

Case Tools & Technology Overview

Case Technology Classification

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1- What is CASE Technology classification?

Basically, CASE Tools classification is done, to help understand the functions of different CASE tools, their support & process activities.

2- How a CASE technology classification scheme may be helpful to managers responsible for CASE system procurement:

For procurement, CASE Technology classification helps managers a lot. It helps managers to choose the best combination of CASE tools which fulfils the need of company, and by using that set of CASE Tools Company may be able to perform all activities related with CASE; also they may want to choose most cost effective tools for their company.

3- Survey & Classification of CASE tools:

We have tried to do survey to get information about CASE Tools from a local software house (<http://IdeaFist.COM>) & an USA Based Company (<http://NiagaraIA.COM>), but we didn't find any significant results.

I have also contacted one of My Philippines Friend, He is a software engineer, Here is his website <http://kiphughes.com> But He also says that he does not use any type of CASE Tools.

So I have tried to classify some of the tools that I have found myself.

a. Classification of CASE Tools according to Function:

In this classification, Tools are classified on the basis of what function they perform...

I. Planning Tools:

We can put such tools in this class, which provide estimation like cost estimation etc.

Eg:

SmartCost ; A knowledge Based Cost Estimation by Knowledge Based Systems, Inc
(<http://kbsi.com>)

CCC QuikTrak ; A spreadsheet version control by Softool Corporation
(<http://www.softool.com/>)

II. Change Management Tools:

MKS Integrity Engine is a change management for Web by Mortice Kern Systems (<http://www.mks.com/>)

III. Configuration Management Tools:

In this class does lie the tools which control various versions of our Project etc.

I have found an example for this;

CCC/Manager; A configuration management & version control Tool by Softool Corporation (<http://www.softool.com/>)

IV. Prototyping Tools:

These tools are used for designing UI's and also some high level languages for creating Rapid-Prototyping also lie in this class.

LOCANA ; An O-O Rapid Prototyping CASE Tool by Rapid Prototyping Laboratory (Ian.Mitchell@sunderland.ac.uk)

V. Method-Support Tools:

In this category design editors, data dictionaries and code generators does lie...

I have an example for data dictionary (I am not sure for this because I have not found it on site of Oracle but I think it would be outdated).

CASE*Dictionary by Oracle (<http://oracle.com>)

Rational Rose ; A UML designing tool by Rational Software Corporation (<http://rational.com>) (<http://ibm.com>)

Visual Paradigm for UML by Visual Paradigm (<http://visual-paradigm.com>)

VI. Language-Processing Tools:

These are the compilers for developing our project.

E.g.:

PHP (PHP: Hypertext Preprocessor) ; An Open Source Language for Web Development (<http://php.net>)

Compilers for VB/ C++/ C# ; by Microsoft (<http://msdn.com>) (<http://microsoft.com>)

VII. Program Analysis Tools:

These are cross reference generators, Static / Dynamic Analyzers.

E.g.: LDRA Testbed ; A static/dynamic analysis test toolset by LDRA Group of Companies (<http://ldra.com>)

VIII. Testing Tools:

These are tools for testing;

e.g.:

TestMate by Rational Software Corporation (<http://rational.com>) (<http://ibm.com>)

IX. Debugging Tools:

These are tools for removing bugs from our developed software.

E.g.:

CICS-*dBUG-AID* by Compuware (<http://www.compuware.com/>)

X. Documentation Tools:

Tools for generating somehow automatic Documentations...

E.g.:

SoDA ; A documentation generator by Software Corporation (<http://rational.com>)
(<http://ibm.com>)

Prodoc ; A software documentation generator by Software Productivity Centre
(<http://www.spc.ca/spc/>)

b. Classification Based on Activity:

This classification is done on the base that Which CASE tool will be used when...

Above I have described classification based on the function, below I have given a figure which shows that which tool will be used for which step in Software engineering Process.

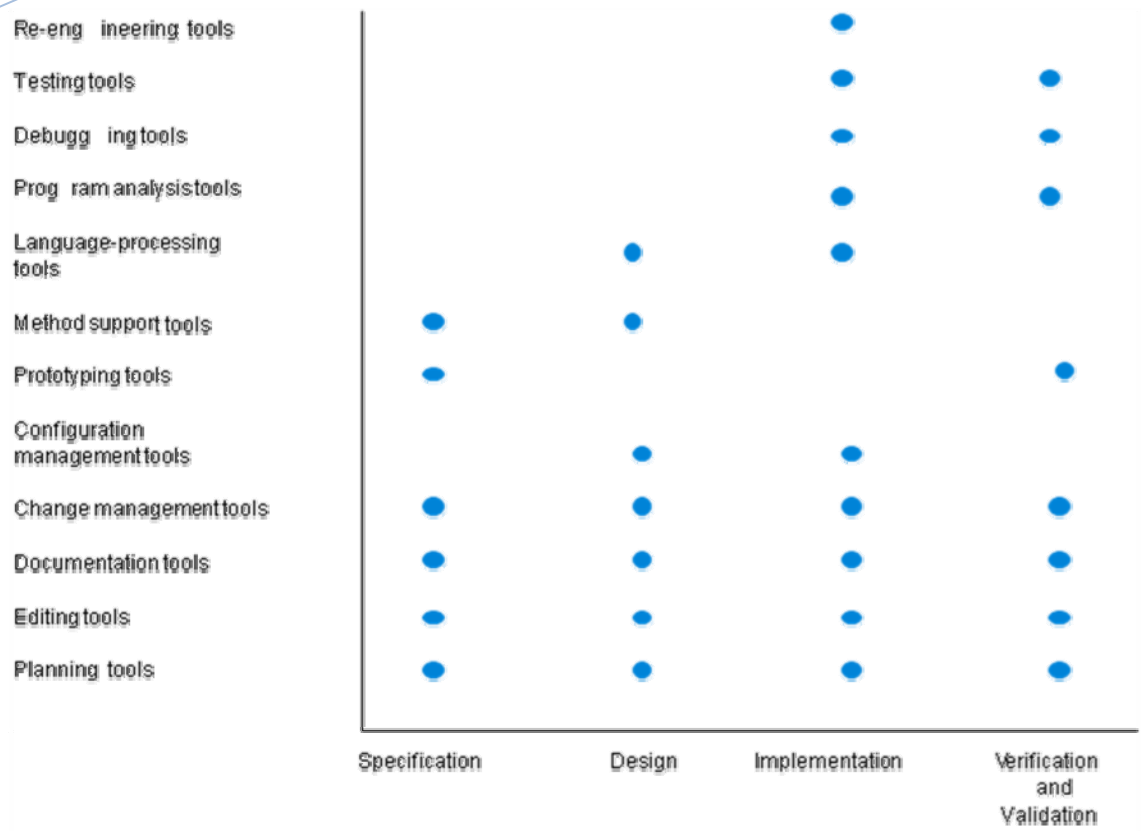


Figure 1 - Classification Based on Activity

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c. Classification Based on Breadth of Support:

It depends on the software company, that what level of support they get from the CASE tools.