

Basics

High Profit	High Growth
Lifestyle	Sell the company
Organic growth	Investment
Debt finance	Equity finance

Investment criteria:

- Global sustainable under-served market need
 - Market need: who needs it, why, how do we sell it
 - * Features: “this program runs quickly”
 - * Advantage: tangible, “less time waiting”
 - * Benefits: intangible, “less frustration”
 - Sustainability: growing market or global potential?
- Strong management team
 - Chair: part-time senior figure, has experience and contacts
 - CEO: finds money, talks to investors, sets style
 - CFO: accounts, office management, administration, legals, QC
 - CTO: research and development
 - COO: manufacturing and distribution
 - VP Marketing: what and how to sell, pricing, market information (desk job)
 - VP Sales: selling, CRM (field activity)
- Defensible technology advantage (IPR or technological leadership)
- Believable plans (business, development, marketing, sales, quality, financial)
- 60% IRR (a discount rate of 60% makes the present value of the company equal to the investment)

Business plan:

- Executive summary and funding requirement
- Concept
- Market (size, need, sustainability, competition, marketing plans)
- Team
- Technology and its IPR
- Plan summary
- Financials

Money

Accounts:

- Instruments on company dashboard
- To control we must first measure
- Statutory duty
 - Keep proper books of account
 - Annual audit
 - Solvency (reasonable expectation that you can pay your bills as they fall due)

Double entry book-keeping:

- Debits (owed to the company) on the left
- Credits (owed by the company) on the right
- Profit and Loss Accounts:
 - Debit: cost of goods sold, expenses, profit (balancing figure)
 - Credit: sales
 - An integral over time
- Balance Sheet:
 - Debit: fixed assets, debtors, goods for resale (stock), bank balance
 - Credit: creditors, loans, capital, retained profits (profit made so far)
 - An instantaneous measurement

Boundaries: know what you are accounting and how often

Measurement: use a consistent cost and time basis, indicating materiality (e.g. goodwill and know-how are immaterial)

Ethics: be prudent, consistent and objective

Cash Flow:

- Shows when income and expenditure arrives by month
- Keeps track of your cash in the bank at every point

Ratios:

- Current ratio: $\frac{\text{current assets}}{\text{current liabilities}}$, < 1 indicates potential cashflow problems
- Acid test: $\frac{\text{current assets} - \text{stocks}}{\text{current liabilities}}$, shorter term than current ratio
- Gearing: $\frac{\text{net borrowings}}{\text{shareholders funds}}$, if this is high you are vulnerable to interest rate rises

- Return on investment: $\frac{\text{profit before tax}}{\text{shareholders funds}}$, should be about 0.4 for sustainable high growth

Financing:

- Debt
 - Personal financing (£50K)
 - Debentures: loan secured on company
- Equity
 - Angels (£500K, 30% of company)
 - VCs (£5M in round 1, £25M in round 2)
 - IPO (£250M, exit)
 - Redeemable preferences: investors can swap their shares for a loan
 - Take equity in stages to prevent dilution: build up company value in between financing rounds
 - 25%: blocks substantive resolutions
 - 50%: day-to-day control
 - 75%: total control

Company types:

- Sole trader
- Partnership
- Private limited company
- Public limited company (not necessarily listed)

Setting Up

Purchase:

- Solicitor
- Agent (prepackaged company you can change the name of)
- Companies house (longest lead time)
- Documentation:
 - Memorandum and articles of association
 - Objectives
 - Share conditions
 - Company books (minutes, initial resolutions, appointment of bankers and auditors)

Shares:

- Distribute control, capital and profits
- Tag-along: if a shareholder wants to sell they must offer equivalent rights to other investors

- Drag-along: you can force some shareholders to sell if they form an uncontactable rump
- Share options: typically 4-year monthly accrual with a 1 year cliff, locks in employees (with provision for good/bad leavers)

IPR:

- Patent
 - Absolute right to invention
 - Must be novel and reducible to hardware (at least in the UK)
 - One-year, low-cost provisional patents are given before the novelty examination and can be challenged
 - Expensive to obtain, maintain and defend
 - Can hobble technology uptake and hence network effects
 - Can become quickly obsolete in technology
 - Forces you to reveal your methods
- Copyright
 - Protection of use for 70 years from death of author
 - Does not prohibit reinvention
 - Fair use
 - * “Deep linking” around front page OK
 - * “Direct linking” to include others media within your page not OK
 - * Search engines benefit from implicit permission by the site omitting the “noindex” directive

- Trademark
 - Exclusive use of name or mark within class of goods
 - Having a company name does not imply you have the trademark
 - Law of “passing-off”
- Design right: copyright for designs, self-declarative
- Registered design: fast-track alternative to patents for designs
- Database rights
- Trade secrets: informal protection
- Plant breeders rights

Contracts:

- Must be for a fair exchange of value
- Offer and acceptance
- Terms limited by legislation and standards (e.g. Sales of Goods Act)

- Ensure that you mention the place of applicable law and litigation

Tort:

- Avoiding infringement of the rights of others and giving adequate notice to others of your rights that you may want to enforce
- Defamation, negligence, copyright violation (must indicate copyright), trademark violation (must also be indicated)

Management theories:

- Classical: formal and rational, focus on organization structure, assumption that main motivation is pay
- FW Taylor: all knowledge should be recorded (ISO9001)
- Theory X:
 - People must be coerced into working with a hierarchy, defined roles
 - Poor communications due to Chinese whispers, have little flexibility and are slow to react to change
- Theory Y:
 - People want to work but are prevented from doing so
 - Accept and seek responsibility
 - Flat management structure
 - Good communications with flexible work teams which adapt to change
- Maslow: hierarchy of needs (physiological, safety, social inclusion, esteem, personal growth)
- Groups:
 - 7 people is a natural hunting group
 - Informal as well as formal communication/interaction
 - Definable membership
 - Group consciousness: think as a group
 - Shared purpose, goals or interests
 - Interdependence of members
- Authoritarian-consultative-democratic axis: goes from manager overloading to slow, LCD decisions
- Must take on interpersonal (team-shielding), informational and decisional roles

Hiring: employment contract and statement of employment specifying hours, holidays, pay..

Firing: 2 verbal and 2 written warnings given and documented required before firing, alternatively can make redundant

Discriminatory laws mean that to employ a foreign worker you must show that no national could do the job

Interviews:

- Take notes on candidates so you remember all of them
- Check references, career gaps, short job durations

Appraisals:

- Give team members ideas of how they are doing and areas for support
- Set objectives and discuss career growth

Product Development

Chasm: go from early adopters to the early majority, attempt to resist blandishments of early adapters and prevent “tornado”

1:3:10 rule cost of prototype is $\frac{1}{3}$ that of turning it into a product and $\frac{1}{10}$ that of bringing the product to market

Don't plan to use more than 80% of the available resources

Methodologies:

- Ego-less programming: OK to admit mistakes and ask for help
- Chief programmer: totemic idolization of very productive team members
- Iron triangle of time, resource, function
- Waterfall, spiral, agile..

Productization:

- Generalization to hardware and software platforms
- Internationalization
- Documentation
- Conformance to the specification
- Legal issues (IPR generated/used, license, contract, liability)
- Packaging
- Manufacturing
- Marketing materials
- Testing (functionality, usability, standards bodies)
- Maintenance (organization setup and training, help desk)

Planning for quality is cheaper in the long run and helps define when you are done.

Documentation:

- Project definition (user requirements, project constraints)
- Base definition (functional specification, top level design)

- Control (project plan, log, quality plan, document plan)
- Sub-system, module specs and interfaces if required

Try and create culture which warns of impending disaster, schedules regular review and milestone meetings (should be short, punctual and have purpose and structure)

Brain storming: problem solving, list all ideas and topics regardless of craziness and break into groups to discuss top 3

SWOT: strengths and weaknesses (internal to the company), opportunities and threats (external to the company)

ACCTO: relative Advantage, Complexity, Compatibility, Trialability and Observability criteria for customer acceptance

Testing: plan, with test suite for functionality and regressions and bug reports/database

Maintenance:

- Revenue stream and sales channel
- Can use help desk as a source of product improvements

Marketing and Selling

Marketing:

- What and how to sell (cerebral)
- Market characteristics, obtained through desk research, surveys, focus groups, usability testing..
- Sales channels: direct (bespoke or mail order) or distributor/retailer (introducing more middlemen!)
- Advertisements which show need satisfaction, can be general or targeted
- Price setting
- Exhibitions: prepare stand, exhibits etc

Selling:

- Moving the product, CRM (contact sport)
- Prospecting: locate likely buyers (cold calling, qualified prospects from marketing response)
- Pre-approach: research buyers and their decision makers, present to them and leave brochures etc
- Approach: listen, build contacts
- Survey: determine needs, requirements, constraints, budget, structure, timescale
- Proposal: sell the benefits to the customer, make recommendations with justification, price, conditions etc
- Demonstrations, close: discover customers concerns, add in kicker (discount, limited offer)

- Organize sales force by product, region, channel/key account
- Measure cost per sale, response rate, timeliness
- Pay by generous commission on basic salary upon receipt of payment

Growth and Exit

Horizontal growth: selling similar products and services to new customers (e.g. in a new region or at a new price)

Vertical growth: selling new products and services to similar customers (e.g. via vertical integration)

Problems of growth:

- Communication, control and monitoring breakdown
 - Formal channels
 - Mitigate with newsletters, company meetings/events
- Structural change: must establish reporting structures
- Formalization
- Second system effects

Exit:

- Acquisition: trade sale
- Floatation
 - Sell to the public
 - Highly regulated
 - Expensive and requires underwriting
 - Primarily for capital raising
- MBO: sell to the staff
- Liquidation:
 - Sell the assets
 - Voluntary if you stop trading and distribute proceeds to shareholders
 - Compulsory if you don't pay taxes or go bankrupt (can't trade insolvent)

Valuation:

- Asset value
- NPV of profitability
- Discounted cash flows