What is IS? Classification of IS

An information system is integrated and co-ordinate network of components, which combine together to convert data into information. It is essentially made up of five components hardware, software, database, network and people. These five components integrate to perform input, process, output, feedback and control.

Classification of IS:

There are 6 types of IS.

Transaction Processing System (TPS): A computerized system that performs and records daily routine transactions. It process data resulting from the occurrence of transactions. It conduct mainly three works. Those are Data entry, Data processing, Database maintenance, document and report generation and inquiry processing.

Management information system (MIS): Provides information for managing an organization. It mainly manage

* Extract and summarize data from TPSs
* Allow managers to monitor & direct the organization.
* Provide accurate feedback.
* Provide pre-specified reports.

Decision Support System (DSS): An interactive information system that provides information, models and manipulation tools to help make decisions in semi-structured and unstructured situations. It support analytical work and simulate and optimize decisions and assumptions.

Executive Information System (EIS): A highly interactive system that provides a flexible access to information for monitoring results and general business conditions.

Office automation system (OAS): Help people perform personal record keeping, writing and calculations efficiently. For example personal database system and note taking systems.

Knowledge work system (KWS): It is used by technical staff to convert design specifications into graphical designs. It uses computer aided design (CAD).

Classification of IS in a short is as following:

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|  | EIS | DSS | MIS | KWS | OAS | TPS |
| Type | Strategic level | Management levels | Management Levels | Knowledge levels | Knowledge Levels | Operational Levels |
| Input | Aggregate Data | Low volume data | High volume  Data | Design specification | Schedules | Transaction |
| Processing | Interactive | Analysis | Simple models | Modeling | Document management | Updating |
| Outputs | Projections | Decision analysis | Summery reports | Graphics | Documents | Detailed reports |
| Users | Senior manager | Professionals | Middle managers | Professional | Electrical workers | Operational personnel |
| Example | 5-10 year operating plan | Sales region analysis | Annual budgeting | Engineering workstation | Document imaging system | Payroll system |

Difference between open system and close system

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| Open System | Close System |
| Interacts with environment constantly | Doesn’t interacts with environment at all. |
| Has an infinite scope. | Has limited scope. |
| Relevant variable keep on interacting. | The variables are self-contained. |
| Generally flexible and abstract. | Generally rigid. |
| Can be disorganized easily. | No matter what happens, it can not be disorganized. |
| Environmental factors influence it’s behavior. | Environmental factors does not influence it’s behavior. |
| Example: Business system | Example: research and development departments |

Difference between DSS and MIS

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| MIS | DSS |
| MIS focuses on structured tasks and routine. | DSS focuses on semi-structured tasks. |
| MIS emphasis on data storage. | DSS emphasis on data manipulation |
| In MIS, data often accesses indirectly by managers. | In DSS, data is directly accesses by managers. |
| MIS puts reliance on computer experts. | DSS puts reliance on manager’s own judgement. |
| MIS provides tactical information top management to take decisions. | DSS provides strategic information. |
| MIS are regular and recurring. | The need for DSS can be irregular. |
| Make use of simple methods such as summaries and comparisons. | Make use of mathematical model/ statistiical techniques. |