

Small Business Enterprise

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Lesson 4: Analysis of Business
Information

Key Topics

- Purpose of business information analysis
- Methods of business analysis
- Business forecasting

Business Analysis

- Business Analysis is the set of tasks, knowledge and techniques required to identify business needs and determine solutions to business problems.
- Solutions often include a systems development component, but may also consist of process improvement or organizational change.

International Institute of Business Analysis – Body of Knowledge (BABOK)

Business Analyst

A Business Analyst works as a liaison among stakeholders in order to elicit, analyze, communicate, and validate requirements for changes to business processes, policies, and information systems.

Purpose of Business Analysis

- Purpose:
 - Identify where the business stands in relation to rivals, etc.
 - Collect and use data to inform business decision-making
 - Identify strengths and weaknesses in the business
 - Use information to inform strategic planning

Methods of Business Analysis

- Collection of data from a range of sources
 - Market research
 - Past sales data
 - Market growth data
 - Specialist analyst data
 - Secondary data

Methods of Business Analysis

Range of methods used to analyse data:

- **Trends**

- Growth rates
- Nominal
- Average
 - Mean
 - Median
 - Mode

- Variance

- Standard deviation
- Range

- Time series analysis

- Scatter graphs

- **Correlation**

Trends

- Looking for patterns in data collections
- Frequency and reliability of trends
- Impact of external factors, e.g. seasonal variation, random events, cyclical trends

Averages

- Averages are a measure of central tendency – the most likely or common item in a data series
- Calculated through 3 measures:
 - Mean
 - Median
 - Mode

Averages

- Mean = Sum of items in the series \div number of items

$$\bar{X} = \frac{\sum x}{n}$$

- Median = middle number in a data series – 0.5 (n+1)
- Mode = the most frequently occurring value in a data series

Variance

- Averages have limitations
 - – measures of data spread used to assess width
- Range – difference between the highest and the lowest value
- Standard Deviation – used to measure the variance of the data set from the mean
 - can highlight how reliable the mean is as being representative of the data set

The Standard Deviation

$$s = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n}}$$

Correlation

- The degree to which there is a relationship between two or more random variables
- The closer the relationship the higher the degree of correlation
- Perfect correlation would be where $r = 1$

Time-Series Analysis

- Used to analyse movements of a variable over a time period – usually years, quarters, months, etc.
- Importance of assessing the:
 - Trend
 - Seasonality
 - Key moments
 - Magnitude

Presentation

- Graphs
- Charts
- Tables
- Index numbers – Method of showing average changes in large amounts of data
 - Laspeyres – Uses a base period weighting measurement
 - Paasche – Uses a current price weighting measurement

SWOT Analysis

- SWOT analysis involves looking at the internal strengths and weaknesses of a business and external opportunities and threats.
 - It is used to analyze the possible internal advantages and problems that a business has, and to determine the external factors of the business which may affect its strategy.

SWOT Analysis

- The purpose of a SWOT analysis is to conduct a general and quick examination of a business's current position so that it can help the business to develop or plan a direction of development or a proper strategy in future.

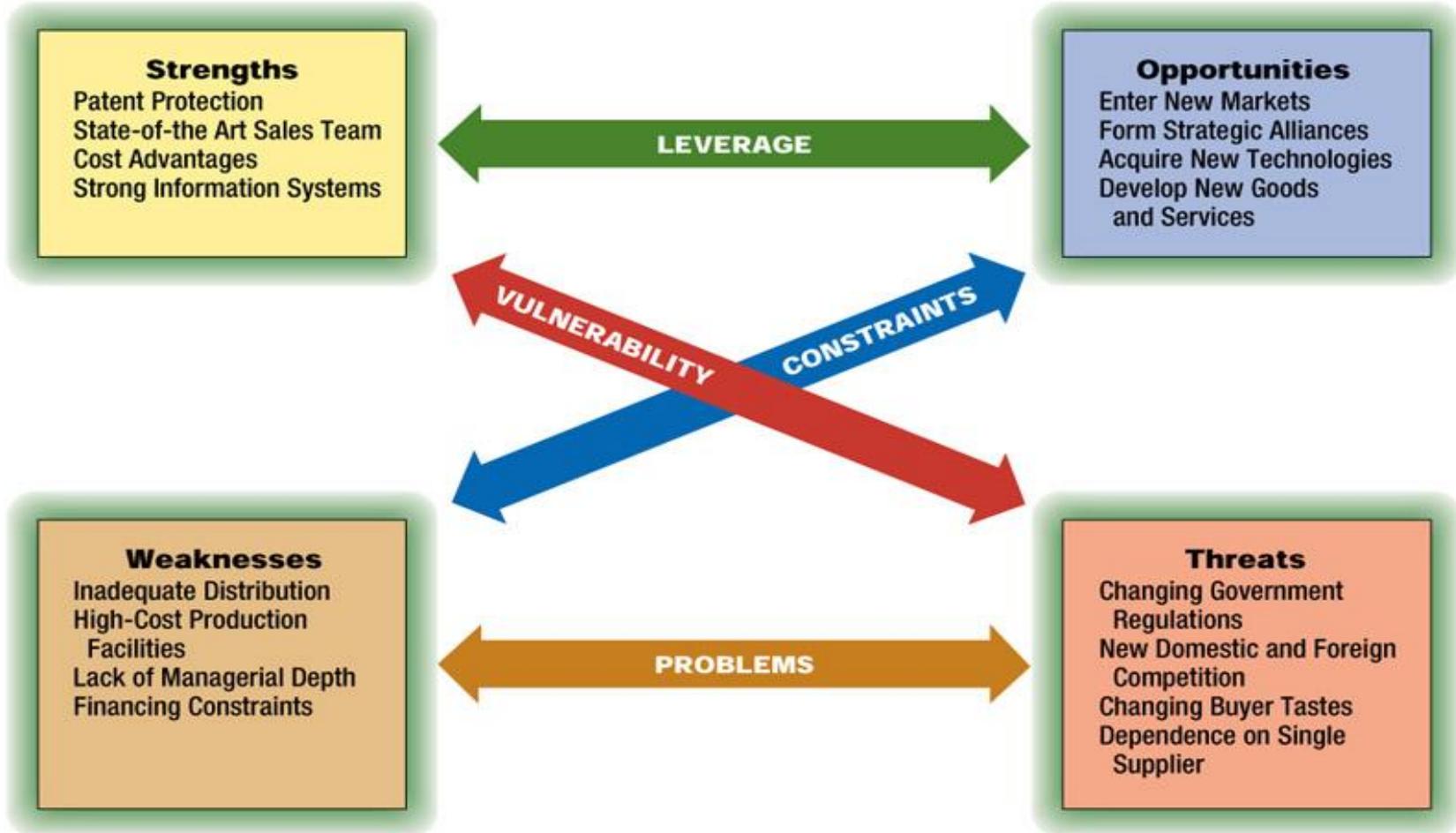
SWOT Analysis: Thinking Strategically

- **S**trengths
 - What aspects of a firm are its strengths?
 - Can be structural, market based, IP, etc.
 - What gives a firm its competitive advantages?
- **W**eaknesses
 - What aspects of a firm are weak?
 - Can be structural, legal, market based, etc.
 - What hinders a firm from competing well?
- **O**pportunities
 - What areas/markets are there that a firm can grow into?
 - Do the above strengths contribute, or do new capabilities need to be created?
- **T**hreats
 - What will stop a firm from growing into new spaces?
 - What out there threatens a firm's existing market share and product line?
 - What is the nature of this threat?
 - Competition?
 - Political environment? Something else?

SWOT Scorecard

<p><u>Strengths:</u></p>	<p><u>Threats:</u></p>
<p><u>Weaknesses:</u></p>	<p><u>Opportunities:</u></p>

Elements of SWOT Analysis



Uses of SWOT Analysis

- An effective way of gathering and classifying information, illustrating particular matters, and generating strategic planning ideas for a business.
- Result of the analysis may provide a basis on which a more detailed analysis can be conducted.
- Often used as a method by which a business or its marketing department can plan its marketing strategy.

SWOT Analysis - Strengths

- **Good brand image**
- **Well-known name**
- **Good reputation**
- **Cost advantage in production**
- **High market share**
- **Confidence in the market**
- **Customer loyalty or repeat business**
- **More advanced technology and R & D**

SWOT Analysis - Weaknesses

- Ineffective in production
- Falling profit
- Falling sales of the product
- Declining age of the life cycle of a product
- Poor reputation
- Lack of innovation and change
- Lack of adequate capital or having some financial problems
- Customers' losing confidence or increasing complaints on the business
- Poor management or inefficient organizational structure

SWOT Analysis - Opportunities

- Possible development of new products
- Expansion into new markets
- Development of a global brand
- Joint –development with other companies
- Possible growing demand for a product in the market
- Possible government policies encouraging the growth of the business and its certain products
- New sources of profit or income

SWOT Analysis - Threats

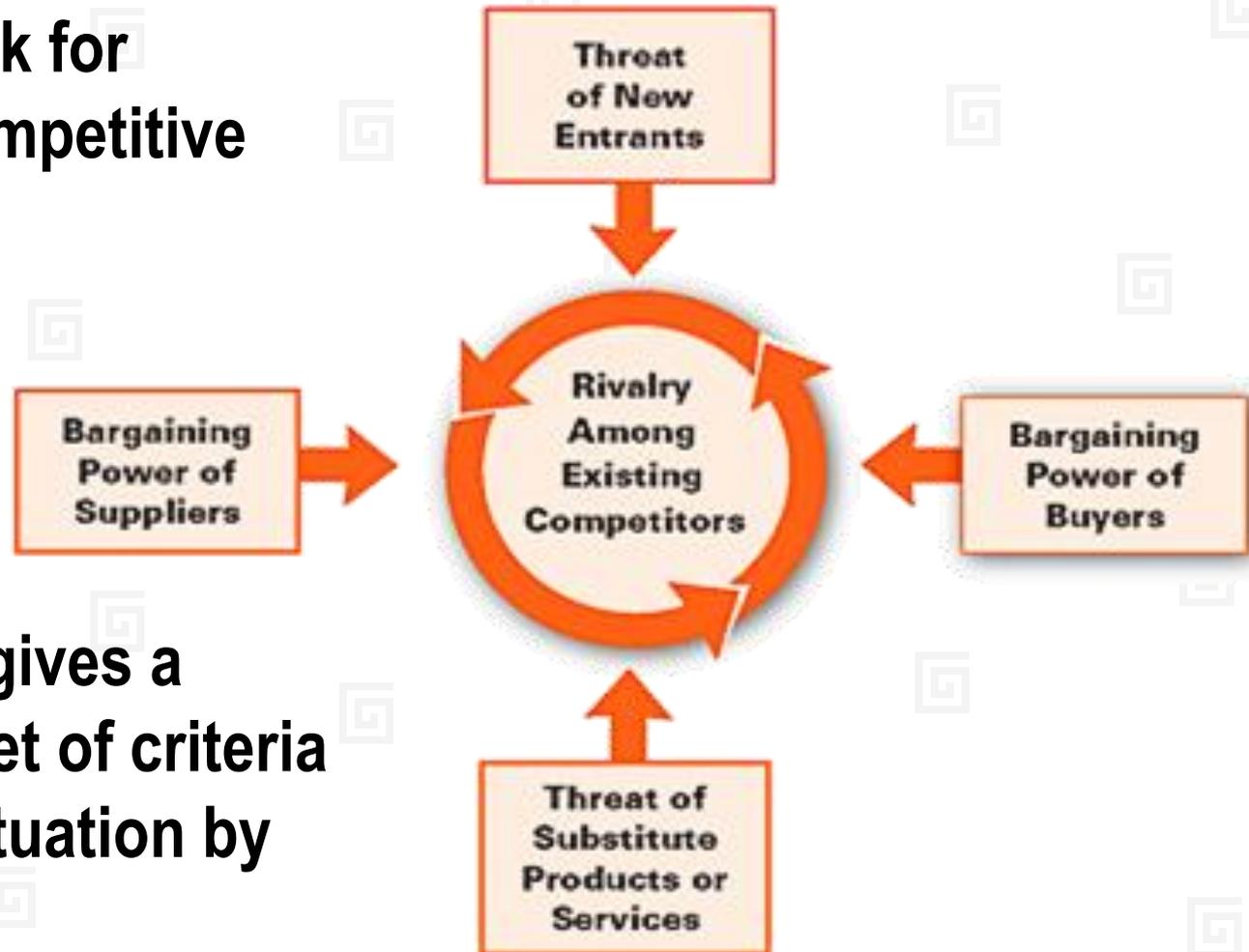
- **Changes in law or regulation which may prohibit or affect the production of a business**
- **Growing competition from local companies**
- **Increasing competition from foreign competitors**
- **New products developed by other companies which may replace the product of the business**
- **Marketing activities or strategies which will be implemented by competitors**

SWOT Summary

- Is a good technique to get the strategy discussion going – puts a lot of high-level information in context
- Use it to assess situations and think more deeply about tactical moves
- If the SWOT picture looks really misaligned with the market/your firm, can tell you that your overall strategy should be reassessed
- Is only as good as the thinking that went into it

Porter's Five Forces Model

- A framework for shaping competitive strategy
- Like SWOT, gives a repeatable set of criteria to judge a situation by



Goal of Any Business

- Identify external threats and undue influence
- Maximize own influence
- Minimize negative influences
- Create differentiation
- By maximizing/minimizing influence, and creating differentiation you get pricing power
 - assuming there is a market

Threat Of New Entrants

- Also known as “Barriers to Entry”
- Essentially: How hard is it for other firms to enter your business?
 - Do you have IP protection, trade secrets, etc. that everyone else doesn't have?
 - Is there significant cost associated with entering your market?
 - Are there regulatory barriers?
 - Branding, marketing, advertising?
 - Network effects?
 - Does one firm enjoy a production cost advantage?
 - High switching costs?

Barriers to Entry

- Network effects: Arise when your product is used by a large group of users...
 - ...and the value of the product increases the more people who use it
 - Examples: Telephone, iPod, MySpace, Facebook (and all social networking media & content), Windows, MS Office, Xbox Live!,
- Network effects can be an extremely powerful barrier to entry
 - Your entry forces other people to change their behavior.

Barriers to Entry

- One more thought on network effects:
 - Network effects often determine winner and losers, even if the loser is the superior product.
- Example: Network effect loser
 - Sony Betamax
 - Better picture quality than VHS, better sound, smaller tape size
 - But JVC opened up the VHS standard and allowed it to proliferate in the market, sacrificing high prices for volume
 - End result? Consumers snapped up cheap VHS VCRs.
- Example: Network effect winner
 - Apple's iPod
 - Dozens of MP3 players on market + millions of songs
 - Apple launches iPod using MPEG-4 encoding (.mp4)
 - Co-launched iTunes as a complementary product. Users could easily buy a full album or 1 song at a time legally from central point
 - iPod/iTunes sales took off, dominating market (Apple now world's largest music retailer)

Power Of Suppliers

- Put simply: How much influence do suppliers have over your business?
 - Are you dependent on a component to succeed?
 - Are people buying your product because it contains x or y from another supplier?
 - Are there high switching costs to use another firm?
 - Are there any substitutes?

Power Of Buyers

- Flip side of supplier power
- Put simply: How much influence do buyers/customers have over your business?
 - Are you a commodity? (Customers can get what you have from anywhere)
 - Do buyers of your product have significant negotiating leverage?
 - Are you dependent on 1 or 2 buyers for the majority of your business?
 - Are you developing a standard product?
 - Low switching costs to go to something else?
 - Can your buyer threaten to produce your product themselves?
 - Where are the end-users eyeballs?

Threat Of Substitutes

- Put simply: Is there something else out there similar to your product that's "Good Enough"?
 - Interwoven with power of buyers/suppliers
 - Undifferentiated products never earn high profits – market mechanisms (supply and demand) take over
 - When there is an acceptable substitute out there, you will require another edge (marketing, branding, regulatory edge, etc.)
 - New technologies can make products obsolete
- Sometimes economic conditions come into play, making other substitutes more attractive

Threat Of Substitutes - Examples

- Land lines vs. cell phones
- DSL vs. FIOS vs. Cable Internet
 - Steve very happy with his new Cable internet service
- Cable TV vs. Satellite
- New technology displacing old:
 - Zip Drives → Killed by CDR's → Killed by Flash → Killed by net backup
- Economic conditions: (In this case, the weak dollar)
 - Rising aluminum prices makes carbon fiber more competitive
 - Biodiesel vs. Regular diesel
- Sometimes, substitutes can cross industry lines (we'll see this when we look at Southwest Air next time) – key is proper frame of reference (in this case, the *travel* industry)

Rivalry Among Competitors

- The more energy you put into fighting off competition, the less you have for profitability
 - Potential for price wars (everyone loses) – subject of game theory
 - Increased expenditures for marketing, ads, etc.
- Intensity increases where there are:
 - Mature, slow growth industries (\$\$\$ pie is fixed)
 - Participants enjoy roughly same amount of power
 - Products and services are indistinguishable
 - Fixed costs are high, marginal costs low
- Rivalry can be good for all:
 - For average consumer, competition tends to lower prices and drive new offerings to market
 - For market participants, competition leads to better products and profitable market segmentation

Rivalry - Examples

- Steve's friend Sean in grad school:
 - Every 2 months, would get a call from a long distance phone provider
 - "Hi, this is ---- from Sprint and we have a deal for you! Would you be willing to switch your long distance service?"
 - Sean: "Sure. What are you offering?"
 - The next month, he'd get a call from AT&T asking why he left
 - Needless to say, Sean was a nightmare customer
 - He wheedled better and better deals out of all of his suitors every other month
 - Also had a way to get "free" electronics from Target
- Example of rivalry leading to better deal for end user. Of course, in the end, no phone company ever made any money off of Sean.

Five Forces Summary

- Is a good generic framework
 - is as detailed as you make it
- Curious treatment of the government – should there be a 6th force?
- Complementary products can make or break an offering –
 - iPod example
 - Cars are pretty useless without roads or gas stations
 - Airlines irrelevant without airports
- Does not tell you how to exploit a market, just helps ID the forces driving it
 - There are other strategies for that
- Industry structure changes: Another item to watch for
 - Example: Newspapers. News is available 24/7 on the web. Is print dead?
 - Does it make sense for big city newspapers to have foreign bureaus?
- Like other tools, is applicable up and down the chain

Application of Tools

- Using SWOT and Five Forces in tandem allows you to:
 - Identify the strategic environment
 - Make an assessment of your strength relative to other players
 - If you're thorough in gathering information and disciplined in its presentation, the right answer can leap off the page
- Apply these tools to:
 - Your company
 - Your business unit
 - Your organization
 - Your team
 - You
- Strategy is a mindset

PEST Analysis

- An analysis model examining the external environment and the global factors that may affect a business.
- It can provide a quick understanding of the external pressures facing a business and their possible constraints on its strategy.
- It is usually divided into four external influences on a business – political, economic, social and technological.

PEST Analysis - Political

- To find how political development, locally, nationally, and internationally affect the strategy of a business.
- Areas to be considered:
 - Consumer laws and regulation
 - Political pressures
 - Government views of certain business activities, including local, national or international government political issues affecting a business

PEST Analysis - Economic

- To find how economic factors may affect on the business.
- Areas to be considered:
 - Consumer activities, such as spending patterns
 - Economic conditions, such as inflation, unemployment, growth, etc.
 - Government policies, such as fiscal, monetary, exchange rates, etc.
 - The changes in production and labor market

PEST Analysis - Social

- To find what competitive advantage a business may gain by social changes.
- Areas to be considered:
 - Aging population trend, which may increase services for old people
 - Birth rate increase, which may affect baby product markets
 - Security condition, e.g. increase in crime may cause a business to increase insurance costs
 - Pressure groups, such as environmental groups, local community groups, etc. which may prevent a business from polluting a river

PEST Analysis – Technological

- **To find how new technologies might affect the business activities.**
- **Areas to be considered:**
 - The rate of technological change
 - The development of IT
 - The wide use of Internet
 - The creation of new materials for production
- **Impacts:**
 - All these technological changes will lead to some effects on the business, such as the product of the business may be replaced by new products or its production methods may have become out of date.

Review Questions

- What are the key differences between SWOT and PEST?
- Explain Porter's Five Forces model
- How can you apply SWOT and Porter's model to your organisation?
- What are some of methods that can be used for business analysis?



References

- Cadle, James, Paul, Debra, and Turner, Paul 2010, *Business Analysis Techniques: 72 Essential Tools for Success*, BCS The Chartered Institute for IT, United Kingdom
- <http://asq.org/learn-about-quality/six-sigma/overview/overview.html>