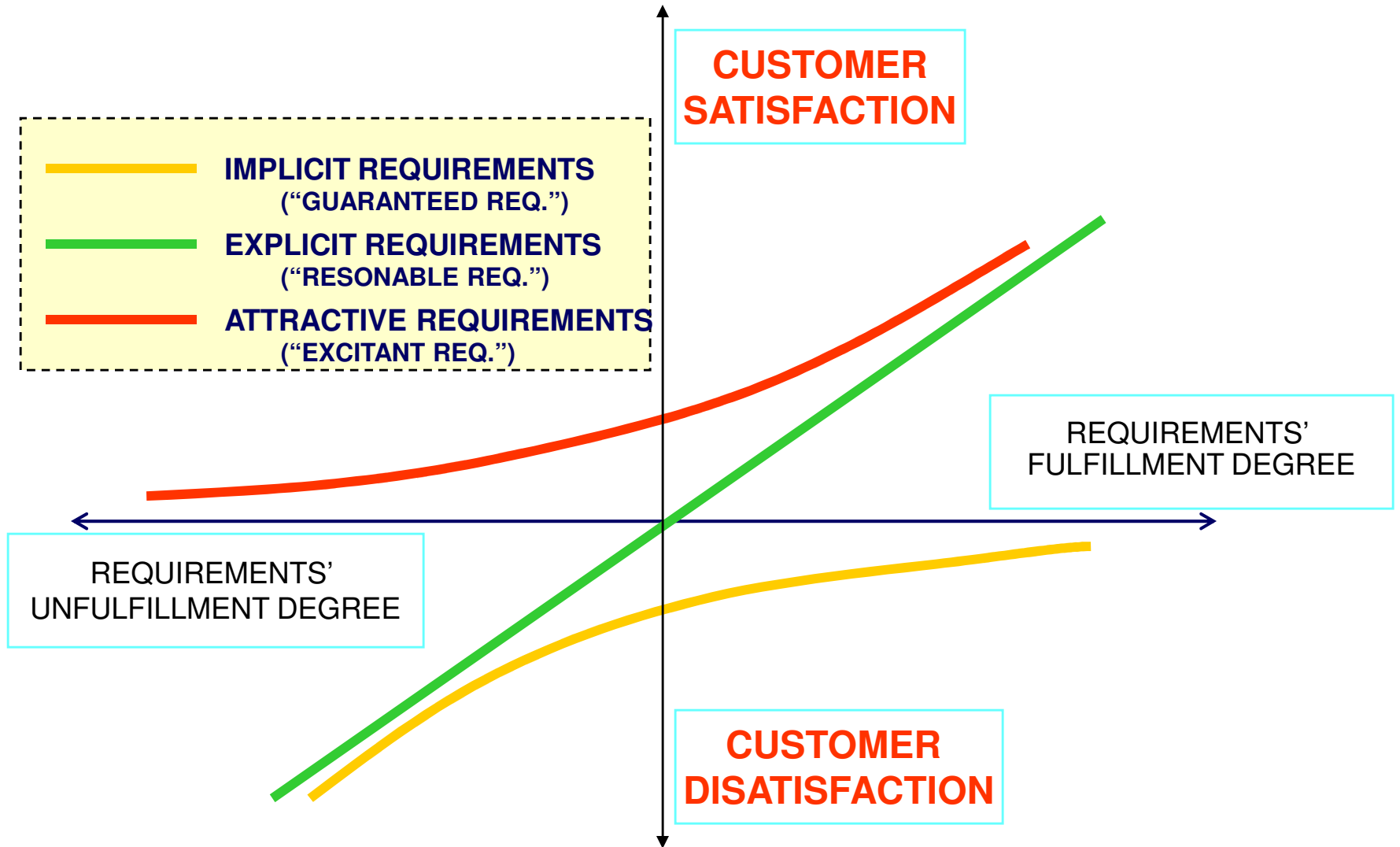
What is <Requirement> ?

- <Requirement> is “*a need or expectation that is stated, generally implied or obligatory*” (EN ISO 9000:2000)
- **Notes:**
 1. “Generally implied” means that *it is custom or common practice* for the organization, its customers and other interested parties, that the need or expectation under consideration is implied.
 2. A qualifier can be used to denote a *specific type of requirement*, e.g. “product/ service requirement”, “quality management requirement”, customer requirement”, etc.
 2. Requirements can be generated by *different interested parties - or “stakeholders” - (i.e. shareholders, providers, customers, managers, employees, creditors, national authorities, community, state representatives, etc.)*

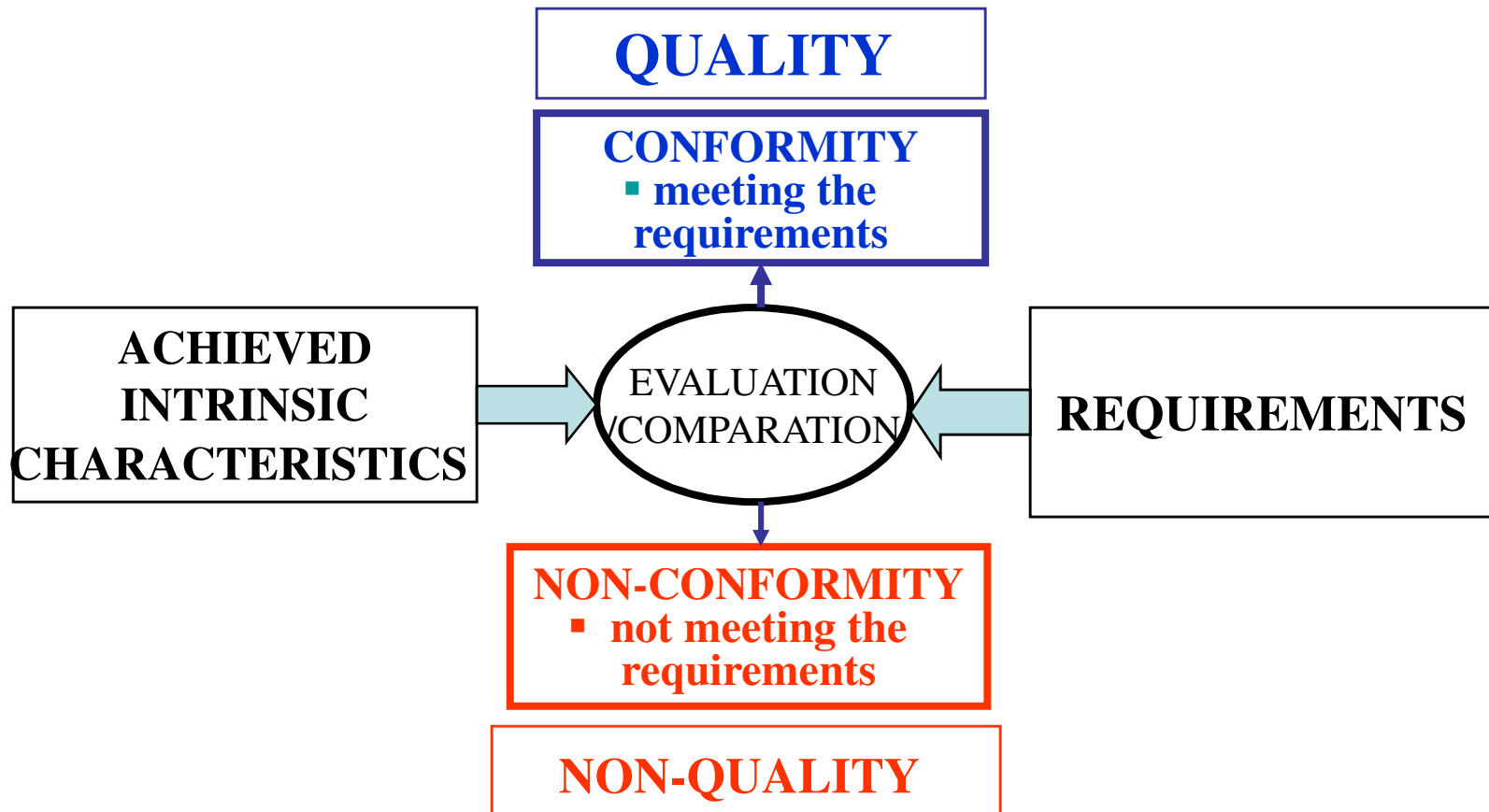
What is <Customer Satisfaction> ?

- <Customer satisfaction> is “the customer’s *perception of the degree to which the customer’s requirements have been fulfilled*” (EN ISO 9000:2000)
- **Notes:**
 1. Customer complaints are a common indicator of *low customer satisfaction* but their absence does not necessarily ensure high customer satisfaction
 2. Even when *customer requirements* have been agreed with the customer and fulfilled, this does not necessarily ensure high customer satisfaction

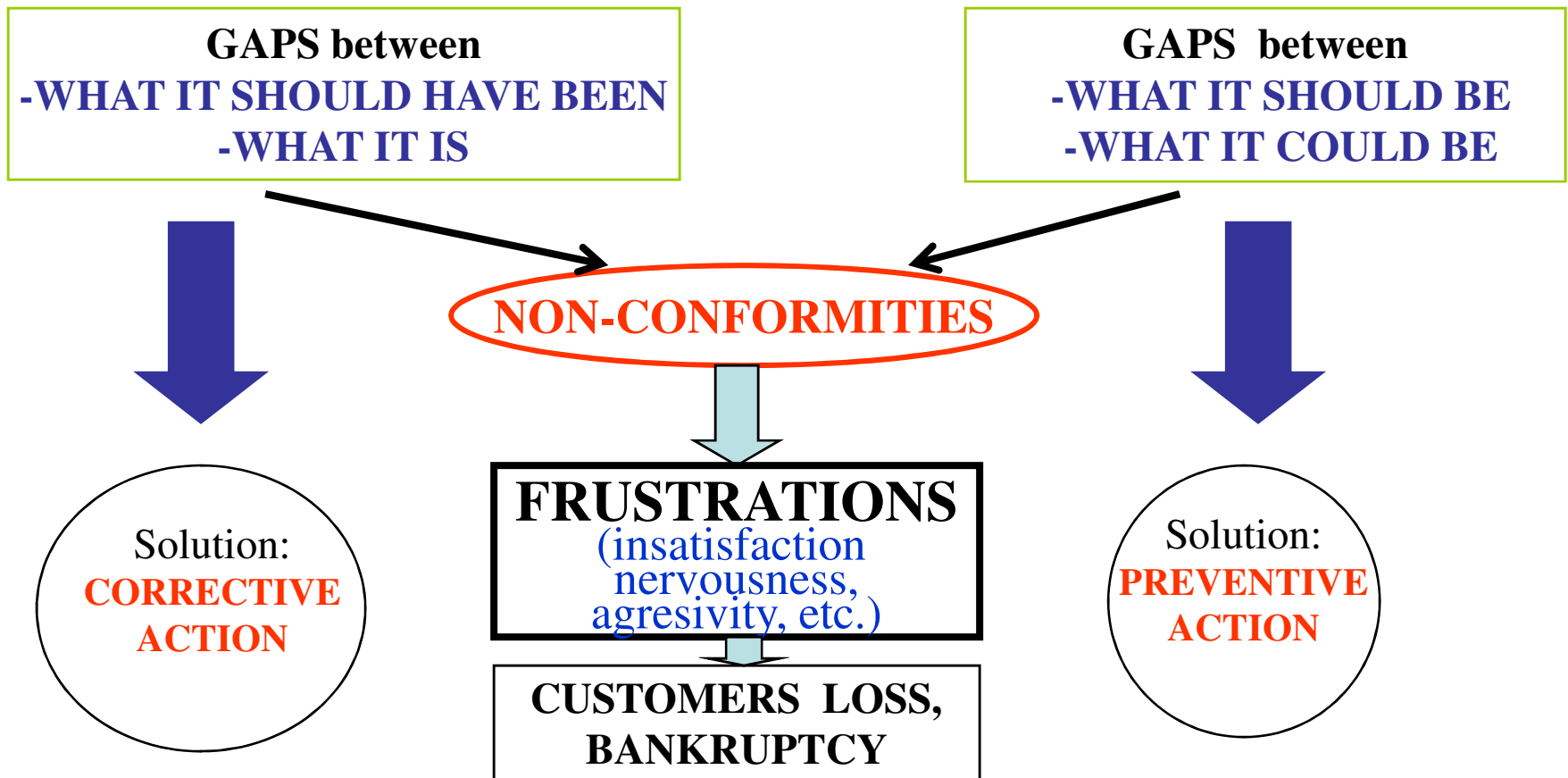
Kano's Diagram



What are <CONFORMITY> and <NON-CONFORMITY>?



What are the CONSEQUENCES AND SOLUTIONS OF NON-CONFORMITIES ?



World Wide Web (WWW)

The **World Wide Web (WWW)** is today a huge and very complex information technology network.

- It consists today of *several hundred million **Web pages** and several hundred million users.*
- Each day users are searching the myriad of accessible **Web sites in order** to find ***the most convenient, relevant and up to date information they need.***
- On the **Web**, users search for information by navigating from page to page along **Web** links.
- But the content of **Web pages** accessed by these links ***does not always meet (all) user's requirements.***
- For example: it is presented to the user only in *snippets of text or graphics.*

Basic characteristics of a Web page (I)

- **A Web page** may provide a wide range of products ranging from *marketing of goods/ products, services, texts, sound and/or images of mass-media productions, including electronic documents, journals, newspaper articles, etc.*
- They may include also: *personal Web pages, e-mail messages, news-groups postings, etc.*
- Basically, **the Web page** has three main components, namely,
 - the header,
 - the body and
 - the footer.

Basic characteristics of a Web page (II)

These three components can be used in order to test ***the quality*** of the **Web page** by addressing its following basic characteristics :

- *author identity*
- *origins and page review*
- *domain of URL*
- *organizational representation*
- *links to local home page and other provided links*
- *intended audience of the site/page*
- *purpose of information*

HOME WORK:

An Exploratory Study

- The following basic eight evaluation criteria have been given to my students in order to determine their utility in evaluating the **quality of a Web site** (of their choice) - as its ability to meet student's *needs and requirements*, through above mentioned *Web page characteristics*.
- Following slides are detailing each of these basic eight evaluation criteria and are introducing the user's questions which were established together with my students through this *exploratory study*.
- Conclusively, my students reported that **a quality Web site** had to be *instantaneously and simultaneously responsive, interactive, credible, current, objective, accurate, inclusive and comprehensive (!)*

EVALUATION CRITERIA (I)

QUESTIONS TO BE ANSWERED BY USER

1. **ACCURACY (extent/ degree of information exactness and correctness)**

- *Does the author mention his information sources?*
- *Is it possible for you to check if these sources are legitimate?*
- *Is the author's background related to the covered topics?*
- *Did the author indicate clearly the research method and how he collected and processed data (only for research-based data)?*

EVALUATION CRITERIA (II)

QUESTIONS TO BE ANSWERED BY USER

2. AUTHORITY (extent/ degree to which the author could be considered an expert in his field).

- *Is the author known?*
- *What do you know about the author (as for example: his background, position, affiliation, publications, etc)?*
- *Is it possible, for you, to determine the author's expertise and credibility?*

EVALUATION CRITERIA (III)

QUESTIONS TO BE ANSWERED BY USER

3. COVERAGE (extent/ degree to which topics was observed, analyzed and reported)

- *Are all site's topics explored in depth?*
- *Are all site's links relevant, appropriate, comprehensive and operational?*
- *How relevant and comprehensive is, for you, the site's information?*

EVALUATION CRITERIA (IV)

QUESTIONS TO BE ANSWERED BY USER

4. CURRENTNESS (extent/ degree to which the distributed information is belonging to the time now in progress)

- *When was created and reviewed (last time) the site?*
- *Is the copyright date displayed?*
- *Are all mentioned resources available?*
- *Are all of site's links relating to correct INTERNET addresses?*

EVALUATION CRITERIA (V)

QUESTIONS TO BE ANSWERED BY USER

5. DENSITY (extent/ degree to which comprehensive and relevant information is displayed on each site's page)

- *Is text or graphic content predominant on each page?*
- *Is enough comprehensive, for you, text/ graphic information displayed on each page?*
- *Is enough useful, for you, the displayed text/graphic?*
- *How much advertising information is included on site's pages?*

EVALUATION CRITERIA (VI)

QUESTIONS TO BE ANSWERED BY USER

6. INTERACTIVITY (extent/ degree to which is operating the bidirectional communication between user and author)

- Is it possible, for you, to find at least one e-mail link to Web site author or to the webmaster?
- Is this link active?
- Is this link quickly operational?
- Did you receive an answer to the message you sent to author/ webmaster?

EVALUATION CRITERIA (VII)

QUESTIONS TO BE ANSWERED BY USER

7. OBJECTIVITY (extent/ degree of site's author objectivity versus his subjectivity)

- *What is the real goal of the site?*
- *What is the real purpose of the site's author?*
- *Are you enough confident in author's objectivity?*

EVALUATION CRITERIA (VIII)

QUESTIONS TO BE ANSWERED BY USER

8. PROMPTNESS (time delay needed for site finding and its pages displaying)

- *Was the site URL found enough quickly?*
- *Is it possible to change immediately displayed pages?*
- *Is it possible, for you, to contact, within a reasonable delay, all provided links?*

REFERENCES

1. **DRAGULANESCU, Nicolae** – *Information Science and Technology – Genesis and Evolution* (in French), AGIR Publishing House, Bucharest, 1999
2. **DRAGULANESCU, Nicolae** – *Information Science and Technology – Genesis and Evolution* (in Romanian), AGIR Publishing House, Bucharest, 2004
3. **DRAGULANESCU, Nicolae** – *Information Science and Technology – Genesis and Evolution* (in English), Denbridge Press, New York, 2007
4. **LE COADIC, Yves** – *Information Science* (in French - *La science de l'information*), http://www.puf.com/Book.aspx?book_id=022141
5. **LE COADIC, Yves** – *Need for Information* (in French: *Le besoin d'information.* ; <http://www.adbs.fr/site/publications/ouvrages/recherche.php>
6. **LE COADIC, Yves** – *Uses and Users of Information* (in French: *Usages et usagers de l'information*) ; <http://www.armand-colin.com/livre.php?idp=270098>

Thank you for your
kind attention !

e-mail: nicudrag@yahoo.com