1.0 INTERACTION DESIGN

WHAT IS IT?
Interaction design is the design of interactive products and systems to support the way people communicate and interact in their everyday lives.
Interaction design is an umbrella term for all aspects of what is being designed:

Interface Design
Software Design
Product Design
User Experience Design
Web Design
We view interaction design as fundamental to all disciplines, fields, and approaches that are concerned with researching and designing interactive products and systems for people.
NOTHING IS USEFUL IF WE DON’T KNOW HOW TO USE IT.
Interaction design exists because people need an intuitive system to help learn, perform tasks, and navigate through new and existing content, technology and spaces.

Ultimately... we aim to improve communication between people and technology.
INTERACTIVE PRODUCTS

Smart phones / handheld devices
Toys / games
Remotes
Household technology
Mobile applications / software
Websites
Robotics
Airport / mall kiosks
Restaurants / stores
Exhibition graphics
Signage / wayfinding / navigation
Theme parks
User-centered design is a philosophy and a process in which the needs, wants and limitations of end users of a product or system are given extensive attention at each stage of the design process.

Who is this product for?
Why would they use it?
How will they use it?
USABILITY

Ensuring that interactive products are easy to learn, effective to use, and enjoyable from the user’s perspective.

USABILITY GOALS

effective  
efficient  
safe    
utility 
learnability 
memorability
USER EXPERIENCE (UX)

The user experience is about how people feel about a product and their pleasure and satisfaction when using it.

UX GOALS

satisfying
enjoyable
engaging
entertaining
motivating
challenging
rewarding
helpful
£60.26

Shopping List/Lista de compras

Look at the tag! Every item has a tag with details you need. These numbers identify what aisle and bin to pick up your furniture in the Self-Serve Furniture warehouse.

¡Mire la etiqueta! Cada producto tiene una etiqueta con todos los detalles necesarios. Estos números indican el pasillo y la ubicación de la bodega de Autoservicio en donde se recoge el producto.

Product Name
Nombre del producto

Aisle Pasillo

Bin Ubicación

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There are four main types of interactions. Understanding which interaction type to use helps designers choose which interface and behaviors to implement.
**INSTRUCTING**
tell time  
print a file  
reminders  
word processing

**CONVERSING**
search engines  
banking  
ticket booking  
help centers / help chat

**MANIPULATING**
toys / games  
zooming  
moving  
selecting  
shrinking

**EXPLORING**
virtual tours  
location-detection  
technology
GOOD DESIGN REDUCES THE NEGATIVE ASPECTS WHILE ENHANCING THE POSITIVE ONES.
DIETER RAMS 10 PRINCIPLES OF GOOD DESIGN

innovative
useful
beautiful
understandable
unobtrusive
honest
long-lasting
thorough / detailed
environmentally friendly
simple
<table>
<thead>
<tr>
<th>GOOD</th>
<th>BAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>simple</td>
<td>complicated</td>
</tr>
<tr>
<td>easy</td>
<td>difficult</td>
</tr>
<tr>
<td>clear</td>
<td>confusing</td>
</tr>
<tr>
<td>minimal</td>
<td>cluttered</td>
</tr>
<tr>
<td>effective</td>
<td>useless</td>
</tr>
<tr>
<td>value</td>
<td>worthless</td>
</tr>
</tbody>
</table>
REVOLUTIONARY OR EVOLUTIONARY

Not all products and systems need to be new and original.

Research will determine whether or not you need a revolutionary concept or an evolutionary redesign of the current model.
Graphic Design

Designer → Audience
INTERACTION DESIGN

Researcher → Designer → Developer/Engineer

↓

User

↓

Experience
Keyword = team

The design of new products and systems is never done by one person. They are created by teams formed by people from many disciplines.
### HUMAN FACTORS / RESEARCH
- UX Researcher (UX)
- Human factors (HF)
- Psychology
- Sociology

### DESIGN
- Visual Design
- Product Design
- Industrial Design
- Environmental Information Design
- Animation/motion

### ENGINEERING
- Computer Science Engineering
- Human-Computer Interaction (HCI)
- Information Architecture (IA)

### BUSINESS
- Marketing
- Product Development
- Content Writer
DEVELOPMENT CYCLE  WATERFALL

- REQUIREMENTS
- DESIGN
- BUILD
- TESTING
- MAINTENANCE
DEVELOPMENT CYCLE ITERATIVE

IDEAS

BUILD FASTER

CODE

LEARN FASTER

DATA

MEASURE FASTER
AGILE MANAGEMENT

Individuals and needs over process.

PHILOSOPHY
COLLABORATIVE
ADAPTIVE PLANNING

LEAN LEARNING

Eliminate everything not adding value.

REDUCES COST
MINIMUM VIALBE PRODUCT
QUICK LAUNCH
PROCESS

PHASE 1: RESEARCH AND REQUIREMENTS
Define problem, content gathering, user research

PHASE 2: PRODUCT DEVELOPMENT AND DESIGN
Brainstorming, content integration, design and system development

PHASE 3: BUILD AND IMPLEMENTATION
Visual design, programming, refine product

PHASE 4: TESTING AND EVALUATION
Usability testing, revisions and bug fixes
DESIGNISM #3

THE ULTIMATE INSPIRATION IS THE DEADLINE.

— NOLAN BUSHNELL (PONG, ATARI, CHUCK E. CHEESE)