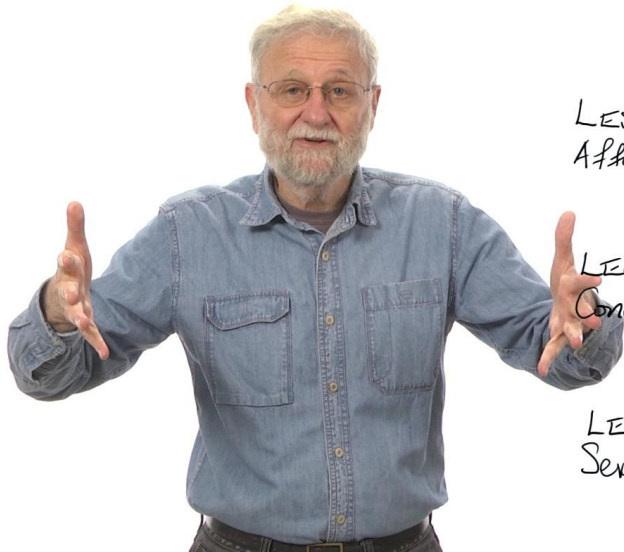


QUALITY.

MODELS & META-MODELS. THE 7LOCI



LESSON 1
Affordances & Signifiers

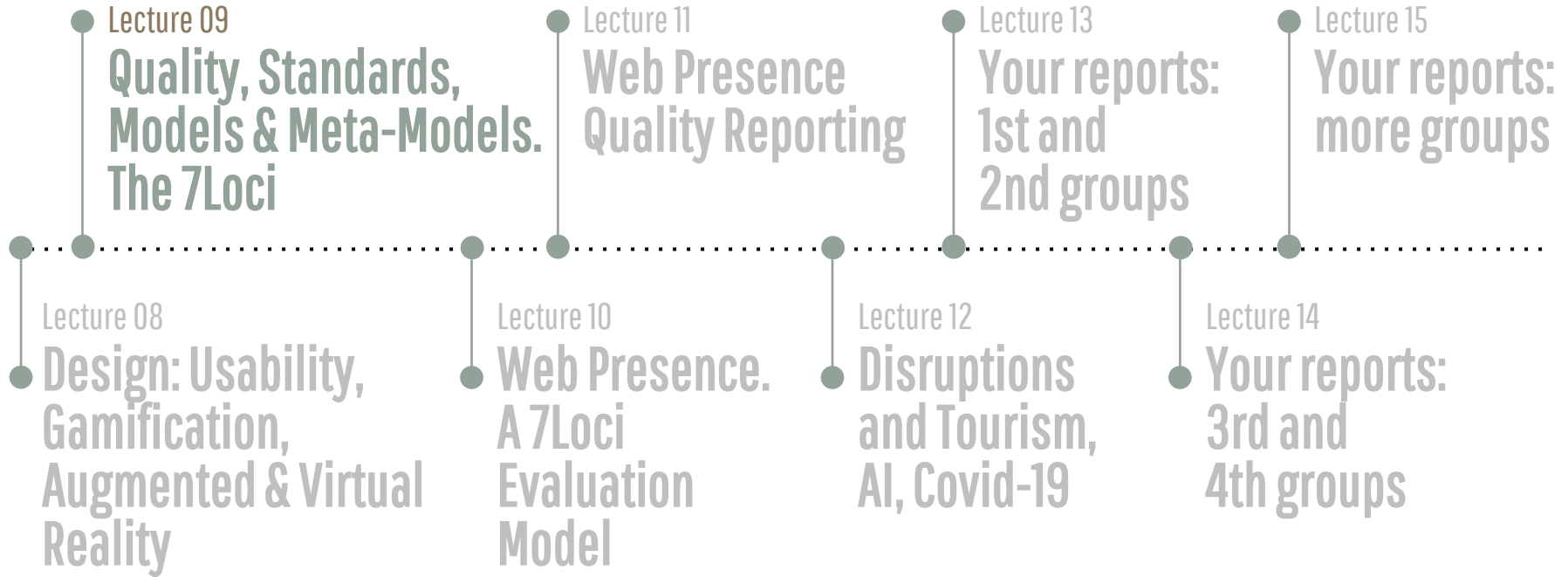
LESSON 2
Conceptual Models

LESSON 3
Seven Stages of Action



International
Organization for
Standardization

TODAY



WHAT ARE WE TALKING ABOUT TODAY?



1. MEASURING QUALITY?
2. STANDARDS
3. MODELS
4. RHETORIC, JOURNALS & LOCI
5. THE 7LOCI META-MODEL
6. A META-MODEL FOR WEBSITES
7. AND FOR THE WEB PRESENCE ?



image credit to infinityimmigration.com, BC, Canada

“MEASURING QUALITY? ARE YOU JOKING?”



Quality has nothing to do with measure...

Are you sure?

Think of different electric plugs in different countries, of electric tension (voltage), or octanes in gasoline, or... of the http, the html.

International **standards** are standards developed by international standards organizations. International standards are available for consideration and use, worldwide.

The most prominent organisation is the **International Organization for Standardization**, or ISO.

STANDARDS



A (NEMA 1-15 USA 2 pin)



B (NEMA 5-15 USA 3 pin)



C (CEE 7/16)



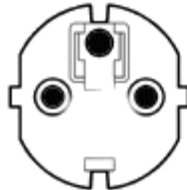
D (BS546 5 A version of Type M)



E (French)



F (CEE 7/4 "Schuko")



G (BS1363 Fused 13 A, 5 A and 3 A also in common use)



H (SI 32 Israel)



I (AS-3112 Argentina / Australia / New Zealand)



J (SEV-1011 Switzerland)



K (SRAF 1962/DB Denmark)



L (CEI 23-16 Chile / Italy)



M (15 A version of Type D BS546)



N Italy



O Denmark



P Israel

DE IURE VS. DE FACTO STANDARDS



Some technology standards that are particularly relevant to our lectures – like the html, Bluetooth, or Wi-Fi – are internationally recognized official standards. Wi-Fi is in fact a set of standards, the creation of which involved an alliance among several companies like Apple, Samsung, Cisco, Microsoft, or T-Mobile. We can consider these standards as **de iure** standards.

Sometimes, however, standards exist **de facto**, though no official agreement is reached about them. This was the case of the portable document format, or **pdf**, developed by Adobe in the 1990s, and accepted as an ISO standard only in 2017. The Flash platform for multimedia distribution, developed by Macromedia, was also a popular de facto standard. It has been dropped before becoming de iure.

QUALITY ACCORDING TO THE ISO

Here's the ISO definition of quality.

“Quality is
the totality of characteristics
of an entity
that bear on its ability to satisfy
stated and implied needs”.

(ISO 8402)



International
Organization for
Standardization

THE METHOD WE'RE ADOPTING



WEE-NET
Web Engineering Network
of Excellence

OLFA
EUROPEAN
OPERATIONAL
LEARNING FOR EXCELLENCE

Summer School in La Plata
January 29 February 9 2007

**Web Sites Quality Evaluation
Projects with the 7LocI method**

Luisa Mich

etourism.m.economia.univr.it

UNIVERSITÀ DEGLI STUDI
DI TRENTO

The **ISO definition** of quality is a **cornerstone** of the quality evaluation **method** we're adopting.

Our method was proposed, and has been developed, at the University of Trento.

It is based on a meta-model, and called **7LocI**.

MODELS



You may ask **what** is “a meta-model”? Well, let’s start with what is a **model**.
“In the most general sense, a **model** is **anything** used in any way to **represent** anything else.” – Wikipedia, “Conceptual model”

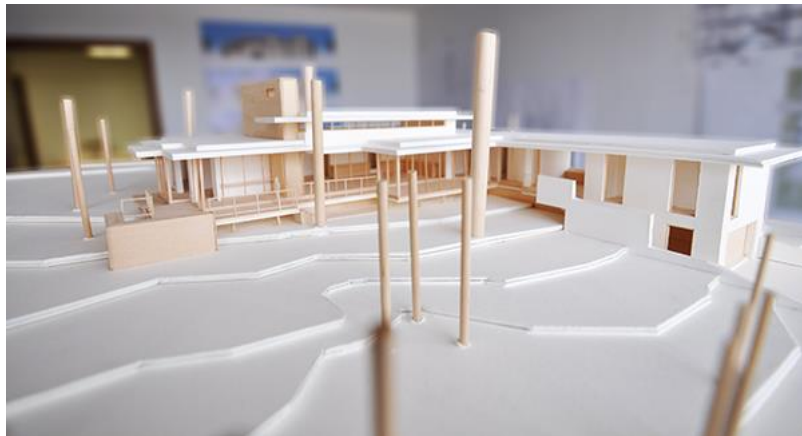


image credit to Ponoko



image credit to Australian Entertainment Talent Agency

DON NORMAN



Let's stick, however, to **a more fitting definition.**

“A conceptual model is **the underlying belief structure** held by a person about **how something works.**” – Donald A. Norman, “Living with Complexity”, 2011

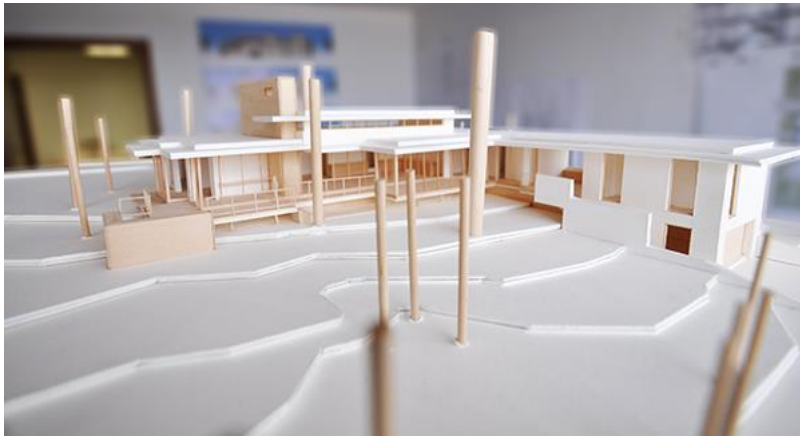
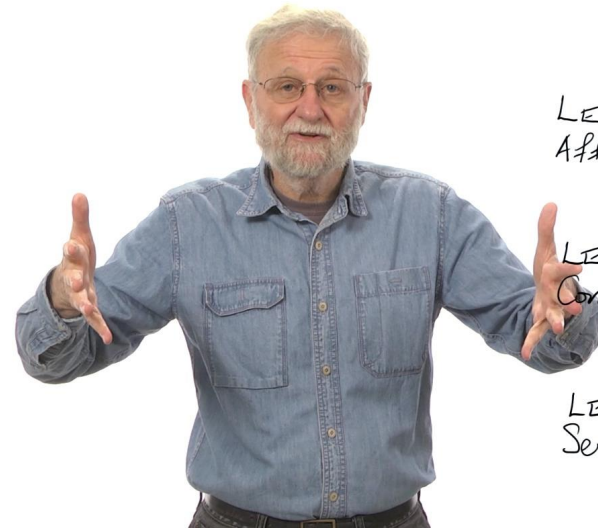


image credit to Ponoko



LESSON 1
Affordances & Signifiers

LESSON 2
Conceptual Models

LESSON 3
Seven Stages of Action

ANCIENT ROMAN RHETORIC



Our 7Loci meta-model combines the ISO definition of quality with the **loci** from the classical **rhetoric**.

- **QVIS?**
- **QVID?**
- **CVR?**
- **VBI?**
- **QVANDO?**
- **QVOMODO?**
- **QVIBUS AVXILIIS?**

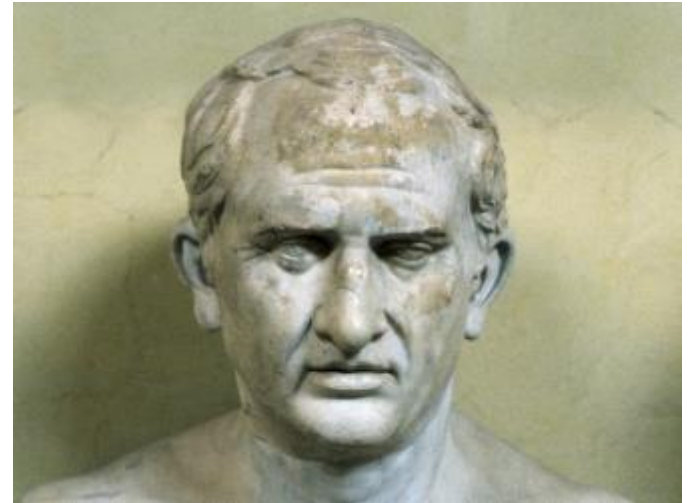


image credit to [history.com](https://www.history.com)

BRITISH JOURNALISM



The loci, from the classical rhetoric, vs. **the Five Ws**, or the basic questions of English journalism.

- QVIS? (**Who?**)
- QVID? (**What?**)
- CVR? (**Why?**)
- VBI? (**Where?**)
- QVANDO? (**When?**)
- QVOMODO? (**How?**)
- QVIBUS AVXILIIS? (**By What Means?**)



image credit to [mercatornet.com](https://www.mercatornet.com)

THE 7 LOCI AS A META-MODEL



A **Meta-Model** is useful because it allows generating specific **models**.



A 7LOCI SPECIFIC MODEL ABOUT A CAKE



Can you place questions in order to evaluate the quality of every characteristic of this birthday cake? Are **all the involved needs** fulfilled?

- **Who**
 - **What**
 - **Why**
 - **Where**
 - **When**
 - **How**
 - **By What Means**
- People in the party
 - Flavour, perhaps wine
 - Wish a happy birthday
 - In a friendly place
 - A birthday night
 - Eating & enjoying
 - A table, a knife, forks



7 LOCI QUESTIONS ABOUT A CAKE'S COOK



Yet, there are other questions that can be asked in order to evaluate the quality of a birthday cake. For instance, are all **the cook's needs** fulfilled?

- Who
 - What
 - Why
 - Where
 - When
 - How
 - By What Means
- Are her skills perceived?
 - Good ingredients?
 - Visibility from her work?
 - How's her brand?
 - Is the cake still fresh?
 - Do party members enjoy?
 - Cooking process was ok?

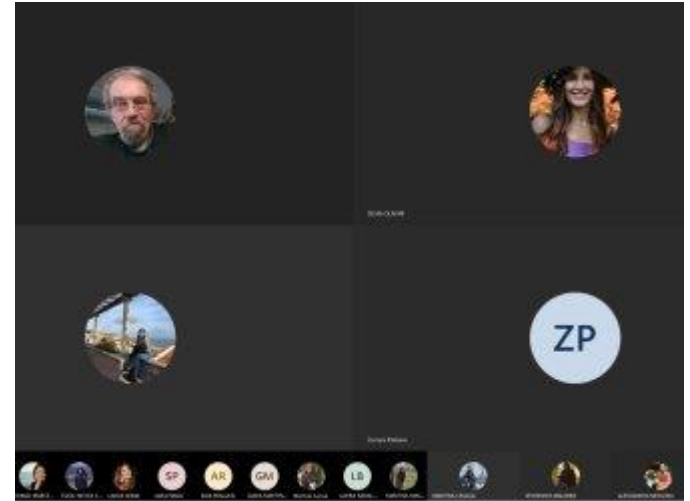


A 7LOCI MODEL ABOUT THIS LECTURE



Can you evaluate the quality of every characteristic of this lecture I'm holding? Are **all your** (and my) **individual needs** fulfilled?

- **Who**
 - **What**
 - **Why**
 - **Where**
 - **When**
 - **How**
 - **By What Means**
- You, me
 - The content we share
 - Make you think
 - In a virtual class
 - Right now
 - Talking & presenting
 - A web platform



7 LOCI QUESTIONS ABOUT THIS LECTURER



Can I place questions to myself in order to evaluate the quality of my management of this lecture? Are all **my individual needs** fulfilled?

- **Who**
 - **What**
 - **Why**
 - **Where**
 - **When**
 - **How**
 - **By What Means**
- Am I doing my duty?
 - How's my content?
 - Am I making you think?
 - Is virtual too poor?
 - Is my lecture too long?
 - Are my words clear?
 - Do I like Teams?



A META-MODEL FOR THE WEB PRESENCE



The 7Loci meta-model, based on the classical rhetoric loci, can be easily given **a naming** which is useful to **evaluate the quality of web presence**.

- QVIS? (Who **Identity**)
- QVID? (What?) **Content**
- CVR? (Why?) **Services**
- VBI? (Where?) **Individuation**
- QVANDO? (When?) **Maintenance**
- QVOMODO? (How?) **Usability**
- QVIBUS AVXILIIS? (By what means?) **Feasibility**

FOR THE WEB PRESENCE OF A DMO?



Ok. But, in practical terms, can we take the 7Loci meta-model and build a specific model to measure the quality of the web presence of a destination?

Why not?

Let's try to figure out which questions might fulfil this task.



image credit to infinityimmigration.com, BC, Canada

WHO?



The 7Loci meta-model can be used to build a quality evaluation model for the web presence of a destination

1. QVIS? (Who?) Identity

- ✓ Website identity: logo, brand, environment
- ✓ Social networks pages' identity? Consistent with the DMO website?
- ✓ Brand, logo, layout, image
- ✓ Different targets?
- ✓ Destination identity?
- ✓ Destination storytelling?

WHAT?



The 7Loci meta-model can be used to build a quality evaluation model for the web presence of a destination

2. QVID? (What?) Content

- ✓ Descriptions?
- ✓ Pictures & Multimedia?
- ✓ Downloads?
- ✓ Does the content meet the managers' needs?
- ✓ Does the content meet the users' needs?
- ✓ Guides? Audio guides? Apps?
- ✓ Local tourist services?

WHY?



The 7Loci meta-model can be used to build a quality evaluation model for the web presence of a destination

3. CVR? (Why?) Services

- ✓ E-commerce for accommodation?
- ✓ Tourism products to purchase: accommodation, tickets, city cards?
- ✓ Proprietary vs. linked content (is this a problem?)
- ✓ Cartography?
- ✓ Meteo?
- ✓ Security?
- ✓ Privacy?

WHERE?



The 7Loci meta-model can be used to build a quality evaluation model for the web presence of a destination

4. **VBI?** (Where?) **Individuation**

- ✓ Search engines? (positioning: networks among websites)
- ✓ Communication with users? (e-mail, or personal networks)
- ✓ Communication among users? (forums, “Web 2.0” – social networks)
- ✓ Social networks, web reputation
- ✓ Communication among tourism operators? (dynamic business networks, perhaps Intranets, i.e. a Destination Management System)

WHEN?



The 7Loci meta-model can be used to build a quality evaluation model for the web presence of a destination

5. QVANDO? (When?) Management

- ✓ Is the website regularly updated?
 - ✓ Are the social networks' pages regularly updated?
- No need to go deeper about this point...
- ✓ Events? Fairs? Exhibitions? Concerts? Theater?

How?



The 7Loci meta-model can be used to build a quality evaluation model for the web presence of a destination

6. QVOMODO? (How?) Usability

- ✓ A navigation menu? Breadcrumbs?
- ✓ An internal search engine? A site map?
- ✓ Languages?
- ✓ Broken links? 404 – File not found?
- ✓ Download time, hardware & software compliance
- ✓ Mobile-friendliness? Local Wi-Fi coverage? Local apps?

BY WHAT MEANS?



The 7Loci meta-model can be used to build a quality evaluation model for the web presence of a destination

7. QVIBUS AVXILIIS? (By what means?) Feasibility

- ✓ Resources?
- ✓ Managers? Responsibilities?
- ✓ Future developments?
- ✓ Business models?
- ✓ Local authorities vs. local operators vs. available resources

But **we won't be** really **able** to evaluate feasibility in full. We should know more!

FINALLY, WHAT ABOUT MEASURING?



Questions like these can be organized in a proper **questionnaire**, which may be useful to **measure** the results of a quality evaluation. You can **count** positive and negative answers to the questions that you've decided to ask along your evaluation. You can even produce **scores** among the web presences of different comparable entities – destinations, in our case.

Identity	quis?	who?
Website brand	<input type="checkbox"/>	Does the website clearly show an identity?
Destination image	<input type="checkbox"/>	Does the website clearly identify what sort of tourism can be performed in the destination?
Destination Geographical Position	<input type="checkbox"/>	Does the website clearly identify where the destination is?
Graphic Design	<input type="checkbox"/>	Does the website have a suitable graphic layout?
Personalization	<input type="checkbox"/>	Does the website promise to provide different content for different targets?

Identity :: Quis? :: Who?

Website brand	<input type="checkbox"/>	Does the website clearly show an identity?
Destination image	<input type="checkbox"/>	Does the website clearly identify what sort of tourism can be performed in the destination?
Destination geographical position	<input type="checkbox"/>	Does the website clearly identify where the destination is?
Graphic Design	<input type="checkbox"/>	Does the website have a suitable graphic layout?
Personalization	<input type="checkbox"/>	Does the website promise to provide different content for different targets?

Management :: Quando? :: When?

Code compliance	<input type="checkbox"/>	Does the website's software work?
Update	<input type="checkbox"/>	Does the website appear to be regularly updated?
Links Compliance	<input type="checkbox"/>	Do all of the links work?
Technologies	<input type="checkbox"/>	Is the website technologically updated?

Management	quando?	when?
Code Compliance	<input type="checkbox"/>	Does the website's software work?
Update	<input type="checkbox"/>	Is the website regularly updated?
Links Compliance	<input type="checkbox"/>	Do all of the links work?
Technologies	<input type="checkbox"/>	Is the website technologically updated?

Usability	quomodo?	how?
Menu	<input type="checkbox"/>	Is the navigation easy and clear?
Full Text Research	<input type="checkbox"/>	Is an advanced search engine provided? Does it work properly?
Site Map	<input type="checkbox"/>	Is there a site map?
Download Time	<input type="checkbox"/>	Does the homepage appear in less than five seconds? [*]
Cultures	<input type="checkbox"/>	Does the website provide different editions in different languages?
Cultures Compliance	<input type="checkbox"/>	Are the different editions really in different languages? Is the content completely located?
Language & Icons	<input type="checkbox"/>	Does the website use clear and sufficient icons and language?
Hardware & Software Compliance	<input type="checkbox"/>	Mark "yes" if no special plugin is needed.
Impaired users	<input type="checkbox"/>	Are impaired users considered?

[*] according to google

BOOLEAN ANSWERS



In fact, if you want to provide a measurable result, the best way to do so is **count the number of positive vs. negative answers** – the True vs. the False – that each entity deserves, according to a robust quality evaluation model and its specific questions asked. It's the same condition that you find in some different sports. You have sports where results are **objectively measurable** (in a 100-meter run race, for instance, the winner is recorded by a photofinish device), and you have sports where results can only be **decided by a jury** (in figure skating, for instance, no objective measurement is possible). But juries are objectionable!

1/0

Yes/No

True/False

This is called a
Boolean Data Type.

MEASURED SPORTS VS. JUDGED SPORTS



image credit to swisstiming.com



image credit to Il Post

MEASURING IS DIFFERENT FROM JUDGING



You may well come across situations where you actually have to **measure quality** in Boolean terms.

Suppose, for instance, that you have to decide which among several **competing web agencies** should be commissioned to build – or improve – your destination’s web presence.

If this is the case, you are compelled to provide **undisputable evidence** that one agency, and one only, **is proposing the best**.

Taxpayers’ money is at stake. You have to be **transparent** and **objective**. The only possible choice is measuring the quality of the competing projects. Only **a countable result** is ok.

1/0

Yes/No

True/False

Do You Have To Provide Boolean Data?



No. You do not have to provide Boolean data in this course.
You're not requested to build and fill a questionnaire.

1/0

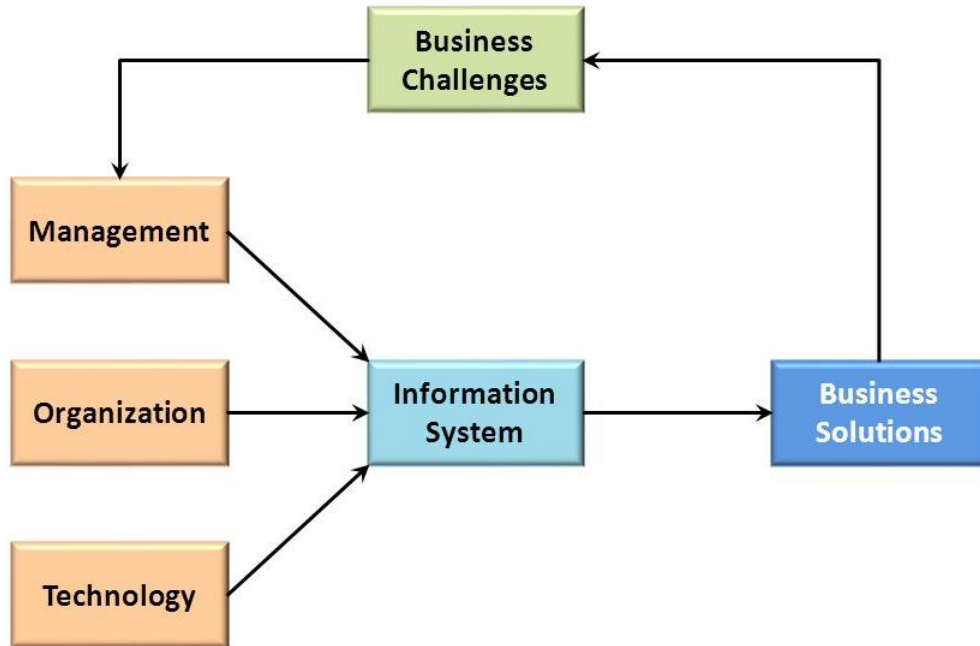
Yes/No

What you are requested to do is consider **all the questions** that should be reasonably asked during **the evaluation of the quality of an entity** – the web presence of a tourism destination, in our case – according to the **7Loci meta-model**.

True/False

Your conclusions, whether or not they have been measured in Boolean data, will certainly contribute to identify the business challenges that the entity – a destination, in our case – has to face.

IT AND BUSINESS CHALLENGES

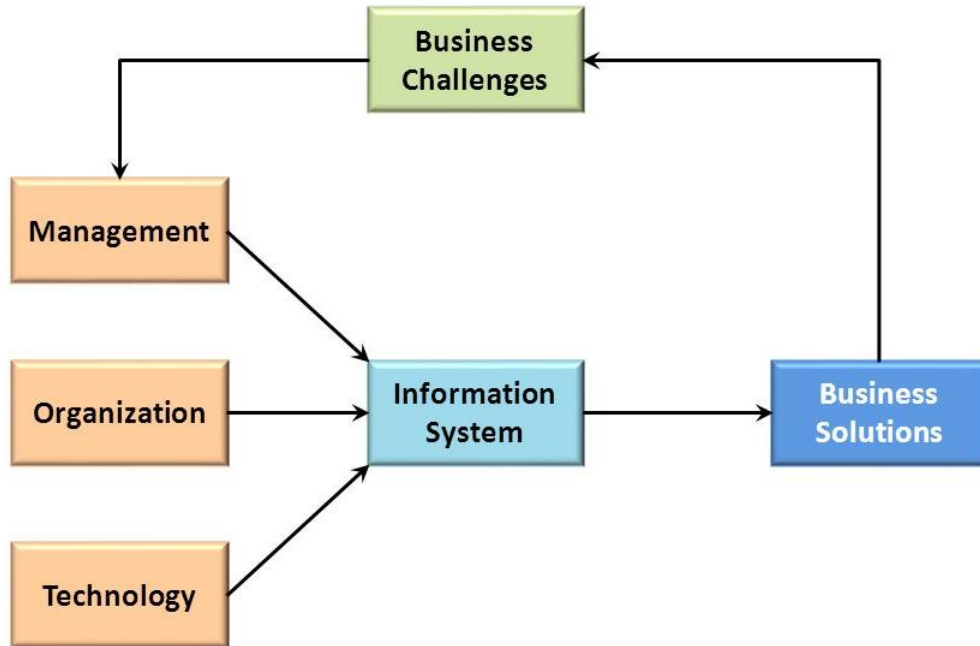


Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

8

This diagram, from Laudon & Laudon, shows that an information system may help **managers** and **technologists** to address the **challenges** they face, by individuating **solutions**. Applying solutions brings to meet the challenges, which can be then faced on a higher level through the information system. And so on.

THE CHALLENGES OF A DESTINATION?



Source: Kenneth C. Laudon & Jane P. Laudon (2014), Management Information Systems: Managing the Digital Firm, Thirteenth Edition, Pearson.

8

Which business challenges does a destination face?

How can

- the management
- the organization
- and technologists

put their information system to good use in order to provide solutions, meet their challenges, and bring the process further?

TODAY'S KEY POINTS

1. MEASURING QUALITY?
2. STANDARDS
3. MODELS
4. RHETORIC, JOURNALS & LOCI
5. THE 7LOCI META-MODEL
6. A META-MODEL FOR WEBSITES
7. AND FOR THE WEB PRESENCE OF A DESTINATION...?

image credit to Australian Entertainment Talent Agency

THANKS FOR YOUR ATTENTION

Picture from the 2013 Workshop