

Management and information systems

[Business](#), [Management](#)



Introduction

In the UK, SSADM is a most commonly used computer application for development purpose. Moreover, this application is mostly utilized for the government computing projects in UK. In Europe, it is widely being adopted by most public sectors than government organizations. The SSADM is in the public sector and is previously specified in British Standards as BS7738.

The name "Structured Systems Analysis and Design Method" is a system advance to the analysis and design of both management and information systems. SSADM was created for the CCTA a UK government of 1980 considered the use of the growing technology in government from 1980 onwards. These key words are at the moment Registered Trade Marks of the Office of Government Commerce (OGC), which is in the United Kingdom Treasury. SSADM is defined as a waterfall technique that an Information System design can be derived.

Again, SSADM can be perceived to symbolize a pinnacle of the precise document-led approach to system design. It is differentiated with contemporary Rapid Application Development methods. The SSADM is chasing the waterfall life cycle model that is starting in order to study physical design stage during development. One of the core features of the SSADM is that it includes intense involvement in the requirements analysis stage.

The clients are made to sign off from every stage that is completed ensuring the requirements are fulfilled. Moreover, the users are offered clear and easy

to understand data that include a number of diagrammatic representations regarding the system. The SSADM will divide the development projects into several stages, modules, steps and tasks. Furthermore, the initial and primary model that is developed and formulated in SSADM is the data model. This method is considered as a part of requirement gathering and consists of well-designed stages, steps and products.

SSADM Benefits and Drawbacks

Advantages

The benefit of SSADM is that it utilizes three techniques in order to determine the information system viability. One of the major benefits of SSADM is the incorporation of three techniques that will determine the viability of information systems. Likewise, the entity identification and their relationship in the system are verified by logical data modeling.

Furthermore, data flow modeling technique demonstrates data modification from one state to another form, occupying space for data and entities that transmit it in the systems along with the routes that are responsible for data flows. In addition, event-modeling credentials demonstrate the impact of these entities within the business and their information systems. Therefore, these three procedures and perspectives are offered the more complete and precise model.

The probability of minimizing information readiness at the initial stages of the project is enhanced by examining and analyzing a thorough review of the system. Likewise, the occurrence in the system occurs due to poor design.

Moreover, SSADM is regularly used in the United Kingdom; team members associated with the project are familiar with the processes and procedures.

Disadvantages

SSADM methodology is a structured approach that develops and deploys controls on all procedures pertaining to data creation. Likewise, this is the core objective of SSADM as it gives slight room for mistakes and it is also the main reason of its adoption and popularity within the UK. However, the error free structure is linked to some constraints.

One can predict that the necessities of the system may change at each stage during the software development process. As SSADM is constructed on the basis of data analysis if any changes are identified after the analysis stage, system suggested by the data can be defective.

Moreover, for supporting business, SSADM is closely aligned with critical business functions of an organization. Some of the attributes for SSADM supporting business functions includes enhanced quality by reviewing every stage of the software development process and meeting the customer requirements precisely by reviewing requirement analysis stage. The time and volume must be adequate at the disposal for the completion of every stage of the development process.

Moreover, the radically changing situation in business happens because SSADM do not the changes available in the specification after the completion of the review stage. For considering long term benefits of SSADM, overall quality of information services within the organization is enhanced. Likewise,

SSADM use is also adopted by government organizations and initially it was developed to focus on three

kinds of organizations and government projects as these projects have adequate time and resources to align with the nature of SSADM methodology.

The greatest drawback related to the SSADM system is that it use more time than other system. It is difficult for a business organization to generate the information system by a due date because SSADM takes too much time to analyze the projects. There is a monumental suspension among the initiation of the project and the deployment of the system. If the staff members of any organization are not fully qualified in the SSADM techniques, the business will need to spend more period and currency on training their employees.

SSADM Objectives

A framework is provided in order to describe projects that suited for managing the projects related to SSADM. In fact, SSADM divides an application development projects into modules, stages, steps and tasks.

SSADM's objectives are listed below:

- Enhances project management and control.
- Makes good and effective use of experienced and inexperienced development employees.
- Ensures better quality systems.
- Projects are flexible related to the loss of employees.

Projects that are supported by computer-based tools for instance computer-aided software engineering systems are enabled.

For better communications among participants of the project, a framework is created that covers all elements of the life cycle of a system. Furthermore, it starts from the feasibility study stage up to the production of a physical design.

SSADM Phases

A number of techniques, procedures, and conventions are set out by SSADM for each and every stage in order to record and communicate the information pertaining to in textual and diagrammatic forms. In addition, SSADM is considered the most comprehensive model and its characteristics regarding the projects are such that it only utilizes those elements of SSADM appropriate to the project. A number of CASE tool providers maintain SSADM.

SSADM is a waterfall method whereby Information System design can be derived. SSADM can be perceived symbolize a pinnacle of the precise document-led approach to system design. This method is distinguished with contemporary Rapid Application Development methods such as DSDM. SSADM incorporates five phases as they can also be precisely broken down further into sub-phases. They include the following:

Feasibility study

Feasibility: To decide whether it is cost effective to go further on with the system and whether it is actually promising. These are some of the sub-phases under the feasibility study:

- Prepare for the feasibility study
- Define the problem
- Create feasibility report

- Requirements Analysis

Identifying of the requirements and needs related to the system and modeling these requests in terms of the procedures carried out. The sub-phases under the requirement analysis:

- Investigation of Current Environment
- Establish analysis framework
- Investigate and define requirements
- Investigate current processing
- Investigate current data
- Derive logical view of current services
- Assemble investigates results Business system ways
- Define and identify business system options
- Choose business system ways or options
- Classify requirements
- Identify Requirement Specification

The functional and non-functional necessities are determined in detail. The sub-phases under the requirement specification: Definition of Requirements

- Define required system processing
- Develop required data model
- Derive system functions
- Enhance required data model
- Develop specification prototypes
- Develop processing specification
- Confirm system objectives

- Assemble requirements specification
- Logical System Design Specification

Technical systems options are produced and the logical design of the system is created. This consist the design of update and enquiry processing. The sub-phases under logical system design are:

- Technical system options
- Define technical system options
- Select technical system options
- Define physical design module
- Logical Design
- Define user dialogues
- Define update processes
- Define enquiry process
- Assemble logical design
- Physical Design

The logical system measurement and technical system specification is utilized to design a physical database and set of program specifications. The sub-phases under physical design are:

- Physical design
- Prepare for physical design
- Create physical data design
- Optimize physical data design
- Complete function specification
- Consolidate process data interface

- Create function component implementation map

Conclusion

SSADM provides numerous benefits as well as drawbacks in terms of delivering projects on time. In order to develop a system for a medium-sized business organization, a comparatively small information system must be created. There are better solutions for the development of information system.

On the contrary, there are limited resources available in a medium-sized business organization therefore, it should be considered utilizing an off-the-shelf product that is low cost and time consuming. Moreover, stages, objectives, steps, techniques, benefits and drawbacks are also discussed in detail.