

BAIT3013

Business Intelligence

Lecture 3

INTELLIGENCE IN BUSINESS FUNCTION

Strategic Intelligence

- Strategic intelligence (STRATINT) pertains to the collection, processing, analysis, and dissemination of intelligence that is required for forming policy and military plans at the national and international level.

Characteristics of Strategic Intelligence

- Foresight
 - Ability to understand trends that present threats or opportunities for an organization
- Visioning
 - Ability to conceptualize an ideal future state based on foresight and create a process to engage others to implement it
- System thinking
 - Ability to perceive, synthesize, and integrate elements that function as a whole to achieve a common purpose

Characteristics of Strategic Intelligence

- **Motivating**

- Ability to motivate different people to work together to implement a vision. Understanding what motivates people is based upon another ability, personality intelligence .

- **Partnering**

- Ability to develop strategic alliances with individuals, groups and organizations. This quality also depends on personality intelligence

Strategic Planning vs. Strategic Intelligence

- Strategic planning
 - breaking down a company's mission and its objectives into measurable goals in the form of short- to long-range plans that center on financial measurement and improvement over time.

Short- to Long-Range Strategic Plans

- Long-range strategic planning is characterized by the use of marketing facts to discover opportunities, and develop effective strategies and programs to capitalize on the opportunities
- Medium-range strategic planning (tactical planning) is concerned with placing the organization in the best financial position for the next several years

Short- to Long-Range Strategic Plans

- Short-range strategic planning (operational planning) is related to short-term financial planning by examining the key measures of the business such as product line profitability, variable/fixed costs, inventory turnover, manufacturing capacity, financial ratios for the coming year.

Critical Success Factor

- Term for an element that is necessary for an organization or project to achieve its mission
- Critical factor or activity required for ensuring the success of a company or an organization.

CSF Driven Strategic Intelligence

- CSF definition: Critical success factors are the limited number of areas in which satisfactory results will ensure successful competitive performance
- E.g.
 - Top management support
 - IT support

CSF-People

- Yeoh et al. (2009) demonstrated that team skills and composition are an essential critical success factor for BI implementation.
- Williams and Williams (2010) highlighted that BI projects failed because of not supplying adequate resources and funding for drilling competence of knowledge workers.
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- In a recent survey conducted by Olszak and Ziembra (2012) indicated that knowledge workers or qualified skills staffs/teams/managers among critical success factors of the BI projects in small and medium-sized enterprise (SME) in Upper Silesia, Poland.

CSF-Infrastructure

- Turban et al. (2011) defined infrastructure as hardware, middleware and software that required in information system.
- Yeoh et al. (2009) categorised technology as one of the dimensions of CSFs.
- Legodi and Barry (2010) claimed that technology plays a secondary role and c
- Critical for the success of BI initiatives in large enterprises while Olszak and Ziembra (2012) indicated technology is one of the factors that determine success of the BI projects in small and medium-sized enterprise (SME) in Upper Silesia, Poland.

Tactical Intelligence

- Art and Science of determining what the opposition is doing, or might do, to prevent the accomplishment of your mission.
- Questions on advertising, pricing, or product positioning usually are tactical in nature.

Tactical Intelligence : Overview

- Tactical intelligence
 - Tends to involve a mix of external and internal sources of information that provide directions to lower- or middle-level managers in overseeing their functional areas
- E.g. Marketing managers who are concerned about the sales performance of their regions versus competing firms would need internal information and knowledge on quarterly and yearly sales as well as information and knowledge relating to external competitors.

Customer Relationship Management

- The total customer relationship management (CRM) concept goes beyond marketing, sales, and customer service to include Web site customization based on a customer's preferences, characteristics, or previous behavior, as well as versioning of a help desk in the customer's native tongue.
- CRM typical combines a set of business disciplines with technology driven by tactical intelligence

Marketing BIS Application: Telebrands

- Company: Telebrands, New Jersey, U.S.
- Marketing BIS application
 - UNIX based mainframe
 - A data warehouse and three data marts residing on Windows NT Server running SAS Executive Information System
 - SAS multidimensional database viewer

Marketing BIS Application: Telebrands

- Outcome
 - Telebrands is in a better position to channel partners
 - Able to handle better the global aspects of business
 - Able to make more informed decisions for boosting sales and profits

Operational Intelligence : Overview

- Operational intelligence is the source of knowledge and understanding of appropriate changes that can turn a company's manufacturing operations into a competitive weapon for attacking current problems and achieving profitable growth.

Manufacturing Factors Related to Effective Operational Intelligence

- Manufacturing software useful for operational intelligence
 - ERP systems represent an integrated set of application modules that ties together a host of functions.
 - ERP systems are typically open source and RDBMS-based in 4GL client/server environments.

Manufacturing BIS Application: Hallmark Cards

- Company: Hallmark Cards, Kansas City, U.S.
- Manufacturing BIS application
 - NCSR5100 UNIX server
 - NCR Teradata data mart
 - MicroStrategy DSS Agent tool

Manufacturing BIS Application: Hallmark Cards

- The outcome
 - Making critical business needs such as product development cycles, preparing pricing strategies, analyzing the effectiveness of promotional programs somewhat routine.
 - Able to address high level questions, and results are presented in a very user familiar, usable format such as a spreadsheet.

Financial Intelligence : Overview

- Financial intelligence (FININT)
 - Gathering of information about the financial affairs of entities of interest, to understand their nature and capabilities, and predict their intentions.
- FININT involves a large volume of transactional data, usually provided by banks as part of regulatory requirements
- Transactions made by certain individuals or entities may be studied.

Financial Intelligence

- Examples of financial intelligence analysis could include:
 - Identifying high risk housing tenants on the basis of past rental histories.
 - Deterring tax payers trying to avoid their fiduciary obligations by moving wealth surreptitiously out of a tax-levying jurisdiction.

Financial Intelligence

- Examples of financial intelligence analysis could include:
 - Accounting for how a large sum of money handed to a targeted individual disappears
 - Checking to see if a corrupt individual has had any sudden and unexplained windfalls.
 - Detecting relationships between terrorist cells through remittances.

Financial BIS Application: Wells Fargo Banks

- Company: Wells Fargo Bank, San Francisco, U.S.
- BI solution
 - 5-terabyte Oracle data warehouse running on a Sun E10000 server
 - Insight relational OLAP tool from Brio Technology
 - NeoVista Decision Series and SAS Enterprise Miner to allow instant access to clustering algorithms, decision trees, neural networks, etc. that perform complex analyses of customer behavior
- The ultimate goal: to discover connections and relationships in the data

References

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