

New Media & E-Business Applications

Unit 2 – Implementing EC Systems:
From Justification to Successful
Performance

Getting into E-Commerce and Starting a New Online Business

- **CREATING A NEW BUSINESS OR ADDING AN ONLINE PROJECT TO AN EXISTING BUSINESS**
 1. Identify a consumer or business need in the marketplace.
 2. Investigate the opportunity.
 3. Determine the business owner's ability to meet the need.

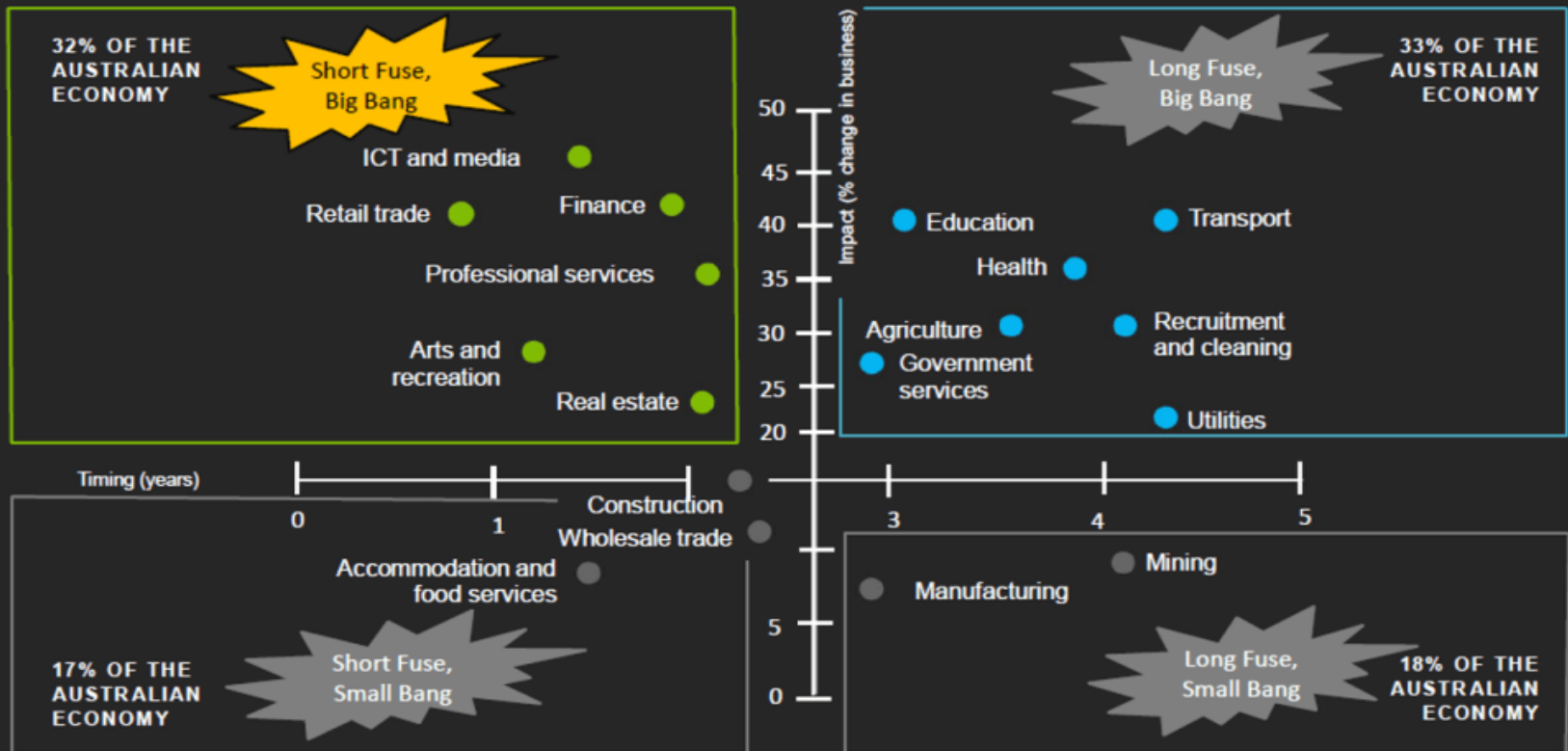
“More than one-third of businesses today will not survive the next 10 years. Companies should not miss the market transition or business model nor underestimate your competitor of the future —not your competitor of the past”

- Gartner

Getting into E-Commerce and Starting a New Online Business

Digital disruption map

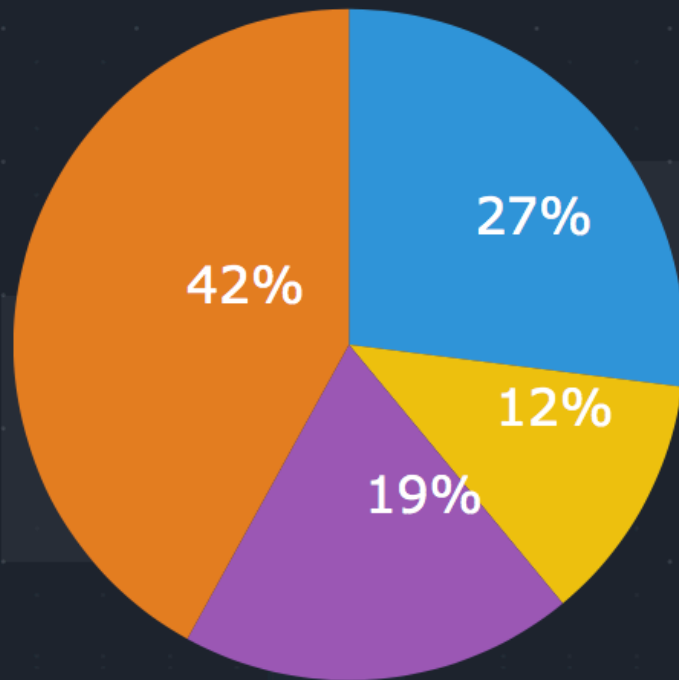
Deloitte.
Digital





Polling

Which of these technology driven trends are foreseen as disrupting a long established industry by 2050?



27%

3D printers large enough to print houses

12%

Space tourism

19%

Sex robots

42%

All of them

52 users in session

26 users answered

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HOME » TECHNOLOGY » TECHNOLOGY NEWS

By 2050, human-on-robot sex will be more common than human-on-human sex, says report

A shocking new report from a futurologist reveals predictions about the future of sex and robots

Amsterdam sex robot BROTHEL 'will help prevent human trafficking and spread of STDs'

17:17, 28 MAY 2016 | UPDATED 18:36, 28 MAY 2016 | BY KEYAN MILANIAN

Scientists Ian Yeoman and Michelle Mars have imagined what a brothel will look like in 2050 and say android sex workers will help stamp out people trafficking and STIs

Difficulties in Measuring and Justifying E-Commerce Investments

•THE USE OF GARTNER'S HYPE CYCLE

–hype cycle

A graphic representation of the maturity, adoption, and social application of specific IT tools. Often used by businesses to determine if a certain technology is ready for application.

Difficulties in Measuring and Justifying E-Commerce Investments

Each hype cycle has five stages that reflect the basic adoption path any technology follows:

1. Innovation trigger
2. Peak of inflated expectations
3. Trough of disillusionment
4. Slope of enlightenment
5. Plateau of productivity

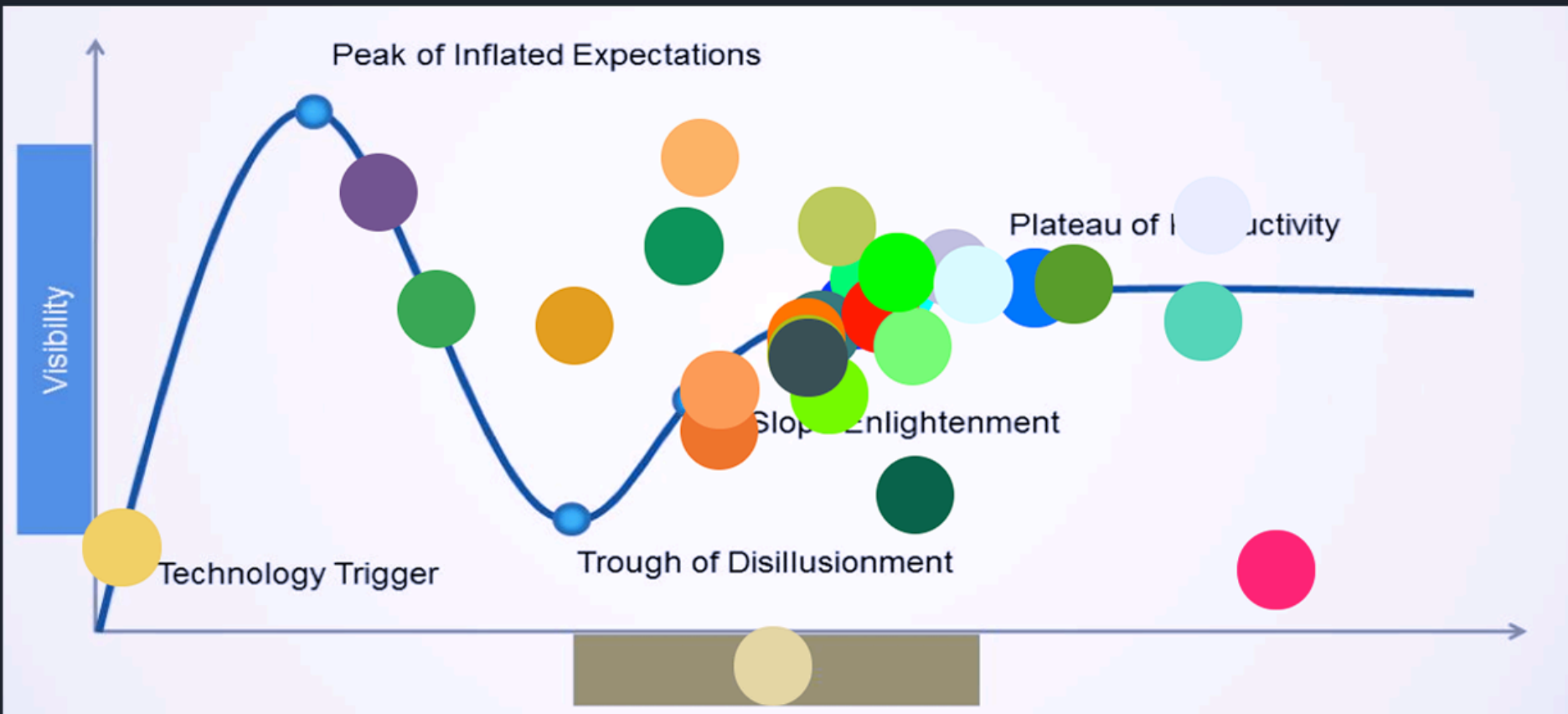
Difficulties in Measuring and Justifying E-Commerce Investments





Pointer

Where do you think SELF-DRIVING CAR are on the hype cycle?



52 users in session

29 points moved

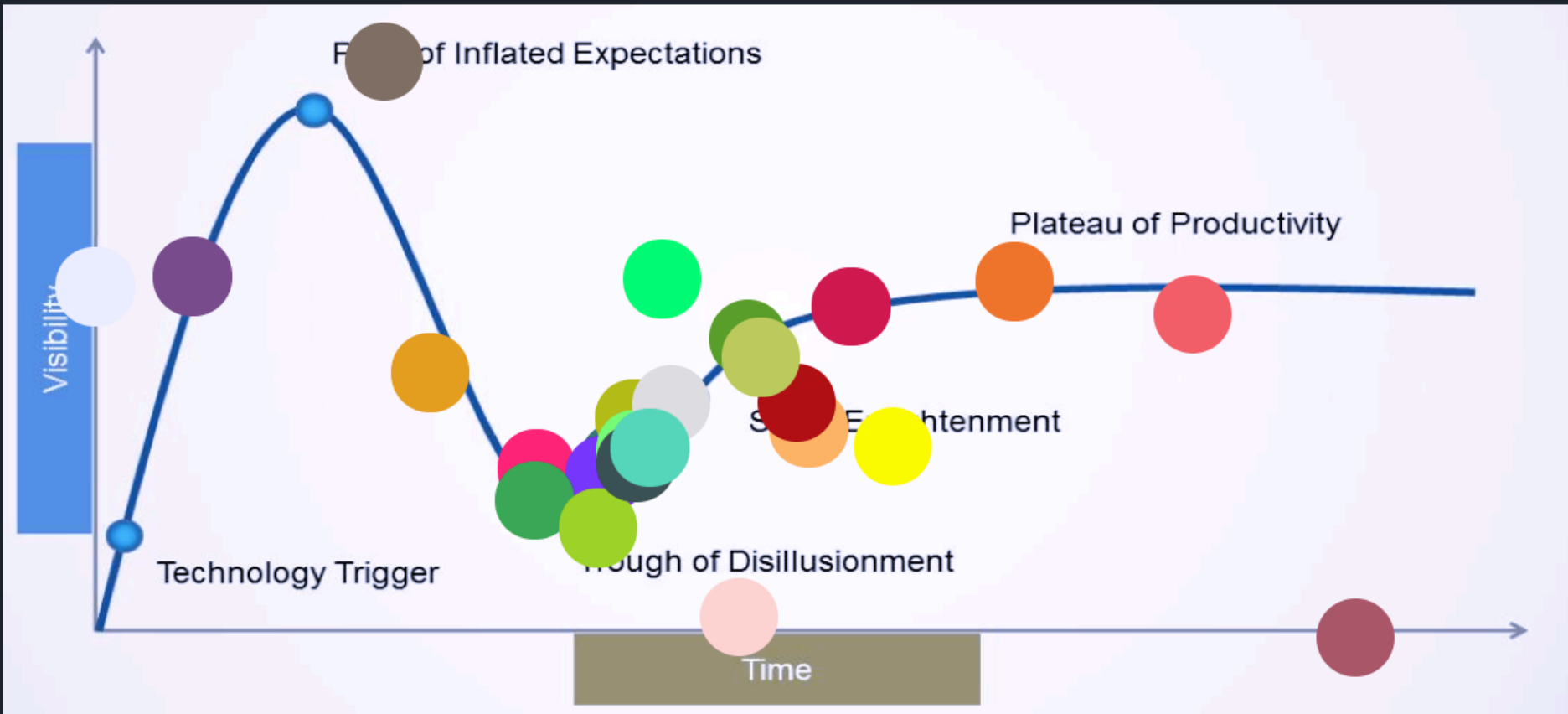
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Pointer

Where do you think VIRTUAL REALITY is on the hype cycle?



52 users in session

26 points moved

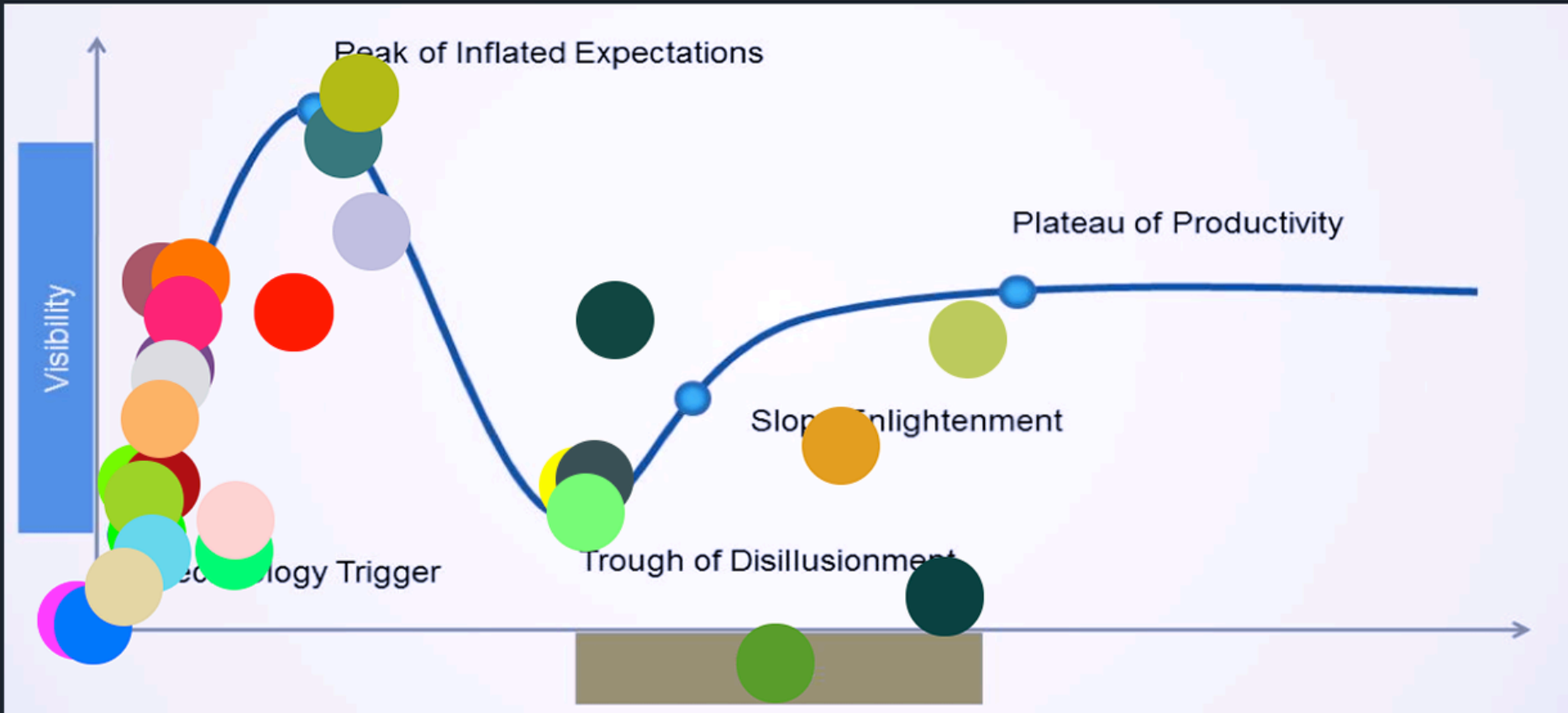
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Pointer

Where do you think the BRAIN-COMPUTER INTERFACE is on the hype cycle?



52 users in session

28 points moved

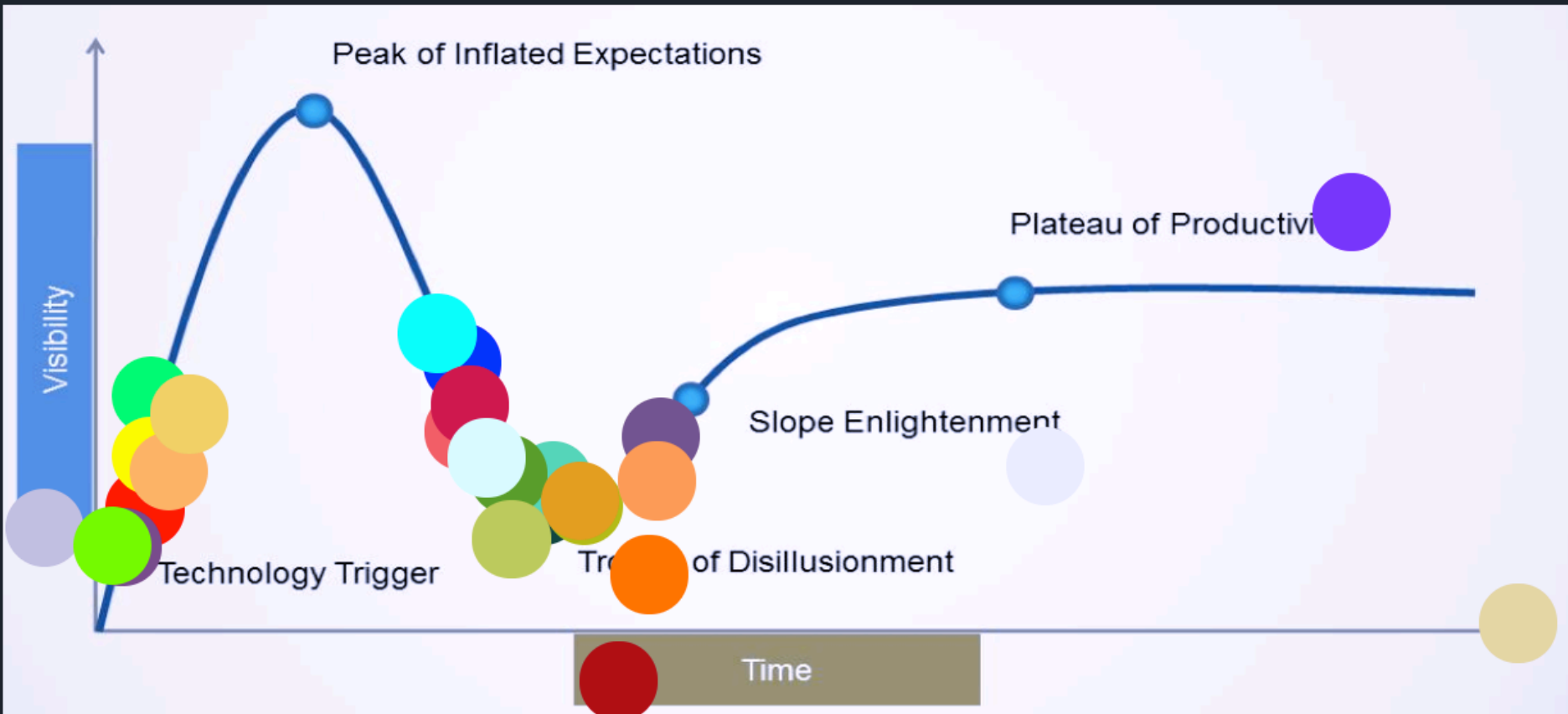
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Pointer

Where do you think SMART DUST is on the hype cycle?



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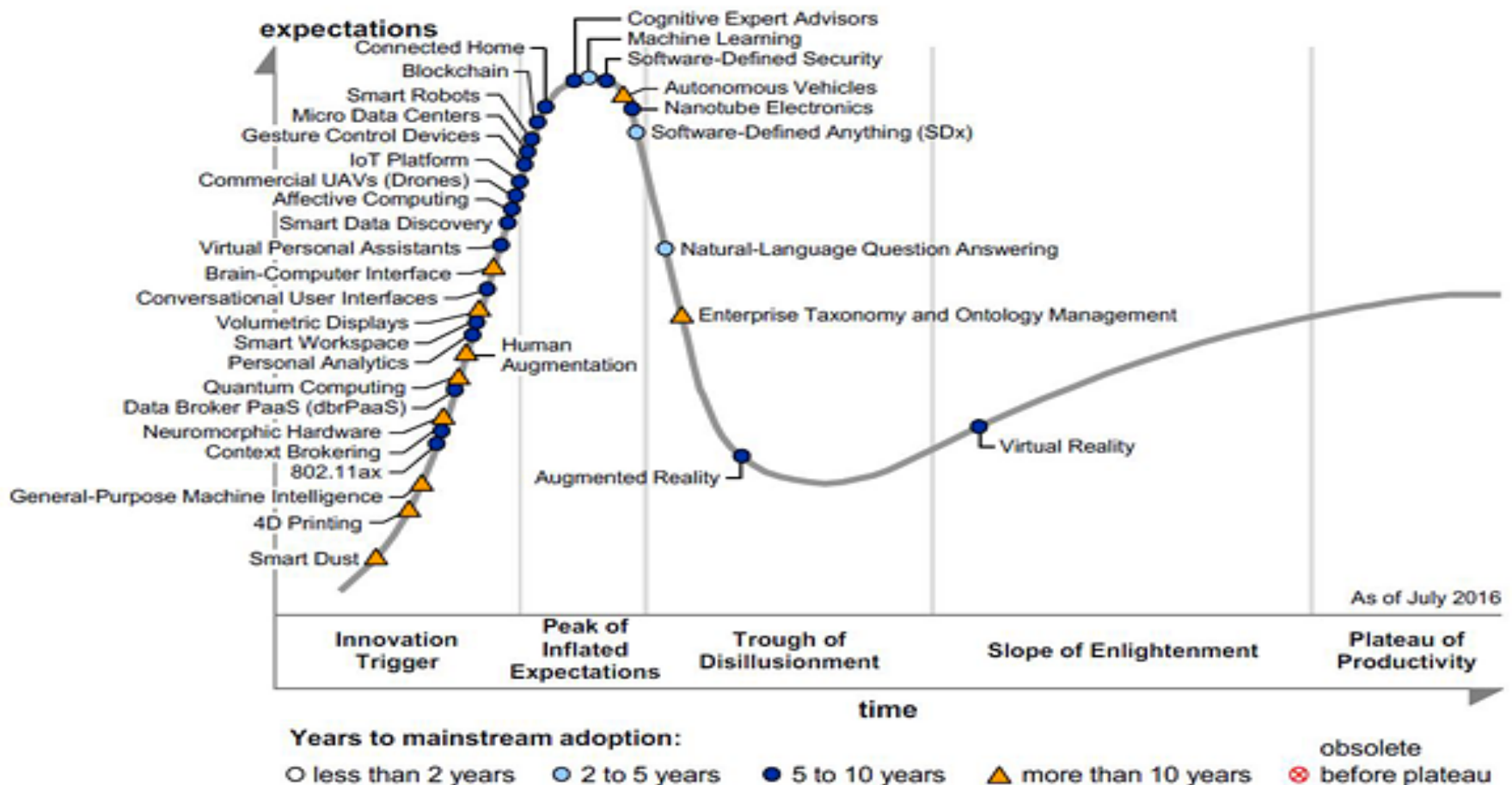
26 points moved

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Difficulties in Measuring and Justifying E-Commerce Investments

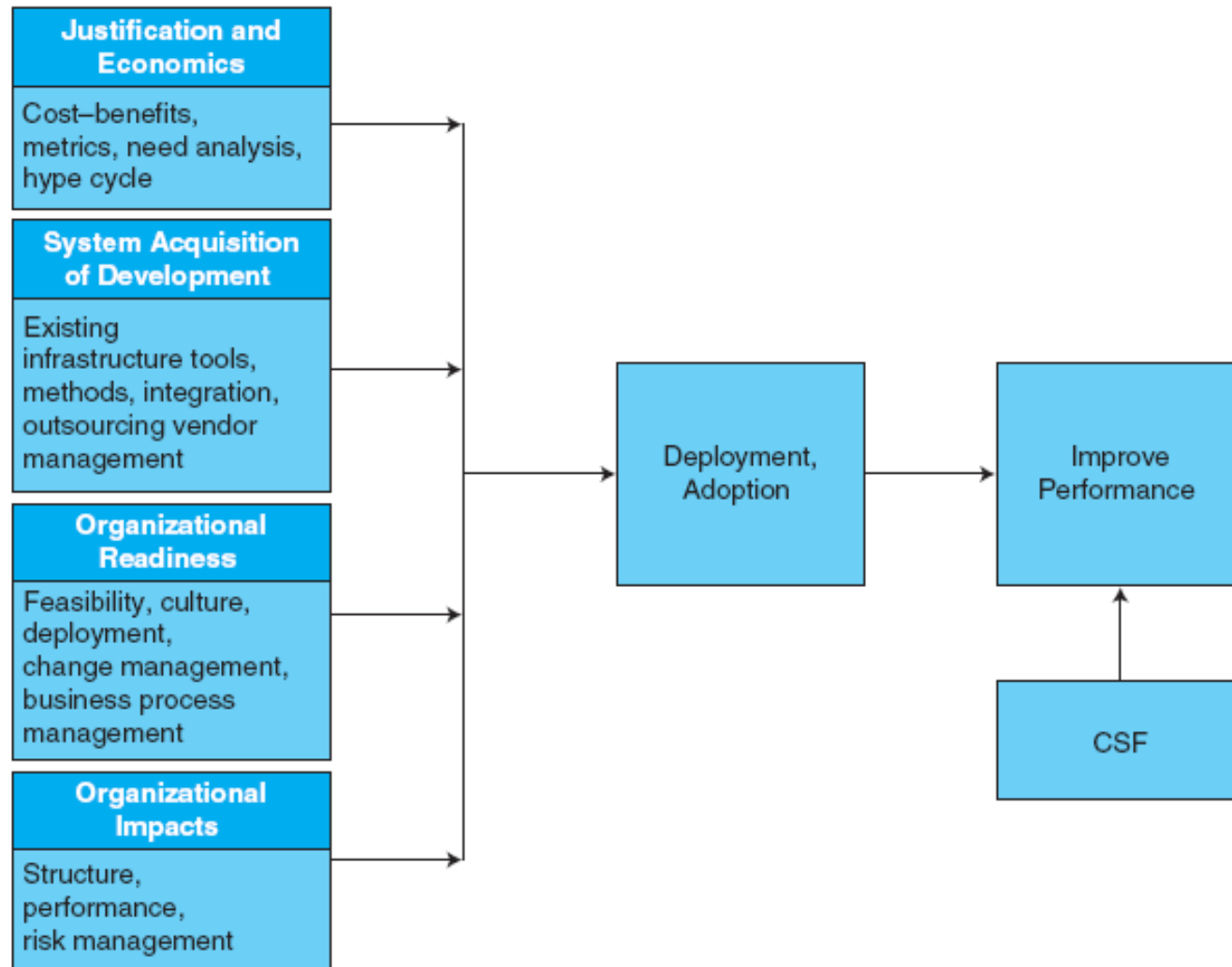
Figure 1. Hype Cycle for Emerging Technologies, 2016



- **THE MAJOR IMPLEMENTATION FACTORS**

- **Justification/Economics of E-Commerce (this lecture)**
- **Acquire or Develop Your E-Commerce System (Lecture 3)**
- **How to Succeed? Finding the right strategy (Lecture 4)**

EXHIBIT 13.1 The Elements in EC Implementation





1999
Mindset

Like many victims of the bubble, the grocery delivery service grew too fast, expanding its services to eight cities in just a year and a half. In the summer of 1999, Webvan announced it was making a \$1 billion investment in warehouses and would expand to 26 more cities by 2001.

At its November 1999 IPO, Webvan raised \$375 million, shares traded at around \$30 and the company was valued at \$1.2 billion. But that was its peak.

Investors soon realized that the company's customer base and margins weren't large enough to support all of the planned expansions.

By the time the company announced it would close up shop in July 2001, Webvan's stock fell to just 6 cents a share. Webvan laid off 2,000 employees when it failed.



- **E-COMMERCE IS TRANSFORMING ORGANIZATIONS AND WORK**

- **Technology and Organizational Learning**

- Existing businesses struggle to adapt their mindset as quickly as technology is changing

- **The Changing Nature of Work**

- Established practices for business activities are changed by technology; new skills need to be supported by employees

- **The Changing Nature of the Market**

- **changes in consumer behavior, path to decisions**
 - **disintermediation of market participants**

- Elimination of intermediaries between sellers and buyers

- **change management**

A structured approach to shifting/transitioning individuals, teams, and organizations from a current state to a desired future state; it is an organizational process aimed at empowering employees to accept and embrace changes in their current business environment

–Restructuring Business Processes

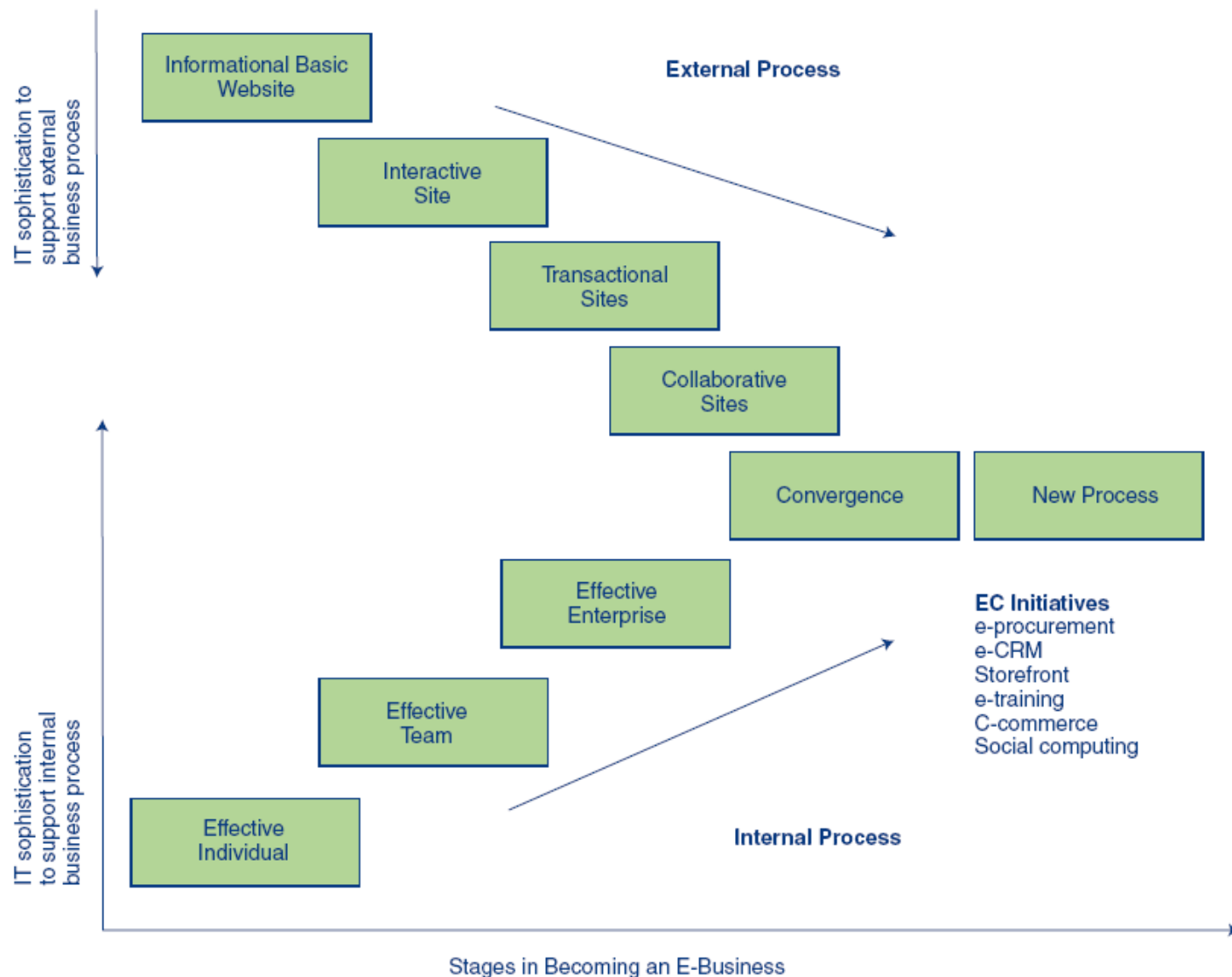
- **business process reengineering (BPR)**

A methodology for conducting a comprehensive redesign of an enterprise's processes

- **business process management (BPM)**

A holistic management approach focused on aligning all aspects of an organization with the wants and needs of clients; promotes business effectiveness and efficiency while striving for innovation, flexibility, and integration with technology

EXHIBIT 15.2 Road Map to e-Business Transformation



- **REDEFINING BUSINESS**

- **New and Improved Product Capabilities**

- **Digitization**
 - **Personalization and Mass Customization**

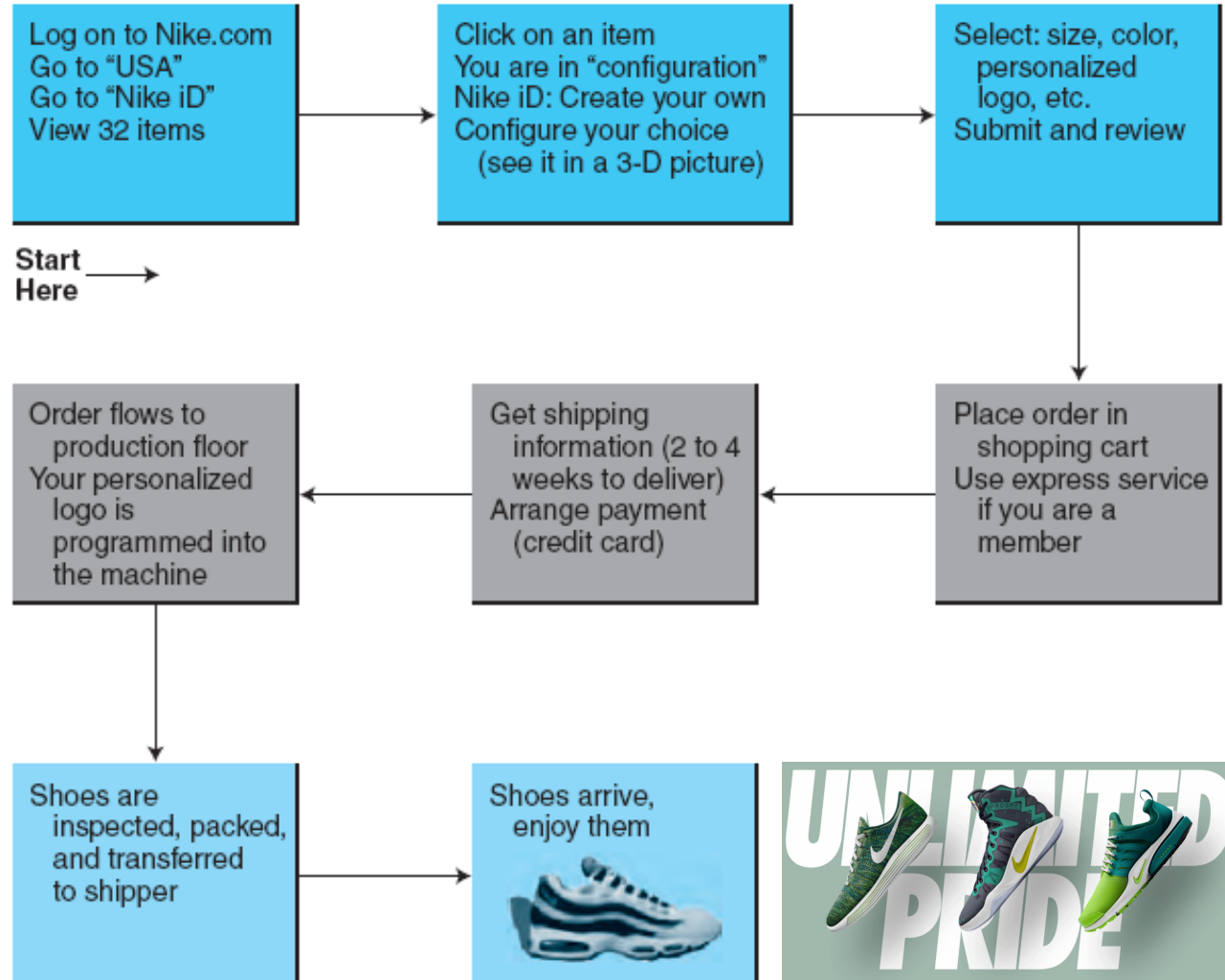
- e.g. design-it-yourself**

- A method that enables manufacturers to create specific products for each customer based on the customer's exact wishes

- **On-demand**

- e.g. 3D printing**

EXHIBIT 13.20 How Customization Is Done Online: The Case of Nike Shoes





Word Cloud

What would you buy online if it were customized precisely to your wishes?



52 users in session

24 words pushed

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Why Justify E-Commerce Investments? How Can They Be Justified?

- **HOW IS AN EC INVESTMENT JUSTIFIED?**

- **cost–benefit analysis**

- A comparison of the costs of a project against the benefits. Assessed by Return on Investment (ROI).

- **Following are the cases where formal evaluation may not be needed:**

- The value of the investment is relatively small for the organization
 - When there is no data available or inaccurate.
 - When the EC project is mandated (must be done regardless of the cost)

Methods and Tools for Evaluating and Justifying E-Commerce Investments

- **OPPORTUNITIES AND REVENUE GENERATED BY EC INVESTMENT**

- Direct revenue as well as indirect revenues (lowering costs, more efficient processes, ability to grow etc.)

vs.

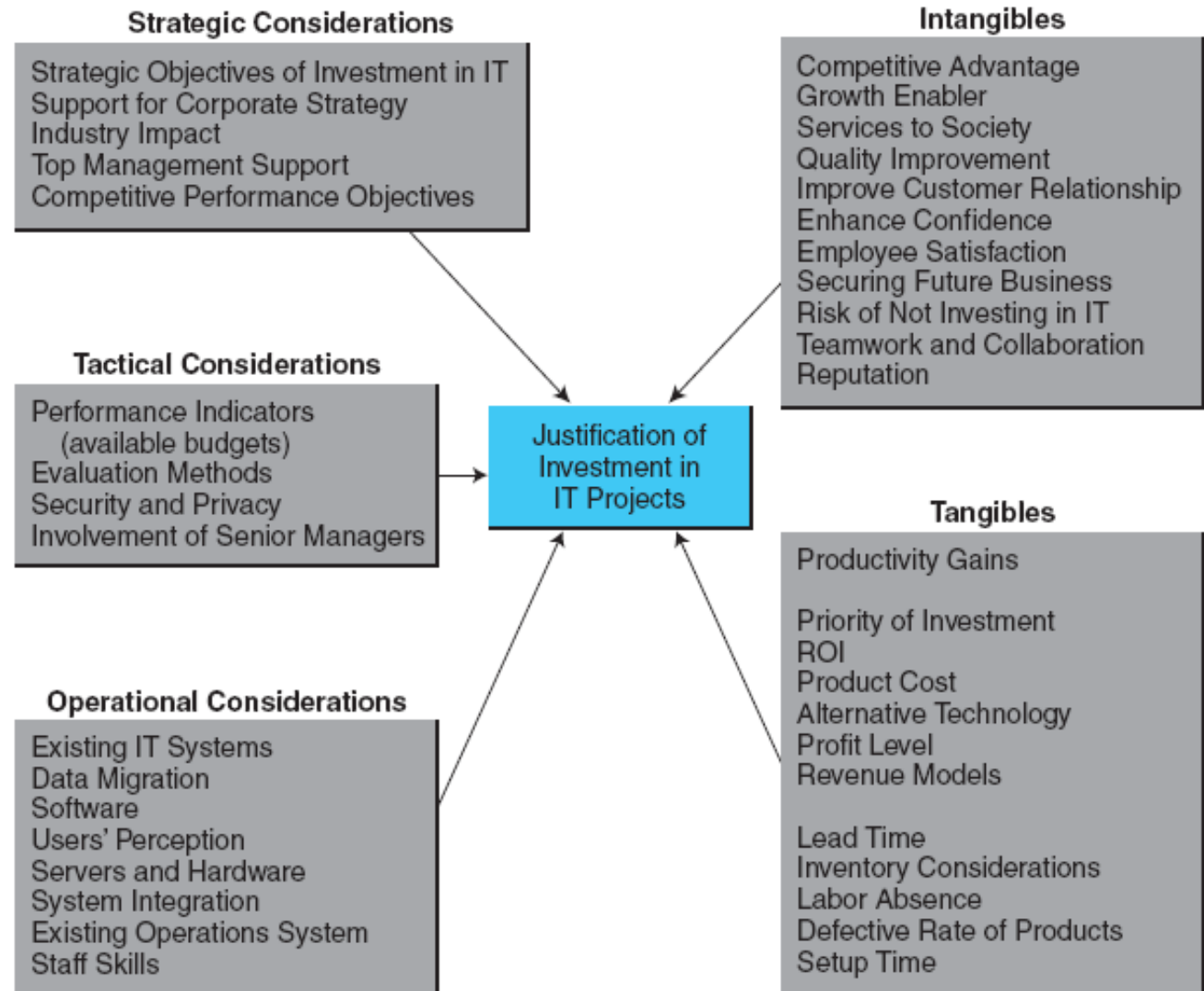
- **THREATS AND COSTS GENERATED BY EC INVESTMENT**

- Both initial (up-front) costs (what the EC project costs) and operating costs (what the EC solution costs)

Difficulties in Measuring and Justifying E-Commerce Investments

- DIFFICULTIES IN MEASURING PRODUCTIVITY AND PERFORMANCE GAINS
 - Data and Analysis Issues
 - EC Productivity Gains in One Area May Be Offset by Losses in Other Areas
 - Hidden Costs and Benefits
 - Incorrectly Defining What Is Measured
 - Other Difficulties (long lag time between investments and profit realization)

EXHIBIT 13.4 A Model for IT Project Justification



Difficulties in Measuring and Justifying E-Commerce Investments

- **Tangible Costs and Benefits**

- These costs can be measured through accounting information systems (e.g. hardware, software, labor).

- **Intangible Costs and Benefits**

- It is necessary to consider intangible benefits in a way that reflects their potential impact.

- **Handling Intangible Benefits**

- The first step in dealing with intangible benefits is to define them and, if possible, specify how they are going to be measured.
- Rough estimates of the monetary values of all intangible benefits can be made and then ROI or similar financial analysis can be done.

Traditional Methods for Evaluating EC Investments

- **The ROI Method:** $\text{total net benefits (revenue-cost for each year)} / \text{initial cost}$
- **Payback Period:** length of time needed to generate net benefits exceeding the current net cost
- **NPV Analysis:** Comparison of the present value of future benefits with the present value of the costs required to achieve those benefits to determine whether the benefits exceed the costs.
- **Internal Rate of Return (IRR):** the rate of growth a project is expected to generate
- **Break-Even Analyses:** At which point the benefits of a project equal to its costs.
- **The Total Costs and Benefits of Ownership:** includes acquisition costs (hardware and software), operation costs (maintenance, training, operations, etc.), and other related costs.
- **Economic Value Added:** net value added by the investment
- **Using Several Traditional Methods for One Project**
- **Business ROI vs. Technology ROI**

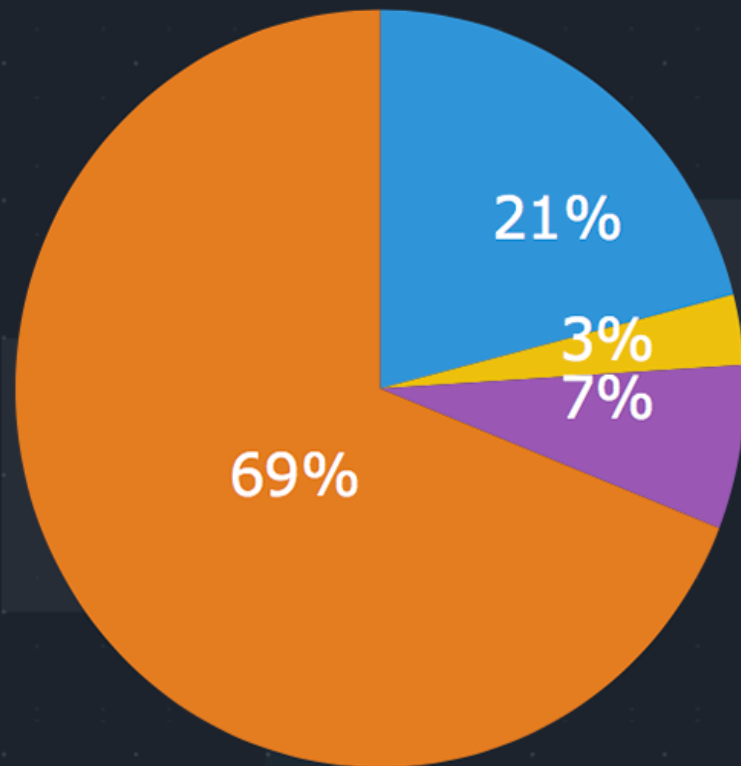
EXHIBIT 13.6 Evaluating EC and IT Traditional Investments Methods

Method	Advantages	Disadvantages
Internal rate of return (IRR)	Brings all projects to common footing. Conceptually familiar.	Assumes reinvestment at same rate. Can have multiple roots. No assumed discount rate.
Net present value (NPV) or net worth (NW)	Very common. Maximizes value for unconstrained project selection.	Difficult to compare projects of unequal lives or sizes.
Payback period	May be discounted or nondiscounted. Measure of exposure.	Ignores flows after payback is reached. Assumes standard project cash flow profile.
Benefit-to-cost analysis or ratio	Conceptually familiar.	May be difficult to classify outlays as expenses or investments.
Economic value added	Measures net value created for the stakeholder.	The true benefits can be difficult to measure.



Polling

In 2012, Facebook paid \$1 billion for an 13 employee social network company which makes no profit. WHY?



21%

Avoid a potential future rival company

3%

Avoid a competitor buying the brand

7%

Monopolize a growing social network domain

69% All of the above

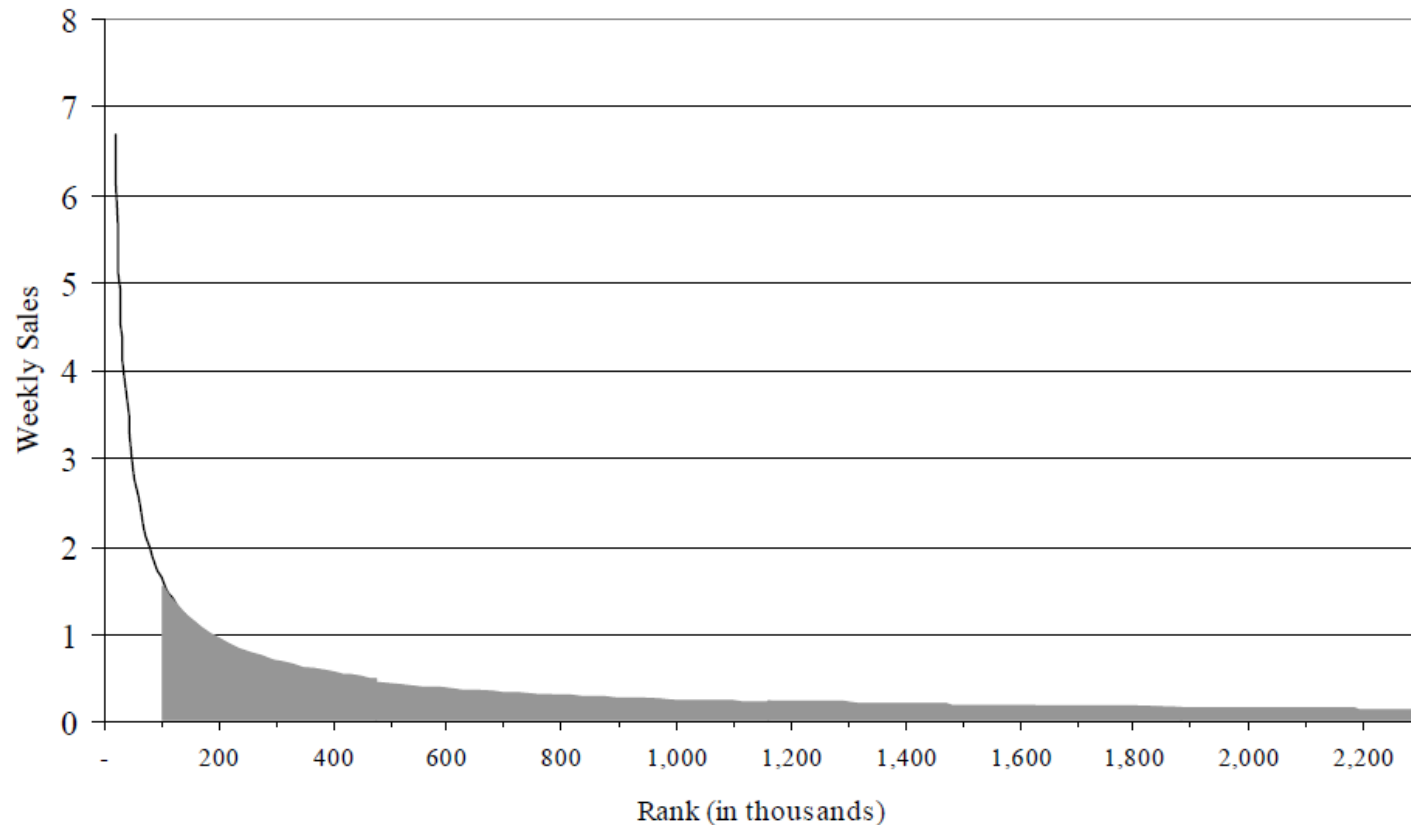


„The Future of Business is selling Less of More“

- Bricks and mortar stores have finite physical space; tendency to stock only the top selling products (or „hits“).
- Chris Anderson („The Long Tail“, 2006) argued that products with a low sales volume can collectively exceed the market share of the relatively few bestsellers (or „hits“)
- The Internet makes it possible to access this long tail market.

Long Tail: Why the Future of Business is Selling Less of More

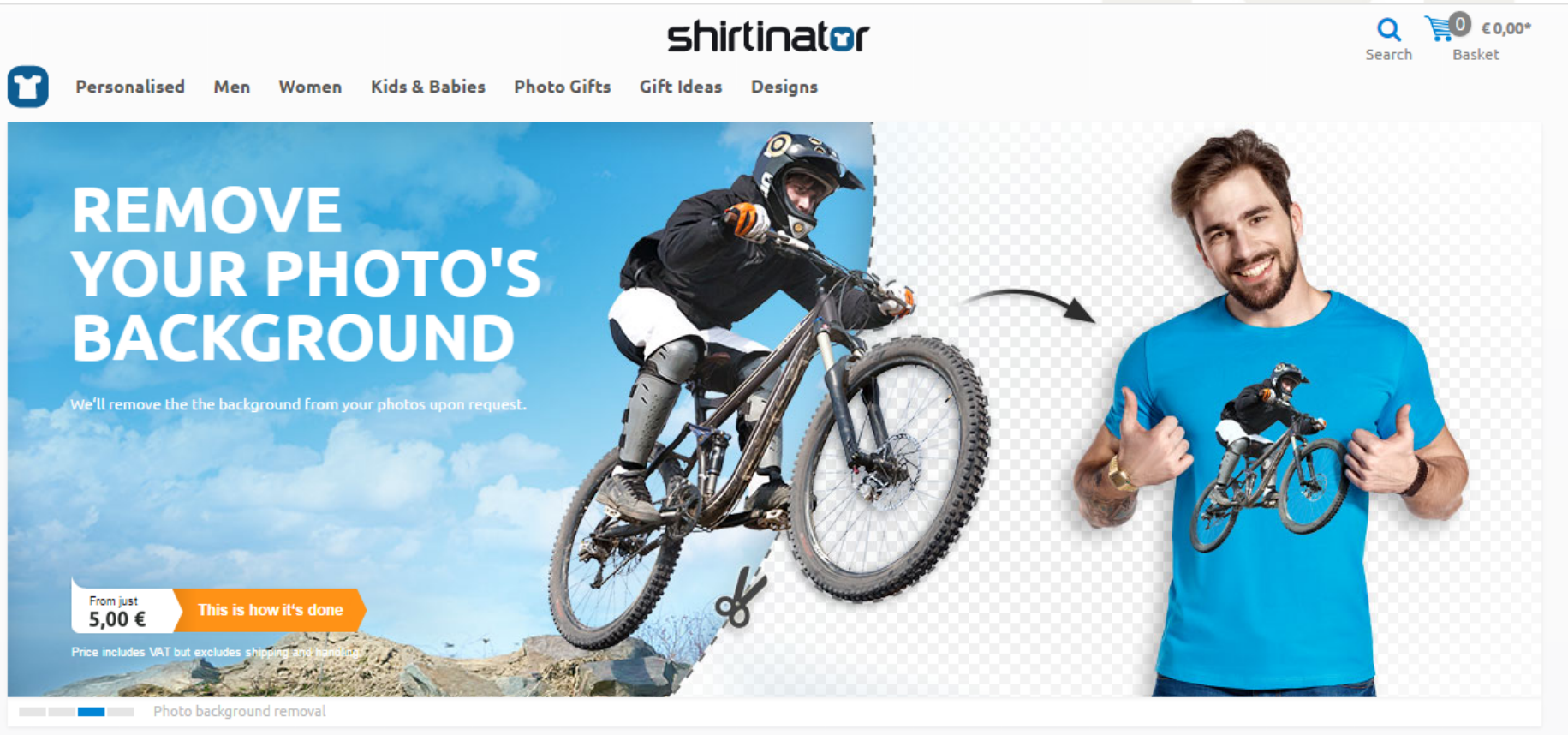
Figure 2: Share of Amazon Sales Above Rank 100,000



Long Tail: Why the Future of Business is Selling Less of More

Why does the Internet make selling in the long tail feasible?

- Decreasing importance of physical proximity to the product
- Reduced costs for stocking and delivery of physical products (Economy of scale by warehousing)
- Almost zero costs associated with storage and delivery of digital products!
- Higher visibility of lower volume sale items (also pushed by recommendation algorithms)
- Web(site)-level search over available items
- ...



The screenshot shows the Shirtinator website interface. At the top, the 'shirtinator' logo is centered. To the right are links for 'Search' and a 'Basket' with a price of '€0,00*'. Below the logo is a navigation bar with categories: 'Personalised', 'Men', 'Women', 'Kids & Babies', 'Photo Gifts', 'Gift Ideas', and 'Designs'. The main content area features a large banner with the text 'REMOVE YOUR PHOTO'S BACKGROUND' and a subtext 'We'll remove the the background from your photos upon request.' Below this, a price tag indicates 'From just 5,00 €' and a button says 'This is how it's done'. A small note at the bottom left states 'Price includes VAT but excludes shipping and handling.' The banner itself shows a transformation: on the left, a mountain biker in full gear is shown against a blue sky background, with a pair of scissors icon indicating where to cut; an arrow points to the right, where the same biker is shown as a graphic on a blue t-shirt worn by a smiling man against a transparent checkered background.

shirtinator

Search €0,00* Basket

Personalised Men Women Kids & Babies Photo Gifts Gift Ideas Designs

REMOVE YOUR PHOTO'S BACKGROUND

We'll remove the the background from your photos upon request.

From just **5,00 €** **This is how it's done**

Price includes VAT but excludes shipping and handling

Photo background removal

The Long Tail of fashion



wikiHow to do anything...



**We're trying to help everyone on the planet
learn how to do anything. Join us.**

Our Mission

We provide universal access to the world's best education.

News > Postsecondary Learning > MOOCs

Udacity, Coursera and edX Now Claim Over 24 Million Students

Sep 8, 2015



WHERE ARE THEY NOW? Shortly after the “Big Three” MOOC providers launched in 2012, nearly everyone focused on user numbers as a sign of their scale and reach. For anyone still keeping tabs on the numbers race, Udacity, Coursera and edX recently shared new figures.

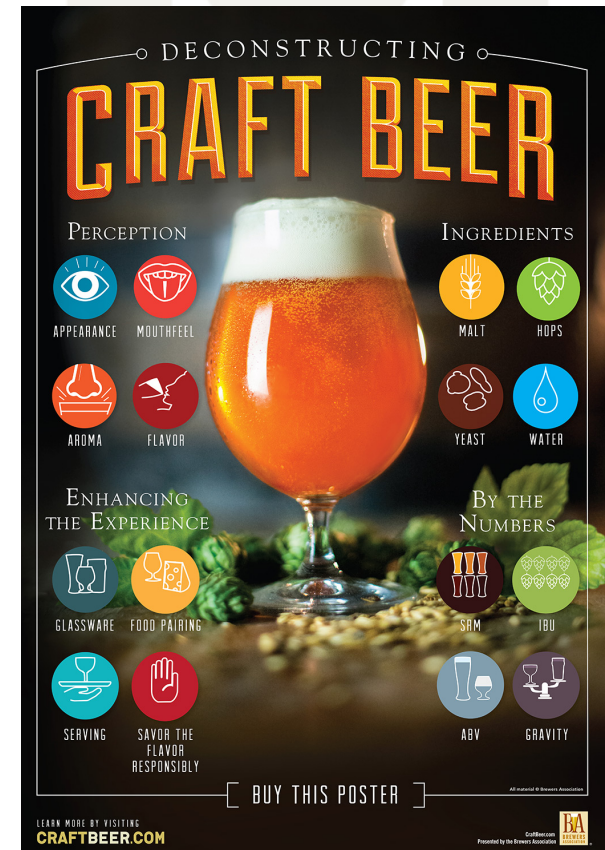
The Long Tail of alcohol

- “ For too long we’ve been suffering the tyranny of lowest-common-denominator fare, subjected to brain-dead summer blockbusters and manufactured pop. Why? Economics. Many of our assumptions about popular taste are actually artifacts of poor supply-and-demand matching — a market response to inefficient distribution.
- “ Anheuser-Busch, battling industry market-share losses to purveyors of wine and liquor, is hinting that it will make an effort to enter the liquor industry... Anheuser has made some tentative moves into the liquor business. Last year, it formed a separate division, Long Tail Libations, to develop, test and market distilled spirits. Its first product, Jekyll & Hyde, a liqueur, is being test marketed in a handful of places. Over the past few years, the St. Louis-based brewer also has joined forces with Bacardi to produce flavored malt beverages, so-called malternatives, under the Bacardi Silver label.



The Long Tail of alcohol

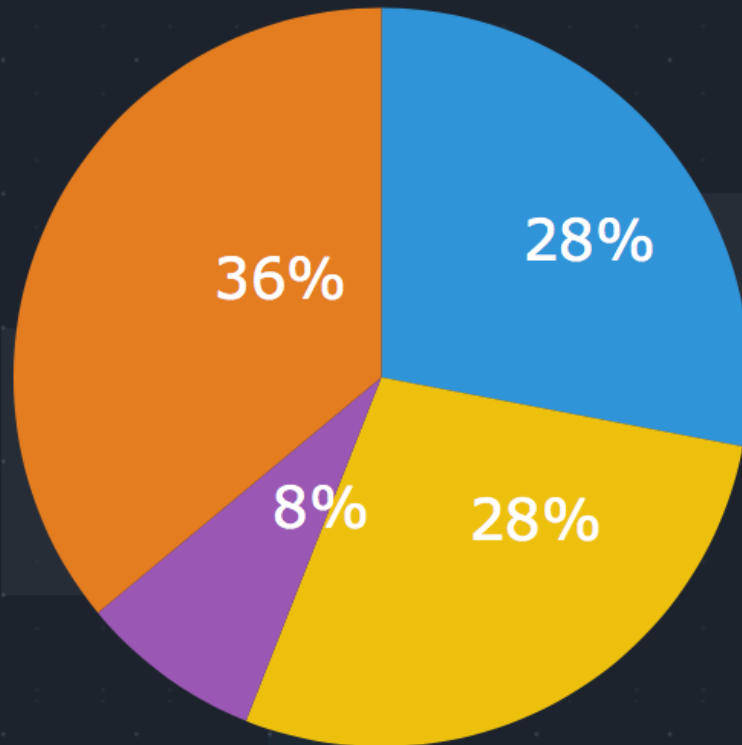
“ As the president of Anheuser-Busch’s U.S. beer operations pointed out, “We will have to re-evaluate our business model going forward in terms of expanding beyond beer and broadening our position within the total alcohol industry.” Does that sound like a Long Tail strategy or what? As the Liquor Snob points out, the new Jekyll & Hyde drink is about the furthest thing from good ol’ Budweiser beer:





Polling

Which of these companies could build a profitable business by exploiting the long tail?



28%

Family car manufacturer

28%

Italian "Giallo" crime-slasher movies' on demand

8%

Office furniture store

36%

All of the above

52 users in session

25 users answered

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Getting into E-Commerce and Starting a New Online Business

• **PLANNING A NEW ONLINE BUSINESSES**

– **business plan**

A written document that identifies a company's goals and outlines how the company intends to achieve the goals and at what cost

– **business case**

A document that justifies the investment of internal, organizational resources in a specific application or project

Organizational Strategy: Concepts and Overview

Why You Need a Business Plan

Even if you don't actually need funding for your business or need to submit a business plan to anyone, there are still some compelling reasons you should consider writing one for yourself.

For example, let's say that you're just starting out. You've created an online store, you may even be making some sales. Creating a business plan at this stage could help you see the bigger picture and chart a strategic course for future growth.

Or maybe you're five years into running your business and you're starting to feel stuck and things are beginning to plateau. Creating a business plan at this stage could help you think outside of the day-to-day grind of running of your business and discover new ways to market it or new products you could be selling to boost revenue.

On the flip side, maybe your business is trending downward. Creating a business plan in this scenario could potentially help you either change the way your business works as a whole or cut your losses before you're in deeper trouble.

The point is, if you haven't written a business plan, you should take the time to do so, no matter what point in your business's lifecycle you're in.

<https://www.shopify.com/blog/8328558-why-your-ecommerce-store-needs-a-business-plan-and-how-to-write-one>

Organizational Strategy: Concepts and Overview

Components of a good business plan:

- Executive summary
- Company description
- Market analysis
- Operational plan
- Organization & management
- Products & services
- Marketing & sales
- Financial projections
- Funding required

EXHIBIT 15.1 The Cost-Benefit Elements of a Business Case

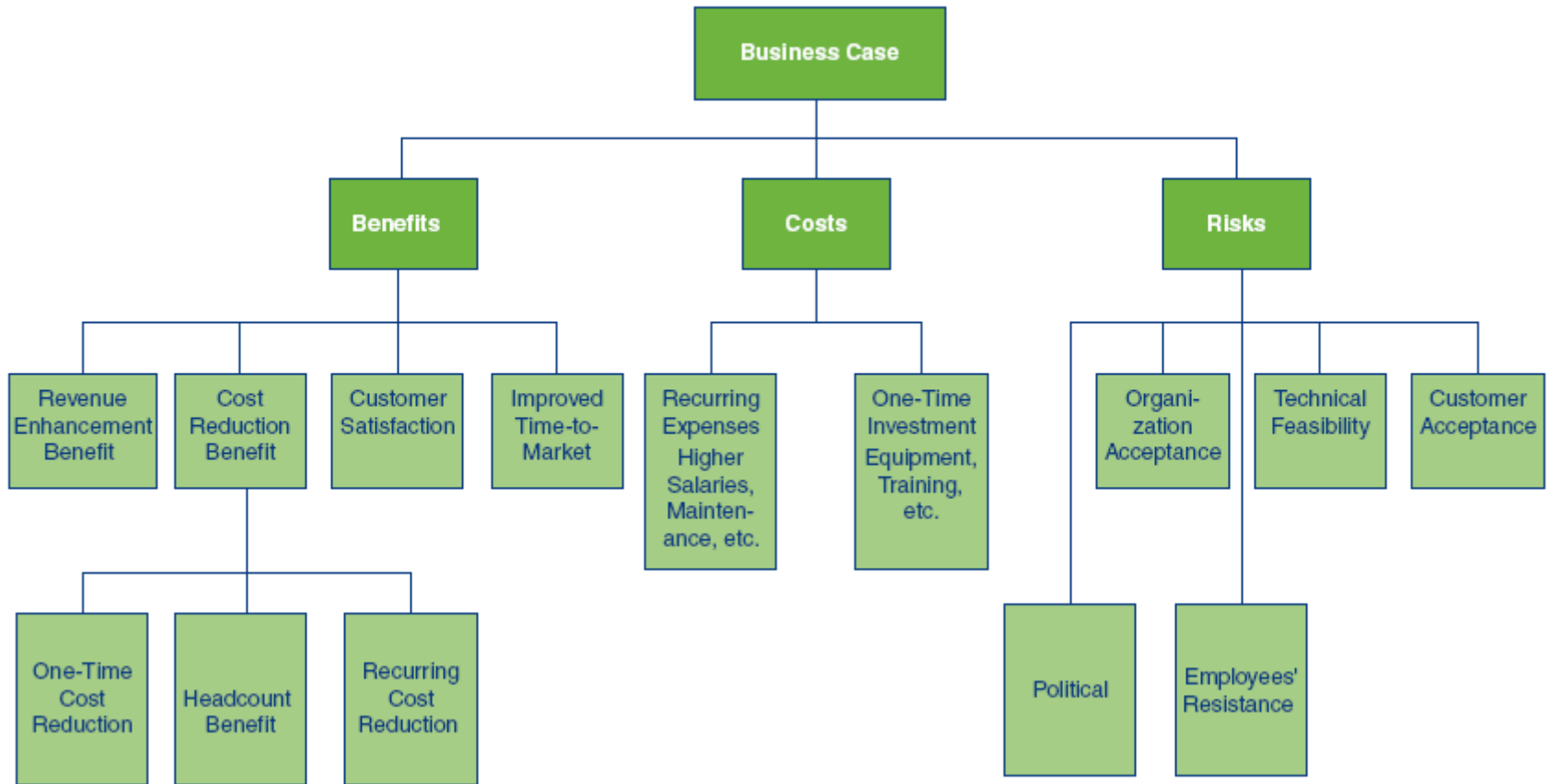
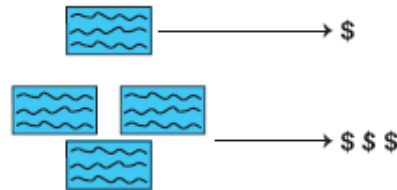


EXHIBIT 1.11 Common Revenue Models

Transaction Fees Model



Commissions paid on volume of transactions

Subscription Model



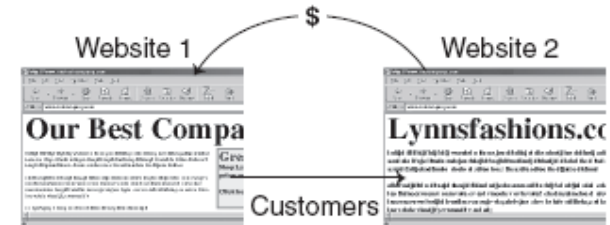
Fixed amounts are charged, usually monthly

Advertisement Model



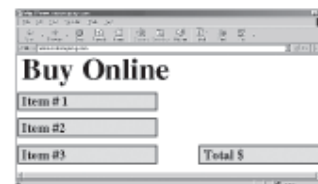
Payments from advertisers

Affiliate Model



Commissions for referring customers

Sales Model



Revenue from sales of goods or services

Getting into E-Commerce and Starting a New Online Business

• **FUNDING A NEW ONLINE BUSINESS**

– **First Round of Initial Funding**

- **angel investor**

A wealthy individual who contributes personal funds and possibly expertise at the earliest stage of business development

- **incubator**

A company, university, or nonprofit organization that supports businesses in their initial stages of development

Getting into E-Commerce and Starting a New Online Business

- **Crowdfunding** is using a crowd of investors to fund start ups. Each individual invests a small amount of money; the collection channels are Internet-based social networks (e.g. kickstarter, gofundme, indiegogo)



Getting into E-Commerce and Starting a New Online Business

- **THE COOLEST COOLER**

- A 21st Century cooler that's actually cooler, complete with built-in ice crushing blender, a waterproof Bluetooth speaker and a USB charger.
- \$13,285,226 August 2014



Getting into E-Commerce and Starting a New Online Business

- **PEBBLE TIME**

- Pebble Technology was itself crowdfunded with \$10 million in 2012 to compete with Apple, Google and Samsung in the smartwatch market.
- Its newest watch Pebble Time is the most funded Kickstarter campaign to date.
- \$20,338,986 March 2015



Getting into E-Commerce and Starting a New Online Business

- **EXPLODING KITTENS**

- “a card game for people who are into kittens and explosions and laser beams and sometimes goats”
- Most backed campaign ever with 219,382 backers.
- \$8,782,571 February 2015



Getting into E-Commerce and Starting a New Online Business

- **POTATO SALAD**

This past weekend saw the culmination of a small internet joke that snowballed into a ridiculous viral sensation. Columbus, Ohio native Zach "Danger" Brown wanted to raise \$10 on Kickstarter to make a potato salad. He got \$55,000 instead. So he used all the extra cash to throw a party, dubbed **Potato Stock**.



Getting into E-Commerce and Starting a New Online Business

–Second Round Finance

- **venture capital (VC)**

Money invested in a business by an individual, a group of individuals (venture capitalists), or a funding company in exchange for equity in the business

–The Initial Public Offer (IPO)

- Raising larger amounts of capital by selling shares in the company on a public stock exchange. Also called “going public”.

Getting into E-Commerce and Starting a New Online Business



FoodPanda, an online takeout delivery service for restaurants that mirrors the popular American company GrubHub, was founded in 2012 and has raised almost \$50 million in venture capital. Gordon Walters for The New York Times

Email

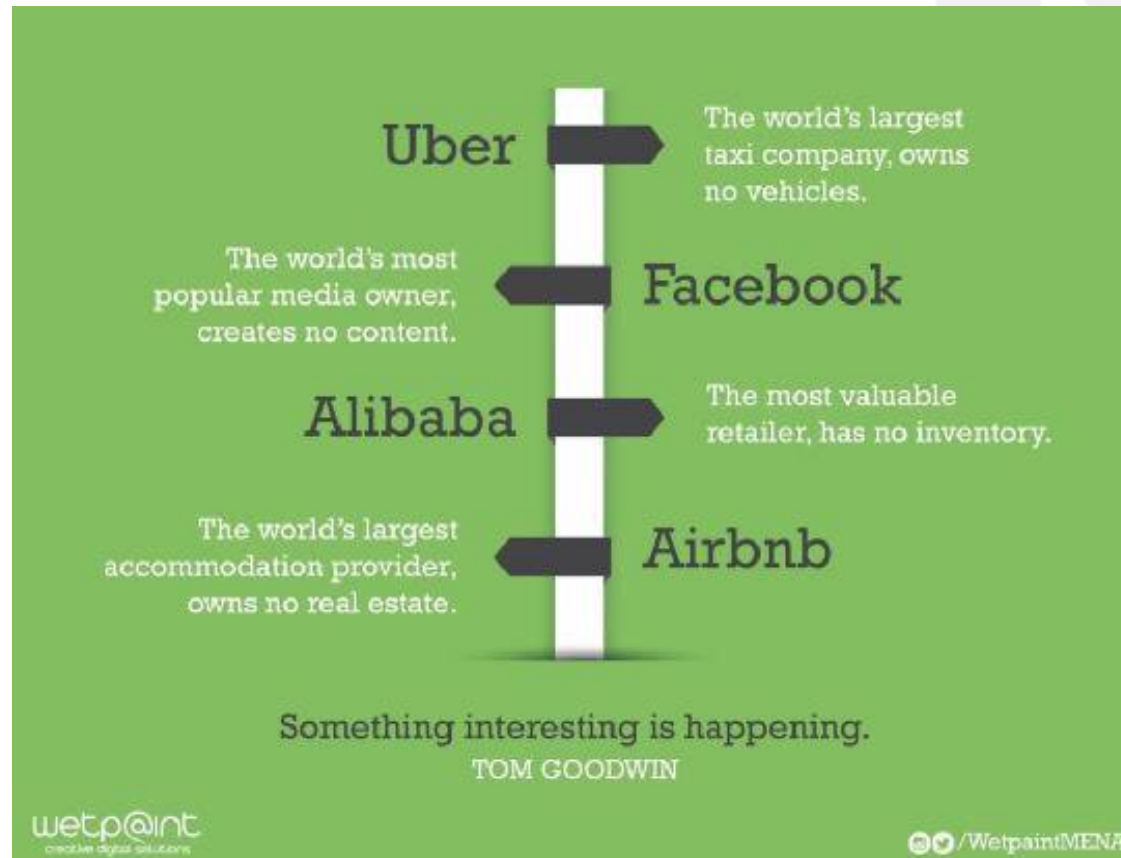
Share

BERLIN — For [Linio](#), think Amazon for Mexicans. For [Zalora](#), think Zappos for Malaysians. For [Easy Taxi](#), think Uber for Nigerians.

And for all of them, think [Rocket Internet](#), a budding tech empire here in Germany's capital.

M AND HOSPITALITY MANAGEMENT
activity for a Global Tourism Market

Getting into E-Commerce and Starting a New Online Business



Getting into E-Commerce and Starting a New Online Business

How far could disintermediation go? Could we even see the emergence of institutions who focus solely on monetising information and relationships, without taking any risks onto their balance sheet? “If you look where technology business models are going, you basically see that it’s all about access and not about assets,” says Ralph Hamers, CEO, ING Groep NV. “The largest media company in the world is Facebook. They don’t produce any content. The largest hotel company in the world is Airbnb, and they have no hotel rooms. And the largest taxi company in the world is Uber, and they have no taxis whatsoever. So the question really is why couldn’t the largest bank in the world be one that doesn’t have a balance sheet?”



Word Cloud

Which industry domain do you think will be disrupted next by pure-play no-asset companies?

Cars
Offices
ANIMATION
gaming
university
Car

52 users in session

6

words pushed

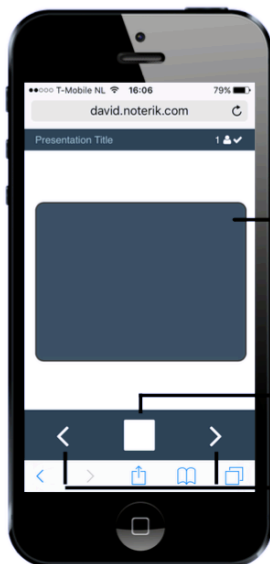
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Tools for the presenter

zooming and pointing on each element in the presentation

Presenter Remote



TRACKPAD:

Use one finger to point at something on the slide



Use two fingers to pinch and zoom into the slide



Use two fingers to pan on the zoomed slide

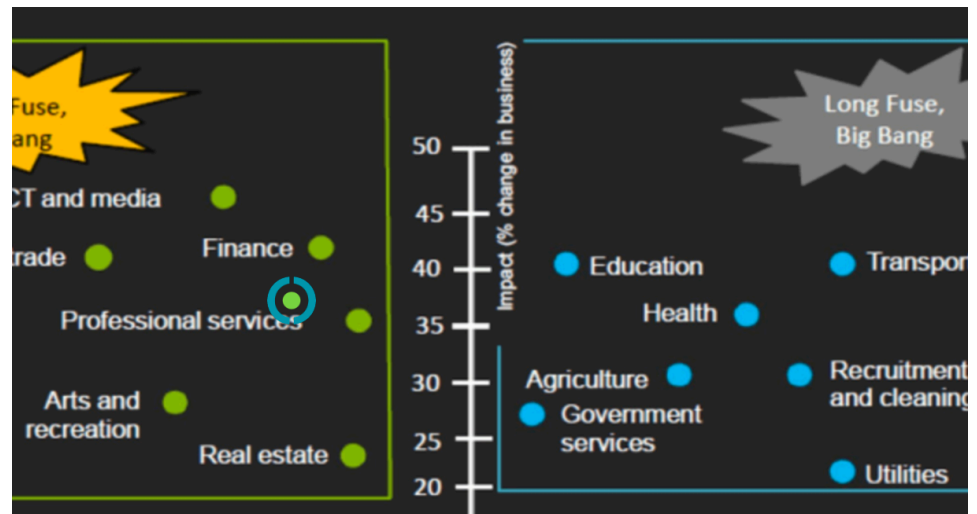
PAUZE AUDIENCE:

Click to pause audience phone in the sessions

NEXT & PREVIOUS SLIDE:

Tap '<' to go to the previous slide
Tap '>' to go to the next slide

Presentation Screen Zoomed



Audience phone interfaces from this session in Vienna

