

**Preparation Sheet for MI 720 Computer Information Systems
Session #6, February 28, 2007: IT and Organizational Transformation**

Session Overview

In Session #5 we discussed transformations in the PC industry. In this session we move down from the industry to the firm level to consider how IT can be used to transform an *organization* and its strategy.

One way IT can transform an organization is by allowing managers to move to *data-driven* decision making. But to do this, an organization must first develop an analytic capability, i.e., the ability to translate *data* into *knowledge* and then into *results*. As IT tools advance and information capture becomes more pervasive, an increasing number of organizations are seeing the value of analytic capabilities (see optional readings below). However, building an analytic capability is not easy. It's not for everyone to try, and many that do try do not succeed. The Harrah's case gives a rich example of a firm that appears to have accomplished this feat.

The first part of class will be devoted to analyzing the Harrah's case. In particular, we will analyze Harrah's Entertainment transformation from a traditional casino to one whose operations and strategy are driven by so-called "database marketing" (DBM).

In the last part of class I will present a mini-lecture on databases and datawarehouse technologies (i.e., the technologies that underlie analytic capabilities).

Required Readings and Study Questions

1. From Data to Knowledge to Results: Building an Analytic Capability, Davenport et al., CMR, 2001. (Coursepack)

- Many organizations have invested massive amounts of money in collecting detailed data about their customer's and operations. But only a few have been able to get value from the results large stores of data. Why? What does it take for an organization to reach the point where it can effectively exploit all the data they are storing away in data warehouses?
- Of the many prerequisites described by Davenport et al. for creating an analytic capability which do you think present the greatest challenges?

2. Case Study: Harrah's Entertainment, Inc (Coursepack)

- **Central Challenge:** Transforming an organization to compete based on analytic capabilities
- **Preparation Questions:**
 - Why is it important to use "customer worth" in the DBM efforts rather than the observed level of play?
 - What information is required to build customer profiles that support "customer worth" calculations, and how is it collected?
 - What is necessary to build a capability that allows Harrah's to actually use this information effectively for decision-making purposes?
 - Is this a good example of IT creating business value? How could Harrah's measure this value?

- What is the sustainability of the advantages conferred by Harrah's actions and strategy? What should Harrah's be doing going forward?
- Are there any privacy and ethical issues that Harrah's should be concerned with?

3. IT Tutorials

- [Learn IT: Unleashing the Power of the Database](#) (web)
 - Read sections 1, 2, 4 and 5. Skim the rest.
- Wikipedia: [Data Warehouse](#), [Data Mart](#)
- **Key Terminology:** Database, file, table, field, record, relational database model, primary key, foreign key, data warehouse, data mart.

4. Optional Readings

- [Math Will Rock Your World](#), Business Week, January 2006 (Web).
- [The Trading Desk](#), New York Times, 2003 (MyFiles). This is great article for baseball fans. It describes how the Oakland As get an advantage by running the team "by the numbers).
- [Competing on Analytics](#), Davenport, Harvard Business Review, 2006. (MyFiles)