

PEMILIHAN PERANGKAT LUNAK SPK

Tidak kalah pentingnya bahwa faktor pemilihan software DSS yang sesuai adalah menjadi problem bagi perusahaan. Biasanya problem akan muncul dalam menentukan kriteria sistem, interaktivitas dan pemilihan DSS generator (yaitu suatu paket yang terdiri dari hardware dan software yang memiliki kemampuan untuk mengembangkan DSS dengan cepat dan mudah).

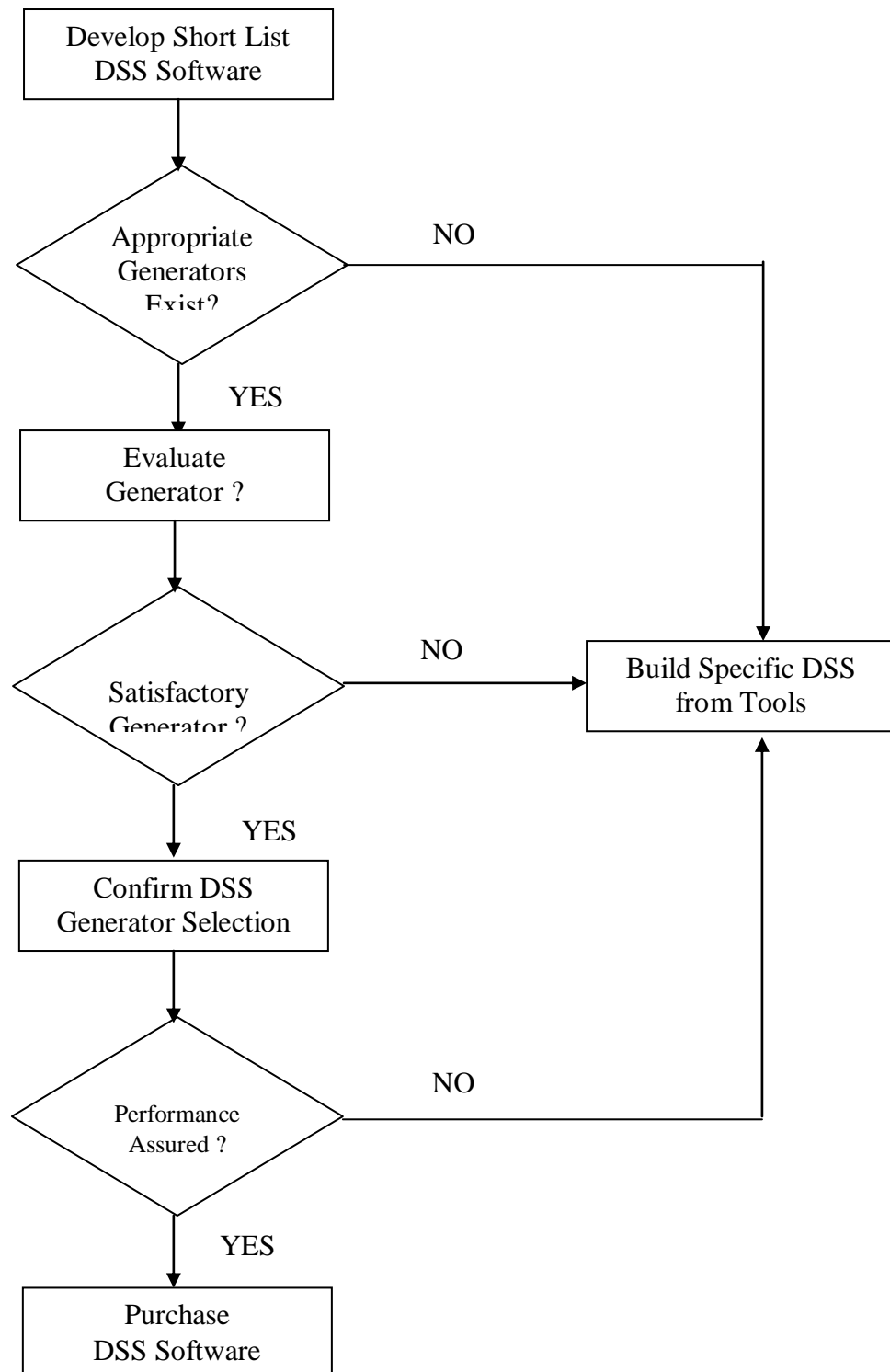
Framework pengembangan DSS, yaitu:

- Specific DSS
- DSS Tools
- The iterative design approach

Kriteria metodologi pemilihan DSS, yaitu:

- DSS software screening
 1. Identify candidate software
 2. Screening criteria
 - Technical requirements
 - Functional requirements
 - Documentation and training
 - Vendor Information
 3. Pick Finalist
 - A vendor has only three employees and has been in business less than a year
 - Operating systems software and hardware is not supported by a vendor
 - system documentation is inadequate
- DSS generator evaluation
 1. Expand evaluation criteria
 2. Obtain package information
 3. Evaluate DSS generator
 - Evaluation matrix
 4. Additional selection requirements
 - Tailoring
 - Documentation
- Specific DSS design
 1. Alter functional requirements
 2. DSS software modifications and supporting programs
 - Vendor-supplied enhancements
 - Supporting programs
 - Alter codes
 3. Finalize DSS generator selection

A Multiple Criteria Decision Methodology for DSS Software Selection



DSS Generator Screening

- IBM PC Compatibility
- Database
- Statistical analysis
- Spreadsheet
- Word processor
- Graphics
- File import/export
- Documentation

DSS Generator Evaluation and Selection

- Technical criteria
- Functional criteria
- Documentation criteria
- Vendor criteria

The Impact of DSS Software on Specific DSS Development

- DSS software impact on systems analysis and design
 - a. User requirements and application design
 - b. Technical design
- DSS software impact on systems installation
 - a. Detailed design and programming
 - b. Systems testing
- Operating DSS Software support
 - a. maintenance

TABLE 15-1 Representative DSS Software Products

Product	Vendor
Mainframe Packages	
EXPRESS	Information Resources, Inc.
IFPS	Comshare, Inc.
SYSTEM W	Comshare, Inc.
SIMPLAN	Simplan Systems, Inc.
INSIGHT	Insight Software
PLATO	OR/MS Dialogue, Inc.
PC or Client/Server Packages	
FOCUS/PC	Information Builders, Inc.
NOMAD 2 PC	D&B Computing Services
ENCORE	Ferox Microsystems
PC ANALECT	Dialogue, Inc.
PC EXPRESS	Information Resource, Inc.
PREFCALC	Euro-Decision
ENABLE	Software Publishing Group
SYMPHONY	Lotus Development
FRAMEWORK	Ashton-Tate

TABLE 15-2 High-Level Screening Criteria of DSS Components

Dialog Management	Data Management	Model Management
Multiple Dialog Styles	Variety of Logical Data Views	Library of Optimization Models
Command Language	Relational DBMS	Linear Programming
Menu	Hierarchical DBMS	Dynamic Programming
Question/Answer	Network DBMS	Integer Programming
Object Oriented	File Management System	

TABLE 15-3 Detailed Functional Criteria for DSS Software**Dialog Management Component**

User Friendliness

- Consistent, natural language commands
- "Help" command and error messages
- Novice and expert modes

Hardware and Operating System Elements

- Printer and plotter support
- Variety of input device support

Variety of Dialog Styles

- Menu
- Command language
- Object oriented
- Question/Answer

Graphics

- Basic plots and charts
- Multicolor support
- Previewing of output

Data Management Component

Data Handling Functions

- Dictionary
- Creation, deletion, update, and query

Management of Internal and External Databases

- Extraction
- Capture
- Integration of data sources

Logical Data Views

- Record
- Relational, Hierarchical, and Network DBMS
- Rule

Model Management Component

Analysis

- What-if
- Goal Seeking
- Monte Carlo
- Mathematical optimization

Forecasting and Statistics

- Basic statistical functions
- Time series with seasonal adjustment
- Multivariate statistics