Business Intelligence Concepts, Tools, and Applications

Week 5: BI Maturity, Strategy, and Summative Project

Lesson 1: BI Maturity
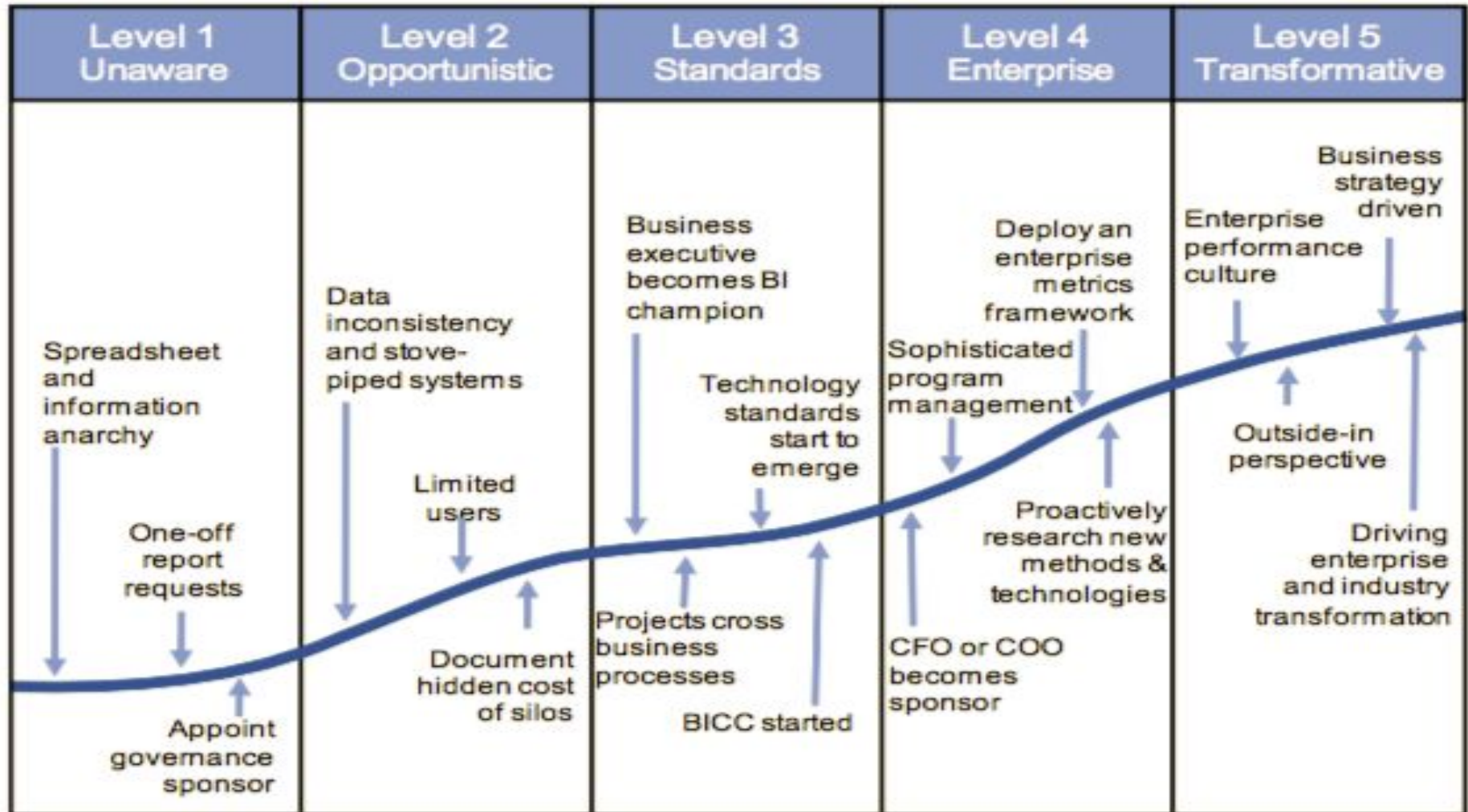
BI Maturity

Learning Objectives

- Identify the five levels of BI and BPM maturity and explain the characteristics of each stage

- Summarize the main factors that impact BI maturity within an organization

- List both the main challenges of pervasive Learn the elements of pervasive BI solutions and potential solutions.

Gartner's Maturity Model for BI and BPM

Level 1 Unaware	Level 2 Opportunistic	Level 3 Standards	Level 4 Enterprise	Level 5 Transformative
Spreadsheet and information anarchy	Data inconsistency and stove-piped systems	Business executive becomes BI champion	Deploy an enterprise metrics framework	Business strategy driven
One-off report requests	Limited users	Technology standards start to emerge	Sophisticated program management	Enterprise performance culture
Appoint governance sponsor	Document hidden cost of silos	Projects cross business processes	Proactively research new methods & technologies	Outside-in perspective
		BICC started	CFO or COO becomes sponsor	Driving enterprise and industry transformation

Source: Hagerty, J. and Hostmann, B., 2010. *IT Score Overview for Business Intelligence and Performance Management.* Gartner, Inc. Available at: http://www.gartner.com/id=1433813

Level 1
Unaware

- Usage of spreadsheets is high, while use of reporting tools is limited.

- A company does not have defined metrics for performance management.

- A company is not devoted to and does not understand the importance of the BI and Performance Management.

Level 2
Opportunistic (Tactical)

- Companies at this level start to invest into BI
  - Use metrics on the department level only. Common metrics do not exist or are inconsistent.
  - Use data, tools, and applications in "silos"
  - Use off-the-shelf software, with few or no modifications, to accommodate company needs.
  - Users often not skilled enough in order to take advantage of the system.
  - Management does not trust the quality and consistency of the information provided.
  - Have low support and inadequate funding of BI projects.

Level 3
Standards (focused)

- Sponsorship usually comes from a business unit or department or is a member of senior management responsible for IT.

- Management dashboards are often requested at this level. Their goal is to optimize the efficiency of individual departments or business units, but is not related to the broader company goals.

- Inconsistencies in metrics and/or goals of individual business units or departments are very common.

- Users are trained for basic functionalities of data retrieval systems.

- Funding of BI projects comes from one or more business units.

- Data is not integrated at this stage and is available through stovepipe solutions, usually not integrated among each other.

- Business Intelligence Competency Center (BICC) is being formed, where experts from business and IT are joined together in order to fulfill the user needs.

Level 4
Enterprise (Strategic)

- Clear business strategy for BI development with sponsors from the highest management.

- Include BI and PM into critical business processes.

- Usage of BI and PM is often extended to suppliers, business partners, and occasionally to customers.

- BICC centers are formed.

- A strategic framework is established that combines financial and other strategic goals with measurements on the operational, departmental and functional level of the company.

- Data management policy and data quality metrics are in place. Data quality is under constant supervision.

- Strategic information becomes trustworthy and is used for strategic decision-making.

- Users are adequately trained for data processing and are able to use them effectively for strategic and tactical decisions.

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Level 5
Transformative (Pervasive)

- BI and PM become pervasive across all areas of the business and across part of the corporate culture.

- BI and PM systems become a part of the business processes. They provide flexibility to adapt to the fast business changes and information demands.

- A company has proactive and dynamic BICC. Information is trustworthy and used at different levels of the company.

- Users are well trained and measured by their ability to support data quality and policy management.

- Users at different levels have access to information and analysis needed for creating a business value and influence business performance.

- Results are measurable and linked to specific goals. Usage of BI is available to suppliers, business partners and customers.

BI Maturity Factors

According to Watson and Wixom (2007) The following are critical success factor to move to higher levels of BI Maturity:

- Senior management perceives and treats BI as a strategic resource has an enterprise-wide strategy.

- There is alignment between BI strategy and overall IT strategy and enterprise goals.
BI delivers high business value.

- A culture of information-based decision making exists.

- Decisions are driven by the numbers.

- BI governance is effective.

- The enterprise wide data infrastructure is effective.

BI Maturity
Factors- Continued

- Data quality is high for success of BI projects
- BI strategy incorporate data architecture and data integration for stable production and development environment
- There is widespread use of BI. BI is pervasive throughout the organization
- The BI staff and users work in a collaborative environment
- People, tools, data, and methodologies are available to manage risk, schedule, cost, and effort
- A strong portfolio of business-driven BI applications exists

Source: Adopted from Watson, H.J., and Wixom, B. H. Enterprise Agility and Mature BI Capabilities, BUSINESS INTELLIGENCE Journal, vol. 12, No. 3, 2007.

BI Maturity
Major Challenges

- The time, cost, and complexity of deployment
- The time and cost of user training and support
- The difficulty of using BI tools

Source: Adopted from Watson, H.J., and Wixom, B. H. Enterprise Agility and Mature BI Capabilities, BUSINESS INTELLIGENCE Journal, vol. 12, No. 3, 2007.

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BI Maturity Solutions

- Open-source BI software

- Web based applications

- Implementing dashboards and scorecards

- Integrating BI with Microsoft Office

- Embedding BI into business processes

- Making BI tools easier to use

Source: Adopted from Watson, H.J., and Wixom, B. H. Enterprise Agility and Mature BI Capabilities, BUSINESS INTELLIGENCE Journal, vol. 12, No. 3, 2007.

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Business Intelligence and Analytics Are Readily Available Across All Interfaces