

Lecture Eight

Management Functions

Management Functions

- ▶ Get the job done
- ▶ On time
- ▶ Within budget
- ▶ Satisfactorily
- ▶ Using available resources

Planning

Devise short-range and long-range plans and set goals to help achieve the plans

Organizing

How to use resources

Staffing

Directing

Guiding employees to perform their work

Controlling

Monitoring progress towards goals

Management Levels

- ▶ High level (strategic)
 - ▶ Long-range view
 - ▶ Planning
- ▶ Middle level (tactical)
 - ▶ Carry out the plan
 - ▶ Assemble the material
 - ▶ Hire the resources
 - ▶ Organize and staff
- ▶ Low level (operational)
 - ▶ Supervisor
 - ▶ Directing and controlling

Historic Development

The concept of MIS has changed substantially over the years.

In the 50's and 60's, the management saw the potential of computers to process large amounts of data speedily and accurately.

The departments that were involved with such activities were known as Electronic Data Processing (EDP) departments. The focus of EDP was Record Keeping e.g. accounting data – Payroll data.

Historic Development

In the 70's, there was a discernible shift from data to information. The focus was not on data but on the analysis of Organisation data.

There was a shift in the philosophy.

Such a concept came to be widely known as 'Management Information System'.

right information in right time to right people

Historic Development

In the 70's the top management relied on the staff of EDP & MIS to supply the necessary information.

The 80's saw the Personal Computer (PC) revolution.



The Personal Computer & the desk-top metaphor changed the picture completely.

The biggest pay-off for such direct use was the "what-if" analysis capability.

This led to the emerge of **Decision Support Systems (DSS)**.

Historic Development

The information and decision hungry managers of 80's saw a huge potential in the expert systems as a result of spectacular growth in the Artificial Intelligence area.

Combined with DSS philosophy the expert systems could supply a superior class of managerial information support, known as **Knowledge Based Systems (KBS)**.

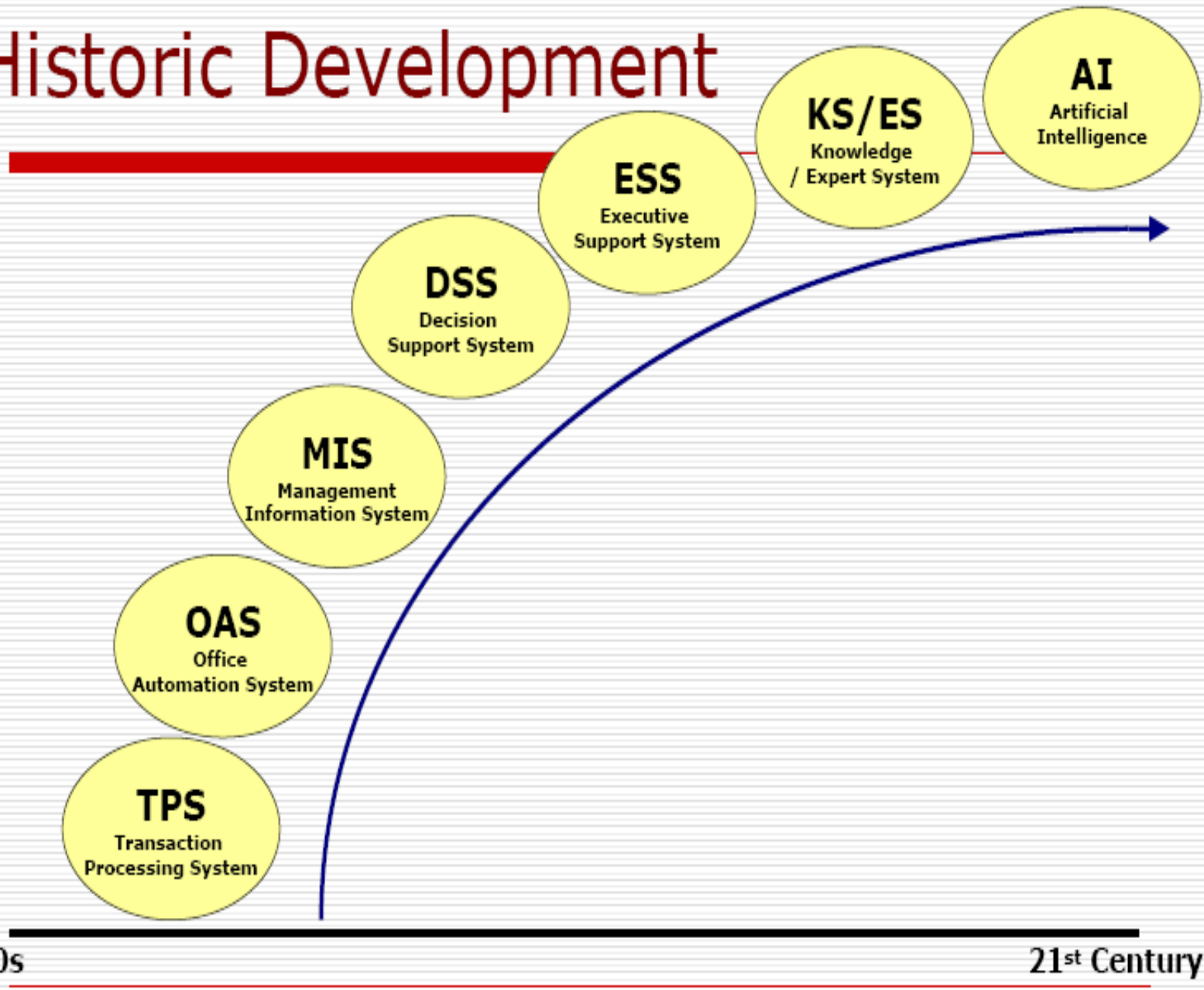
Historic Development

The EDP targeted the operational level of management.

The MIS/DSS/KBS target the middle management.

Attempts were made to provide information to top management as well, known as **Executive Information System (EIS)**.

Historic Development



1950s

21st Century

Historic Development

- EDP - Focus on Data
- OAS - Focus on Communication
- MIS - Focus on Information
- DSS - Focus on Decision Support
- EIS - Focus on Decision Support for Top Management
- ES - Focus on Consultation
- AI - Focus on self-learning / thinking systems

MIS vs. DSS

- ▶ MIS
 - ▶ Planned reporting
 - ▶ Standard, scheduled, structured, and routine
 - ▶ Constrained by the organizational system
- ▶ DSS
 - ▶ Decision making
 - ▶ Unstructured and by request