

The Dimensions of Innovation and its Dynamics

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for Munich University of Applied Sciences
23rd May 2007

Agenda

- Objectives of this presentation
- What is Innovation?
- The 12 Dimensions of Innovation
- The Dynamics of Innovation
- Summary
- References

Objectives of this Presentation

- What are we going to get here
 - You will get different views from Industry Leaders on Innovation and a definition of 'Innovation'
 - You will learn a systematic model of 12 dimensions describing different aspects of Innovation
 - You will see examples in industry of important Innovations
 - You will learn a framework to describe the Dynamics of Innovation
- This knowledge you will help you to
 - Systematically characterise the degree of innovativeness of products and identify potential for improvement
 - Better understand competitive forces and company strategies
 - Better understand why industries undergo different phases
 - Better understand the need for dedicated innovation in each of the characteristic phases

Understanding the mechanisms of Innovation is a key to success for Entrepreneurs

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Key Notes on Innovation

„The species that survived were not the most intelligent – they were the most adaptable to change“

Charles Darwin

„Since I am on the board, I have been doing just one thing: Innovation “

Ed Zander, CEO Motorola

„Innovation is the only way that Microsoft can keep customers happy and competitors at bay“

Steve Ballmer, CEO Microsoft

„It makes no difference how innovative a company thinks it is. What matters is whether customers will pay“

M. Sawhney, MIT

„Innovation is central to the success of the company and the only reason to invest in its future“

Jeffrey Immelt, CEO General Electric

„Innovation distinguishes between a leader and a follower“

Steve Jobs CEO Apple Inc

Innovation is about ...

- delighting customers so that they are willing to pay
- differentiation towards competitors
- bringing costs down

Definition

Innovation is when sustainable
profits are created from successful
exploitation of **new ideas**

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The 12 Dimensions of Innovation

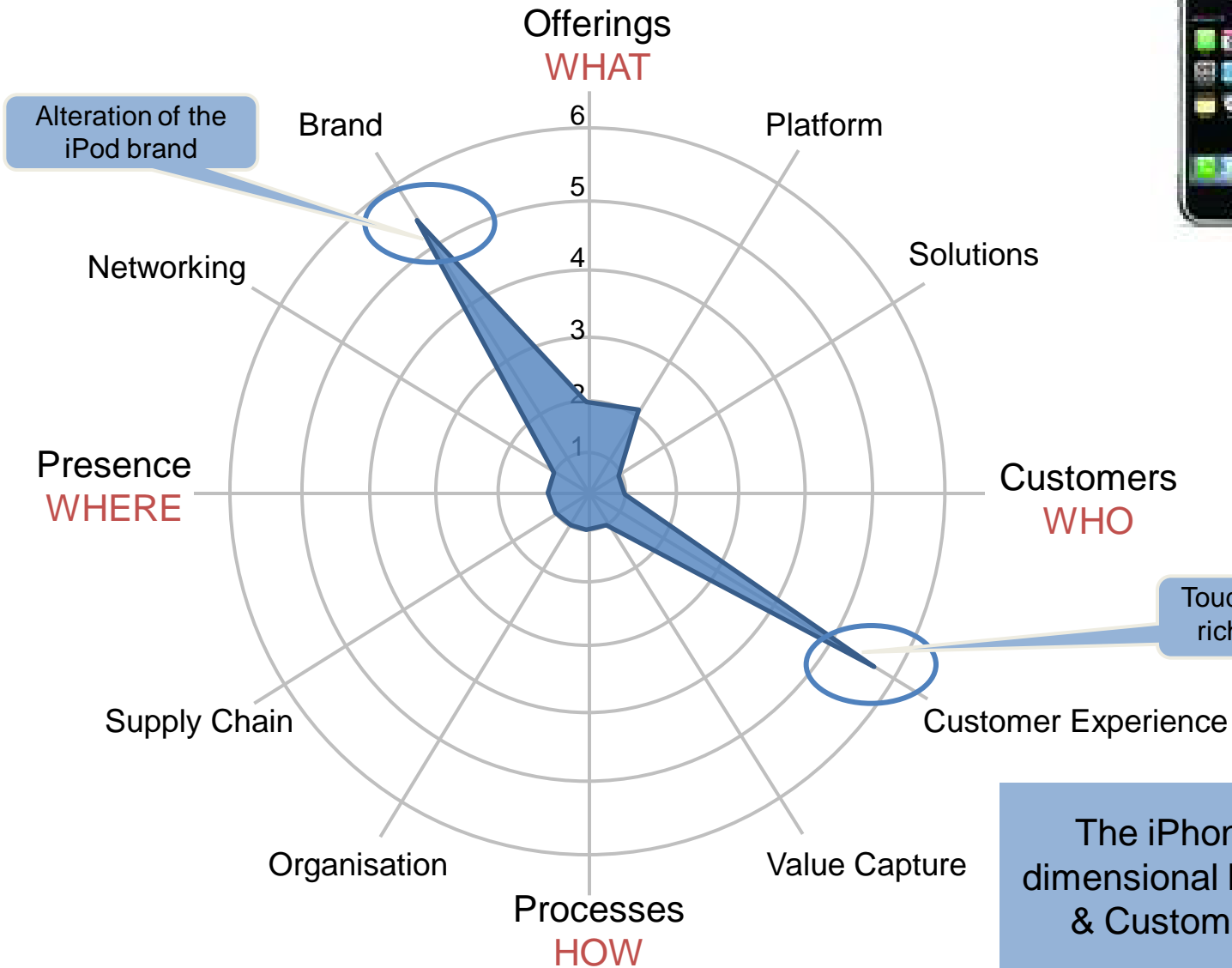


This figure is called 'Innovation Radar'

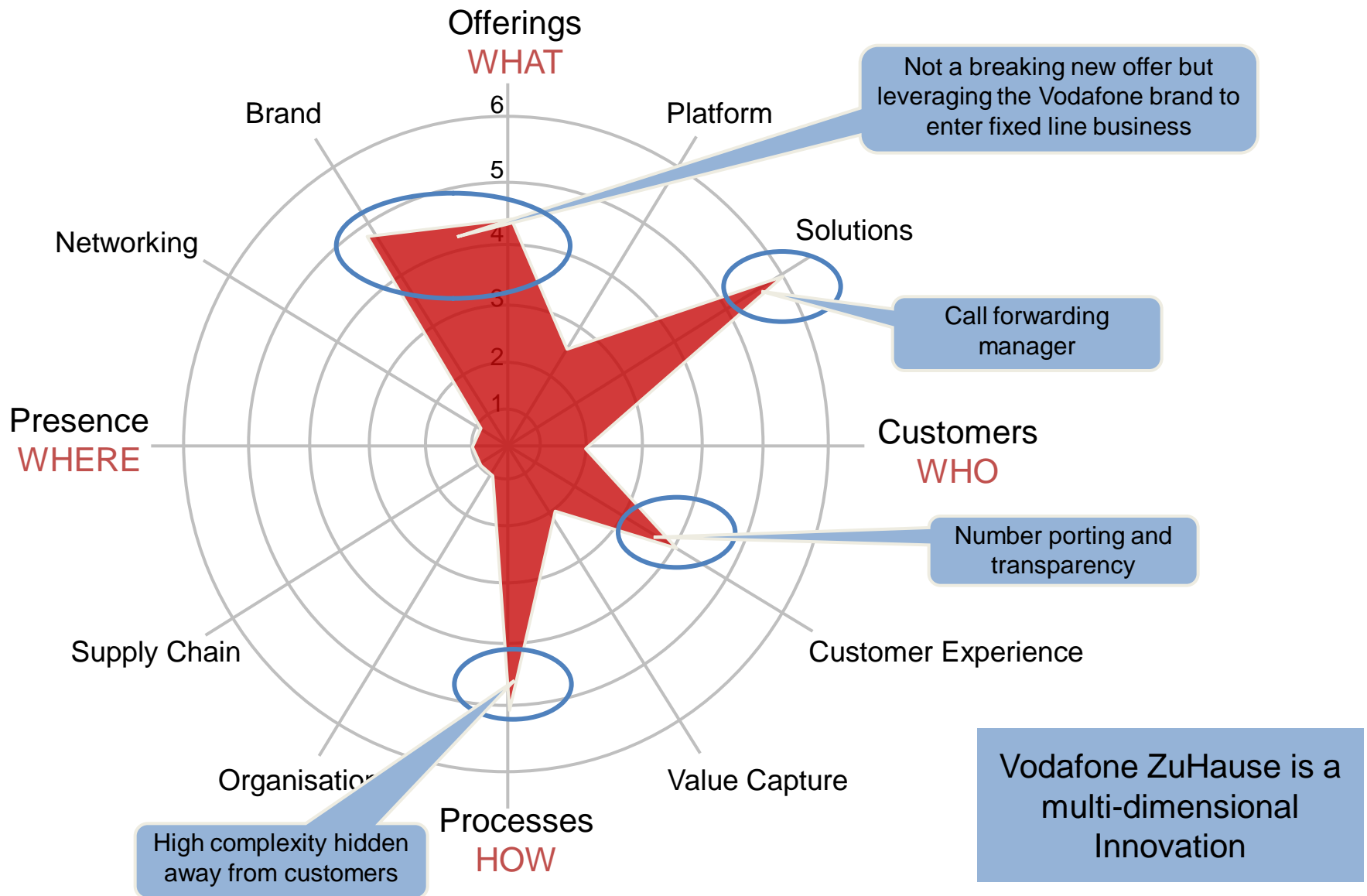
Definitions and Examples for the Dimensions of Innovation

Dimension	Description	Examples
Offerings (WHAT)	Develop innovative products or services	Apple iPod, Online Auctions (eBay), Hybrid cars
Customers (WHO)	Discover unmet customer needs or identify underserved customer segments	Green Power, Investment Funds with focus on sustainability, anti-aging pharmaceuticals
Processes (HOW)	Redesign core operating processes to improve efficiency and effectiveness	Dell's mass customization of PCs, Mannesmann D2's ready-to-go Mobile Phones
Presence (WHERE)	Create new distribution channels or Innovative points of presence	Retail of seasonal goods in Coffee Shops (Tchibo), e-Newspapers via Email
Platform	Use common components or building blocks to create derivative offerings	Car platforms, SAP (in fact, most modular software products),
Solutions	Create integrated and customized offerings that solve end-to-end customer problems	UPS Logistics Services, Turn-Key building constructions
Customer experience	Redesign customer interactions across all touch points and all moments of contact	Retail store as entertainment experience, new user interfaces (Apple iPhone, MS Vista)
Value Capture	Redefine how company gets paid or create innovative new revenue streams	Advertising revenues from Search (Google), revenue sharing with suppliers
Organization	Change form, function or activity scope of the firm	Cisco partner-centric networked virtual organization, Mc Donald's franchising concept
Supply Chain	Think differently about sourcing and fulfillment	Collaborative design with suppliers, functional procurement
Networking	Create network-centric intelligent and integrated offerings	Apple iTunes, Otis Remote Elevator Monitoring service, remote heat metering
Brand	Leverage a brand into new domains	Virgin Group (music label, airlines, branded venture capital), Vodafone ZuHause

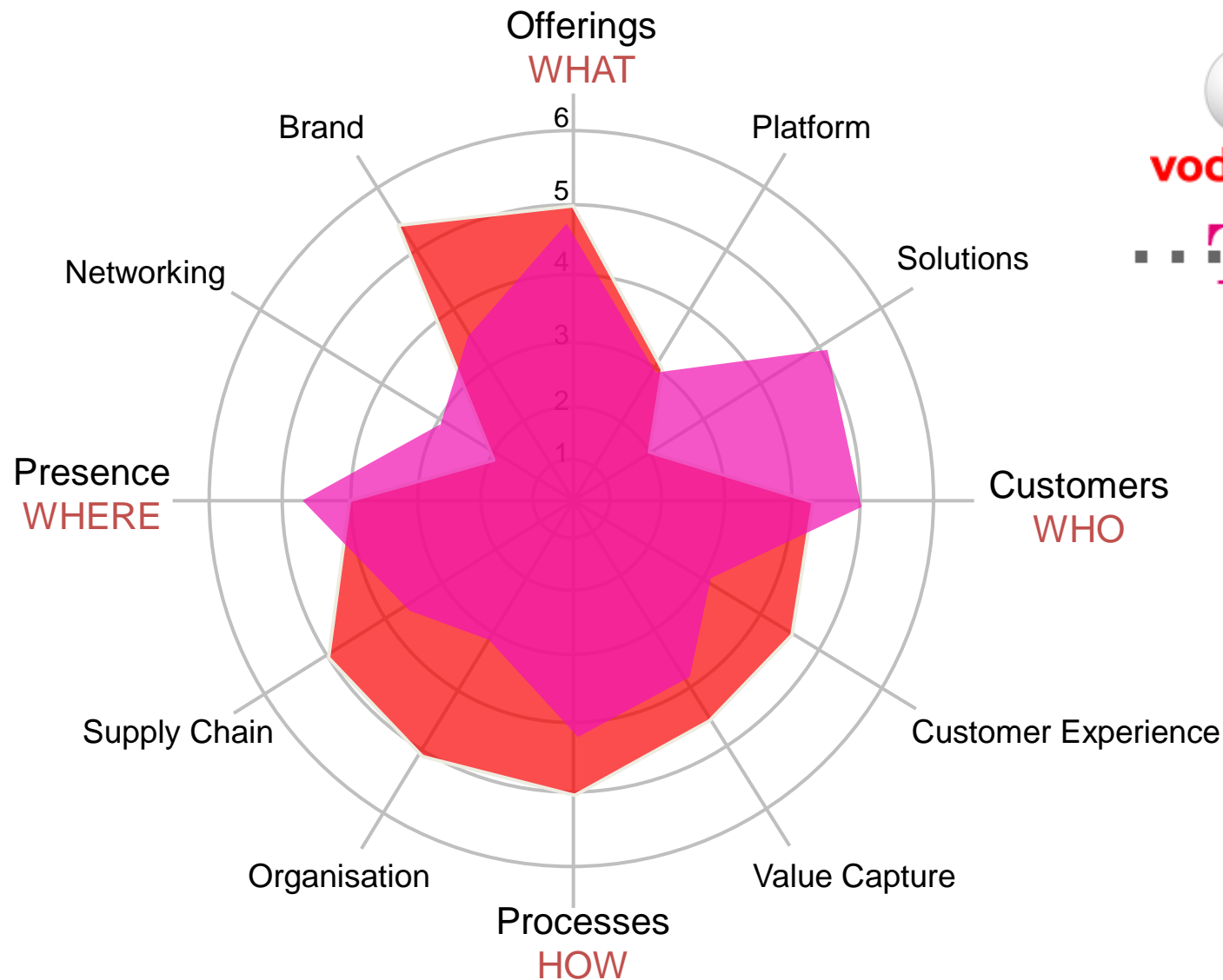
Example: Apple's iPhone



Example: Vodafone ZuHause



The Innovation Radar also can show the overall Innovation Power of competing companies

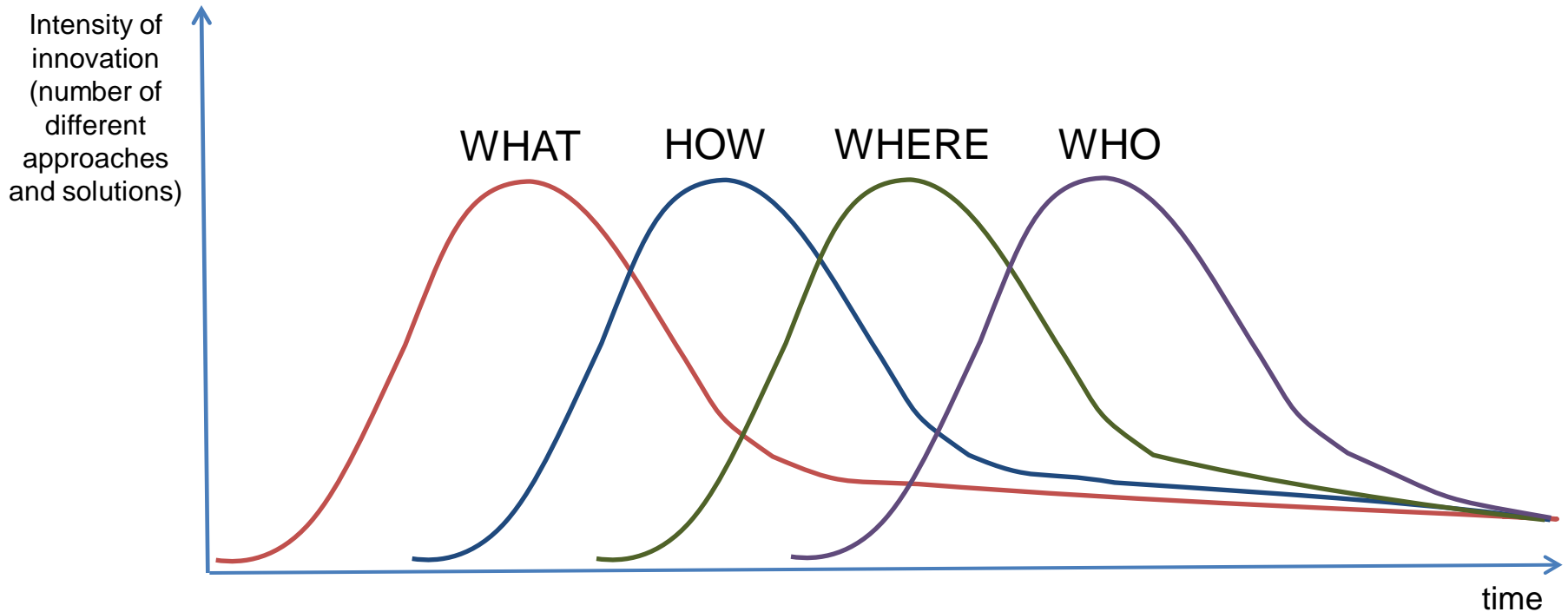


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The Dynamics of Innovation

Thesis: Industries do not innovate on all 12 dimensions all the time – there is a sequence of phases each dominated by an Innovation pattern



Note: In practise, the situation might be more complex. Especially when a company introduces new products and already has processes, presence and customer relationships in place. Several new products may result in overlapping waves of innovation

Four Main Phases for Industry Development

- The Product Innovation Phase (WHAT)
 - Many different competing companies with different product designs in the market
 - Customers are mainly early adopters
 - The inflection point is characterised by the emergence of a **dominant design** ⁽²⁾
- The Process Innovation phase (HOW)
 - As soon as a dominant design has emerged, companies focus on process innovation in order to produce cheaper, faster and with higher quality
 - In many cases **investments in IT systems** are particularly high during this phase
 - The inflection point is characterised by a low RoI for the capital investments in process improvements
- The Expansion Phase (WHERE)
 - As soon as company processes are lean and effective, scale in terms of market footprint is becoming essential
 - In many cases, companies will **expand geographically / internationally** during this phase
 - The inflection point is characterised by a low RoI for the capital investments in distribution
- The Segmentation Phase (WHO)
 - After expansion of distribution channels, companies seek to sell variants of the product to new customer segments
 - **Vertical markets and niches** are being served - very often at lower margins

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Summary

- The ultimate goal of Innovation is to generate sustainable profit
 - increasing revenues, reducing costs, sustainable differentiation
- There are 4 main dimensions of Innovation
 - WHAT, HOW, WHERE, WHO
- 8 further dimensions need to be taken into account in order to have a detailed view on product innovations
 - All 12 dimensions can be shown in a diagram called the 'Innovation Radar'
- Industries undergo phases of development
 - Typically, four main phases with a different focus on Innovation follow each other
 - WHAT – HOW – WHERE - WHO

If you are getting in contact with an industry (applying for a job, trying to sell a product, or trying to found your own company) – make sure you understand which Innovation phase this industry is in and how innovative the products of that company are in relation to its competitors

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