

## How CASE-tools and methods relate to each other.

### Experiences

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#### *Abstract*

Spadab describes some of their business requirements and why application development methods must change in order to meet the actual and future demands on high quality software.

The need for and importance of an architecture that supports the different aspect of systems development is stressed. Spadab will also discuss how the architecture and strategy forms the basis for succesful information systems and for use of case tools.

Spadab also describes their view on how case tools fits in into the systems development environment, what tasks can be supported by the tools and gives a short overview of IEF's capability and how it supports Spadabs development process. Some of the reasons behind Spadabs IEF-decision are also discussed and how the case tool impacts the systems development profession.

Finally Spadab lists some of their critical success factors for systems development that are important regarding the implementation of case tools.

## Spadab

◆ Computing center for  
92 Swedish Savings banks.

◆ Development of banking  
functions

■ *Basic functions*

■ *Business support*

■ *Information management  
functions*

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### 1.1

Spadab gives EDB-support to 92 banks.

- 4.5 million customers
- 13 million accounts
- 1200 branches
- 7000 bank terminals
- 850 ATMs

## PRIORITIES

✓ Quality

✓ Flexibility

✓ Productivity

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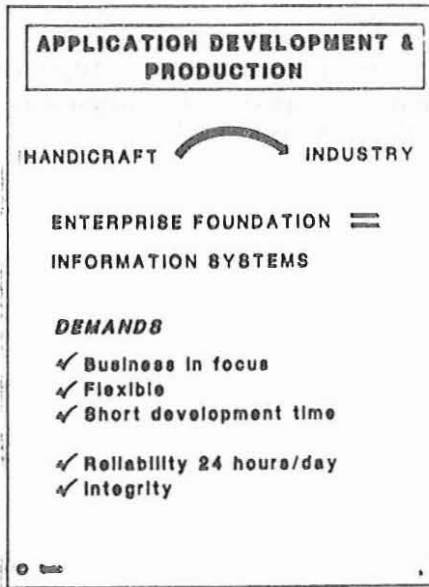
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### 1.2

The overall priority is quality because the banks are highly automated and fully dependent on the EDP-systems.

Flexibility has become more important during the last years - the banks are beginning to compete with products.

Productivity - the profitability margins are tighter.



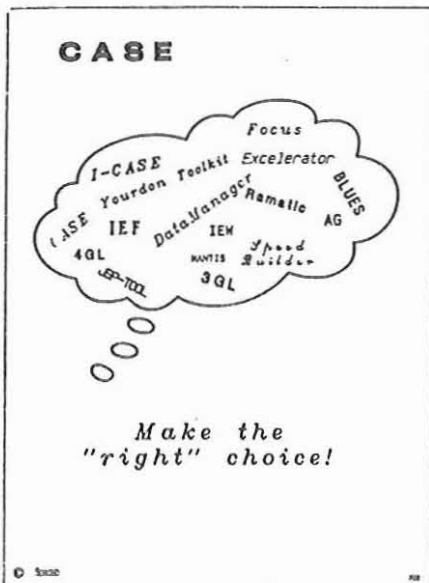
2.1

The status of direction of application development. Go from artform to engineering!



2.2

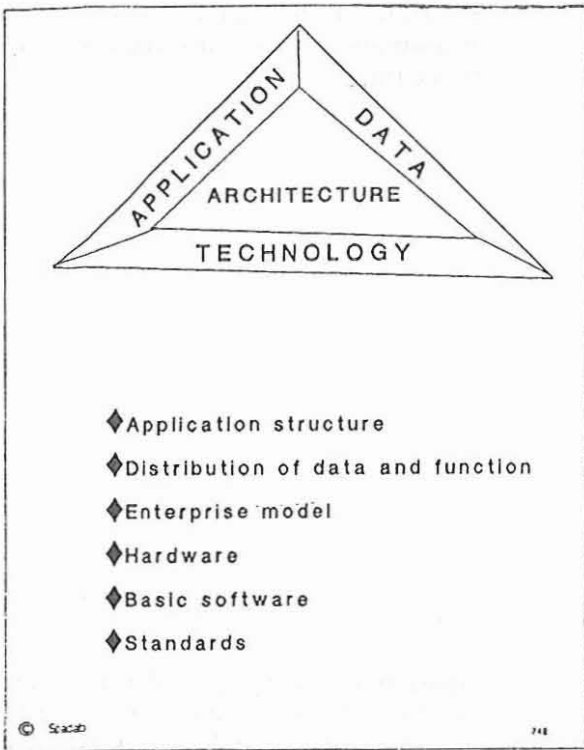
Spadab is engaged in development of new basic systems for nordic savingsbanks. Characteristic for these systems is modularization at a high level (building blocks). These principles gives the different banks possibilities to create their own unique products from the new basic systems and own-developed systems.



2.3

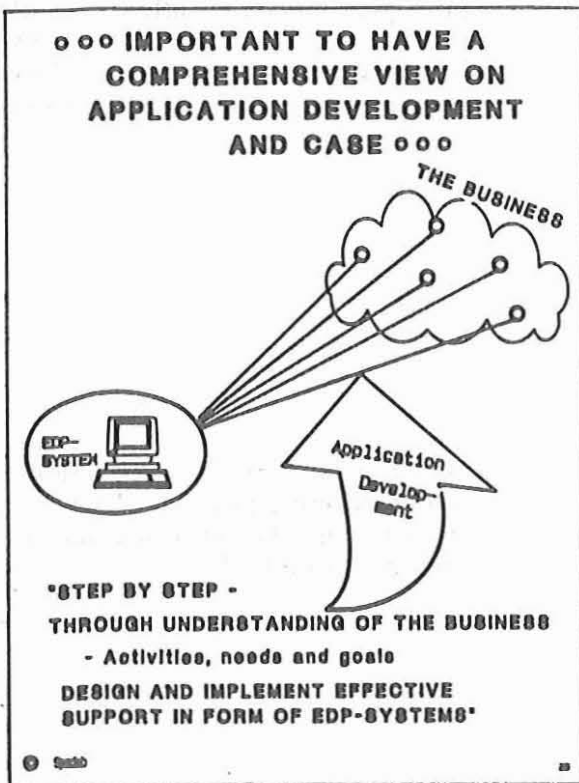
Looking at software production as an engineering process. That is the reason why we must use methods and powerfull tools.

# Spadabs view on application development



3.1

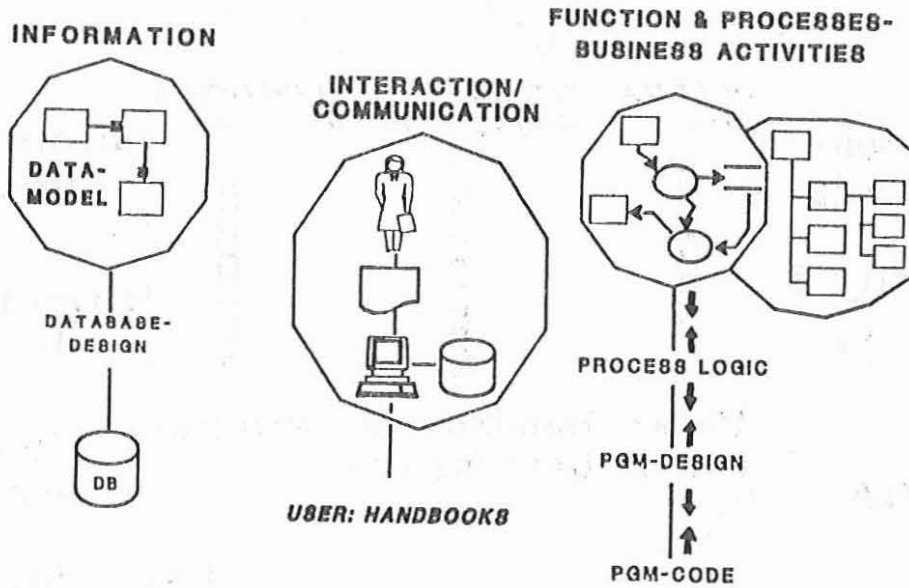
An architecture that supports different aspects of application development is crucial.



3.2

It is extremely important to have a comprehensive view on application development and understand the business as such.

# Spadabs view .....



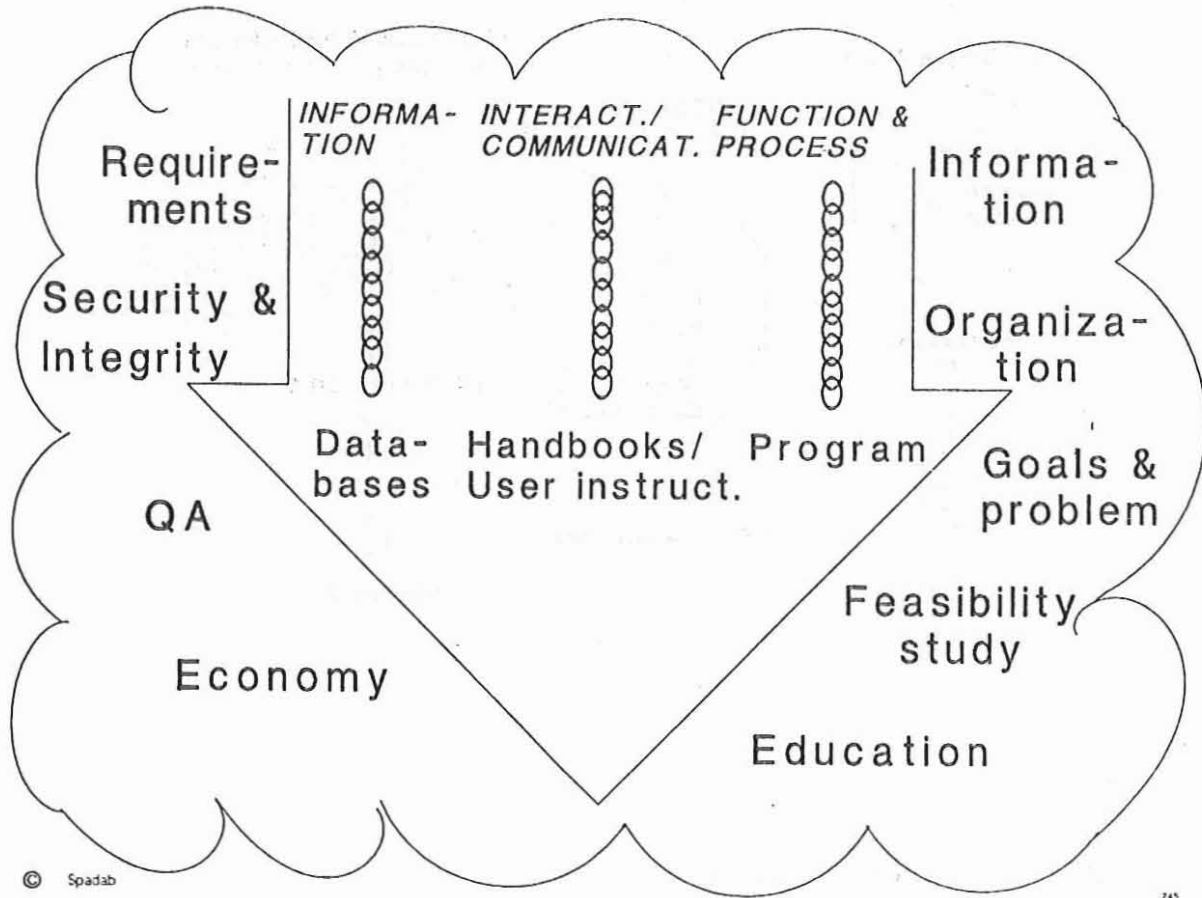
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We have divided our development process in these main areas:

- From business information to databases
- From business logic to program code
- From interaction/communication to end-user instructions

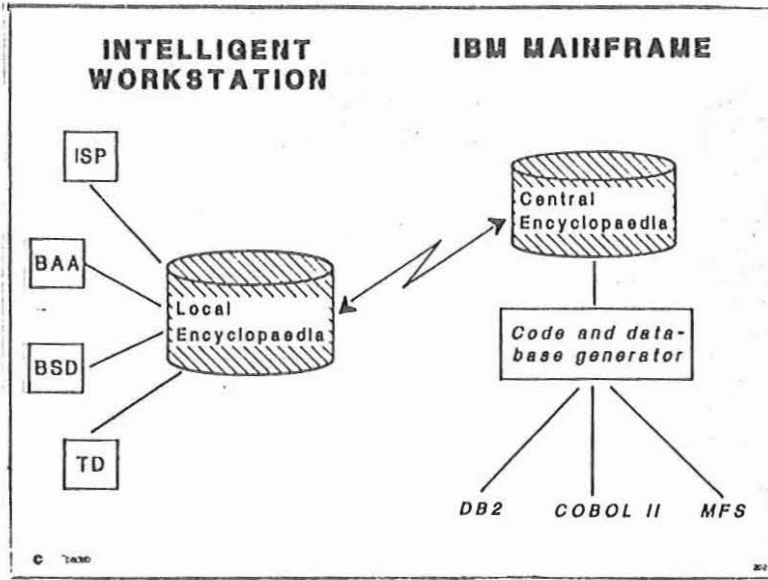
Spadabs view .....



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Added to these three main areas, there are number of other important tasks to be performed in order to build a "complete information system".

# IEF - An overview



6.1

## IEF

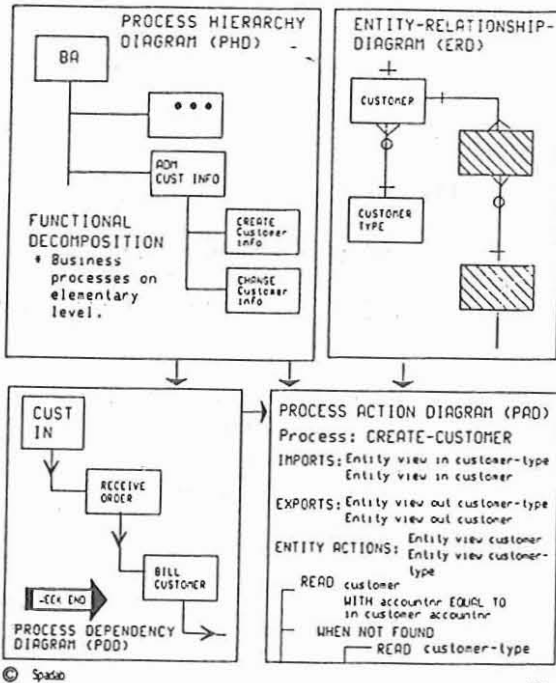
- Local and central encyclopedi
- Tools used on local level
  - ♦ ISP Information strategy planning
  - ♦ BAA Business area analysis
  - ♦ BSD Business systems design
  - ♦ TD - Technical design
- Tools used on central level
  - ♦ Construction

6.2

The deliverables from BAA are:

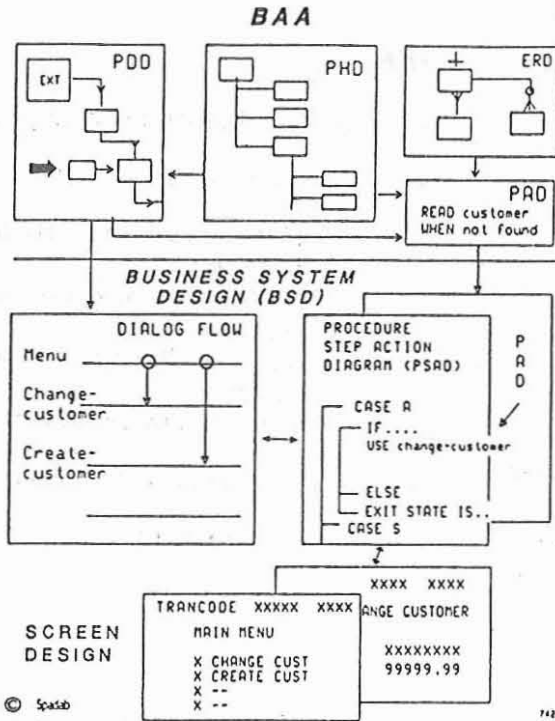
- E-R-diagram
- business logic on elementary level
- process dependency diagram

## IEM/IEF BUSINESS AREA ANALYSIS (BAA)



IEF - An .....

ITEM/IEF



7.1

The deliverables from BSD are:

- procedures (dialogues)
- screens
- error handling

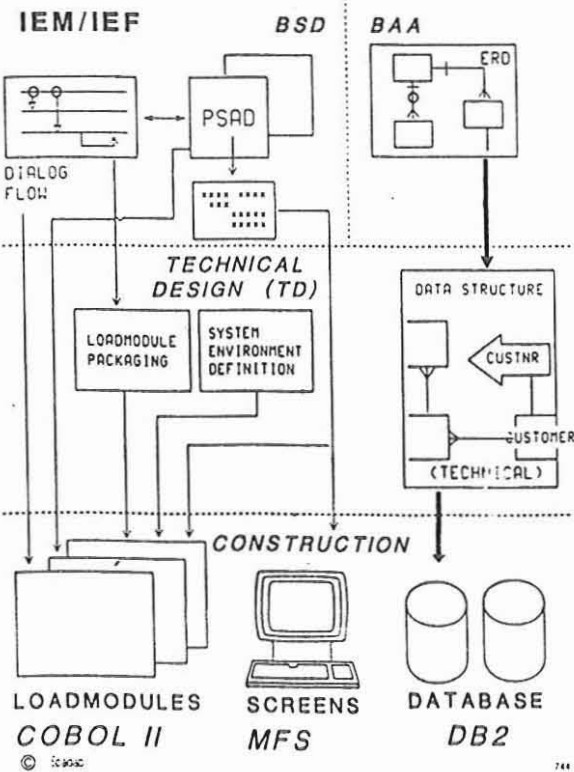
7.2

The deliverables from TD is:

- technical data structure

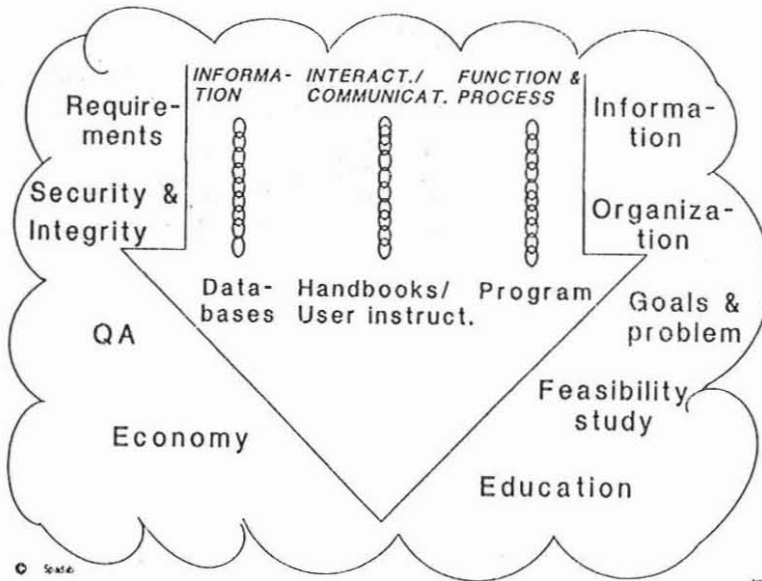
The deliverables from construction are:

- load modules associated to transaction codes
- physical screens
- physical data base





# Spadabs view - and CASE-tools



## 8.1

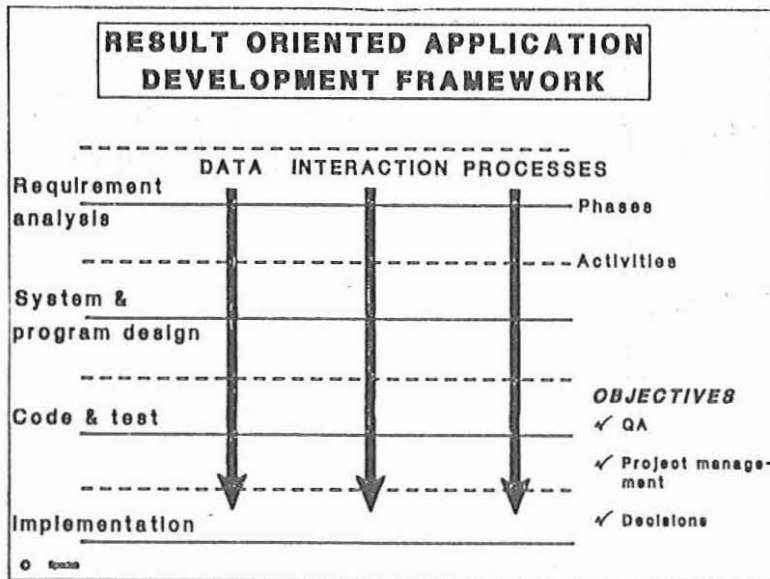
IEF gives good support for the main areas:

- From business information to databases
- From business logic to program code

We have an other PC-product called RUTH to support the main area:

- From interaction, communication to end-user instructions

In spite of that, there are still tasks that are not supported by tools.

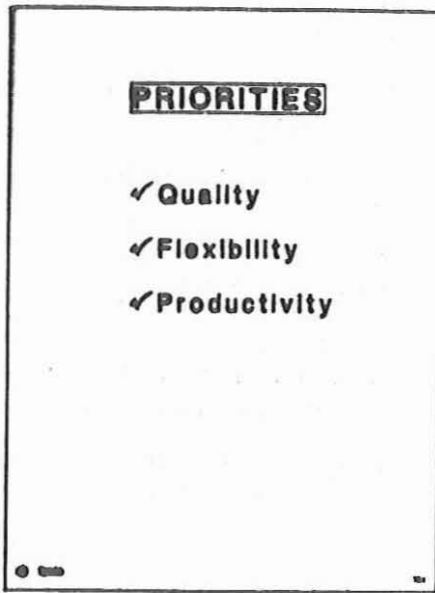


## 8.2

To manage the complete development process, it is very important to have an application development framework that consists of procedures for:

- QA
- project management
- decision making

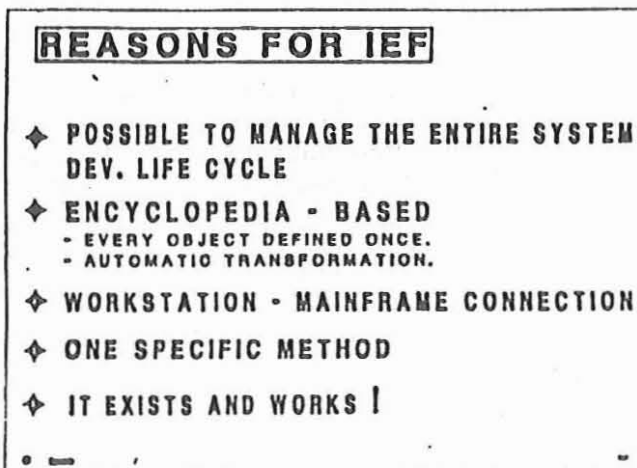
## Decision criteria for Spadab



### 9.1

The main reasons for Spadab to invest in a Case-tool are:

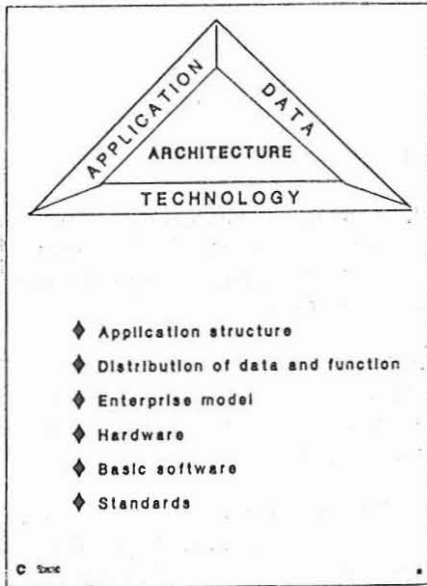
- increased quality
- increased flexibility
- increased productivity



### 9.2

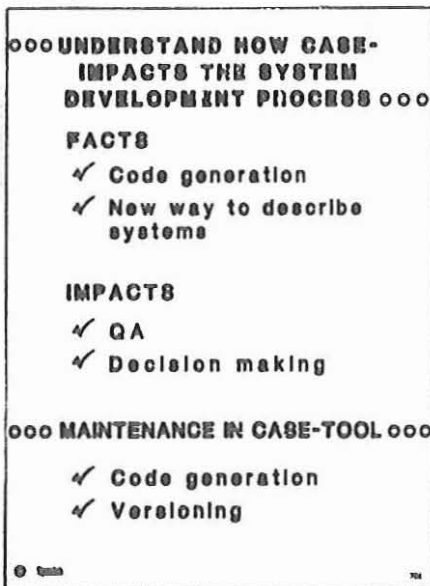
When we made our decision, IEF was the tool that fulfilled our requirements and needs in the best way.

# Critical successfactors for system development with CASE



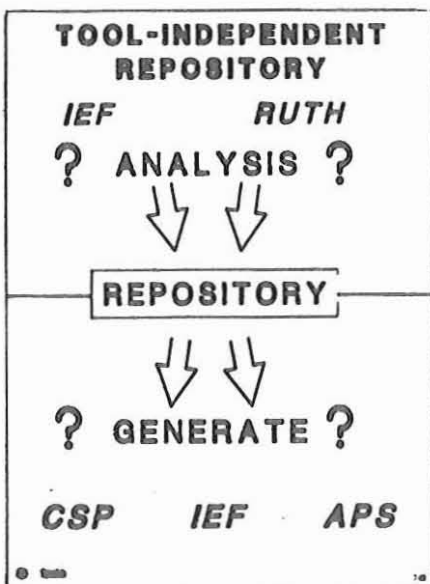
## 10.1

There are differences between the architecture and the current case-tools. Do not change your long-term strategy because of these differences.



## 10.2

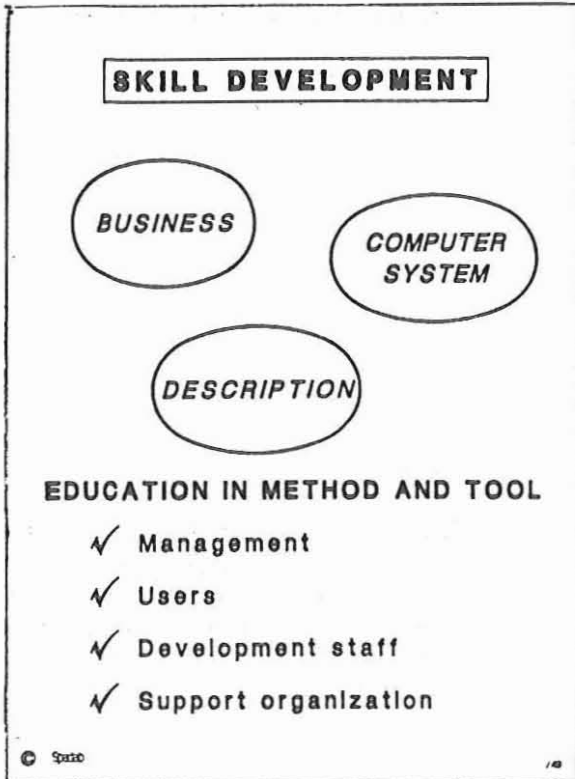
Review and make necessary changes in your development framework, to fit the case environment. If you don't do that, the case implementation could turn out to be a failure.



## 10.3

Future enhancements of our application development environment needs a common database where tools from different vendors can coexist.

Critical successfactors .....



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A good case-tool provides descriptions that both computer specialists and business professionals can understand.

The descriptions are however an abstract model that everybody involved needs education to understand.

If the development staff doesn't understand the ideas the tool is built upon, it is probably a very poor investment