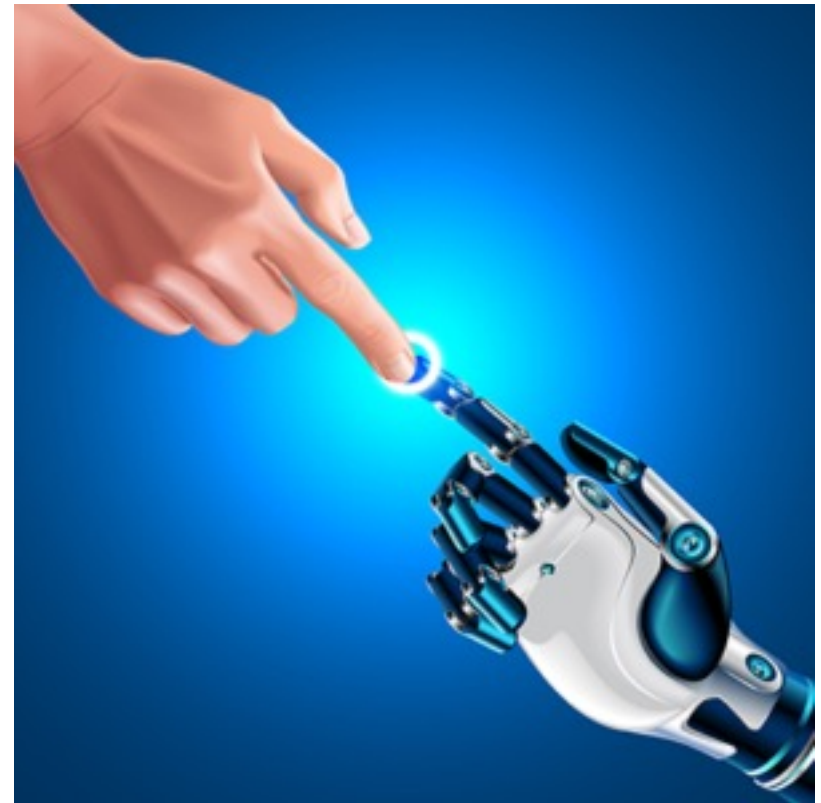


# **HUMAN COMPUTER INTERACTION**



**KASSYMOVA AIZHAN BAKHYTZHANOVNA,  
PHD, ASSOCIATE PROFESSOR**

**A.KASSYMOVA@SATBAYEV.UNIVERSITY**

# LESSON PLAN

- **How to design for navigation**
- **User Experience Research Techniques**
- **Competitive Research**

**“ It's a fact: People won't  
use your web site if they  
can't find their way around  
it.”**

**Steve Krug**



[www.interaction-design.org](http://www.interaction-design.org)

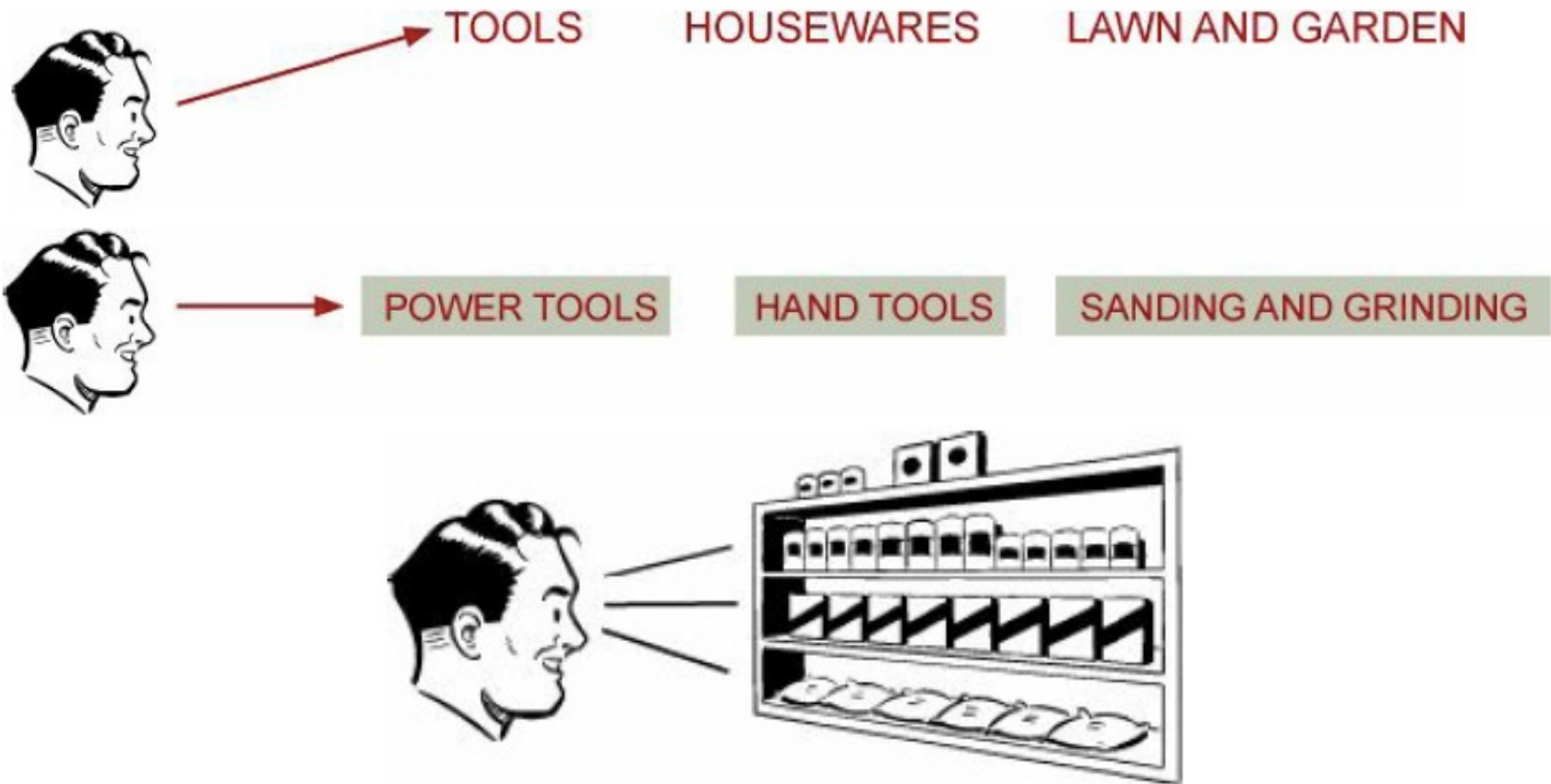
**Solution:**

**Clear, simple, consistent navigation.**

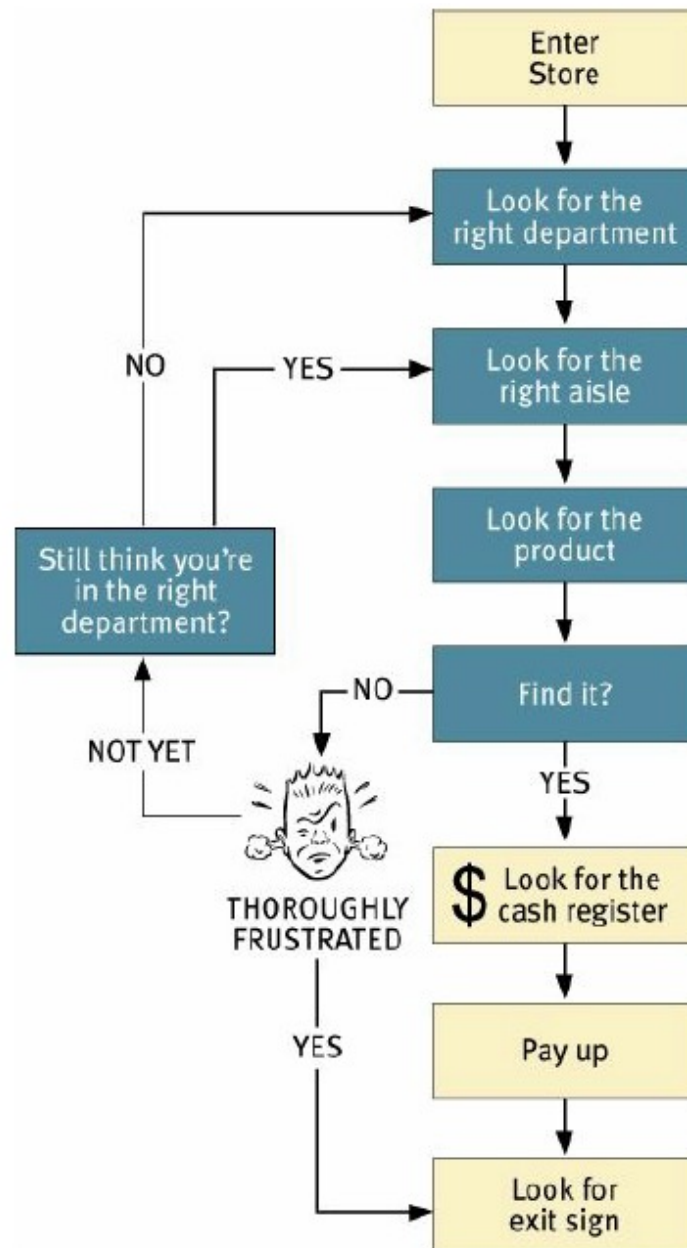
# **SCENE FROM A MALL**

- **Saturday afternoon**
- **Head for shopping mall**
- **Want to buy a chainsaw**

# SCENE FROM A MALL



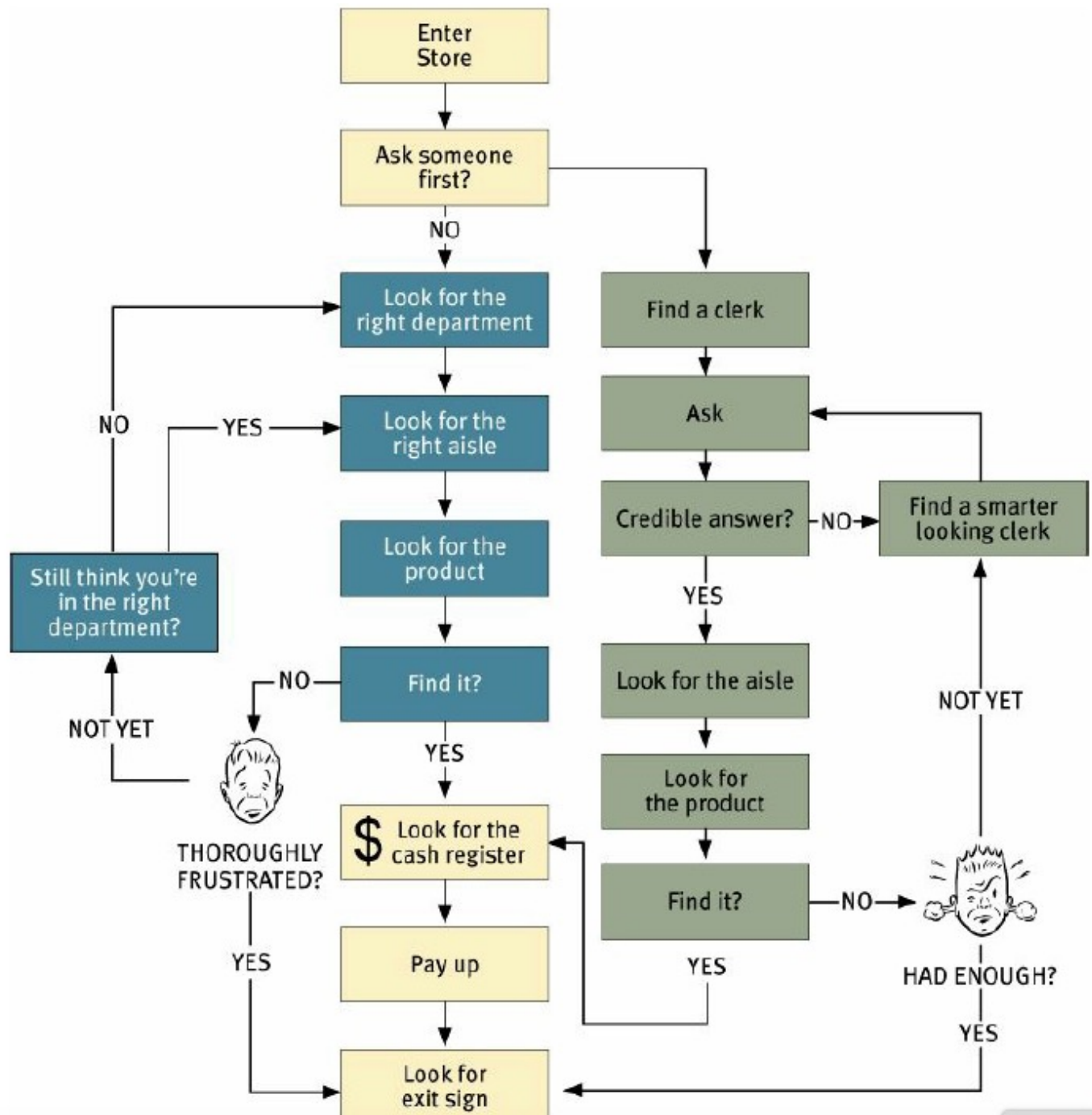
# SCENE FROM A MALL



# SCENE FROM A MALL

- **You may decide to ask someone instead**
- **This depends on:**
  - Familiarity with store
  - Your trust in the store's ability to organize sensibly
  - How much hurry you're in
  - How sociable you are





# WEB NAVIGATION 101

- You got through a similar process when you enter a Web site:
  - you are trying to find something
  - you decide whether to ask first or browse first

gas chainsaws

Search



Search results

Lawn & Garden > Chain Saws

### "Gas Chainsaws"



Remington 55cc 20" Gas-Powered Chainsaw



~~\$309.99~~ **\$237.49**

Add To Cart



PosiLoc 16-in 38cc Gas Chain Saw



~~\$149.99~~ **\$113.99**

Add To Cart



Craftsman 18-in 42cc Gas Chain Saw with Extra 14-in Bar & Chain



~~\$234.99~~ **\$169.99**

Add To Cart



McCulloch 18-in 38cc Gas Chain Saw



~~\$269.99~~ **\$199.88**

Add To Cart



BLUE MAX 16" 38CC Gas Chainsaw - 5466



~~\$169.99~~ **\$161.49**

Add To Cart



Hitachi 40 cc 2.4 hp Gas Chain Saw



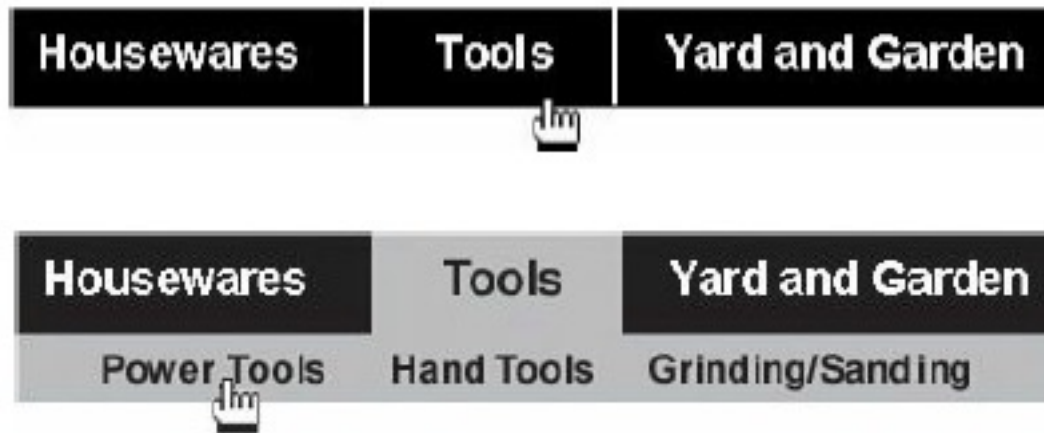
~~\$349.99~~ **\$299.88**

Add To Cart

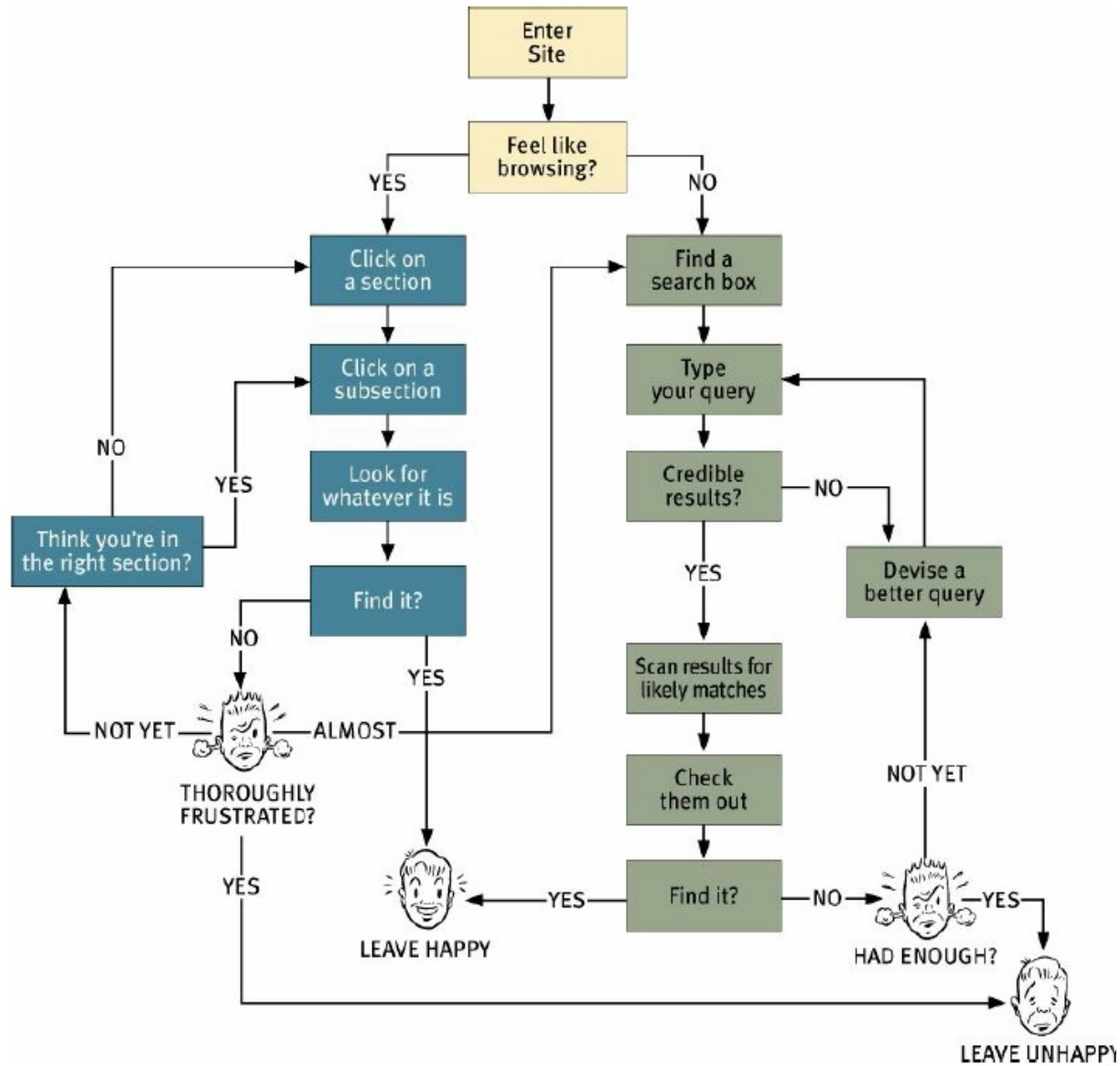
# WEB NAVIGATION 101

- **Search-dominant users (Jakob Nielsen)**
  - Look for search box as soon as they enter a site
- **Link-dominant users (Jakob Nielsen)**
  - Browse first
  - Search only if browsing fails

- If you choose to browse, you make your way through a hierarchy, using signs to guide you.



# HERE'S WHAT THE PROCESS LOOKS LIKE:



# PROBLEMS WITH THE WEB EXPERIENCE

- **Web experience similar to physical experience in the real world:**
  - Moving around in a space
  - “Cruising”, “Browsing”, “Surfing”
- **Web experience misses many of the cues we’ve relied on all our lives to negotiate spaces:**
  - No sense of scale
    - 1 page? 100 pages? 5000 pages?
    - Have I missed something? (museum, department store)
  - How do I know when to stop looking?
  - No sense of direction (no left, up, right, down)
  - No sense of location





# ON THE WEB...

- **No physical sense**
- **Reliance on remembering conceptual hierarchy**
- **Bookmarks – stored personal shortcuts**
- **Back button – accounts for 30-40% of Web clicks**
- **Home pages – Akin to North Star**

# LACK OF WEB'S PHYSICALITY

## Plus side

- **Sense of weightlessness**
- **Easy to lose track of time**

## Negative side

- **Figuring out where you are**
- **Figuring out how to go from one place to another**

# DEFINITION OF NAVIGATION

It's about doing two things

- Getting from one place to another
- Figuring out where you are

# PURPOSE OF NAVIGATION

- **Helps us find what we're looking for**
- **Tells us where we are**
- **Tells us how to use the site**
  - Implicitly gives instructions
  - Where to begin
  - What options are available
- **Gives user confidence in builders**
  - Good navigation creates good impression

# CONVENTIONS FOR NAVIGATING THE PHYSICAL WORLD

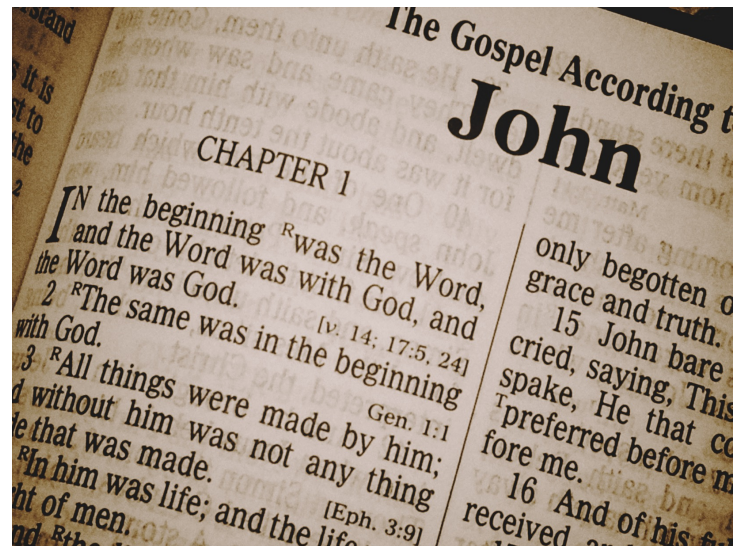
- **Cities and Buildings**

- Street signs



- **Books and Magazines**

- Page numbers, chapter titles





"You are here" indicator

Page name  
**CERAMIC KNIVES**

- Local navigation (Things at the current level)
- Cutlery
  - SHOP BY CATEGORY
  - Knife Sets
  - Chef's Knives
  - Santoku Knives
  - Steak Knives
  - Utility Knives
  - Cleavers & Boning Knives
  - Slicing & Carving Knives
  - Paring Knives
  - Bread Knives
  - Cheese Knives
  - Fruit & Vegetable Knives
  - Kitchen Shears
  - Ceramic Knives
  - Cutting Boards
  - Knife Sharpeners
  - Knife Storage

The product page for 'Ceramic Knives' features a large hero image of a ceramic knife. Below the image is a grid of product listings with prices. The page includes a 'Shop by Category' sidebar and a footer with contact information and utility links.

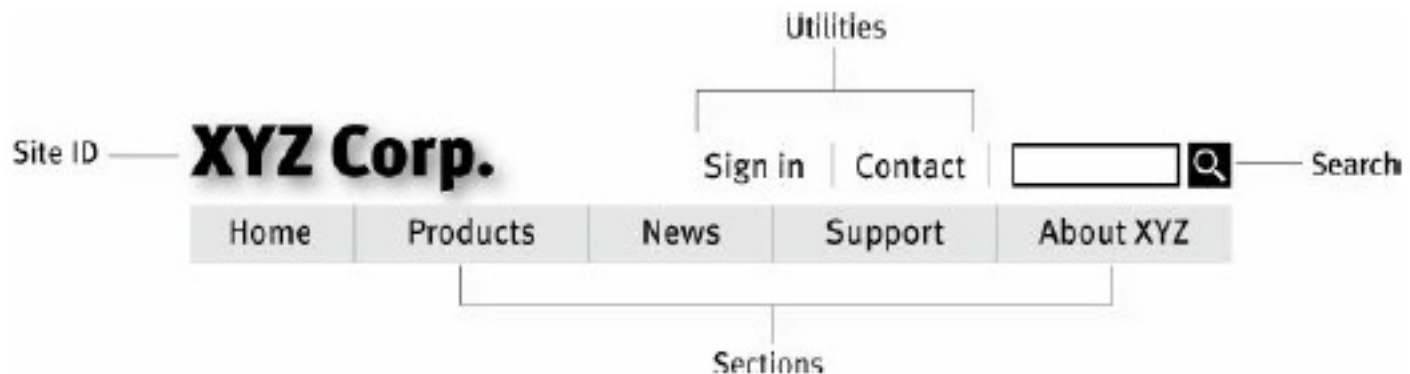
Footer navigation

1.877.812.8236    LET US CALL YOU    LIVE CHAT    NEED HELP    RESOURCES    CREDIT CARD    OUR COMPANY

Stores Locations    Track Your Order    Returns    Gift Cards    Safety Recalls    Contact Request    Site Feedback    International Shipping    Shipping To [US]

# GLOBAL NAVIGATION AKA PERSISTENT NAVIGATION

- Should be consistent
- Should consist of: Site ID, Sections, Utilities, Home, Search



# GLOBAL NAVIGATION AKA PERSISTENT NAVIGATION

- **Exceptions in consistency**
  - Home Page
  - Forms (e-commerce site)
  - Printable pages
- **Exceptions can have minimal versions**



The image shows a screenshot of the WordPress login interface. At the top, the WordPress logo is displayed. Below it, there is a login form with two input fields: 'Username' and 'Password'. Below the password field, there is a 'Log In' button with a Facebook icon, a 'Remember Me' checkbox, and another 'Log In' button. At the bottom of the form, there are two links: 'Register' and 'Lost your password?'. The 'Register' link is highlighted with a red box. Below the links, there is a 'Back to' link with a blue bar behind it.



# EXAMPLES

## Feedback Form

We would love to hear your thoughts, concerns or problems with anything so we can improve!

### Feedback Type

- Comments     Bug Reports     Questions

### Describe Feedback: \*

### Name \*

First Name    Last Name

### E-mail \*

ex: myname@example.com

SUBMIT FEEDBACK

## Subscribe to our free mailings now!

Name

Your email →

Please enter symbols shown on the image:



[Reload image](#)

- Company news
- Discounts & special offers
- New product releases

Subscribe

# SITE ID (OR LOGO)

- **Building name for a Web site**
- **Only need to see it once on a building**
- **Need to see it on every page on the Web**
  - Why? Primary mode of transportation is teleportation
- **Placement – Top of page**
- **Represents whole site**
  - Highest thing in logical hierarchy of the site



This site

Sections of this site

Subsections

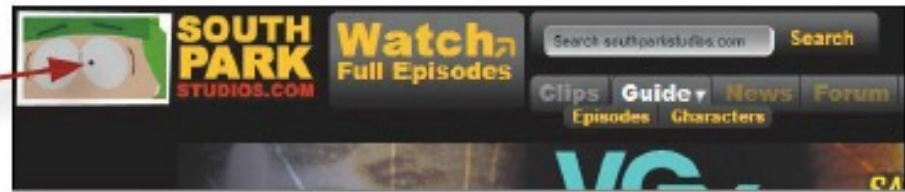
Sub-subsections, etc.

This page

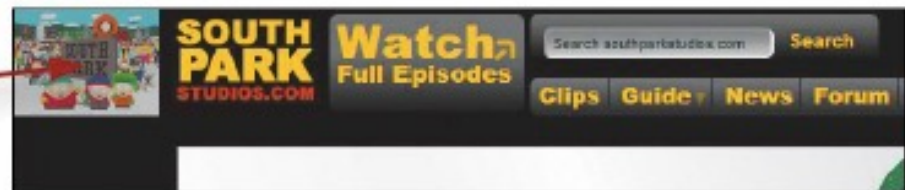
Areas of this page

Items on this page

OK. Now I'm in  
South Park



OK. I'm still in  
South Park

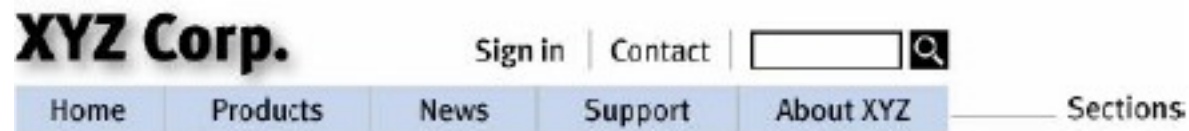


And now I'm  
on Facebook

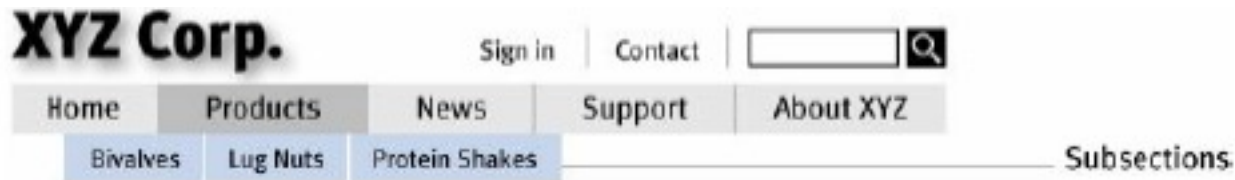


# THE SECTIONS

- *Primary navigation* – are the links to the main sections of the site: the top level of the site’s hierarchy.



- *Secondary navigation* - the list of subsections in the current section.



- In others, pointing at a section name or clicking on it reveals a dropdown menu. And in others, clicking takes you to the front page of the section, where you’ll find the secondary navigation.

# THE UTILITIES

**Utilities** are the links to important elements of the site that aren't really part of the content hierarchy.



These are things that either can help me use the site (like Sign in/Register, Help, a Site Map, or a Shopping Cart) or provide information about its publisher (like About Us and Contact Us).

Utilities will vary for different types of sites

About Us	Downloads	How to Shop	Register
Archives	Directory	Jobs	Search
Checkout	Forums	My _____	Shopping Cart
Company Info	FAQs	News	Sign in
Contact Us	Help	Order Tracking	Site Map
Customer Service	Home	Press Releases	Store Locator
Discussion Boards	Investor Relations	Privacy Policy	Your Account

digital content from 200+ publishers.

[START YOUR FREE TRIAL >](#)

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Infrastructure & Ops Conference  
Open Source Software Conference  
Software Architecture Conference  
Strata Data & AI Conference  
TensorFlow World

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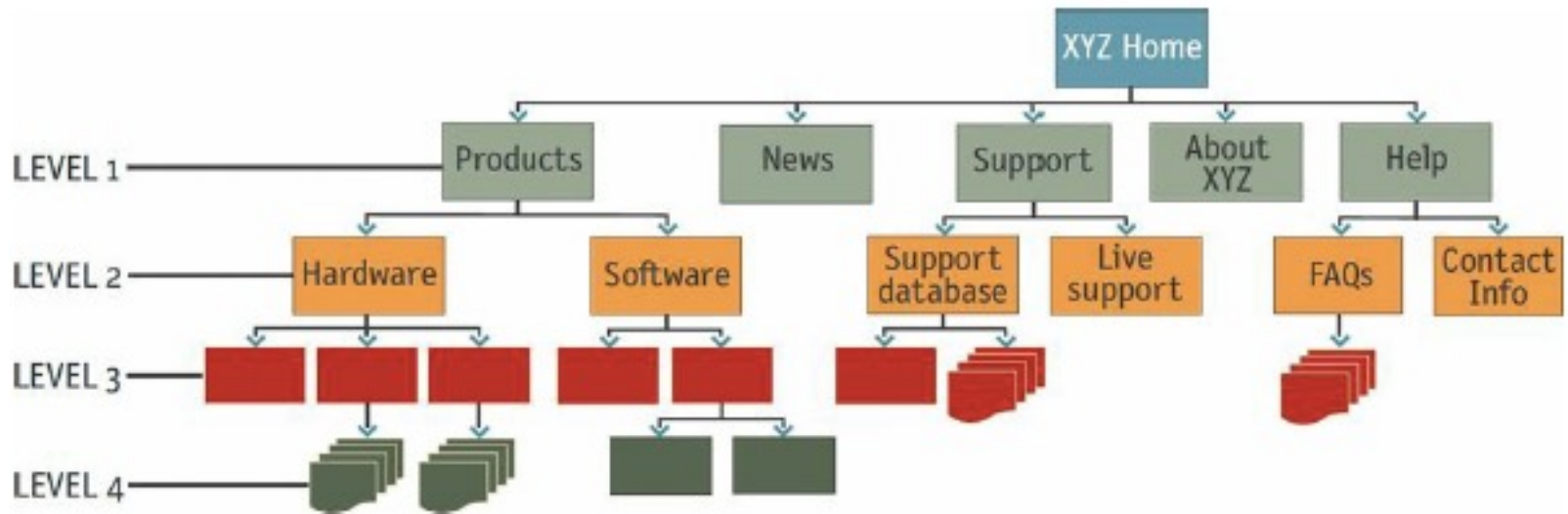
- Get unlimited access to books, videos, and live training
- Never lose your place—all your devices are synced
- Learn during your commute with online and offline access

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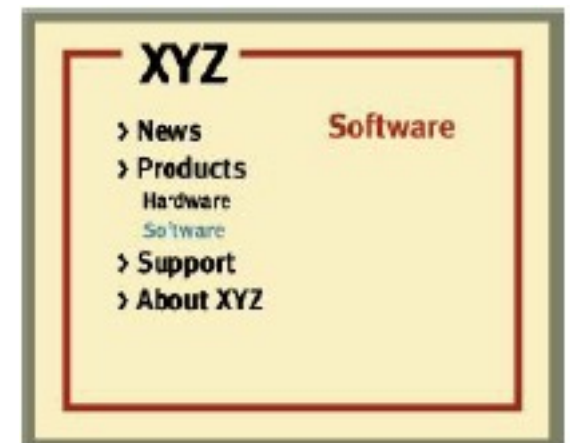
# LOW-LEVEL NAVIGATION



Home

Second level page

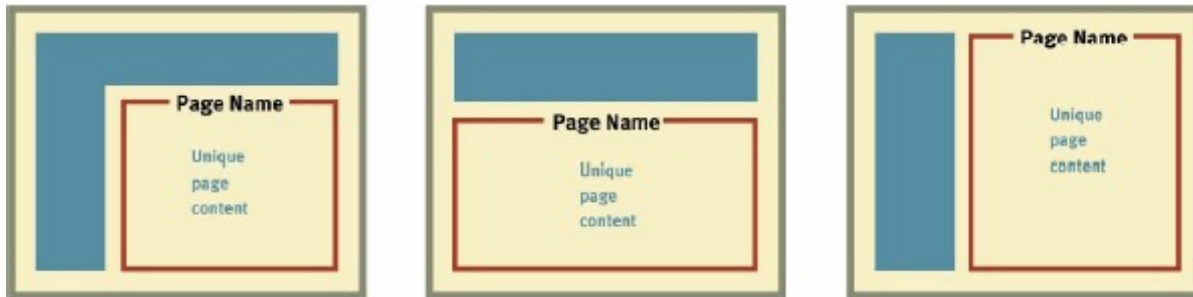
Subsection page



# PAGE NAMES

There are four things you need to know about page names:

1. Every page needs a name.
2. The name needs to be in the right place.



1. The name needs to be prominent.
2. The name needs to match what I clicked.

**WHAT I CLICK...**

Lug nuts

**WHAT I GET...**



Names match. Comfort, trust, no thought required.



Names don't match. Frustration, loss of trust.



**“YOU ARE HERE”**



# “YOU ARE HERE”



There are a number of ways to make the current location stand out:

Put a pointer next to it

Change the text color

Use bold text

Reverse the button

Change the button color

Sports  
Business  
▶ Entertainment  
Politics

Sports  
Business  
Entertainment  
Politics

Sports  
Business  
Entertainment  
Politics

**Sports**  
**Business**  
Entertainment  
**Politics**

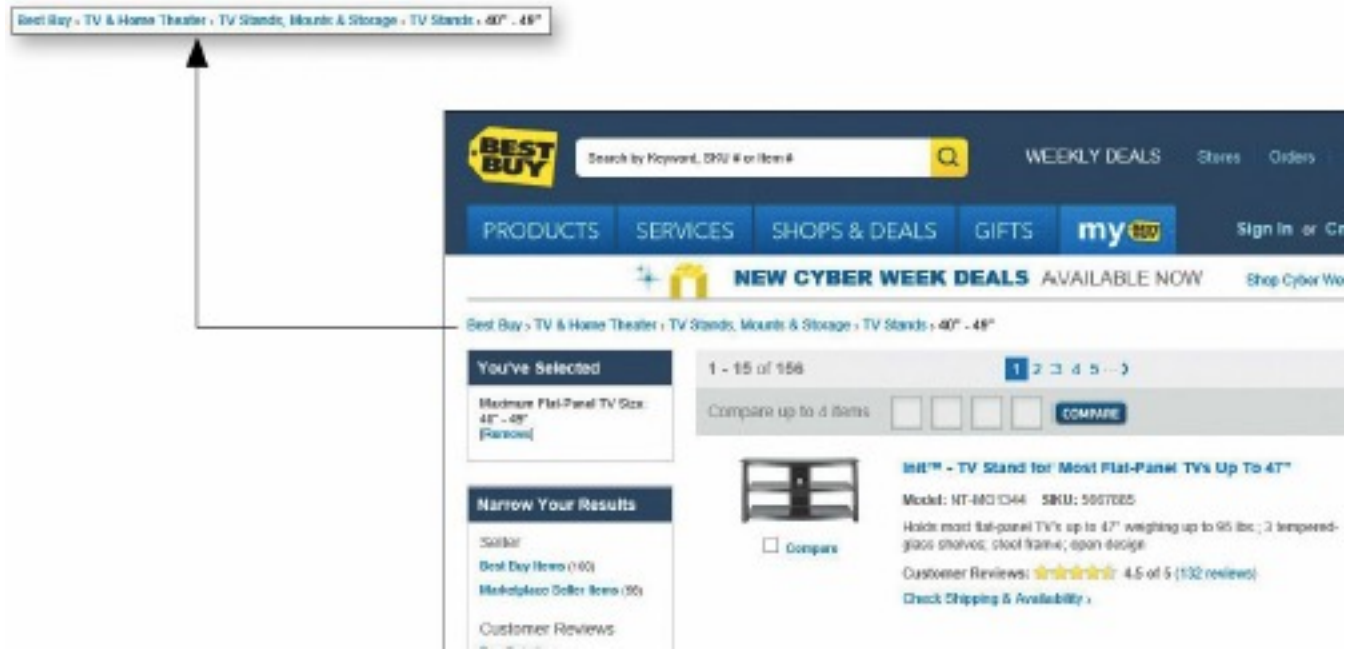
Sports  
Business  
Entertainment  
Politics

# BREADCRUMBS

Like “You are here” indicators, Breadcrumbs show you where you are.

A few best practices for implementing them:

- Put them at the top.
- Use > between levels.
- Boldface the last item.



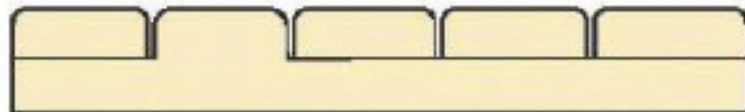
# TABS

## Tabs are:

- Self-evident.
- Hard to miss.
- Slick.



**BAD:** No connection, no pop.



**BETTER:** Connected, but no contrast.  
Limited pop.



**BEST:** Duck! It's coming right at you.

# TRUNK TEST

Here's how you perform the trunk test:

Step 1: Choose a page anywhere in the site at random, and print it.

Step 2: Hold it at arm's length or squint so you can't really study it closely.

Step 3: As quickly as possible, try to find and circle each of these items:

- Site ID
- Page name
- Sections (Primary navigation)
- Local navigation
- "You are here" indicator(s)
- Search

Try it on your own site and see how well it works. Then ask some friends to try it, too. You may be surprised by the results.

# HOME PAGE

Things the Home page has to accommodate:

- Site identity and mission.
- Site hierarchy.
- Search.
- Teases.
- Content promos.
- Feature promos.
- Timely content.
- Deals.
- Shortcuts.
- Registration.
- Show me what I'm looking for.
- ...and what I'm not looking for.
- Show me where to start.
- Establish credibility and trust.





# THE HOME PAGE NEEDS TO ANSWER THE FOUR QUESTIONS

What is this?



What do they have here?



**KICKSTARTER** What is Kickstarter? Discover great projects Start a project Search projects Help Support Log In

Bring creativity to life  
Curious how Kickstarter works?  
[Learn more >](#)

McCrack poured 91 paintings of Don Quixote in 91 days.

**Staff Picks: Film & Video** See all 882 Film & Video projects

**Project of the Day**  
**Mycephale - a short documentary**  
by Matthew MacCubbin in Woodstock, NY  
Come explore the strange and curious world of mycephale. you may even discover something new about yourself!

100% funded \$5,663 pledged 15 days to go

- Art
- Comics
- Dance
- Design
- Fashion
- Film & Video
- Food
- Games
- Music
- Photography
- Publishing
- Technology
- Theater

What can I do here?



Why should I be here—and not somewhere else?





# WHAT THE SITE IS ABOUT

Everything on the Home page can contribute to our understanding of what the site is. But there are 3 important places on the page where we expect to find explicit statements of what the site is about.

- The tagline
- The Welcome blurb.

Tagline

**RESERVATION READY**

Welcome blurb

**Online Booking Software**

Rezdy is the easiest way to take online bookings for tours, activities, rentals, charters, shuttles & tickets.



The image shows a screenshot of the Rezdy website home page. The page has a dark teal background. At the top left is the Rezdy logo, which consists of a circular icon with a stylized 'R' and the word 'rezdy' in lowercase. To the right of the logo is a navigation menu with links for 'FEATURES', 'PRICING', 'CASE STUDIES', 'RESOURCES', 'BLOG', 'FREE TRIAL', and 'LOGIN'. Below the navigation is the main heading 'Online Booking Software' followed by a sub-heading 'Rezdy is the easiest way to take online bookings for tours, activities, rentals, charters, shuttles & tickets.' Below this is a list of three bullet points: 'Quick set up. Accept online bookings the same day you start your free trial.', 'Simple to use. Update your prices and availability in minutes.', and 'Easy payment. Straight into your bank account.' At the bottom of this section are two buttons: 'FREE TRIAL' and 'REQUEST A DEMO'. To the right of the text is a large image of a computer monitor displaying a dashboard with various charts and graphs, and a smartphone next to it showing the mobile version of the site. Two red arrows point from callout boxes on the left to the tagline and the welcome blurb on the website.

Online Booking Software

Rezdy is the easiest way to take online bookings for tours, activities, rentals, charters, shuttles & tickets.

- ✓ Quick set up. Accept online bookings the same day you start your free trial.
- ✓ Simple to use. Update your prices and availability in minutes.
- ✓ Easy payment. Straight into your bank account.

[FREE TRIAL](#) [REQUEST A DEMO](#)

- The “Learn more.”
- Use as much space as necessary
- Don’t use a mission statement as a Welcome blurb.

**Staff Picks: Film & Video**[See all 852 Film & Video projects](#)**Mycophilia - a short documentary**

by Madison McClintock in Bozeman, MT

Come explore the strange and curious world of mushrooms, you may even discover something new about yourself.

**104%**  
funded**\$5,663**  
pledged**15**  
days to go

- Art
- Comics
- Dance
- Design
- Fashion
- Film & Video**
- Food
- Games
- Music
- Photography
- Publishing
- Technology
- Theater

# TAGLINE

- Good taglines are **clear** and **informative** and explain exactly what your site or your organization does.

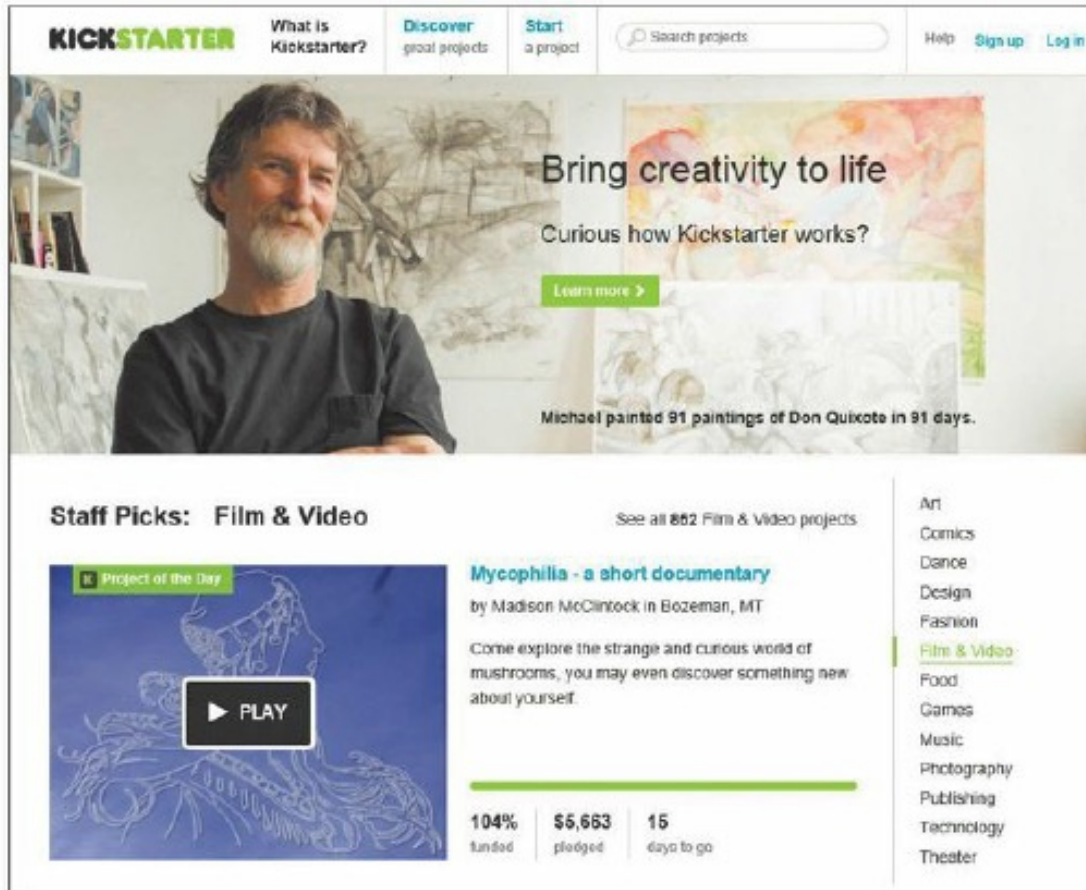


- The image shows the OpenTable logo, which consists of three overlapping circles in shades of green and red. To the right of the logo is the word 'OpenTable' in a red, sans-serif font. Below the logo and text is the tagline 'Restaurant Reservations - Free • Instant • Confirmed' in a smaller, black, sans-serif font.

Six to eight words seem to be long enough to convey a full thought, but short enough to absorb easily.
- Good taglines **convey differentiation** and a clear benefit.
- Bad taglines sound **generic**.
- Good taglines are personable, lively, and sometimes clever. Clever is good, but only if the cleverness helps convey—not obscure—the benefit.



# WHERE DO I START?



The screenshot shows the Kickstarter homepage. At the top, there is a navigation bar with the 'KICKSTARTER' logo, links for 'What is Kickstarter?', 'Discover great projects', 'Start a project', a search bar, and links for 'Help', 'Sign up', and 'Log in'. The main banner features a man with a beard and a black t-shirt, with the text 'Bring creativity to life' and 'Curious how Kickstarter works?'. A green button says 'Learn more >'. Below the banner, it says 'Michael painted 91 paintings of Don Quixote in 91 days.' The 'Staff Picks: Film & Video' section is highlighted, with a link to 'See all 882 Film & Video projects'. A featured project is 'Mycophilia - a short documentary' by Madison McClintock in Bozeman, MT. The project description says 'Come explore the strange and curious world of mushrooms, you may even discover something new about yourself.' A progress bar shows 104% funded, \$5,663 pledged, and 15 days to go. A sidebar on the right lists various categories: Art, Comics, Dance, Design, Fashion, Film & Video (highlighted), Food, Games, Music, Photography, Publishing, Technology, and Theater.

**KICKSTARTER** What is Kickstarter? Discover great projects Start a project Search projects Help Sign up Log in

Bring creativity to life  
Curious how Kickstarter works?  
Learn more >

Michael painted 91 paintings of Don Quixote in 91 days.

**Staff Picks: Film & Video** See all 882 Film & Video projects

**Project of the Day**  
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Art  
Comics  
Dance  
Design  
Fashion  
**Film & Video**  
Food  
Games  
Music  
Photography  
Publishing  
Technology  
Theater



Where do I start?