Entrepreneurship and new ventures finance

Designing a new business (2): The five dimensions of the project feasibility

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Agenda

- 1. The feasibility components
- 2. Entrepreneurial feasibility
- 3. External feasibility
- 4. Technological feasibility
- 5. Operative feasibility
- 6. Economic and financial feasibility



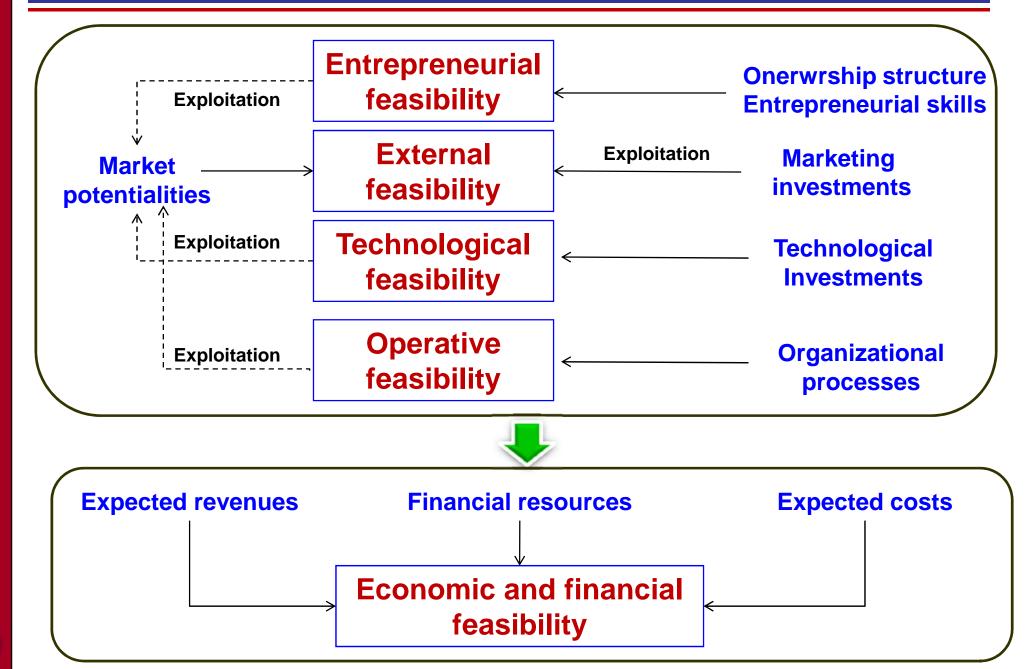
The feasibility components

- Entrepreneurial feasibility: Adequacy of the entrepreneur (or the team of entrepreneurs) in relation to the new business that he (they) is (are) proposing.
- External feasibility: Market potentialities of the new business.
- Technological feasibility: Adequacy of available technologies.
- Operative feasibility: Quality of internal processes.
- Economic and financial feasibility: Capacity for obtaining a sufficient level of financial resources; Potential capacity for generating economic and financial results over time; Risk level





The feasibility components







Entrepreneurial feasibility

Entrepreneurial capacities

- 1. Respectability
- 2. Problem solving capacity: Finding solutions
- 3. Operational capabilities and technical knowledge
- 4. Personal behavior and relationship capacity
- 5. Balance skills
- 6. Financial capacity: capacity to invest on the project
- 7. Propensity to risk



Business characteristics

- Business idea
- 2. Product/service characteristics
- 3. Production process
- 4. Technological profile
- 5. Organizational structure
- 6. Internal resources
- 7. Financial need
- 8. Project Risk





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Entrepreneurial feasibility

Typical examples of inconsistency between entrepreneurial capacities and business characteristics

- Knowledge lack of entrepreneurial team in relation to the technological profile of the business.
- Leadership lack.
- Absence of managerial skills
- Skill concentration in one or few areas
- Few external relationships
- Incapacity to explain the projects contents
- Lack of initial capital
- Riskiness of the project higher than the propensity to risk (initial unawareness).
- Low propensity to accept external controls and/or corporate governance rules.

Entrepreneurial feasibility

Inconsistency between entrepreneurial capacities and business characteristics

In some cases it's possible to remove inconsistency elements thanks the the collaboration with external actors:

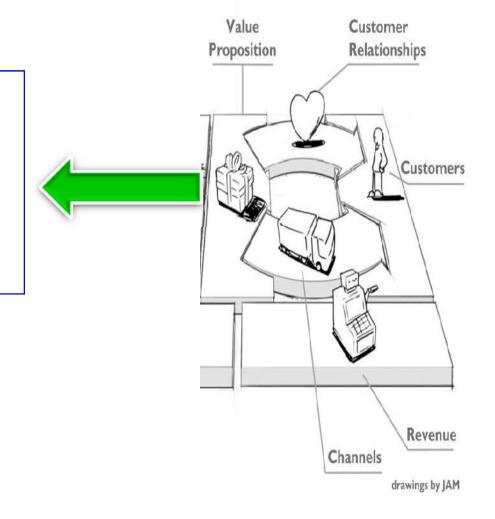
- Actors who have interest to acquire business shares;
- Actors who are able to give consulting services

The cost of those solutions can push the entrepreneur to give up the project



External feasibility:

- Demand analysis
- Marketing strategies
- Expected revenues







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External feasibility

Primary demand and secondary demand

$$D'' = D' \cdot q_{m}$$

$$D''_{max} = D'_{max} \cdot q_{m}$$

D' = current primary demand ; D'' = expected secondary demand;q_m= best hypothesis of expected market share.

Primary demand and secondary demand

Main exogenous variables

Macro environment

Micro environment: Structural characteristics of the sector

Lifecycle of the sector

Main endogenous variables

Competitive strategies

Marketing

Price elasticity of demand





Macro environment

- Economic system
- Financial system
- •Demographic structure
- Macro technological dynamics
- Institutional actors

Microenvironment (sector)

- Suppliers
- Clients
- Competitors
- •Real services
- Financial services

The characteristics of the microenvironment amplify or reduce the effects of the macro environment on the primary demand

Secondary demand

Primary

demand

The characteristics of the project amplify or reduce the effects of the primary demand on the secondary demand

Project characteristics

- Product/Service
- Organizational structure
- Capital
- Marketing strategies





Identifying the sector

Three main approaches:

- •Supply side approach: The sector consists of all companies that sell the same goods (for instance: automotive)
- •Demand side approach: The sector consists of different goods that satisfy the same need and/or the same type of potential clients (for instance: the luxury sector can regard several products such as cars, watches etc.)
- Combining supply side and demand side approach





Sector barriers

Sunk costs

Financial need

Economies of scale

Difficult access to distribution channels

Institutional barriers

Resources and competencies necessary to compete

The sector barriers allow the strengthening or maintaining the primary demand; they reduce the space for new businesses

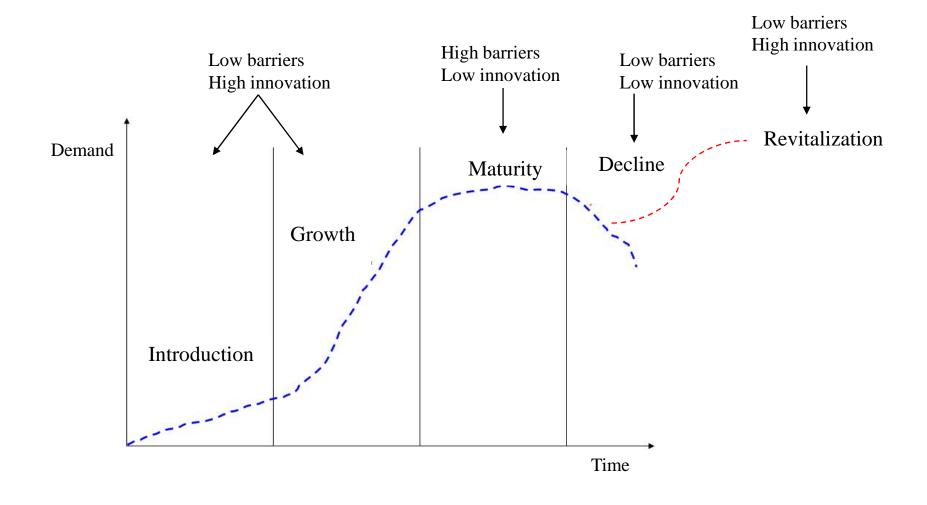




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External feasibility

Sector barriers, innovation and product lifecycle





Competitors analysis

- Characteristics of competitors' goods
- Size of competitors (number of employees; sales; investments)
- Market share of each competitor
- Strategic approach



External feasibility: BCG Matrix of competitors

Market Growth

Low

Financial need: High; Current Profit: Low; Potential profit growth: High High

Financial need: ?; Current Profit: Low; Potential profit growth: ?

Question Mark

Financial need: Low; Current Profit: High; Potential profit growth: Low

Financial need: Low; Current Profit: Low; Potential profit growth: Low

Star

Cash Cow

DOG

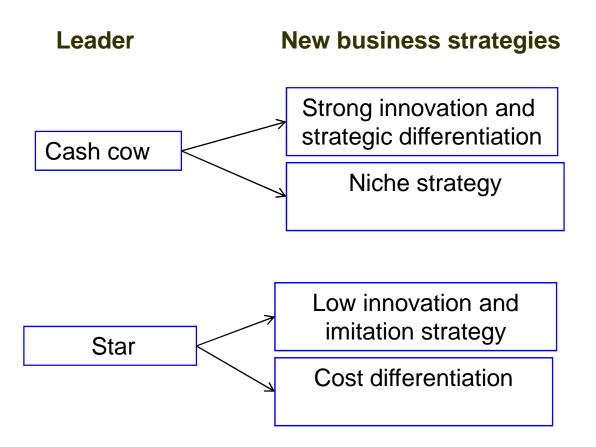
High Low





External feasibility: BCG Matrix of competitors

Leader firm and new buisiness strategies







Attractiveness of the sector

	Low attractiveness	Limited attractiveness	High attractiveness
Market accessibility	High barriers	Low barriers	Absence of barriers
Product lifecycle	2 years	> 2 years 10 years	> 10 years
Market growth per year	5%	> 5%; 10%	> 10 %
Competition intensity	Monopoly or oligopoly	Unstructured competition: Without a firm leader; Without defined rules of the competition game	No Competition





How competitors look at our business

- A) Like a danger that implies reactions (creation of new barriers, for instance decreasing price)
- B) Like insignificant in relation to their market position
- C) Like an opportunity to realize a cooperative competition and/or synergies (for instance collaboration forms could be about new technologies, distribution processes, sharing costs of R&D etc.).

In the entrepreneur perspective

The hypothesis A causes more strategic constrains and lower success probabilities.

The hypothesis B helps the project realizing in terms of competition absence.

The hypothesis C helps the project realization in terms of more resources and synergies. However, that hypothesis implies opportunity costs in terms of knowledge sharing and a lower decisional autonomy.



Demand forecasting methods

Methods Based on Judgments: the expected demand comes from subjective opinions.

Methods Based on Quantitative Data: the expected demand depends on a statistical analysis.



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External feasibility

Main Methods Based on Judgments

Delphi Method

The Delphi Method is based on questions to experts that have a deep knowledge about the sector where the new project will be placed. Interviews with experts mainly concern the future industry trends.

Panel Method

The Panel Method is based on the interaction of individuals with respect to the demand forecast. This interaction allows to compare several opinions and seek a consensus about future demand trends.

Intentions and Expectations Surveys

In this case the analyst makes interviews to a significant cluster of potential customers for understanding their intentions to buy.



Methods Based on Quantitative Data

- Time series analysis
- Correlation analysis
- Regression analysis



Technological feasibility

- Analysis and clustering of technological factors
- Analysis about the real possibilities to acquire in a proper time one or more technologies
- Analysis of the physical and economic duration of technologies



Operative feasibility

- Analysis of production cycle phases
- Division of tasks
- Layout
- Internal control processes



Economic and financial feasibility

The economic and financial feasibility is the final result of the project feasibility. It arises as a combination between the other feasibility factors.



Economic and financial feasibility

Expected revenues | Expected costs

Economic analysis

Financial structure

Plan of investments and financing

Expected cash inflows Expected cash outflows

Cash flow analysis

Business volatility - Internal volatility

Risk analysis

Economic Value





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Economic and financial feasibility

Three perspectives

Entrepreneurial perspective:

The economic and financial feasibility as required factor to obtain a sufficient capital in relation to the financial need covering.

The profitability as necessary result in relation to the survival and development of the business.

Investors perspective:

The economic and financial feasibility as the project capacity to reward the initial investment within a certain period.

Lenders perspective:

The economic and financial feasibility as the project capacity to generate cash flows to repay (period by period) financial debts.



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Economic and financial feasibility

