



Universidade do Porto

**FEUP** Faculdade de  
Engenharia

# Sistemas de Informação

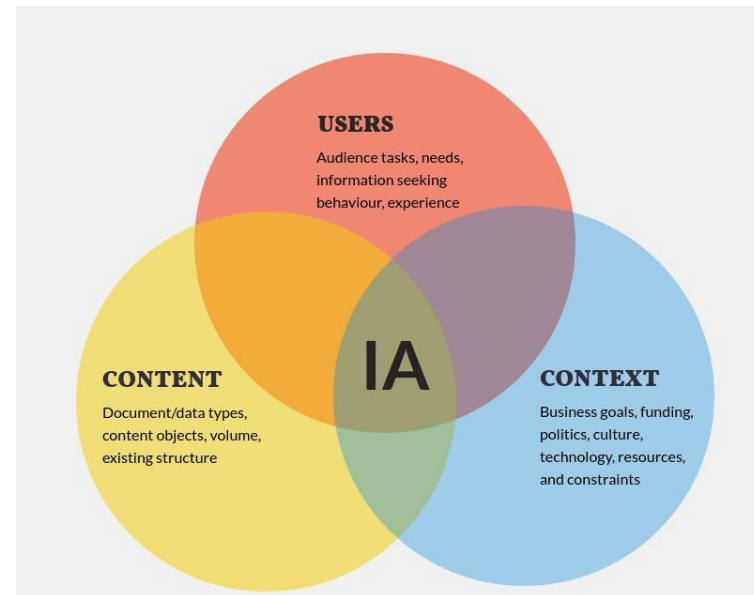
## *Information Systems*

*Information Architecture*

# Information Architecture

## Definition

- The art and science of structuring, organizing and labeling information to help people find and manage information.
- Information architecture is the practice of deciding how to arrange the parts of something to be understandable.
- *Information architecture is all about prioritization. Pareto Principle (80/20): determine which 20% is most important (information needs, content design).*



<http://boxesandarrows.com/designing-screens-using-cores-and-paths/>

## Core and Paths

- “Instead of beginning with the homepage and overall navigation scheme, start with the core content and work outward from there.”
- “To layout paths, first place goals at natural points of interest. Then connect the goals to one another to form the paths.”

Christopher Alexander

# The Cores and Paths Model

## 1. The Core

- The core is **the reason users come to the site**. From the provider's perspective, the core is what's offered on the site. Note that the core isn't always a page. For YouTube, the core is a video and not a page on [www.youtube.com](http://www.youtube.com). This makes it possible to have distributable cores, or content that may be found on other websites.
- The core may be accompanied by supporting information. Technical details, for instance, can be considered an extension of the core. On sites like flickr a description of a photo as well as the tags user give it are supporting information for the core, which is the photo itself.

## 2. Inward Paths

- **How do users get to the core?** Sometimes visitors arrive at the core via the main navigation or search of site. But they might also come directly from Google. Other paths are possible as well, such as links from other sites, teasers, entering URLs directly in the browser, and even via rss feeds and newsletters. Thinking about inward paths also considers aspects of SEO, such as what the trigger words do people search with.

## 3. Outward Paths

- Assuming users found what they were looking for, **what can they do from there? What are their calls to action?** Fundamentally **every subsequent interaction should bring some kind of value to the business**. This is where conversion takes place. Outward paths can be everything from placing an item in a "shopping cart" to recommending a product to a friend. As with inward paths, there are a variety of options to consider, including links that lead away from the site.

<http://boxesandarrows.com/designing-screens-using-cores-and-paths/>

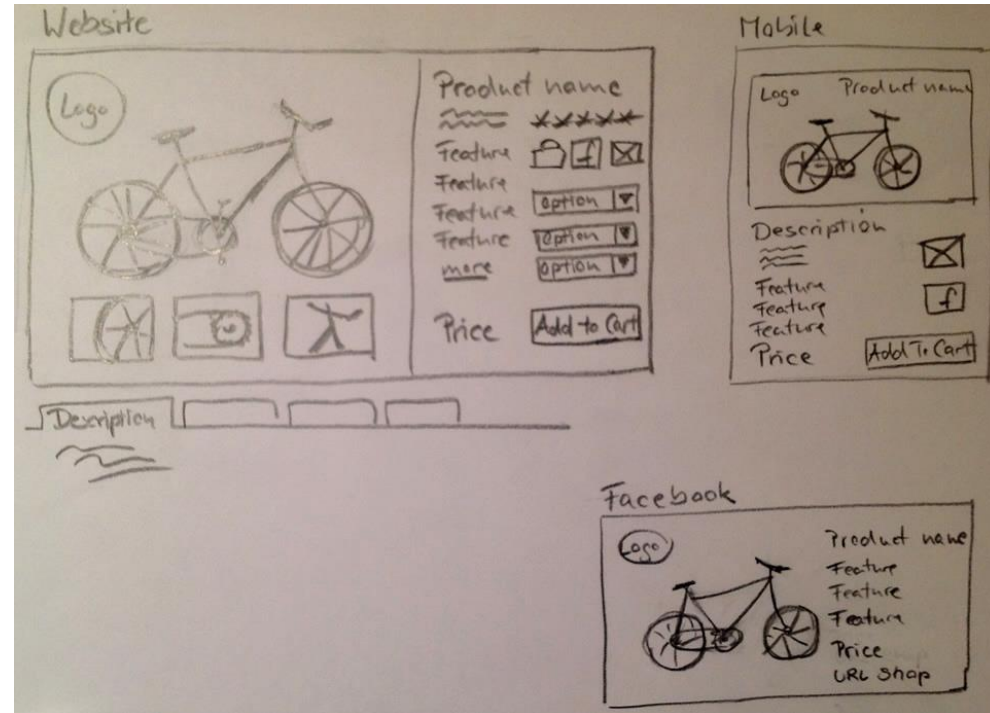
Imagine you're on one side of a grass lawn and you want to reach the bus stop on the opposite side. Do you walk on the sidewalk around the edges or cross in the middle? Assuming the grass is dry and it's not prohibited, you'd probably take the shortest path and walk across the lawn to the bus stop. If others have done so before, you may see a beaten path that you could follow.

Such unplanned paths connect the shortest distance between two points, and we can find them everywhere in our surroundings. In urban planning they are known as “desire paths” or “desire lines.” They are an indication of the gap between natural human behavior and contrived (planned or forced) routes.



# From core to the paths ... CORE VIEWS

Each of these three elements has a different function. **The core** is really where value creation for both users and the business takes place. Persuasion plays a big role here: organizations ultimately want users to take some specific action. The **inward paths ensure findability**. This is how people come to the products and services they are looking for on the web. From a business standpoint, the **outward paths** are what bring ROI to an organization.



# Amazon IA design approach

## INWARD PATHS

Ensure *findability* for the user

External search

Internal search

Navigation

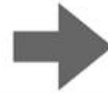
Internal teaser

Link from wish list

Newsletter

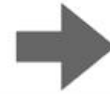
Email

Link from website



## CORE

Creates *value* for users  
and for the business



## OUTWARD PATHS

Bring *ROI* to  
the business

Add to Cart (new)

Add to wish list

Buy used

"Like" this book

Read Kindle edition

Rate this book

Related products

Sell this item

amazon.com

Help, Sign in to get personalized recommendations. New customer? Start here

Your Amazon.com | Today's Deals | Gifts & Wish Lists | Gift Cards

Shop All Departments | Search: Books | Cart | Wish List

Books | Advanced Search | Browse Subjects | New Releases | Best Sellers | The New York Times Best Sellers | Children's Books | Textbooks | Sell Your Books

FREE Two-Day Shipping: See details

Your Digital Items | Your Account | Help

Shop All Departments | Search: Books

Books | Advanced Search | Browse Subjects | New Releases | Best Sellers | The New York Times Best Sellers | Children's Books | Textbooks | Sell Your Books

Look Inside!

The Long Tail: Why the Future of Business is Selling Less of More [Hardcover]

Chris Anderson (Author)

Amazon Price: \$11.33

Buy New

Add to Cart

Buy Used

Used - Good \$3.99

Add to Wish List

Read this book on Kindle

Kindle Edition \$11.33

Read it now on this PC

Also on Kindle, iPhone, iPad, Android, Blackberry, PC and Mac

Format	Amazon Price	New from	Used from
Kindle Edition	\$11.33	-	-
Hardcover	\$11.33	\$1.50	\$0.01
Paperback	-	\$1,209.00	\$15.10
Audio CD, Unabridged	\$15.99	\$0.07	\$5.27
Audible Audio Edition, Unabridged	\$27.54	or Free with Audible 30-day free trial	-

Book Description

Publication Date: July 11, 2006

What happens when the bottlenecks that stand between supply and demand in our culture go away and everything becomes available to everyone?

"The Long Tail" is a powerful new force in our economy: the rise of the rich. As the cost of reaching consumers drops dramatically, our markets are shifting from a one-size-fits-all model of mass appeal to one of unlimited variety.

# What to do ...

- Content refers to patterns and relationships
- Prior to the beginning of the work is mandatory to know what we have to work with
- For that we must ...
  - Do the content “inventory” – What we have and Where it is
  - *"If you don't know what content you have now, you can't make smart decisions about what needs to happen next."*

*In Content Strategy for the Web, Kristina Halvorson*

- Audit the content ... Is it suitable ? How to improve ? (Qualitative evaluation)
- Create a content map ...



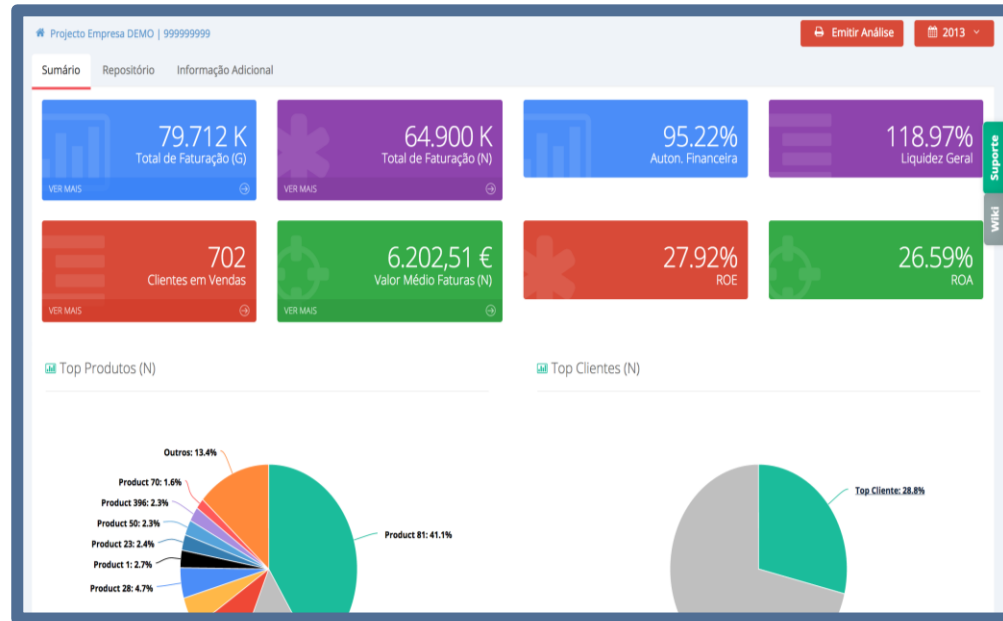
Company overview (Turnover, Costs, Cost Evolution).

Quickly View Company Status

View to be used as a management tool

### Inward Paths/Trigger Words

- Sign-in
- Home button



### Outward Paths/Call to Action

- Provide to the user an aggregate and as of period/year information about the company activity (sales, accounting, KPIs)
- Drill down to “know more” on Products, Customers, all KPIs (ex. Total Faturação/Total Turnover)
- Change Year (and related information)
- Issue integrated analysis (export as PDF)

Elements of the core

KPI\_001 (KPI) | Total Turnover

KPI\_002 (KPI) | Total Costs

KPI\_003 (KPI) | Customers with Sales

KPI\_004 (KPI) | AVG Sale

PIE\_001 (PIE) | Top Products

PIE\_002 (PIE) | Top Customers

(...)

# Paths

