



EBU5608 Product Development and Management

Topic 18 – Start-ups and
Entrepreneurship

Agenda

- Product development in a small company
- What is a 'start-up'
- Entrepreneurship
- Advantages and Disadvantages of starting a new business
- Challenges of a small business
- Types of business
- Putting a high-tech start-up together
- Raising capital
- Business plan
- Causes of business failure



Introduction

- **Free enterprise** is the economic basis for all entrepreneurial activity
 - It means that any individual is free to transform an idea into a business
- The opportunities for potential entrepreneurs are unlimited
- During the last 10 years, new ventures have emerged at the rate of 500,000 per year in the US



Product development in a small company

- We have talked about Product Development in **large companies**
- The same processes need to be used in **small companies** such as start-ups
- BUT:
 - There will be **less people** involved, and they may each have **multiple** roles
 - You may need to **simplify** some of the processes
- Do **not** make the mistake of thinking “we are too small to bother with a proper process”
- You need to understand the special **challenges** of starting a company to exploit your ideas



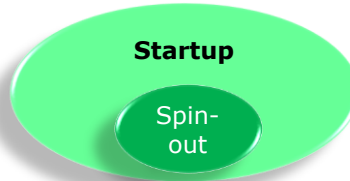
What is a 'startup' [2]

- A **startup company** or **start-up** is a company with a limited operating history
- These companies, generally newly created, are in a phase of development and research for markets
- Typically it involves some **novel technology, or use of technology**, but crucially...
 - a coherent means for **making money** from the technology
- High-tech (e.g. telecom, software) is very different from bio-tech or medical



Startup vs. spin-out

- A **spin-out** implies that some part of the enterprise is owned by some third party, typically a university or a larger company
- A startup isn't necessarily a spin-out, but a spin-out **IS** a startup



The entrepreneur [3]

- An **entrepreneur** is a person who
 - has possession over a new enterprise or venture and
 - assumes full accountability for the inherent risks and the outcome
- **Entrepreneurship** is the practice of starting **new** organisations or **revitalizing** mature organisations,
 - particularly new businesses - generally in response to identified opportunities



Two types of entrepreneurship [1]

Social

- Aim is to create social change rather than make money
- Often involves business, public & charity organisations
- Examples
 - poverty relief
 - environment
 - arts & culture

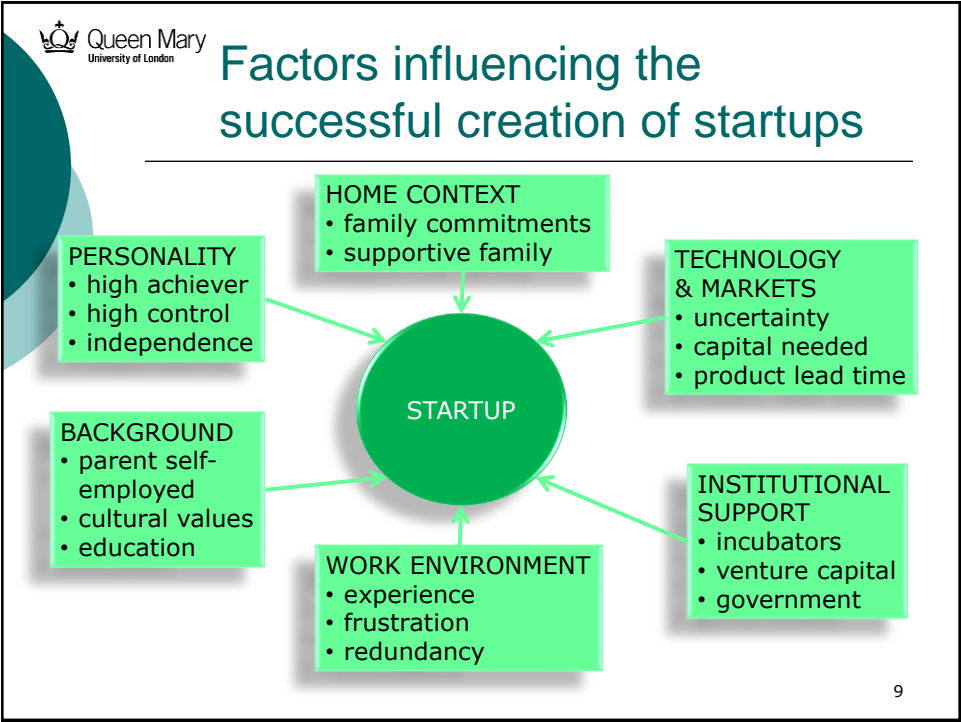


Technological

- Aim is to gain independence to exploit a technology
- Often results from being frustrated in a large company



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Supporting entrepreneurship [4]

- Many kinds of organizations now exist to **support** would-be entrepreneurs, including
 - specialized **government agencies**
 - e.g. in the UK, Business Link is a free business advice and support service, available online and through local advisers [5]
 - **business incubators**
 - **science parks, and**
 - **Non-Government Organisations**
 - e.g. Chambers of Commerce in the UK [6]



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Challenges of a small business

- Hard work, making most decisions on your own
- Considerable risks involved
- Costly to raise finance
- No economies of scale



Advantages and Disadvantages of starting a new business

Advantages

- Independence
- Financial opportunities
- Community service
- Job security
- Family employment
- Challenge



Disadvantages

- Sales fluctuations
- Competition
- Increased responsibilities
- Financial losses
- Employee relations
- Laws and regulations
- Risk of failure



Some early decisions

You need to take some early decisions about your company:

- What **type of business** – e.g. life style?
- What form of **ownership** – e.g. sole trader?
- Are you driven by the **technology** or the **market**?
- Who are your **customers**?



Types of business

- Scalable, global technology player
- Biotech business with long-term R&D plans
- Manufacturing facility with medium growth plans
- Service provider
- Lifestyle business



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What form of ownership?

- Sole Trader
- Partnership
- Limited Company

These were discussed in EBU5402
This is just a brief reminder



What form of ownership?

- sole trader

- Most **basic form** of organisation
- **Not a legal form** of organisation – the individual and the organisation are indistinguishable (they are similar)
- The 'sole trader' is responsible **financially** and **legally** for any debts, outstanding unfulfilled contracts etc.
- Very easy to establish
- Sole trader can have employees (despite the name)
- Examples – hairdressers, newsagents, window cleaners



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What form of ownership? - partnerships

- **Two or more people** combine resources and form a **partnership**
- Contract exists between the two (or more) parties; terms include:
 - The amount of **capital** subscribed by each partner
 - How **profits** will be determined and allocated between partners
 - **Salary** allocation for the partners
 - Procedure for **dissolving** the partnership
- Examples – solicitors, accountants etc.



What form of ownership?

- Limited companies

- **Limited** in this instance meaning that the owners no longer have unlimited liability for the **debts** of their companies
- In the US, these are known as **incorporated** companies
- All companies have **shareholders** who have invested in the company
- All companies have **directors** who are selected by the shareholders to run the company



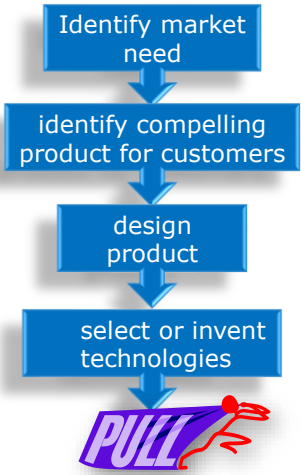
Technology- or market- driven company?

Technology push



You need a mix of both of these!

Market pull



Who are your customers?

- End-users, i.e. consumers
 - i.e. you are B2C (business to consumer)
- Business that has its own customers
 - i.e. you are B2B (business to business)
- You **must** know who your potential customers are



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How a hi-tech start-up comes together

The Ingredients:

- Technology
- Intellectual Property (Protection)
- The Vision (Where can the technology lead? Is there a market for it)
- Personnel
 - Scientific leaders
 - Business managers
 - Fund Raisers
 - Scientists/Engineers
- Money



The stages for creating a hi-tech start-up

1. **Assess** the opportunities - generate, evaluate & refine the business concept
2. **Develop** the business plan and decide on the structure of the venture
3. **Acquire** the necessary resources and funding
4. **Grow** and harvest the venture





RAISING CAPITAL

Raising capital

- **Why?**
 - Growth
 - Maintenance of operations
 - Survival
- **How?**
 - Re-mortgage or loan
 - Venture Capitalists or Angels
 - Grants
 - Family and friends



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Fund-raising Stages



- Pre-investment
 - University fund, friends, bank loan
 - £5k-£50k
 - build demonstrator, build business plan



- Round A
 - Angels, or special startup funds
 - £100k-£500k
 - Establish board, partial executive team
 - 5 - 10 employees



- Round B
 - Venture Capital
 - £1M-£5M
 - Complete board and exec team. Expand to 20+



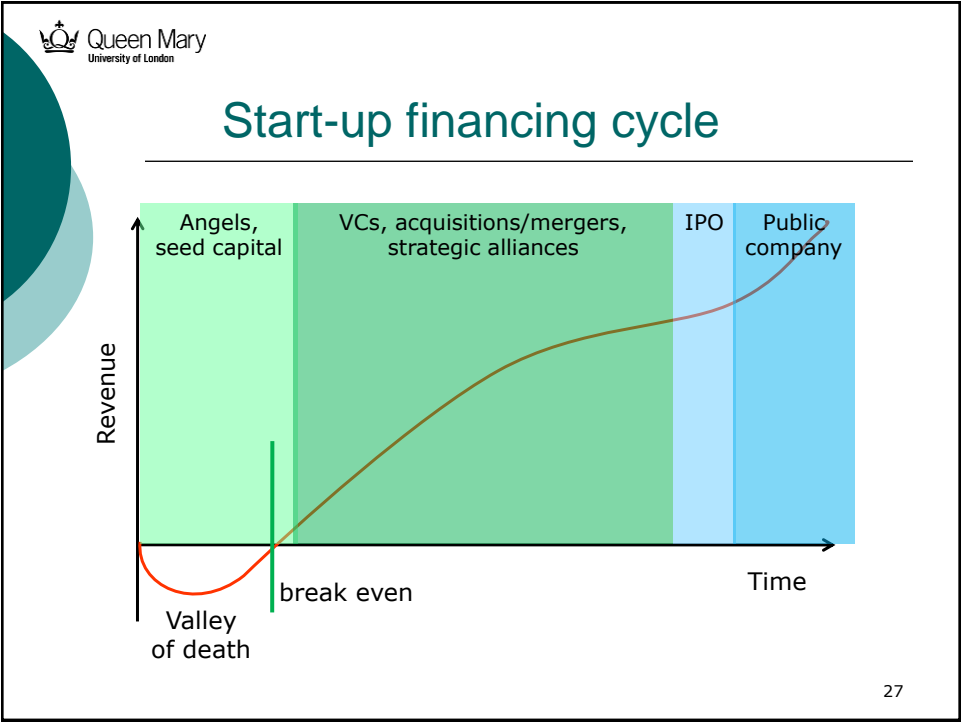
- Exit

What are VCs (Venture Capitalists)?

- A company that collects funds (e.g. from pension funds) and then invests those funds in startups
- Go for high-risk, high reward
- Need very large uplift in value, 10 times or more
- Take large stake in company equity
- Expect only 1 in 10 to succeed



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The fund-raising process

- Elevator pitch/executive summary
- Business plan, presentation, management team
- Business survey
- Due diligence
- Valuation, ownership, control, legal issues
- FUNDING



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Business plan



Two Essential Functions

1. Guiding the company by charting its future course and defining its strategy for following it.
2. Attracting lenders and investors who will provide needed capital.

What a Business Plan is

...the entrepreneur's **road map** for a successful enterprise

- Describes
 - The **market** you plan to enter
 - The unique and compelling **features** of your contribution to this market
 - **Intellectual property**
 - **Business model** and **Financials**
 - Team and Company development and **strategy**
 - **Investment** proposition
 - **Exit** strategy



Features vs. Benefits

- **Feature** – a descriptive fact about a product or service:
*"an ergonomically designed,
more comfortable handle"*
- **Benefit** – what a customer gains or a satisfaction received from the product or service feature:
'better fuel consumption by a new car engine which reduces overall costs and increases efficiencies'

Why do you need a Business Plan?

A business plan...

- provides a **formal agreement** between the founders of a company about the direction to be taken
- can reduce **self-delusion** amongst the founders
- defines **responsibilities** & rewards
- helps to translate **abstract** goals into **explicit** operational needs

Without a business plan...

- nobody will invest in your company
- you will wander aimlessly



Business Model

- The Business Plan must describe your Business Model
- This shows how you will **make money** from your business, e.g.
 - Selling software
 - Selling services
 - Licensing software
 - Selling hardware
 - Selling/licensing Intellectual property
 - e.g. the ARM processor (CPU based)
 - Some mix of the above
- Will be supported by **Revenue predictions**



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Key Elements of a Business Plan

- Title Page and Table of Contents
- Executive Summary
- Vision and Mission Statement
- Company History
- Business and Industry Profile
- Business Strategy
- Description of Products/Services



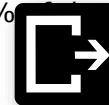
Key Elements of a Business Plan

- Marketing Strategy
 - Document market claims
 - Show customer interest
- Competitor Analysis
- Description of Management Team
- Plan of Operation
- Projected Financial Statements
- Loan or Investment Proposal



Exit strategy

- VC wants to know how it will get a return on investment (ROI)
 - Company **sale** (e.g. to Microsoft, Google, Philips, etc)
 - **IPO** (Initial Public Offering), i.e. making shares publicly available via a stock exchange (SSE – Shanghai Stock Exchange; AIM (London) – Alternative Investment Market, NASDAQ – New York, etc.)
- In how many **years**?
- If you get this right, you are now getting 10% value of a company worth £50M or more!



Guidelines for Preparing a Business Plan

- Remember: No one can create your plan *for* you.
- Potential lenders want to see financial projections, but they are more interested in the *strategies* for reaching those projections.
- Show how you plan to set your business apart from competitors; don't fall into the "me too" trap (copying other businesses – no advantage to this).
- Identify your target market and offer evidence that customers for your product or service exist.

Tips on Preparing a Business Plan

- Make sure your plan has an attractive cover. (First impressions are crucial.)
- Rid your plan of all spelling and grammatical errors.
- Make your plan visually appealing.
- Include a table of contents to allow readers to navigate your plan easily.
- Make it interesting.

Tips on Preparing a Business Plan

- Your plan must prove that the business will make money (not necessarily immediately, but eventually).
- Use spreadsheets to generate financial forecasts.
- *Always* include cash flow projections.
- Keep your plan “crisp” – between 25 and 40 pages long.
- Tell the truth – *always*.

Causes of business failure

Business failure is caused by a number of reasons but the most common of these are detailed below:

- lack of **skills**
- **sales** problem
- **financial** control
- lack of **funds**
- high cost of **finance**
- insolvent **customers**
- overtrading **development**
- **marketing** issues
- red tape (**bureaucracy**)



Summary

- There are no guarantees for success.
- Creating a business plan will be valuable primarily because of the process itself.
- The business planning process may provide insight to increase the chances for success.
- The business plan: Entrepreneurs benefit; lenders and investors demand it!

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- Chapter 3. Entrepreneurship, New Ventures, and Business Ownership
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