Bauhaus-Universität Weimar

02. Media & Mediatization

Faculty of Art & Design
Chair of Interface Design

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http://www.uni-weimar.de/medien/wiki/IFD:MobileMediaDesign-SS16

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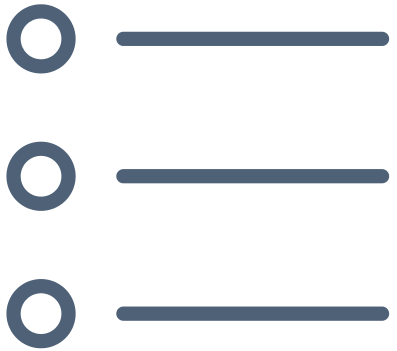

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What is Medium

What is medium

What is medium

One of the simplest definition of medium (or media – in its plural form) is

- *"a means by which something is communicated or expressed"*
  ("definition of medium from Oxford Dictionaries Online," n.d.).

What is medium

In other words, it can be interpreted as any item that carries some form of communication, such as paper, screen or radio. Media are strong tools in our society and play a strong role in enhancing the communication and expression between people.

What is medium

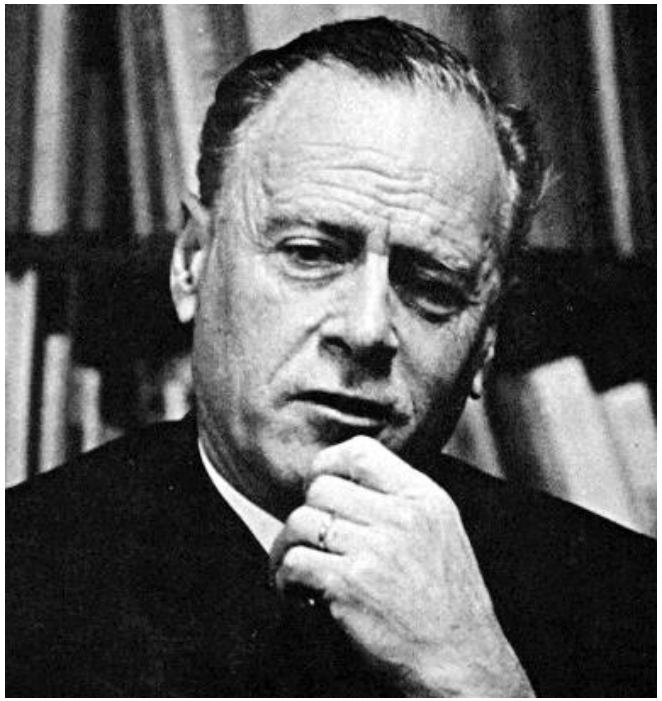
An alternative definition by Hoenisch (2005), is that

- *"'media' includes any medium or object used to communicate a message or a meaning".*

What is medium

Marshall McLuhan

(Edmonton 1911 – Toronto 1980)



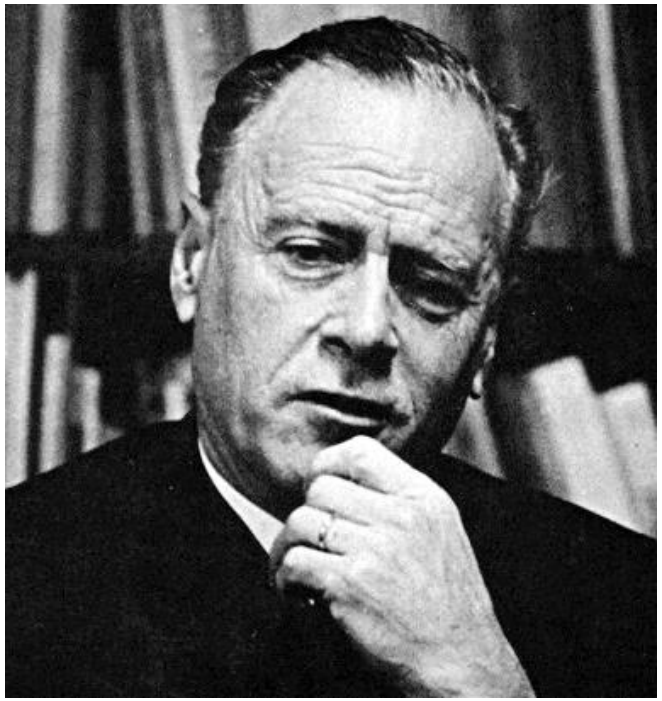
- Global village
- Figure and ground media
- Tetrad of media effects
- Hot and cool media
- Predicted the World Wide Web

Image retrieved from http://www.classroom20.com/profiles/blogs/marshall-mcluhan-s-tribal

What is medium

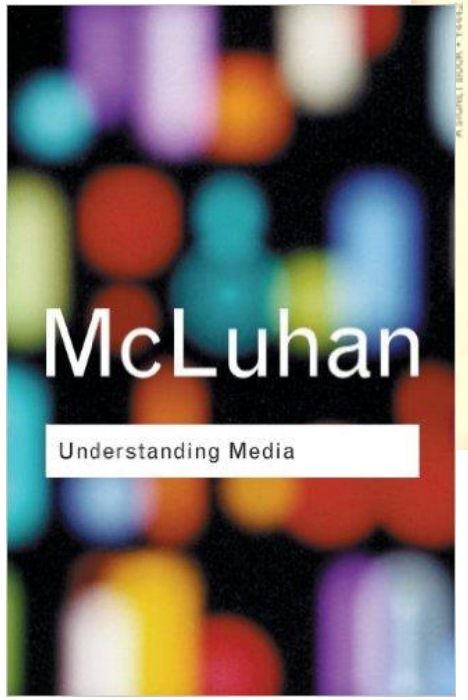
McLuhan defines that

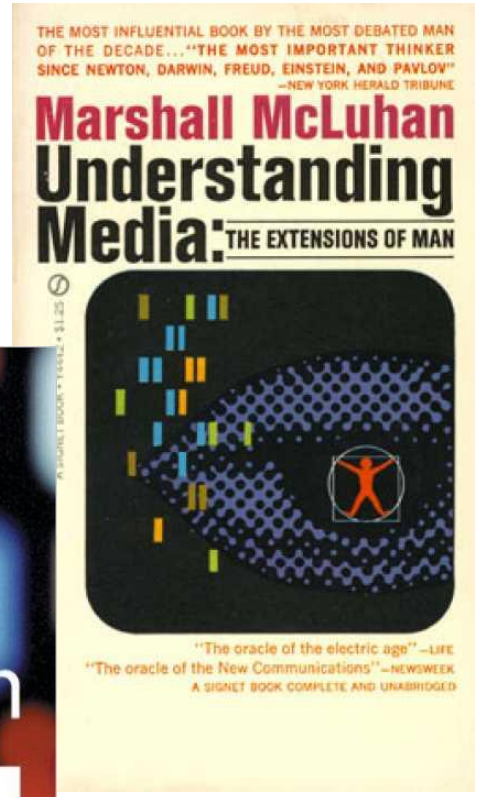
“The medium is the message"



Marshall McLuhan

1964 - *Understanding Media: The Extensions of Man*





What is medium

Medium
is the
Message

Video retrieved from http://www.youtube.com/watch?v=oMUuHNP8ixY
Originally retrieved and edited from http://www.youtube.com/watch?v=ImaH51F4HBw

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What is Digital

What is digital

The original definition of digital is
"*relating to or performed with the fingers*"
("WordNet Search - 3.0," n.d.),

which is not directly related
to the current usage in the
domain of programming
and tools based on
multiple binary sequences.

What is digital

It also belongs to the cave men and their finger prints, which connects again with McLuhan, when he mentions that

- *technological innovations are extensions of human abilities and senses"*

("The Playboy Interview: Marshall McLuhan," 1969).

What is digital

Nowadays, digital can be understood as the opposite to analogical, but not limited to it.

Analogical relates to the scale representation of physical objects; digital is then a transposition, when some analogical information is represented in a discrete mathematical scheme.

What is digital

Gere (2002, p. 15) also offers a deep discussion on the definition of digital. Among the approaches, he mentions that

- *"[i]n technical terms it is used to refer to data in the form of discrete elements. Though it could refer to almost any system, numerical, linguistic or otherwise, used to describe phenomena in discrete terms over the last 60 or so years,* ***the word has become synonymous with the technology*** *which has made much of the aforementioned possible,* ***electronic digital binary computers***".

What is digital

This reflection is important to reinforce that the new media revolution is a continuous process and its reflections are intrinsically present on several environments of the modern life, including, as a consequence, the urban spaces.

- *"Technologies not only provide us with new tools for communication and expression, but also provide a new social context for our daily existence"* (Lunenfeld, 2000, p. 2).

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What is Digital Medium

What is digital medium

The term **digital media**, which is gaining evidence nowadays, results from the conjunction of the presented ideas.

What is digital medium

The concept is commonly translated as **new media** and understood as phenomena represented by the addition of technologies in order to create and distribute all sorts of contents.

What is digital medium

Digital media represent a change on the available technologies to distribute information as sound, video, photography and other sort of meaningful data, and also allows the combination and unlimited re-organization and re-distribution of content.

What is digital medium

- *"The digital is more than simply a technical term to describe systems and media dependent on electronic computation, just as the analog, which precede it, describes more than a proportional system of representation"* (Lunenfeld, 2000, p. 15).

What is digital medium

Pavlik (2008, p. 8) also defined that

- *"digital media as the systems of public communication, the systems of content production and distribution, and the computer and networked-based technologies that support and shape them",*

but considering "public" not only the domain of the public, but also the private media production for public consumption.

What is digital medium

The term digital media could also be understood as a substitution for the original “new media” concepts.

- *"(...) [F]ield of new media studies (sometimes called "digital studies") (...)"* (Manovich, 2002, p. 10).

What is digital medium

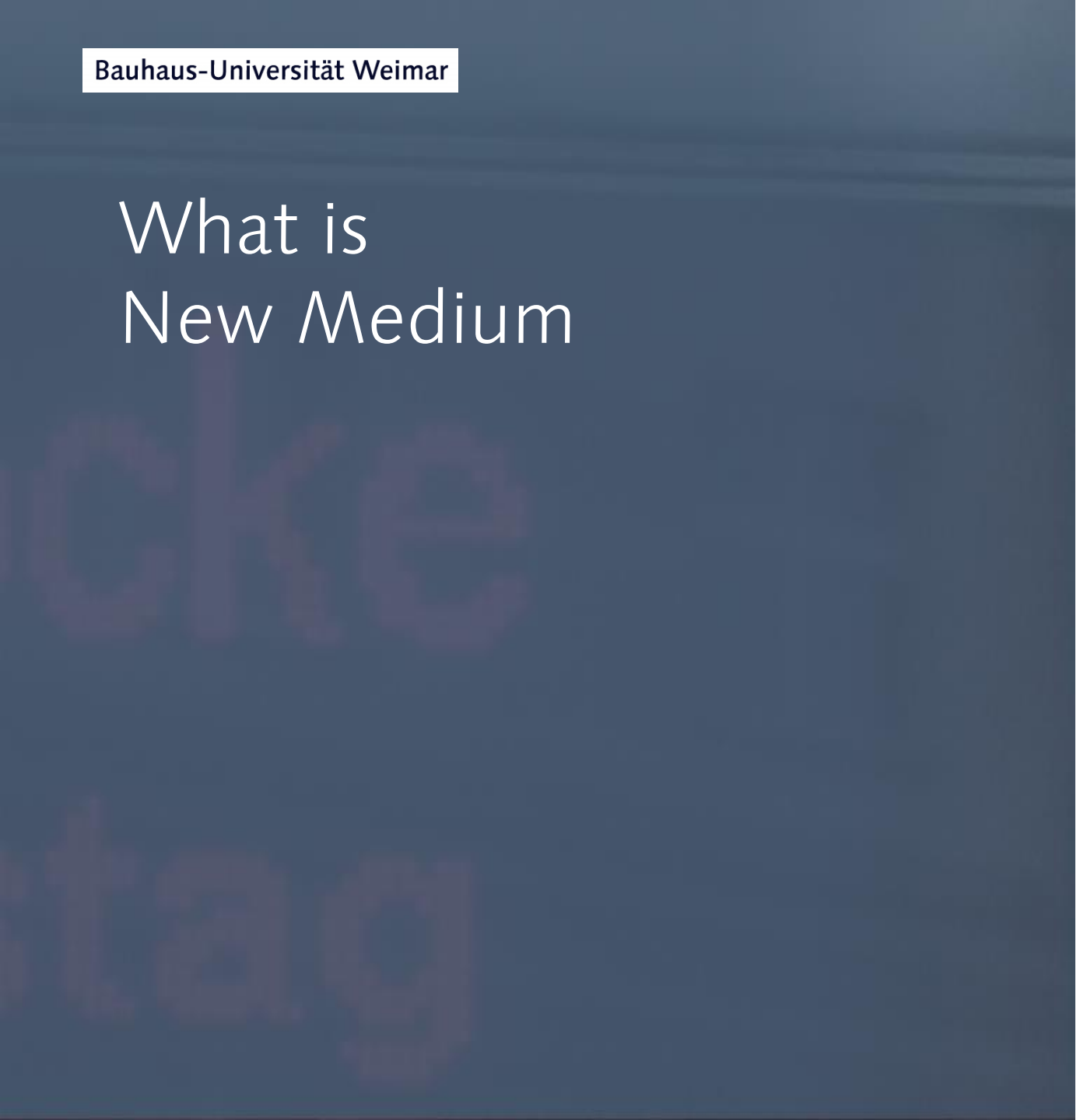
The term new media is often used in contrast to the "old" media: the analogical television, the radio and the newspapers.

In simple words:

- *"New media are networked and digital"* (Hearn, Tacchi, Foth, & Lennie, 2009, p. 9).

What is digital medium

With all that in mind, this course concerns with digital media items as all sorts of equipment or gadgets based on binary computing, interactive or not, updateable or not, being able to display or manipulate any kind of information.



What is New Medium

What is New Medium

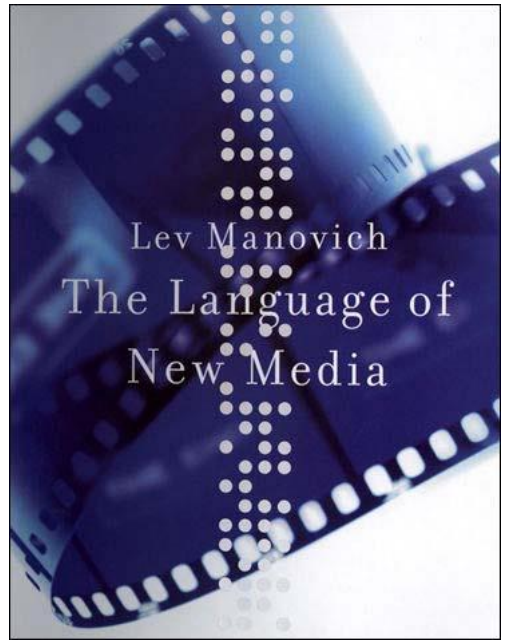
Lev Manovich

(Moskow 1960 – Currently resident in New York City)

Image retrieved from http://v2.nl/archive/people/lev-manovich/leadImage_large

Lev Manovich

2001 – *The Language of New Media*



What is New Medium

"(…) just as the printing press in the fourteenth century and photography in the nineteenth century had a revolutionary impact on the development of modern society and culture, today we are in the middle of a **new media revolution** -- the shift of all of our culture to computer-mediated forms of production, distribution and communication."

2001 – *The Language of New Media*

What is New Medium

"This new revolution is arguably more profound than the previous ones and we are just beginning to sense its initial effects.

(…) computer media revolution affects all stages of communication, including acquisition, manipulating, storage and distribution; it also affects all types of media -- text, still images, moving images, sound, and spatial constructions".

2001 – *The Language of New Media*

New Medium

Manovich's Principles of New Media:

1. Numerical representation
2. Modularity
3. Automation
4. Variability
5. Transcoding

2001 – *The Language of New Media*

New Medium

Manovich's Principles of New Media:

1. **Numerical representation**:
   All new media objects, whether they are created from scratch on computers or converted from analog media sources, are composed of digital code; they are numerical representations.

01010101110101010101010001001011110101011010101010101101001010101010100010101010101010101010010010110101010101010100100101010011101011

2001 – *The Language of New Media*

New Medium

Manovich's Principles of New Media:

2. **Modularity**:
   This principle can be called "fractal structure of new media". (…)Media elements, be it images, sounds, shapes, or behaviors, are represented as collections of discrete samples (pixels, polygons, voxels, characters, scripts). These elements are assembled into larger-scale objects but they continue to maintain their separate identity. The objects themselves can be combined into even larger objects -- again, without losing their independence.

2001 – *The Language of New Media*

New Medium

Manovich's Principles of New Media:

3. **Automation**:
   Numerical coding of media (principle 1) and modular structure of a media object (principle 2) allow to automate many operations involved in media creation, manipulation and access. Thus human intentionally can be removed from the creative process, at least in part.

   The of new media coincides with this second stage of a media society, now concerned as much with accessing and re-using existing media as with creating new one.

2001 – *The Language of New Media*

New Medium

Manovich's Principles of New Media:

4. **Variability**:
   A new media object is not something fixed once and for all but can exist in different, potentially infinite, versions. This is another consequence of numerical coding of media (principle 1) and modular structure of a media object (principle 2). Other terms which are often used in relation to new media and which would be appropriate instead of "variable" is "mutable" and "liquid".

2001 – *The Language of New Media*

New Medium

Manovich's Principles of New Media:

5. **Transcoding**:
   The last, fifth principle of cultural transcoding aims to describe what (...) is the most substantial consequence of media's computerization.

   In new media lingo, to "transcode" something is to translate it into another format. The computerization of culture gradually accomplishes similar transcoding in relation to all cultural categories and concepts.

2001 – *The Language of New Media*

New Medium

Lev Manovich

- http://manovich.net/
- https://twitter.com/manovich
- https://www.facebook.com/lev.manovich

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Mediatization

Mediatization

Mediatization

- *"City space is a space of concentration, vis-à-vis the dispersal that characterizes the territory, the countryside"*
  (Brighenti, 2010, p. 475).

The bright lights, the vending machines, the information displays, the communication devices are also immediately introduced to this mental concept of city.

Mediatization

It is almost natural to converge the urban/city idea in the direction of media studies.

- *"In other words, not only is the city mediated, but new media themselves are 'urbanized' and urban media: they are designed on the basis of a model of social relations that is soaked in the urban experience of modernity"*
  (Brighenti, 2010, p. 473).

Mediatization

There are some possible theoretical approaches to discuss the integration of the media devices in the context of the urban spaces.

The concept of ***Soft Urbanism*** is one approach:

- *"It addresses the changes of public urban space due to mediatization and develops scenarios for the interplay of the public urban space and the public media domain, for the creation of urban hybrid spaces"* ("Urban Screens 05 - sessions," 2005).

Mediatization

In essence, **mediatization** deals with the presence of the media in the modern life in a way that the existence of both is mutually dependent.

- *"Contemporary society is permeated by the media, to an extent that the media may no longer be conceived of as being separate from cultural and other social institutions"* (Hjarvard, 2008, p. 105).

Mediatization

Several explorations can emerge from this premise: there are social, political, technological implications. For now, it is enough to understand that the medium (in specific the digital medium) is an important part of the urban scenario.

Mediatization

This relation is intricate in a way that it is possible to say that the city, itself, can constitute a medium of expression.

- *"Public space is the city's medium for communication with itself, with the new and unknown, (…). Public space is urban planning's moderator in a city of free players."*
  (Christ, W., 2000 apud Struppek, 2006).

Mediatization

The digital medium is an intrinsic part of the city, and in some cases it is an irreversible evolution of available services. Hjarvard, in the article *The Mediatization of Society* (2008, p. 106), pointed that

- *"[m]edia are not simply technologies that organizations, parties or individuals can choose to use – or not use – as they see fit. A significant share of the influence media exert arises out of the fact that they have become an integral part of other institutions' operations (…)".*

Mediatization

It is not hard to identify public services which are totally dependent on the digital media to work and communicate with its users.

For instance, is it possible to imagine nowadays a ticket machine for public transportation without any display giving immediate feedback regarding the costs and purchase options? Certainly not.

Mediatization

McLuhan (1994) considered the medium as an extension of the human body; O'Neill (2008, p. 2) adds that the media affects the way in which the humans sense the world around:

- *"When we become adapted to using media in such a way, they become natural to us. We only see what they allow us to see, or touch what they allow us to touch".*

Mediatization

The next pictures reveal exactly this phenomenon. Both are showing the same location at the Times Square, in New York, in different time locations:
the first one was taken in 1905, when it was barely possible to identify facades as commercial spots.
In the image from 2008 the profusion of media expressions is evident: advertisements, vending machines, services and information.

Mediatization

Image retrieved from http://www.flickr.com/photos/clicksnappy/4604051532/

Mediatization

Image retrieved from https://picasaweb.google.com/lh/photo/zairunFDwn4nXvE7op2a4w

Mediatization

1905 and 2008

Mediatization

In fact, in cities placed in a similar cultural and temporal context, it is possible to identify the same situation.

So far, one conclusion emerges already: the mediatization is intrinsically related to the users: the city can be a medium and can have its own expression, but this relation depends on having the receptors for this message. The higher the human concentration, the higher is the presence of digital media in urban places.

Mediatization

Or, to be even simpler, mediatization is a complementary concept for urban:

- *"(…) it does mean that an understanding of the importance of media in modern society and culture can no longer rely on models that conceive of media as being separate from society and culture"* (Hjarvard, 2008, p. 106).

How media are present

How media are present

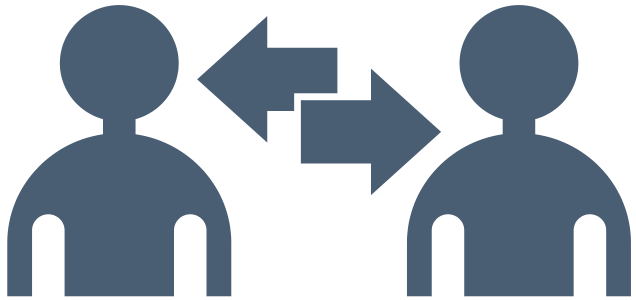
The importance of the technological aspect is evident since it determines the way that the message is perceived. It is possible, therefore, to jump to the discussion of the relation between media and the environment.

How media are present

There are several additional definitions of media, mostly gravitating around **three** main spheres:

How media are present

the ***technology*** which works as a propagation support;



the ***social*** role of this support;

the ***content*** that is being transmitted.

Digital media in public urban spaces

The idea of organizing media items into categories allows for a better understanding of their roles in public spaces.

It is important to keep in mind that the concepts of digital media and new media represent, in this case, synonyms.

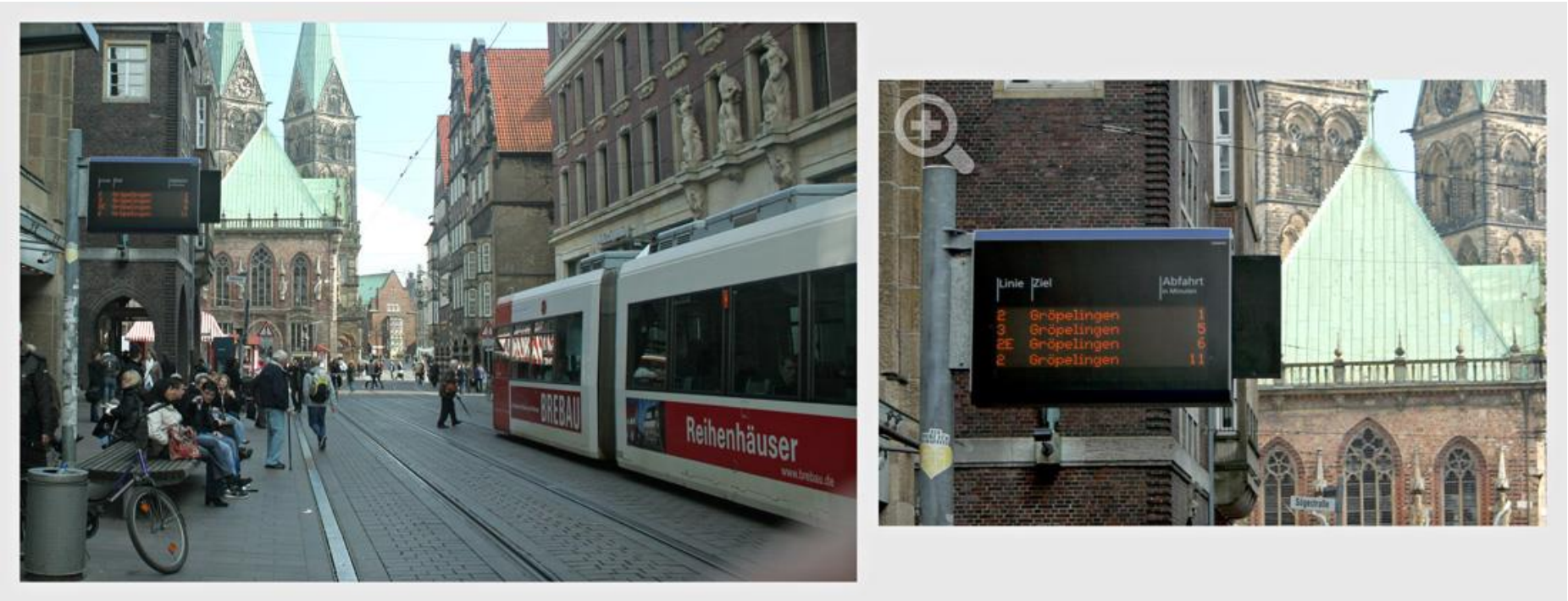
Digital media in public urban spaces

It is possible to develop some deeper considerations regarding the categorization process for the digital media items found in urban public spaces.

Inside this scheme, the items must be included on the three mentioned layers simultaneously, in order to be considered relevant. As a consequence, listed "digital medium item" can be classified by inherent characteristics into the three layers, as will be detailed in the following.

Digital media in public urban spaces

Digital media in public urban spaces



Digital media in public urban spaces

Digital media in public urban spaces

Technology

Display

CRT

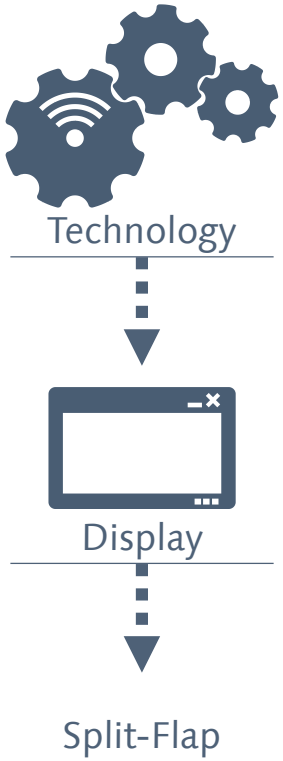
Digital media in public urban spaces

Technology

Display

Flat Screen

Digital media in public urban spaces



Digital media in public urban spaces

Technology

Interface

Button / Keyboard

Digital media in public urban spaces

Technology

Interface

Touchscreen

Digital media in public urban spaces

Technology

Interface

Other type of input

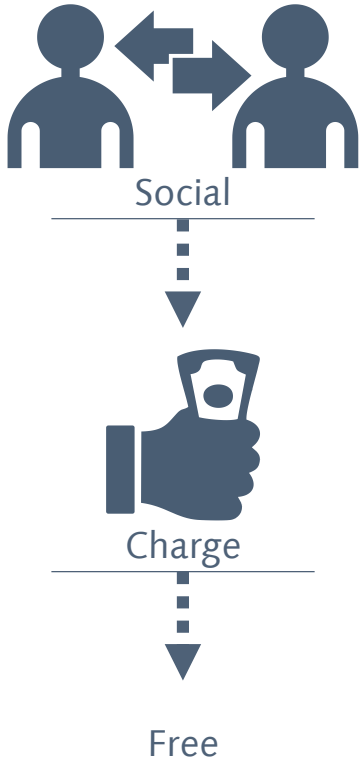
Digital media in public urban spaces

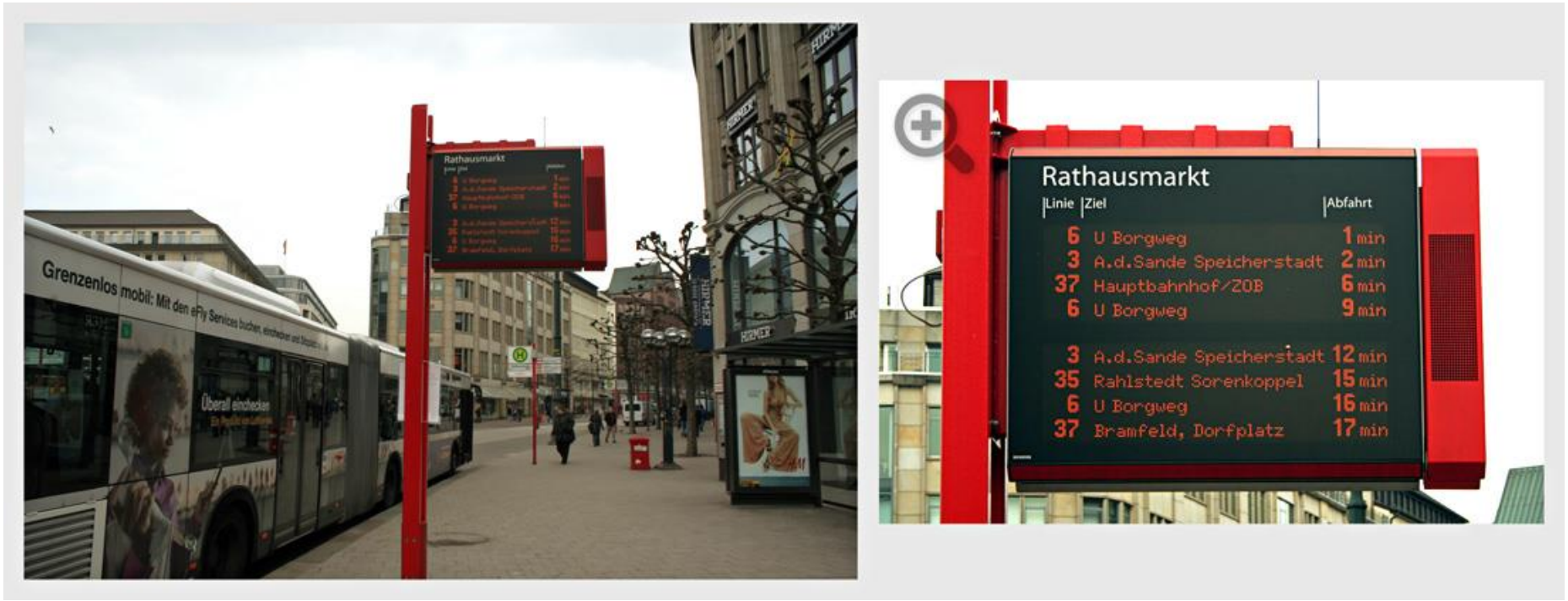
Technology

Interface

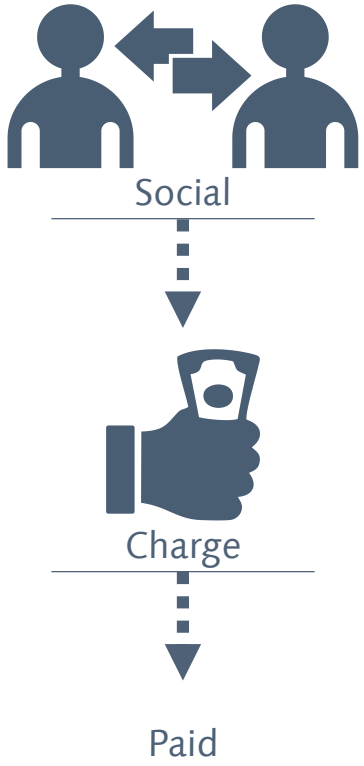
No input option

Digital media in public urban spaces

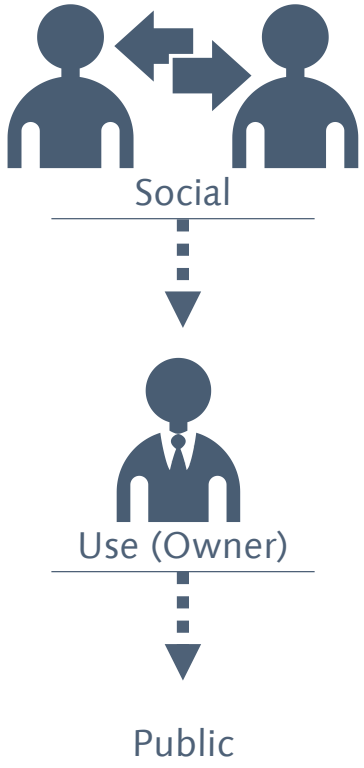




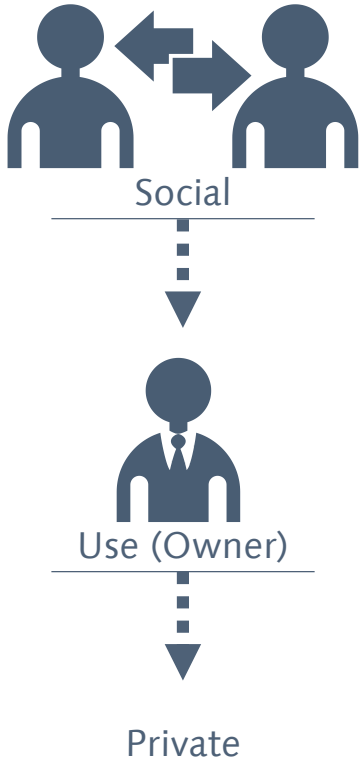
Digital media in public urban spaces



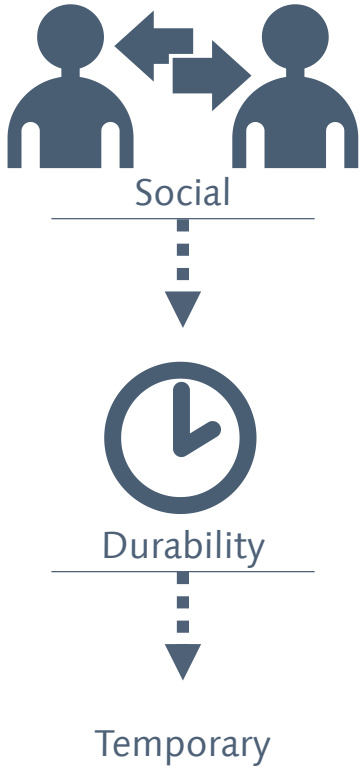
Digital media in public urban spaces



Digital media in public urban spaces

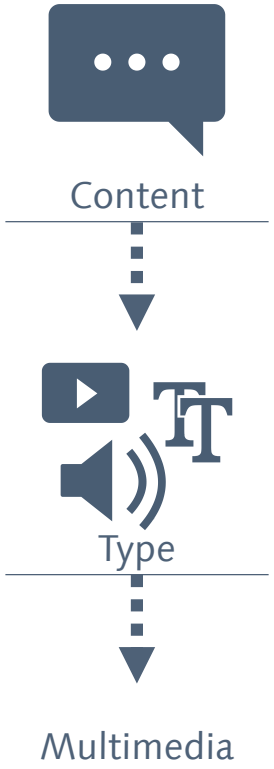


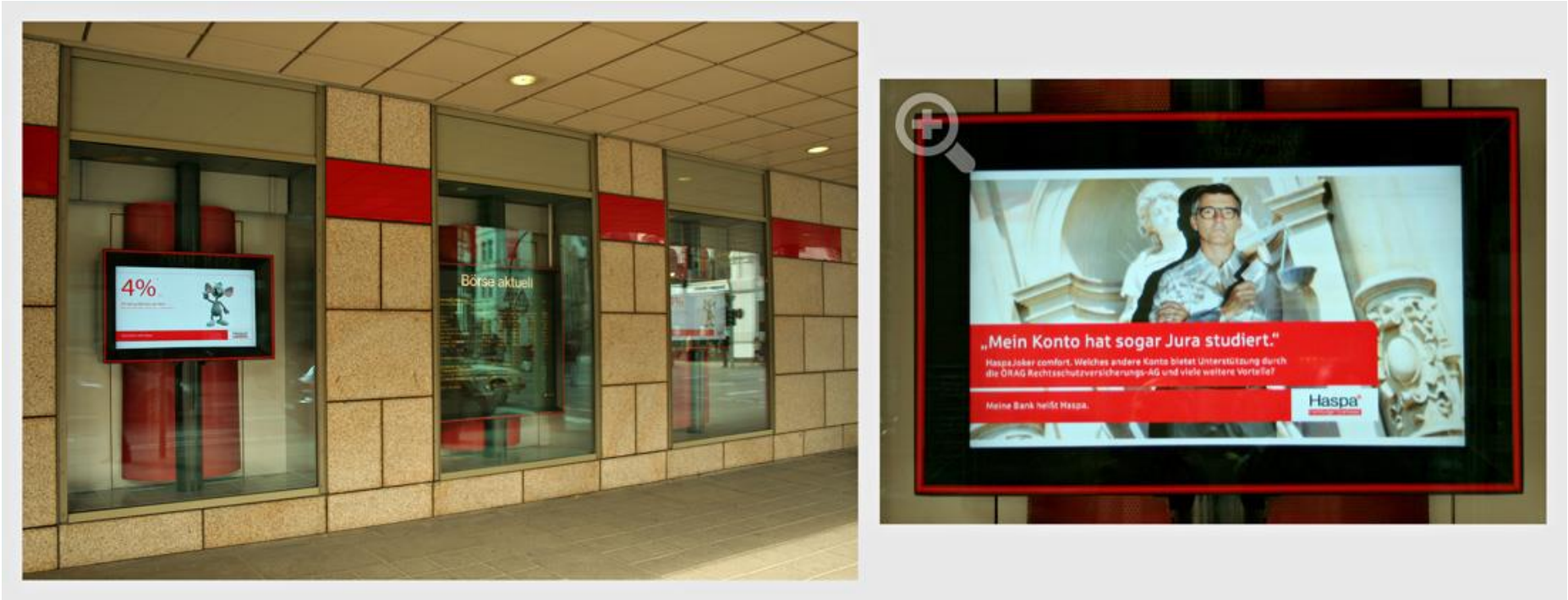
Digital media in public urban spaces



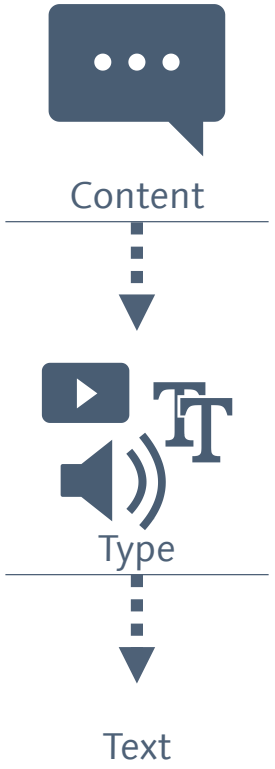
Digital media in public urban spaces

Digital media in public urban spaces

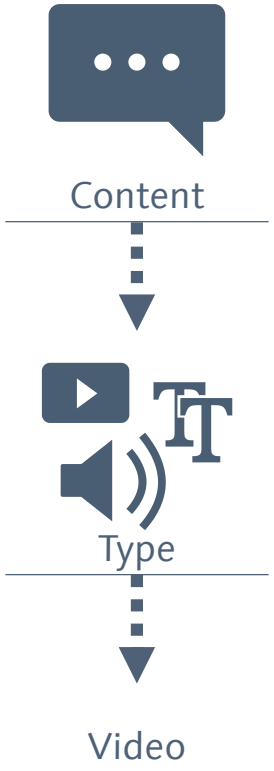




Digital media in public urban spaces



Digital media in public urban spaces



Digital media in public urban spaces

Content

Flow

On-line update

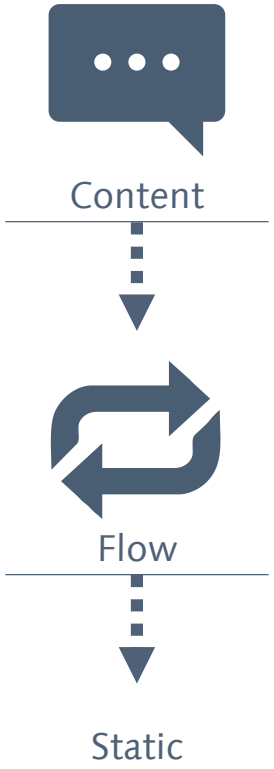
Digital media in public urban spaces

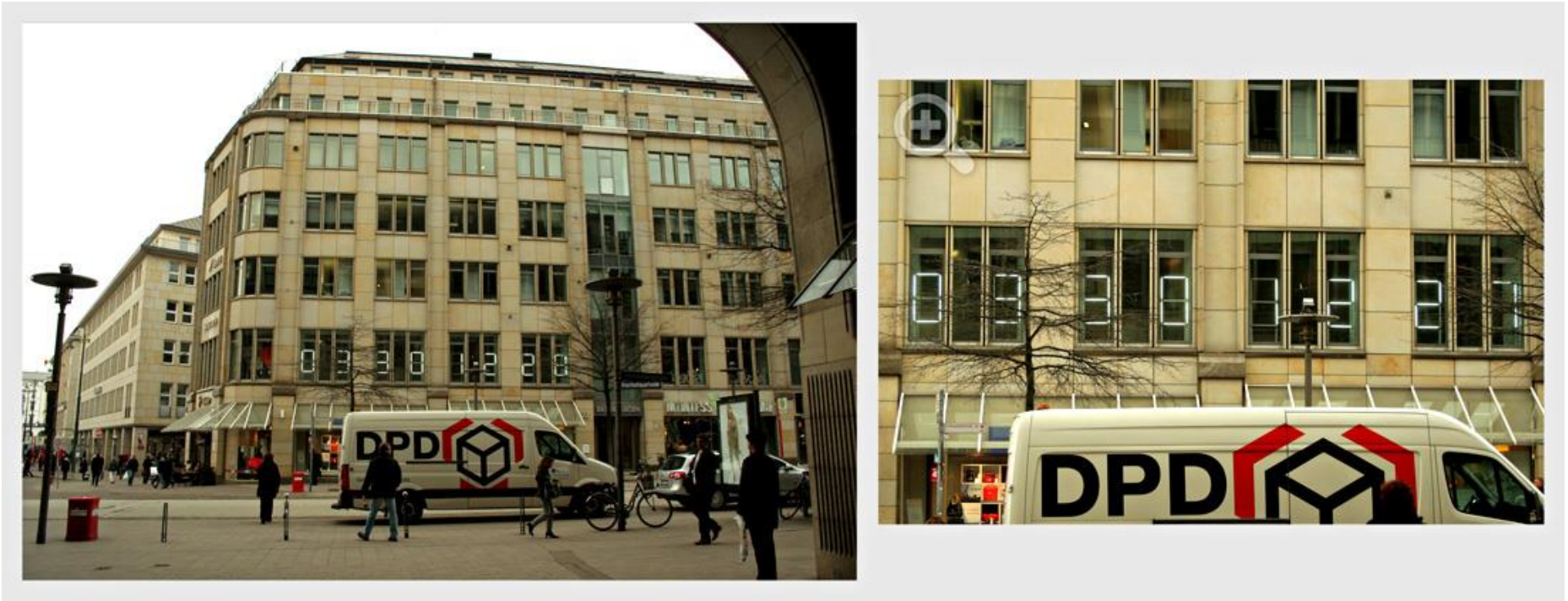
Content

Flow

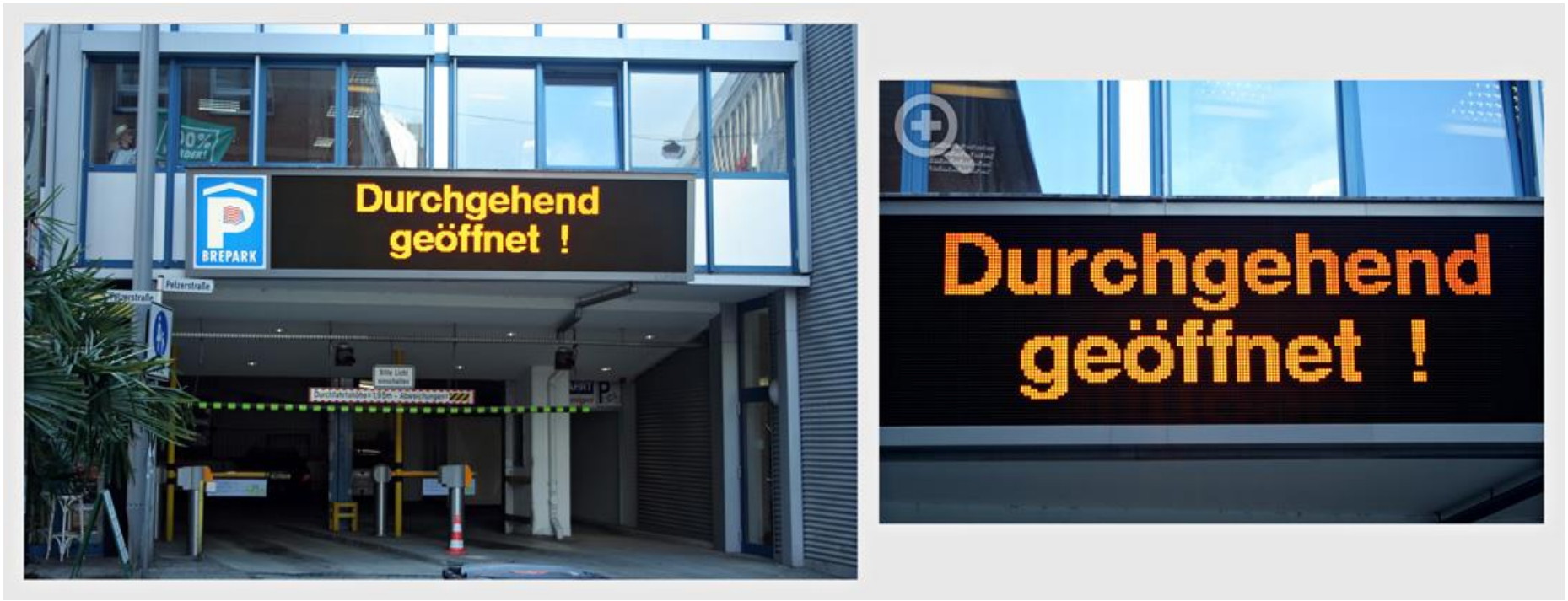
Manual update

Digital media in public urban spaces





Digital media in public urban spaces



Digital media in public urban spaces

Digital media in public urban spaces

Content

Service

Commercial

Digital media in public urban spaces

Content

Service

Communication

Digital media in public urban spaces

Digital media in public urban spaces

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Old Media

Obsolete Technologies That People Thought Would Last Forever

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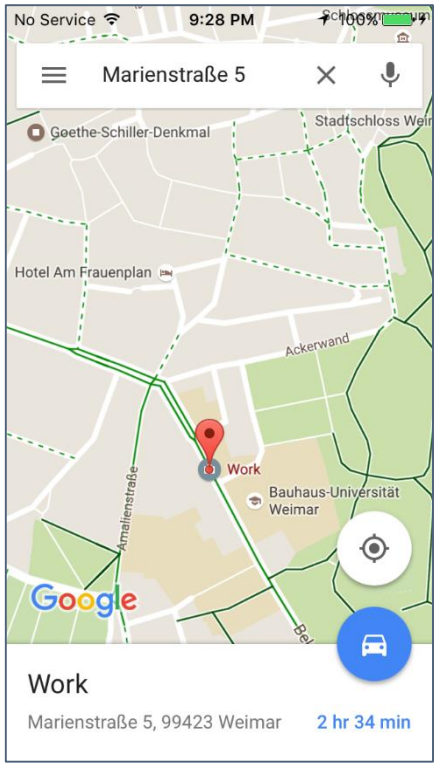
Obsolete Technologies That People Thought Would Last Forever

- Folding Maps



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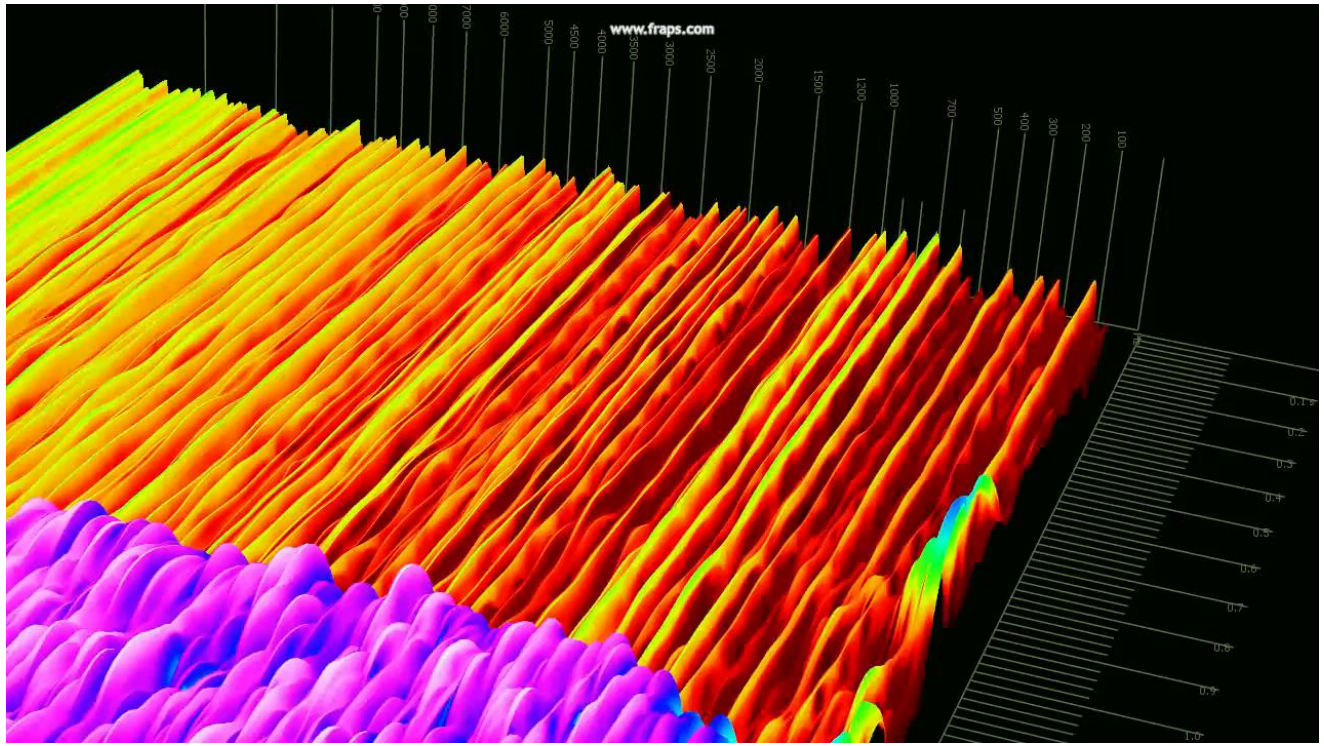
Obsolete Technologies That People Thought Would Last Forever

- Dial-up Modems



Video: https://www.youtube.com/watch?v=vvr9AMWEU-c

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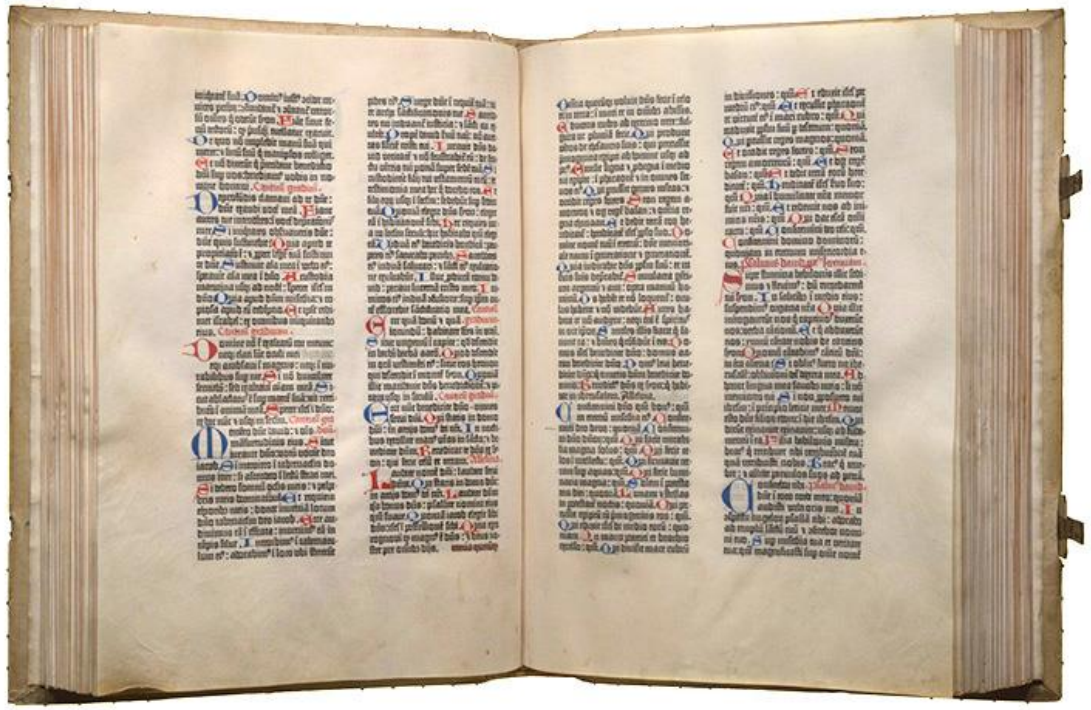
Obsolete Technologies That People Thought Would Last Forever

- Printed Media



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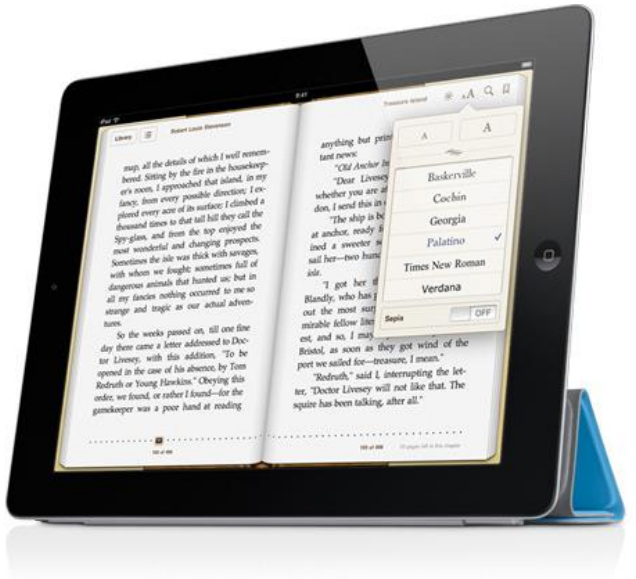

https://richmccue.files.wordpress.com/2012/06/ibooks_reader1.jpg

Retrieved and modified from http://io9.gizmodo.com/25-obsolete-technologies-that-future-generations-will-n-1526922030

Obsolete Technologies That People Thought Would Last Forever

- All Sorts of Data Storage Media

Retrieved and modified from http://io9.gizmodo.com/25-obsolete-technologies-that-future-generations-will-n-1526922030

Obsolete Technologies That People Thought Would Last Forever

- All Sorts of Graphical and Video Media Storage

00101010101
10101010101
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01011011110
10100010101

Retrieved and modified from http://io9.gizmodo.com/25-obsolete-technologies-that-future-generations-will-n-1526922030

Obsolete Technologies That People Thought Would Last Forever

- All Sorts of Audio Players and Media Storage

00101010101
10101010101
00101010101
01010101100
01011011110
10100010101

Retrieved and modified from http://io9.gizmodo.com/25-obsolete-technologies-that-future-generations-will-n-1526922030

Obsolete Technologies That People Thought Would Last Forever

- Pulse Telephone Networks and Rotary Phones

Image Retrieved from http://bpc.h-cdn.co/assets/15/50/980x490/landscape-1449608189-best-smartphones-2015.jpg

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Obsolete Technologies That People Thought Would Last Forever

- Public Pay Phones

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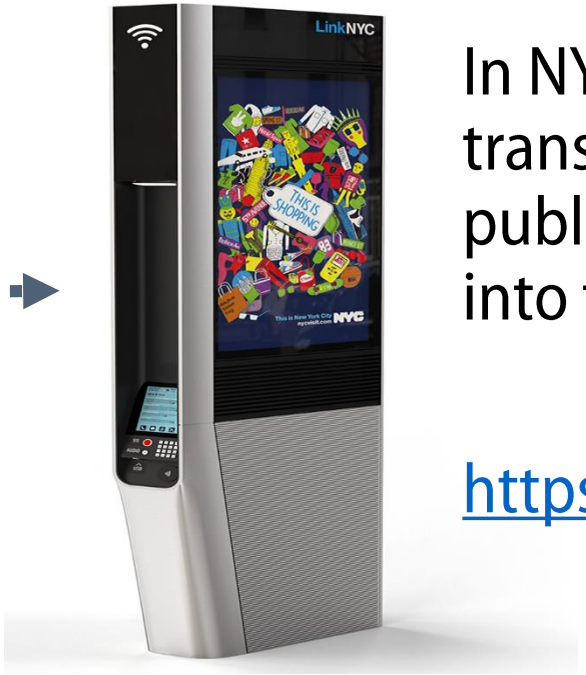
Obsolete Technologies That People Thought Would Last Forever

- Public Pay Phones



In NYC a project is transforming old public pay phones into free Wi-Fi booths.

https://www.link.nyc/

Image Retrieved and Modified from http://thenerdstash.com/wp-content/uploads/2015/12/LinkNYC-Featured-Image.jpg

Obsolete Technologies That People Thought Would Last Forever

- Phones That Allow Neck Cradling

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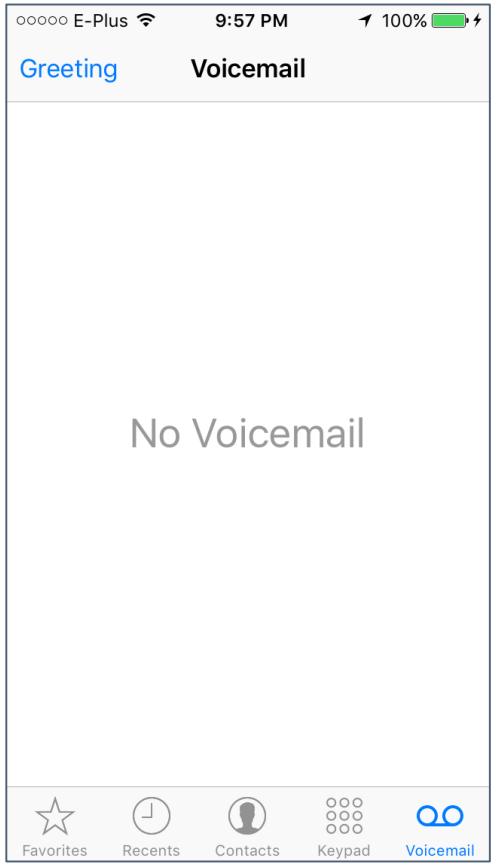
Obsolete Technologies That People Thought Would Last Forever

- Answering Machines

Image Retrieved from https://img0.etsystatic.com/012/1/6262900/il_fullxfull.415289798_8p8e.jpg



Retrieved and modified from http://io9.gizmodo.com/25-obsolete-technologies-that-future-generations-will-n-1526922030

Obsolete Technologies That People Thought Would Last Forever

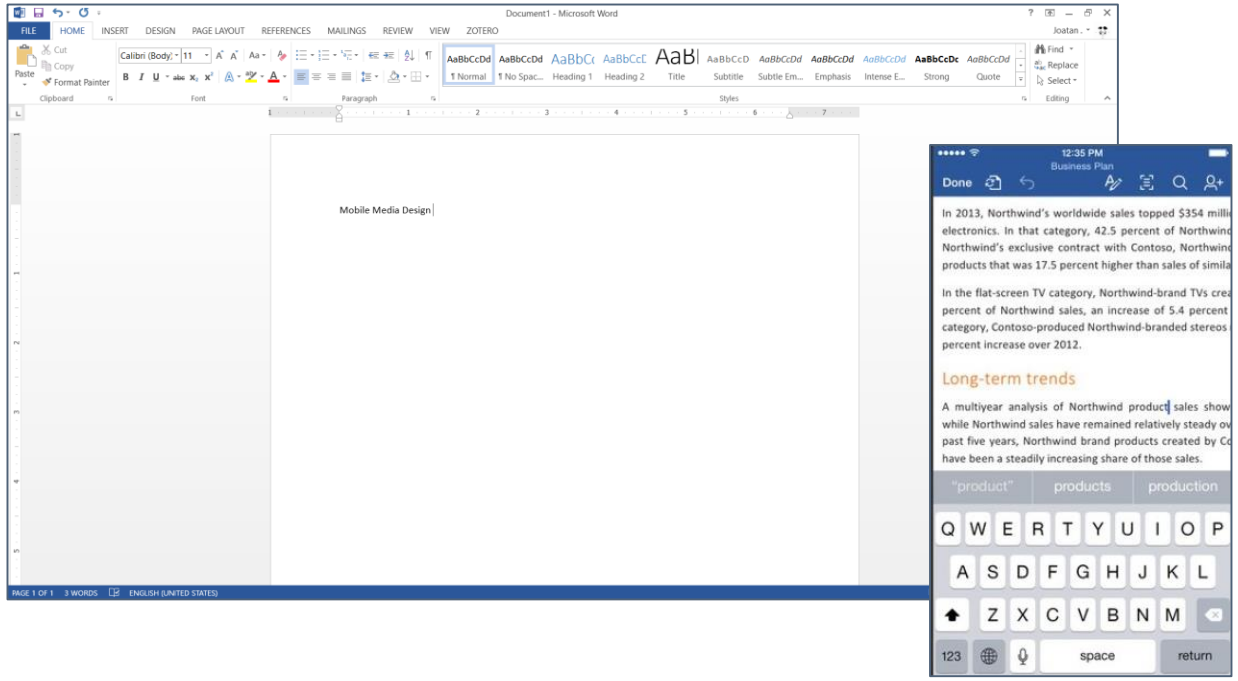
- Cathode Ray Tube Televisions

http://www.5kplayer.com/video-music-player/img/5k-netflix-mp-1127.png

Retrieved and modified from http://io9.gizmodo.com/25-obsolete-technologies-that-future-generations-will-n-1526922030

Obsolete Technologies That People Thought Would Last Forever

- Typewriters



http://i.ebayimg.com/00/s/NjI4WDc2NQ==/z/DlgAAOSwd4tTs9BJ/$_32.JPG?set_id=880000500F

http://cdn.osxdaily.com/wp-content/uploads/2014/11/microsoft-word-iphone-610x494.jpg

Retrieved and modified from http://io9.gizmodo.com/25-obsolete-technologies-that-future-generations-will-n-1526922030

Where most of them go?

http://www.produseonline.com/fisiere/produseonline_62a7c65851178b2e6e8464e7e18de93b_bigstock-flat-design-concept-for-smartp-61608080-e1416951209684.jpg

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Schedule

Course Schedule and Details

- **18.04** **MMD 01** - Introduction | **MMD 02** - Media & Mediatization
- **25.04** **MMD 03** - Mobile Media & Apps | **MMD 04** - UNESCO WHS Tourism in Germany / Project Description
- **09.05** **MMD 05** - Mobile Guidelines | **MMD 06** - Icon Design / Project Consultation
- **23.05** **MMD 07** - References & Writing / Project Consultation
- **06.06** Students' Prototype Presentations **(or 13.06 - waiting external confirmation)**
- **20.06** Students' Prototype Presentations
- **04.07** **MMD 08** - Closing Lecture & Feedback
- **31.07** Deadline for the paper/essay: 23:59

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Thank You!

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02. Media & Mediatization

Faculty of Art & Design
Chair of Interface Design

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http://www.uni-weimar.de/medien/wiki/IFD:MobileMediaDesign-SS16