



IS STRATEGY ,MANAGEMENT

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information technology (IT) investment

- The relationship between information technology (IT) investment and firm productivity and performance has been an important topic.
- quality of the data which is the output of the information systems deployed in the firm, is proposed as a measure of the effectiveness and efficiency of the IT investment.

information technology (IT) investment

- Different firms have different situations and therefore have different strategies in adopting, investing, deploying and using IT.
- For example, some have deployed expensive Enterprise Resources Planning (ERP) systems, some might focus on Customer Relationship Management (CRM) systems, and still others may have other different concentrations.

information technology (IT) investment

- IT is the technology for collecting, processing and presenting data information.
- One way to look at the effectiveness and efficiency of the deployed IT in a firm is to screen the quality of its direct output --- data.
- The quality of the data output from the information system has an important influence on the quality of the services, products, operations and business decisions.

Firms and investment

- In today's marketplace full of fierce competition, managers find themselves needing to make swift and high quality business decisions almost every day, and they need high quality data in their decision making process.
- Firms could benefit greatly if the decisions lead the way to premium competitive advantage or strategic positioning. Otherwise, firms would not gain much if their investment could not deliver high quality data information which business managers rely on to make decisions, no matter how heavily they have invested in IT

IT Investment and Firm Performance

- The results from the research of IT investment and firm performance are mixed on four industrialized economies (Hong Kong, Singapore, Malaysia and Taiwan,) The results on mixed for different economies, but the impact of IT investment on shareholders' return in all four economies was not significant.
- Brynjolfsson and Hitt did a study on 380 large firms between 1987 and 1991. They found that the return on investment for IT capital was over 50% per year and the return on spending on IS labor was also very high.

strategic IT investment

- While transactional IT is targeted to improve internal efficiency and cost cutting, the objective of strategic IT investment is market expansion, such as exploring a new channel to customers, spawning new business, or restructuring an industry.
- By looking at the evolution of information systems, as illustrated in we know that, before the 1990s, MRP and MRP II were popular.
- MRP and MRP II were typically transaction-centric, those systems were designed to support routine transactional activities, but they did not mean to help continuous or strategic planning to drastically improve a firm's performance.

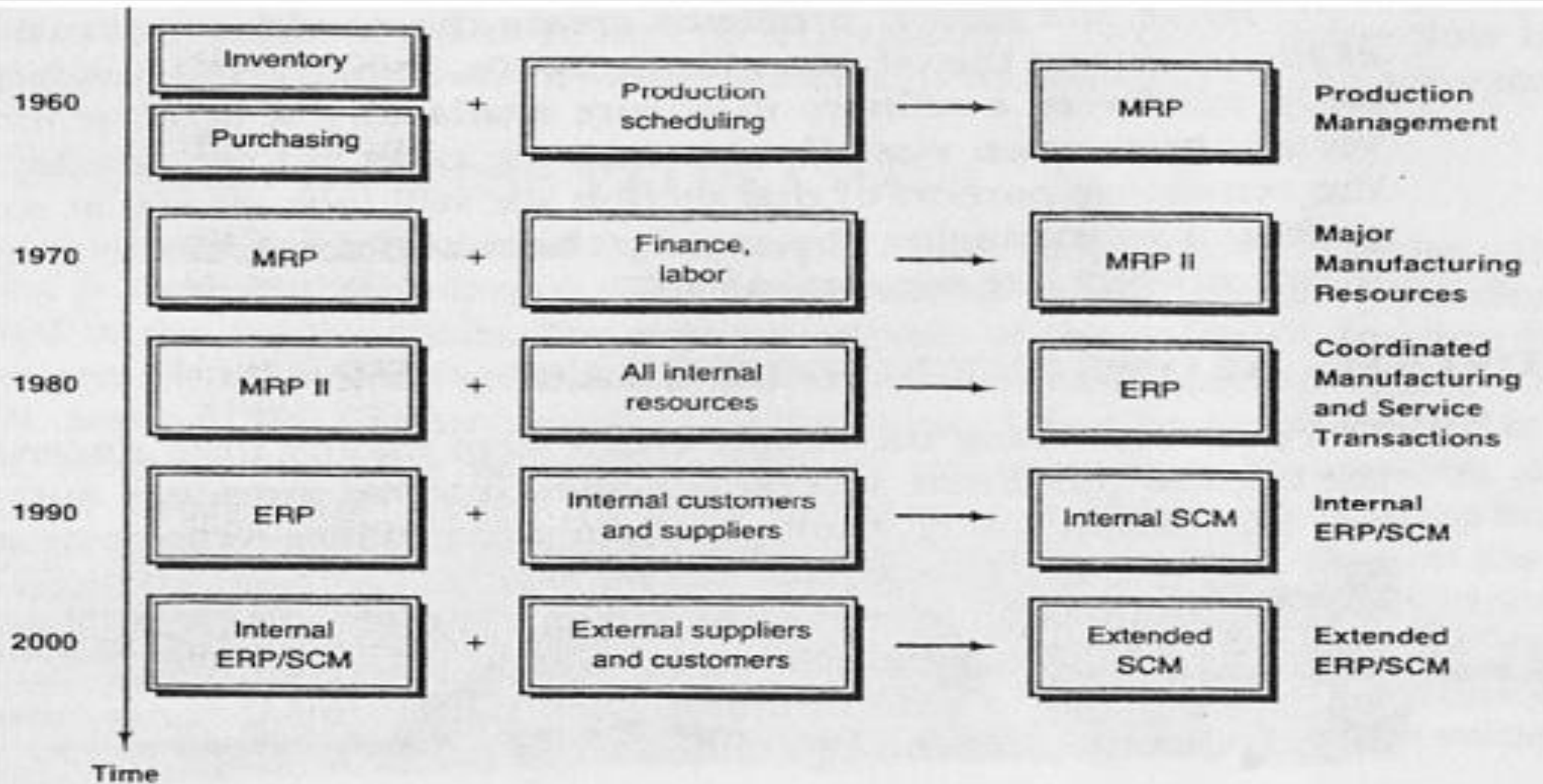


Figure 1. The Evolution of ERP Systems

Measures for IT Investment and Firm Performance

- proposed a framework for evaluating IT investment and firm performance.
- They proposed that the value of IS staff, IS staff training, other IS spending, computer capital, and non-computer capital should be used as independent variables; sales, market share, assets, equity and outstanding shares should be used as dependent variables in the research about the relationship between IT investment and firm performance

Data Quality

- companies are recognizing that data is a key organizational resource, and all kinds of business data are used increasingly in strategic information systems, such as executive- or decision support systems.
- Data needs to be accurate in order to meet the quality requirements. But accuracy is not the only requirement for data quality.