

### III. Opportunity and Timing — Market and Product Planning

- Market Definition
- Customer Identification
- Market Segmentation and Sizing
- Competitive Analysis
- Product Positioning and Differentiation
- Market Niche
- Market Share
- Market Window
- Business Redefinition and Corporate Agility

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### Market Definition

- *Define your market by positioning yourself in a multi-dimensional marketplace space that includes technology, market, service, and pricing factors. You must find a niche that can be defined with some precision, that has customers who are accessible, that is growing “fast enough,” and that is not “owned” by one established vendor. (#12)*
- Well chosen markets: criteria and examples
- Poorly chosen markets: characteristics, examples

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## Criteria for well chosen markets

- Can be defined with some precision, a niche (see below)
- Well timed, within market window (see below)
- Customers accessible
- Growing “fast enough”
- Not owned by one established vendor
- Expansion paths to other niches
- Well suited to your strengths

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## The need for vision, guts, luck

- Example: I.P. Sharp with APL in the 70s
- Example: John Lowry with electronic children's books in the early 90s
- Example: Lee Stein, Einar Stefferud, et al. with electronic commerce in the mid 90s
- Example: Jeff Bezos with Amazon in the late 90s

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## Examples of well chosen markets

- Capacity planning software for IBM mainframe installations in late 70s
- UNIX porting services in early 80s
- Tax packages on IBM PCs for Canadian accountants in early to mid 80s
- Desktop publishing software on the Mac for the graphic arts industry in mid 80s
- Groupware for large corporations in early 90s
- Software for market x on PDAs in the late 90s

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## Characteristics of poorly chosen markets

- Vague
- Too large
- Premature, or too late
- No clear way to reach customers
- Static or declining
- Already owned by others (“category killers”)
- Not suited to your strengths

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## Examples of poorly chosen markets

- Software for the doctor (too vague)
- Word processing market (too large)
- Office automation market (too vague, too large)
- Accounting software for time-shared computers in the 80s (too late, declining)
- Integrated productivity tools market on the IBM PC in the late 80s (already owned)
- Fourth-generation languages for HCR (not suited to the company's strengths)

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## *Class Exercise*

- *Make one of the above a plausibly well chosen market*
- *Answer with your full name and 1-12 words*

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## Customer Identification and Characterization

- *Identify your customers in terms of who they are, what they do, how you can find them, and why and how they will use your products or services. (#13)*
- Key concept is user benefit
  - What the product or service will do for the customer
  - Qualitative description
  - Quantitative description (payback period)
- Another phrase is value proposition
- *Class Exercise: Give an example*

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## Dimensions characterizing customers

- Business or profession, e.g., oil exploration
- Kind of user, e.g., accountant
- Activity for use of the software, financial planning
- Size of the target business
- Geographic location
- Machine and/or software environment

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## Market Segmentation and Sizing

- *Segment your market appropriately, and then attempt to size it in a number of different ways — by working top-down in terms of percentages of some larger population, by working sideways through comparisons with your competitors, and by working bottom-up in terms of specifically identified potential customers or classes of customers. (#14)*
- Market segmentation examples
- Market sizing examples

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## Market segmentation: multimedia titles

- Games
  - Adventure, role playing
  - Simulation
  - Strategy
  - Sports
- Business
- Personal/reference/finance
- Education

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## Market segmentation exercise: the Internet marketplace

- One segmentation of the WWW market
  - Corporate publishing and advertising market (“Yellow pages”)
  - Personal Web pages (“White pages”)
  - Internal corporate communications, Intranets
  - Internet portals
- *Class Exercise — Develop a segmentation of the Internet portal segment*

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## Market sizing: the U.S. K-12 school marketplace

- 14K+ school districts
- 100K+ schools
- 100K+ technology labs (e.g., Writing to Read)
- 2.8M teachers and classrooms
- 0.5M administrators
- 48M students, 34M families at home
- Early childhood market
- Private school market — 15K schools, 5.5M students

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## Market sizing: tax packages for accountants

- Tax packages (personal and corporate) for Canada on the IBM PC in the early to mid 80s
- Top-down analysis:  $\approx 10,000$  accountants
- Sideways analysis
  - Enumerate competition: number of accountants using service bureau packages or number of client returns being processed by service bureaus
- Bottom-up analysis
  - Enumerate target accounts: # of “big 8 firms”  $\times$  # of offices per firm  $\times$  # of accountants per office

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## Competitive Analysis and Product Differentiation

- *Carry out a thorough competitive analysis, investigating the strengths and weaknesses of both the products and the companies from which they originate. Then decide on how you will position yourself and differentiate yourself from these competitors. (#15)*
- Product differentiation — Choosing a product position such that one’s product is positioned (distinguished favourably) from all others
- Differentiation via a positioning diagram
- Product definition to be discussed later

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## Competitive analysis

- Identify the competitors
- Formulate and ask questions with goals in mind
- Gather the data: commercial intelligence
  - Search the Web
  - Read trade papers, magazines, industry market reports, etc. for reviews of other products
  - Read literature and look at demos of other products
  - Talk to customers of other products
  - Get demo versions of or buy the other products, use them, “tear them apart”, analyze them

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## Competitive analysis (cont.)

- Organize the data
- Analyze the data
  - Identify strengths and weaknesses
- Present the data, e.g., via product-feature matrix
  - Features must deal with more than technology

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## Product positioning in terms of...

- The intended customer, e.g., the Mac, “the computer for the rest of us”
- Price, e.g., Borland in the mid 80s
- Market dominance, e.g., Lotus 1-2-3 in the mid 80s
- Talking the customer's language, e.g., Wainman+Kydd
- Features, e.g., Word

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## Product positioning in terms of .. (cont.)

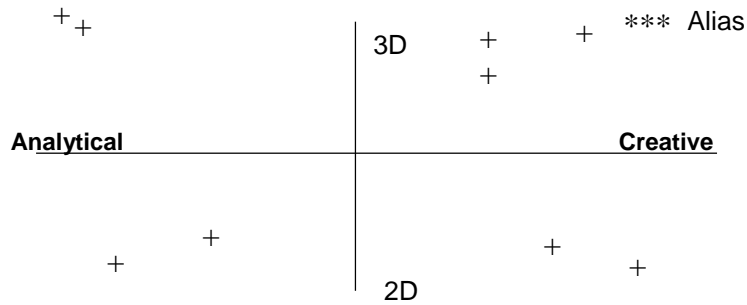
- Standards, e.g., UNIX, XML
- Ease of use, e.g., Mac software
- Customer support, e.g., WordPerfect in past
- Perceived quality, e.g., Hewlett Packard
- Technological leadership. e.g., Microsoft
- Stability and reliability, e.g., Tandem hardware

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## Product differentiation via a positioning diagram

- Example: Alias Research's positioning vis a vis other computer graphics software vendors



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## Market Niche

- *You must find a market niche — a position in a corner or along an edge of a marketplace where it is reasonable to expect to have competitive advantage and to expect to garner a significant market share. (#16)*
- Niches required to “cross the chasm” (Moore)
- Characteristics of market niches
- Examples of market niches

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## Characteristics of market niches

- Ideal size of a market niche
  - Large enough or potentially large enough for growth and profitability
  - Small enough to be affordable and to discourage competition
- The niche and barriers to entry
  - Unique distinctive competence
  - Proprietary technology
  - Creation of a default “standard”
  - Specialized market knowledge
  - Lack of interest because of small size

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## Examples of market niches

- Altamont Computers — Cost accounting systems for large farms in the central California valley
- BGS Systems — Capacity planning software for IBM mainframes
- WK Information Systems — Working paper packages for auditors
- SoccerAge.com — Portal for soccer fans

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## Examples of market niches (cont.)

- Mortice Kern Sys.—UNIX toolkits under DOS (original niche) — Dynamic e-business solutions — (now back to the original)
- SoftQuad — Enhanced UNIX TROFF — Interactive document editors for SGML, HTML — Web publishing (likely sale to Corel)
- Waterloo Computer Products—High-perform. optimizing C compilers for IBM PCs (niche after it began to focus)
- *Class Exercise: Postulate a market niche*

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## Market Share

- *You must garner a significant market share, a substantial percentage of a marketplace. The best way to do this is to create a new market, rather than trying to carve share away from existing players in a market. (#17)*

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## Advantages of large market share

- Large customer base
- Referrals and reference accounts
- Potential for repeat business
- Media attention
- Profitability (correlates with market share, PIMS study, Harvard, 1970s)

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## Disadvantages of tiny market share

- Price vulnerability
- Media inattention
- Shelf space unavailability
- Market creation, not market sharing!!!  
(McKenna)

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## Market Window

- *You must enter a marketplace during the market window — the time period when there is opportunity to dominate an emerging market niche or at least to capture significant market share. (#18)*
- Examples of market windows

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## Examples of market windows

- Late 70s — Spreadsheets
- Mid 80s — UNIX relational data base management systems
- Mid 80s — Networking software
- Late 80s — CASE software
- 90s — Groupware
- 90s — Global information and communication systems via the Internet and the Web
- 90s — Multimedia

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## Examples of market windows (cont.)

- 00s — Software for environmental concerns, e.g., Greenware Environmental Systems
- 00s — Software to exploit broadband communications
- 00s — Software for pen-based computers
- 00s — Software for mobile & wireless devices
- 00s — Software for ubiquitous computing
- *Class Exercise: Postulate a market window*

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## Business Redefinition and Corporate Agility

- *Because market evolve and change, and windows open and close, it may be necessary to reinvent the business frequently, perhaps every 4-6 years. In fact, “reinvention” may be necessary from the outset as one searches for a winning product and market. Don't be afraid to experiment. (#19)*
- Examples of business redefinition
- But when is constant redefinition indecision and failure to focus and succeed?

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## Examples of business redefinition

- Dataline
  - Time sharing --> applications software --> services for industry segments --> stock quotation services
- Corel
  - Desktop publishing systems integration
  - PC-compatible graphics software
  - Desktop publishing software (via Ventura)
  - Desktop videoconferencing, multimedia
  - Office productivity suites (via WordPerfect)
  - Linux
  - Back to the basics