

Interaction Design

The behavior of the people

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Interaction Designer (IXDA)

Interaction Design (IXD) defines the **structure** and **behavior** of interactive systems.

Interaction Designers strive to create **meaningful relationships** between **people** and the **products** and **services** that they use, from computers to mobile devices to appliances and beyond.

Interaction Design

- Designing interactive products to support people in their everyday and working lives
 - Sharp, Rogers and Preece (2002)
- The design of spaces for human communication and interaction
 - Winograd (1997)

Instant expert

We must understand

Business

Technology

Content

People

Purpose

Context

Interaction design process

Traditional

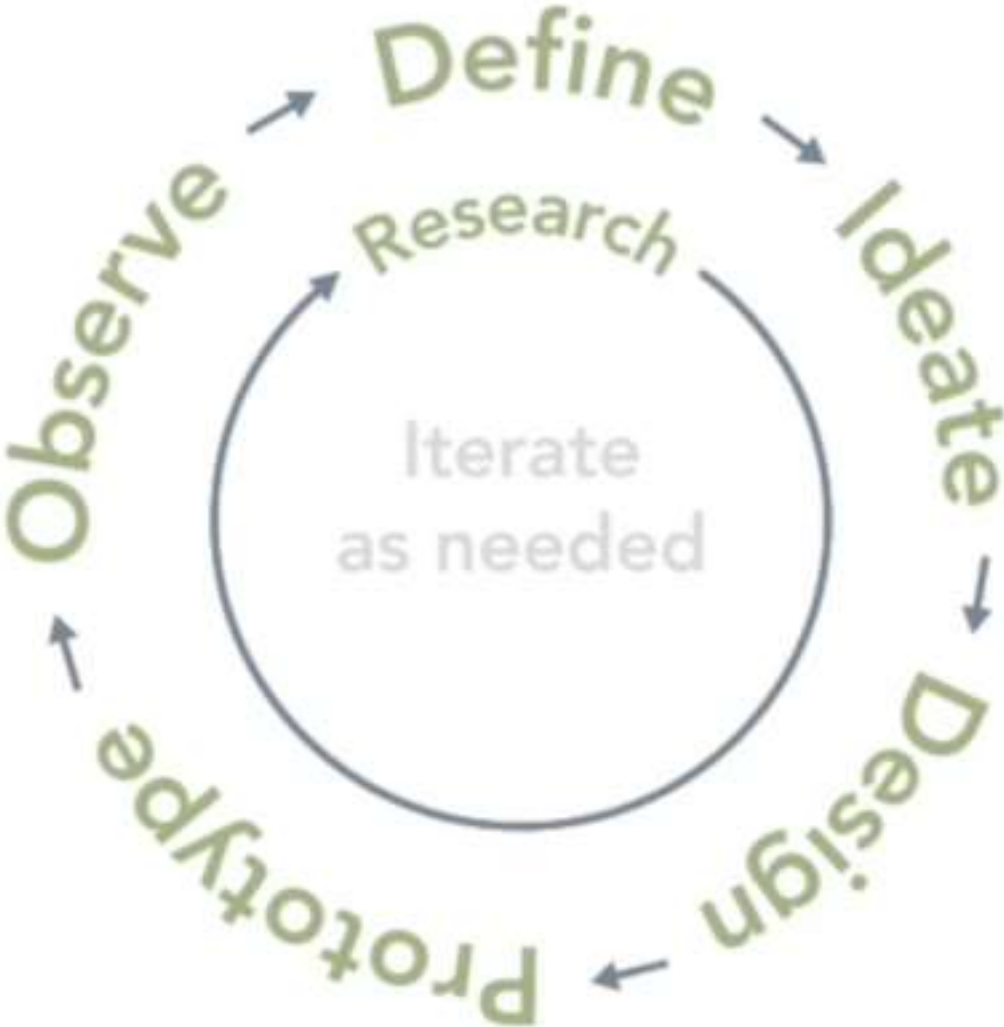
waterfall

Agile

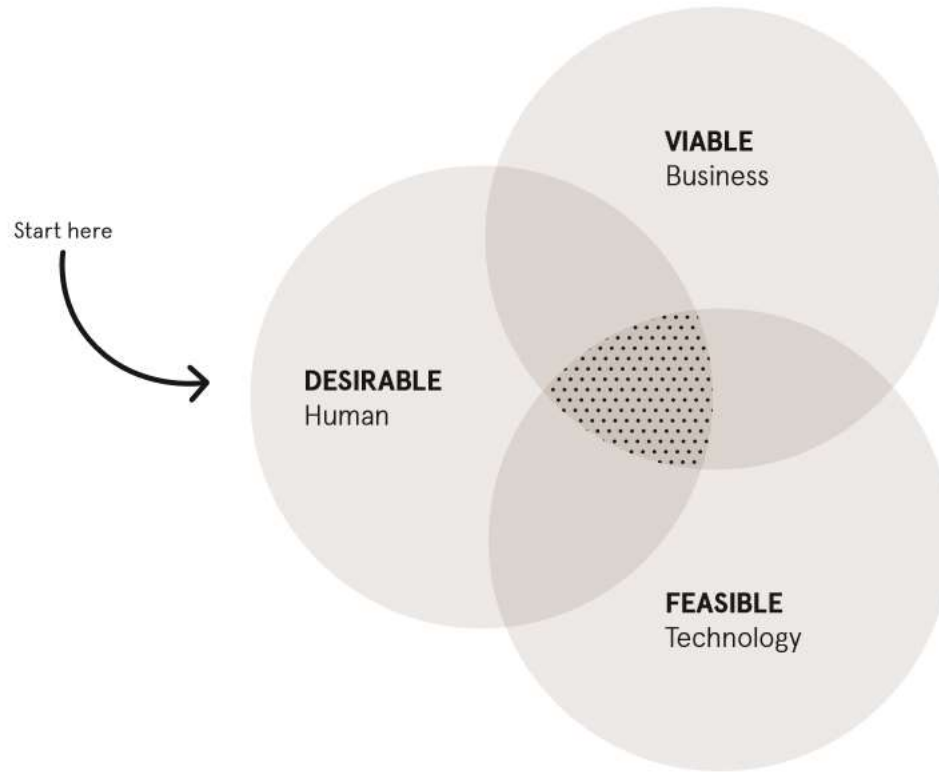
rapid sprints

Hybrid

Process for solving problems



Human Centered Design



Define the Problem

- Define the problem
 - How we define the problem matters if and how we are going to solve it.

Research

- Generate ideas and potential solutions
 - Brainstorm
 - Create personas
 - Write scenarios
 - Interviews
- Informing our designs and prototypes
- Guiding our iterations

Data Data Data

We need data to define the problem

We use data as a foundation of our final product.

Design and Prototype

- From Sketches to wireframes and visual comps
- The steps of interactions (User flow)
- Iterate and evolve the design
- Evaluate the presentation of information
- Validate the purpose and value of the product

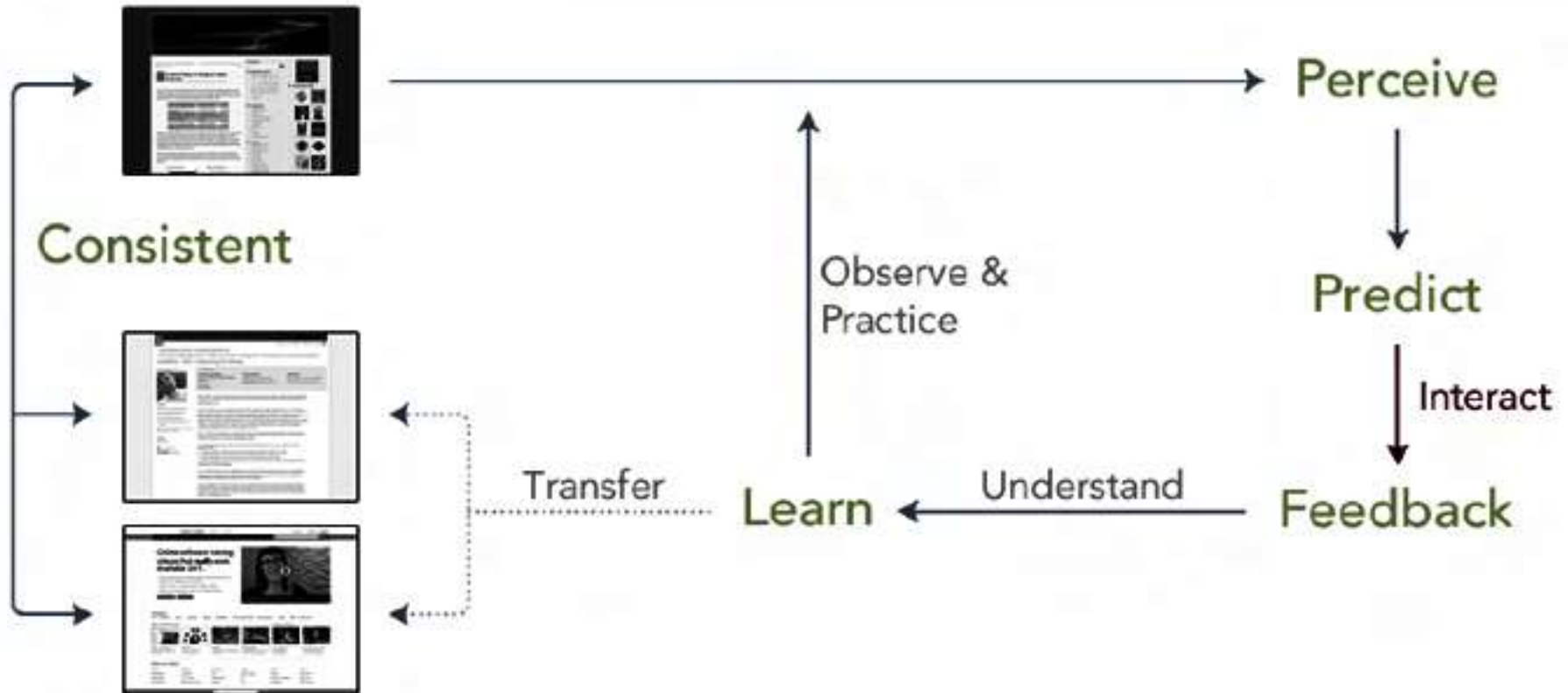
UX Components

- **User** (Persona)
- **Context** (Location or Condition)
- **Tasks** (Activities)
- **Tools** (UI)
- **Goals** (Result)

Interaction Design core principles

- **Consistency** (change)
- **Perceivable** (invite interaction)
 - Cues (visual - auditory - tactile)
- **Learnability** (makes interaction simpler)
 - Intuitive
- **Predictability** (sets accurate expectation)
 - demonstration, instruction and previews
- **Feedback** (acknowledge our interaction)
 - complement

The principles of a System



Context Scenarios

- **Situation** (environment - public or private)
- **People** (who - one or many - shared)
- **Duration** (amount of time needed)
- **Attention** (focus or interruption)
- **Simplicity** (complexity)
- **Needs** (users needs - actions performed)
- **Expectation** (outcome)
- **Urgency** (immediacy)

Motivation

- **Extrinsic Motivation**
 - External factors (fame, reward)
 - focused as long as outcome is guaranteed
- **Intrinsic Motivation**
 - Internal factors (curiosity)
 - more focused

Need Theory (David McClelland, Ph.D.)

- **Need for Achievement**
 - Seek to learn and solve problems
- **Need for Affiliation**
 - Seek family and social relationships
- **Need for Power**
 - Seek recognition, status and influence

Trust and Credibility

- **Expertise**
 - accurate and relevant services
- **Trustworthiness**
 - fresh content, avoiding errors and easy to contact
- **Visual Quality**
 - strong usability and accessibility

Context Sensitive Design

- People need different information and functionality at different time and place.
- Interfaces should be able to adapt to situation and need.

Persuasive Design

- **Reciprocity**
 - return a favor for some good deed
- **Commitment**
- **Conformity**
 - do what everyone is doing
- **Authority**
 - for guidance and recommendations
- **Liking**
 - similarity
- **Scarcity**

Material Design

- Visual
 - Layout, iconography, font, color
- Motion
 - How the motion guides the flow

Accessible Design (Universal)

- Regardless of ability or situation
- Types
 - Color, Visual, Hearing, Cognitive and motor

Accessible design (Why)

- There are more color blind than English speakers
- It's a large population
 - E.g. Google Books
- Can the user do all the tasks via a keyboard only

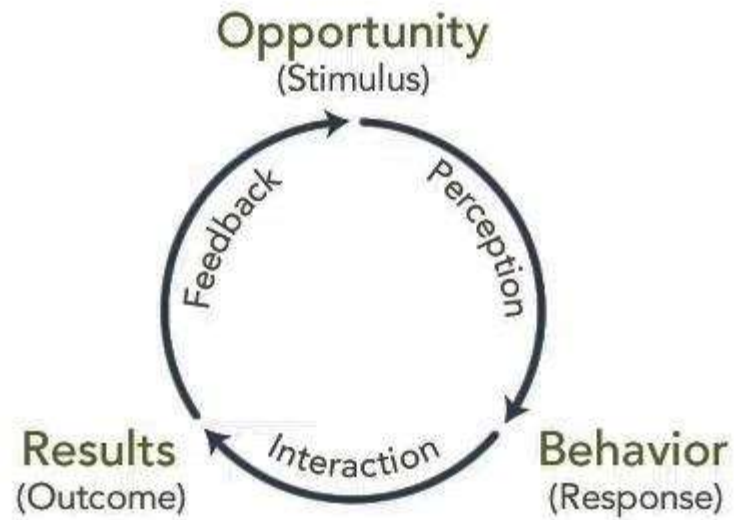
Accessible design (How)

- Understand your users, challenge and pain points
- Online design guidelines
- Be familiar with assistive technologies
 - Close caption on videos
 - Color contrast on websites or apps
 - Chrome extension (see)

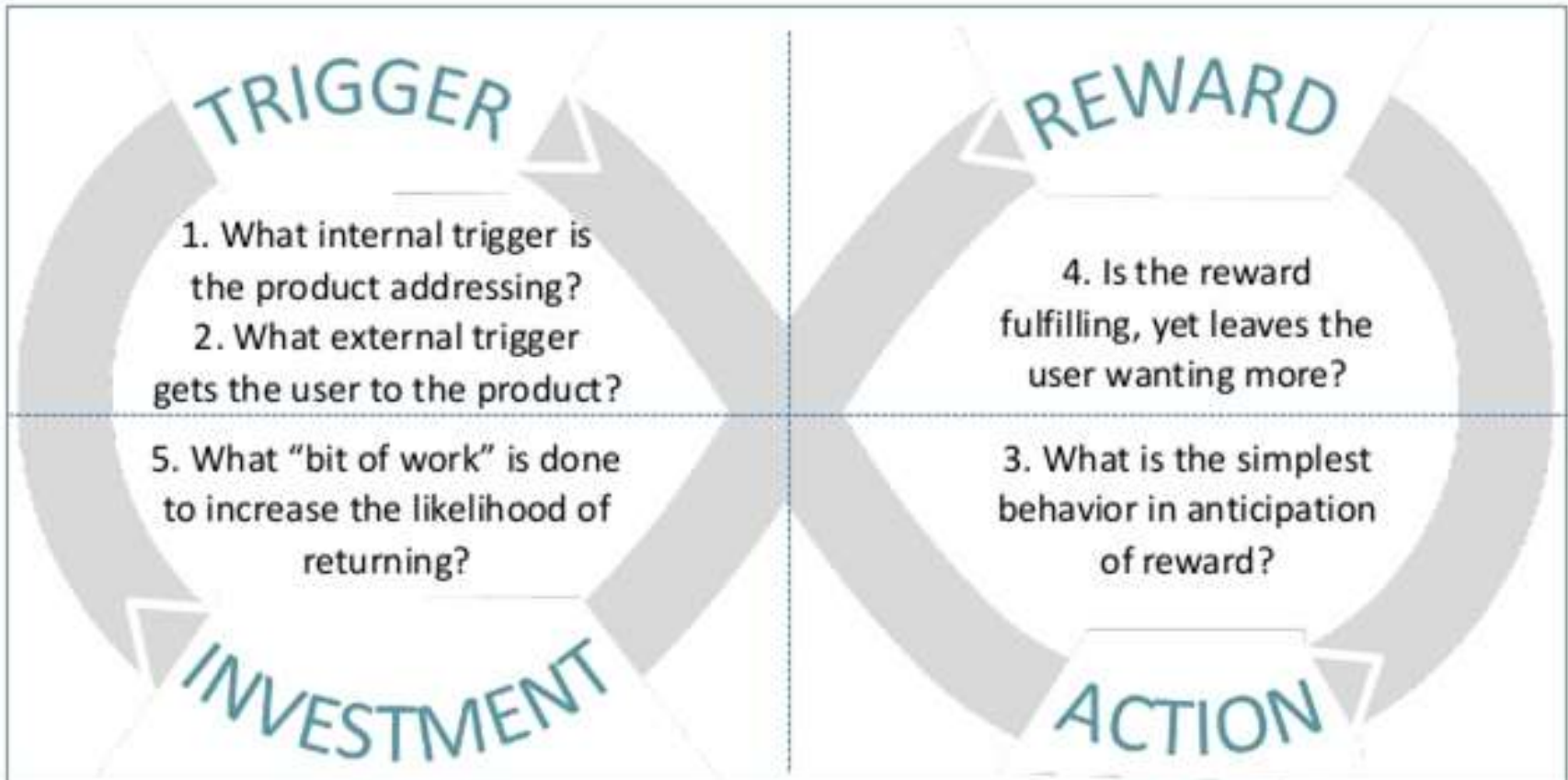
Feedback

- **Place**
 - Where am I?
- **Time**
 - What is my progress or status?
- **Meaning**
 - what does the outcome mean?

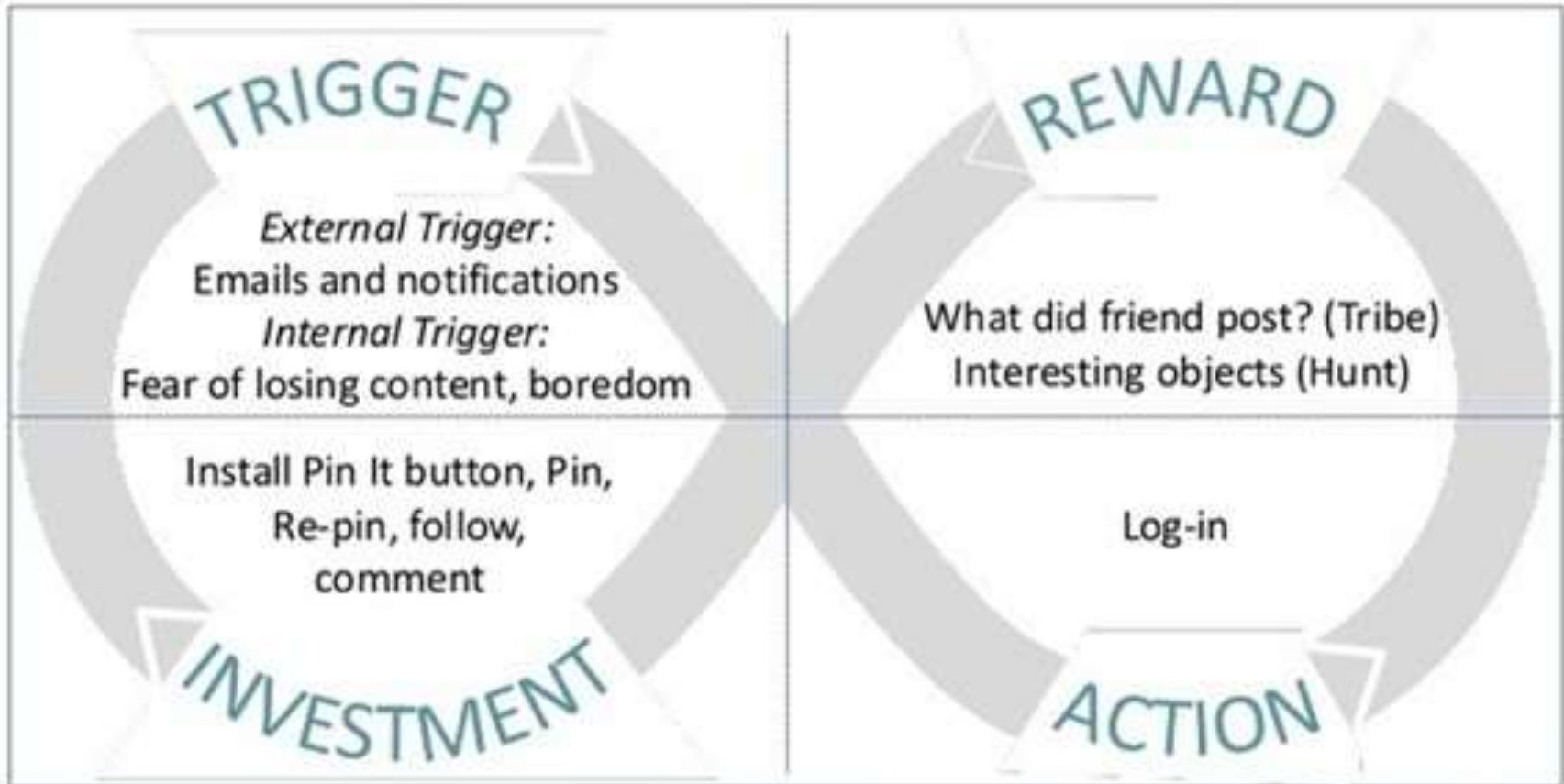
Feedback



Hook (Nir Eyal)



Hooked (Pinterest)



THE THREE WAVES OF THE INTERNET

FIRST WAVE

1985 → ≈1999

BUILDING THE INTERNET

Laying the foundation for the online world

DRIVEN BY

PEOPLE

PRODUCTS

PLATFORMS

PARTNERSHIPS

POLICY

PERSEVERANCE



SECOND WAVE

2000 → ≈2015

APP ECONOMY AND MOBILE REVOLUTION

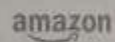
Search, social, and ecommerce startups grow on top of the internet

DRIVEN BY

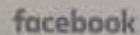
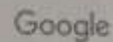
PEOPLE

PRODUCTS

PLATFORMS



Snapchat



THIRD WAVE

2016 →

INTERNET OF EVERYTHING

Ubiquitous connectivity allows entrepreneurs to transform major, real-world sectors

DRIVEN BY

PEOPLE

PRODUCTS

PLATFORMS

PARTNERSHIPS

POLICY

PERSEVERANCE



The End