

# Structured Analysis and Design Systems Analysis

## Chapter 2

### Systems Analysis

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## You Will Learn

- The job of:
  - Systems analyst.
  - System designer.
- The players in the systems game.
- Approaches to understanding people at work:
  - Hierarchy of needs.
  - Working with style.

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# Structured Analysis and Design Systems Analysis

## Systems Analysis: Job

- The systems analysis's job is to identify and document the user's requirements and the constraints within which the system must be built.

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## Systems Designer

- Transforms a technology-free statement of user requirements into a high level architectural design that will provide the framework within which the programmers can work.

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## Players in the Systems Game

- Users
- Management
- Auditors
- Systems analysts
- Systems designers
- Programmers
- Quality assurance
- Operations personnel
- Other stakeholders

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## Players – User Side

- Executive managers
- Supervisors - operational managers
- Operational staff
- Auditors
- Partner organizations
- Ultimate consumers

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# Structured Analysis and Design Systems Analysis

## Players – Systems Side

- Systems management
  - Executive management
- Development
  - Project management
  - Analysts
  - Designers
  - Programmers
  - Quality assurance
  - Tech writing
- Operations
  - Managers
  - Supervisors
  - Operators
  - Procedure writers
  - Training
- Standards enforcers
  - EDP Auditors

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## Systems Analyst Job

- Archeologist and scribe
- Innovator
- Mediator
- Project Leader
- Must create communication between those who need a computer system and those who will create it.

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## Maslow's Hierarchy of Needs

- The analyst who understands basic motivation, why people resist change, and how they resist change may be able to overcome some of the resistance.

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## Maslow's Hierarchy of Needs

<u>Need</u>	<u>Example</u>
Physiological	Food, clothing, and shelter
Safety	Protection from danger and loss of job
Social	Being able to identify with individuals and groups
Egotistic	Recognition, status and importance
Self-fulfillment	Realizing one's potential

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## The Actors

All the world's a stage, And all the men and women  
merely players. They have their exits and their  
entrances, And one man in his time plays many parts,  
His acts being seven ages.

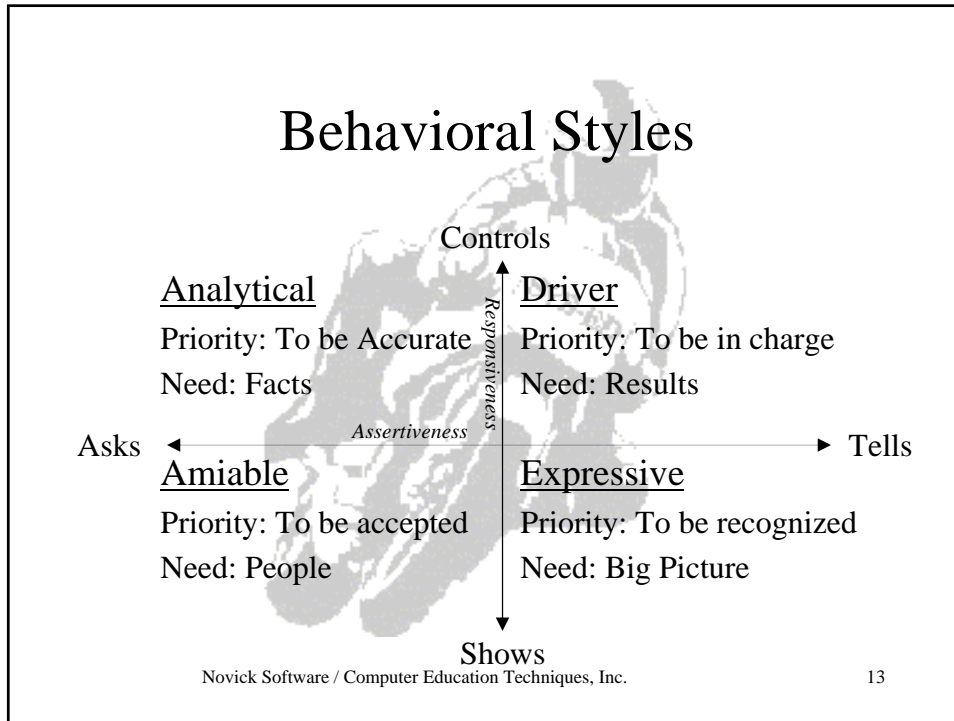
*As You Like It* Act II Scene 7 Rows 139-143

William Shakespeare 1598

## Shakespeare's Stages

- Infant
- Youth
- Lover
- Soldier
- Justice
- Patrician or pantaloon
- Second childishness

# Structured Analysis and Design Systems Analysis



## Working with Different Styles

	<u>Focus On</u>	<u>Spend Time On</u>	<u>Provide</u>
Analytic	Principles Logic	On Accuracy	Evidence
Driver	Goals Action	On Efficiency	Options
Expressive	Ideas Vision	On Listening	Incentives
Amiable	Relationships	On Personnel	Personal Assurances

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# Structured Analysis and Design Systems Analysis

## Do's of Systems Analysis

- Involve users in requirements analysis
- Use user's experience to validate the design through walkthroughs
- Show respect.
- Defer judgment
- Take into account requirements that may not be mentioned by anyone:

Security!

Accounting Standards

Record Retention Requirements

Usability

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## Don'ts of Systems Analysis

- Let anyone specify technological choices before it's appropriate for the project.
- Display thinly disguised (or undisguised) contempt towards the user.

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## Structured Analysis and Design Systems Analysis

### Question for Discussion

- Describe a project in which the systems analyst did not have direct contact with the real user.
- What were the advantages and disadvantages of this situation?

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### Question for Discussion

How much responsibility should the analyst take for building consensus among the users?

What if the analysis fails to do this?

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