



Service Science

UniMiB

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Knowledge Issues in  
uncertain Scenarios

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# The Pets Case

- The \*\*\*\*\* company was created to sell pet food and accessories on-line, in 1998.
- Strategy:
  - Building brand recognition
  - Get Big Fast (GBF) i.e., focus on enlarging the customer base
- The company collected a lot of money from investors
  - They created their own logistic infrastructure
  - Aggressive advertisement campaign
    - Local TV and Radios
    - The Sock Puppet Company Mascot became very famous
    - American Super Bowl Advertisement
  - Aggressive pricing (below-cost)



# Strategy

- Get Big Fast Strategy
  - Several .com company followed this strategy e.g., amazon.com
  - KPI to monitor
    - # user registration
    - # purchases
    - ...
- Brand recognition
  - Everybody was talking about the company
  - Several advertisements awards
- The company user registrations skyrocketed
- The site was hit with traffic as people began to place orders
- A month later the super bowl advertisement, the company raised over \$80 million dollars in its IPO (Initial Public Offering)

# Even better

- The company succeeded to purchase its biggest online competitor at the time too
- They got amazon.com on board as an investor ...
- The management was using a well known success strategy
- You might expect a very happy ending

# The End?

- The company is pets.com
- It was referred as one of the greatest dot-com disasters in history  
<https://www.cnet.com/news/pets-com-latest-high-profile-dot-com-disaster/>
- 268 days after Initial Public Offering the company went to liquidation (November 2000)
- What was wrong?

# Main Problem: Sustainability over Time

- Business model not sustainable over time
  - Low profit margin sector (2% to 4%)
  - Not enough to cover the delivery costs
  - Strong competition from local grocery stores
- Management failed twice;
  - neither they obtained useful insights in advance (e.g., market research or expert advices). Pet market was a well known business
  - nor they **recognized the problem at run time** (before ending resources). More on this topic later

# Problem Root Cause

- (Very) wrong approach
  - creating products and services in a state of **isolation** and ...
  - ... **later** task marketing and sales teams to **identify customers**
- Some questions to be answered before (or during) product design, not after:
  - are there any **needs** or **problems** that people are facing?
  - how **many** of these **people** are there?
  - would they actually **pay** for something that meets their needs?
  - are **competitors** already serving those needs?  
What can they do to offer a more compelling proposition?
  - can the revenue **sustain** the business?

# (Possible) Alternative Approach

- To focus on one or few specific market segments where higher prices may pay for delivery costs
  - This is a well known marketing/strategy approach
  - Main steps
    - Customer segmentation (i.e., to identify customer segments and specific features)
    - Targeting (i.e., identify segments to focus on)
    - Positioning (...)
- Later, some more segments can be added
- E.g., amazon.com successfully used this approach



# (Focus on Market Research)

- Market analysis can be useful
  - It is not a silver bullet
  - results must be carefully interpreted
- Market analysis might be misleading in (very) innovative scenarios
  - Customers don't really know what they want
  - There is a famous quote (somewhat dubiously) attributed to Henry Ford: "If I had asked people what they wanted, they would have said faster horses."  
<https://www.forbes.com/sites/forbesfinancecouncil/2017/10/19/on-building-a-faster-horse-design-thinking-for-disruption/#18234dd849f9>  
<https://www.entrepreneur.com/article/290410>
- Neither entrepreneur/service designer/... are better (BlackBerry's Famous Last Words At 2007 iPhone Launch)  
<https://www.forbes.com/sites/parmyolson/2015/05/26/blackberry-iphone-book/#2562764963c9>

# (The Innovator/Entrepreneur Role)

- Considerations
  - If the answer is "yes" to each of the previous questions (... are there any needs not actually addressed by competitors that the customer will pay for ... [sustainability]...) ...
  - ... it is very likely that someone else is already in the business
- The innovator/entrepreneur role is to discover how to turn some *no* into *yes*
  - but she/he must be aware of the actual situation and challenges
  - the sooner she/he realize the problems/challenges the better is

# The pets.com very important Error

- How to quickly recognize problems at run-time (before ending resources)?
- Important suggestion: focus on the underlying assumptions
  - **Identify** the **assumptions** underlying your business model
  - **Validate** them as soon as possible! Assumptions haven't been proved to be true (they are assumptions, after all)
- Pets.com assumptions. What is your opinion?
  - pet owners **want to buy online** and knew how to (in 1998)
  - people are happy **to wait a few days**, rather than just driving down to the local shops
  - the overall business is **sustainable**

# Customer Behavior Models

- AIDA model describing the people purchase process (Awareness -> Interest -> Desire -> Action)
- The pets.com massive marketing campaign had certainly generated **a lot of Awareness** and **some Interest**
- But it wasn't translating into sufficient **Desire** and certainly not to enough **Action**
- Later
  - not enough people were ordering products and
  - those that did were ordering only small amounts
- The selected KPI (Key Performance Indicators, see previous lesson) delayed the AIDA issues identification (more on next slide)

# Focus on KPIs

- The KPIs selected by the management were
  - # of user registration (per time)
  - # of purchases (per buyer, per time)
- High scores at the beginning. Main issues:
  - # of user: focus on interest rather than desire/action
  - # of purchases were measured in a below-cost-pricing scenario
- Neglected questions:
  1. when below-cost-pricing end, will existing **customers keep buying?**
  2. **will customers keep increasing** once finished the massive advertisement?
- What can you do? ... [open discussion]

# Business sustainability over Time

- Revenues should be high enough
  - not only to cover costs of produced goods
  - but also to cover growth costs e.g., advertisements. We will come back to this topic in a next lesson
- Another Problem: the company invested in huge warehousing
  - This was a fixed cost that could not be avoided (in 1998 there was no logistic platform available)
  - It made a serious dent in the sales profitability
- More information on pets.com case

<https://brainmates.com.au/brainrants/pets-com-a-classic-example-of-product-development-failure/>

# Start-up Definition

Service and Data Entrepreneurship

# Start-up Definition

- “A start-up is a **human institution** designed to create a **new product or service** under conditions of **extreme uncertainty**”

Ries, Eric. The Lean Startup. The Crown Publishing Group

- Learning is the most vital function of organizations building under conditions of extreme uncertainty
- E.g.,
  - Learn about which **elements of a strategy are working** and which not
  - Learn what **customers really want**, not what they say they want or what we think they should want
  - Discover whether the organization is on a path that will lead to growing a **sustainable business**



# Learning Goal

- Start-up learning goal
  - Discover how to perform a sustainable (long term) business model
  - Sustainable business
    - To provide value to Customers
    - ... and to Stakeholders
    - Long lasting (e.g., longer than initial aggressive advertisement Campaigns)
- Value or Profit?
  - In the above definition **Value** could be replaced by **Profit**
  - However, value is more general, it encompasses also
    - Not-for-profit scenarios,
    - Public sector activities
    - Any scenario where the value is not straightly related to monetary aspects

# Terminology

- Hereafter, “start-up scenario” will be used to refer to each project framed in (highly) uncertain scenario
  - independently whether it is carried out in a “young” company or
  - a “mature organization” or
  - a combination thereof