

# ET Robocon 2013

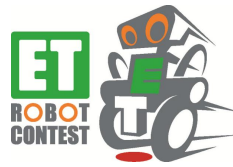
## Model judgment for Developers

04/21/2013

ET Robocon committee



# 1. Principle for model judgment



## ■ Background

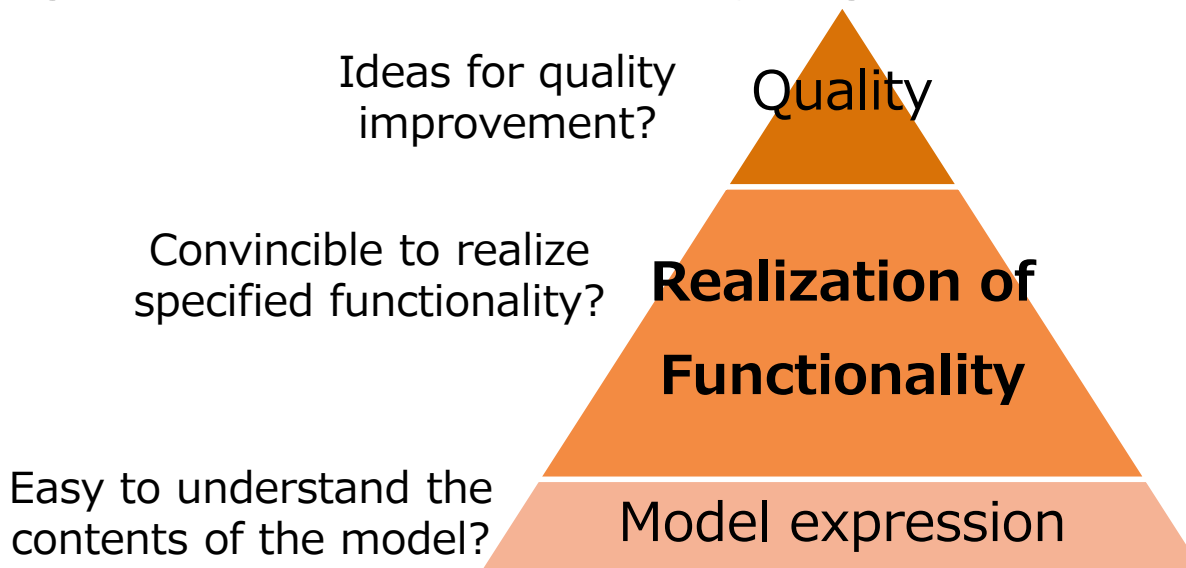
- Problems
  - Complex criteria for model judgment
    - Too many criteria
  - Model becomes PPT
    - Should be for design of the system
- Positioning of “for Developers”
  - Compete solutions against given objectives

## ■ Principle for model judgment

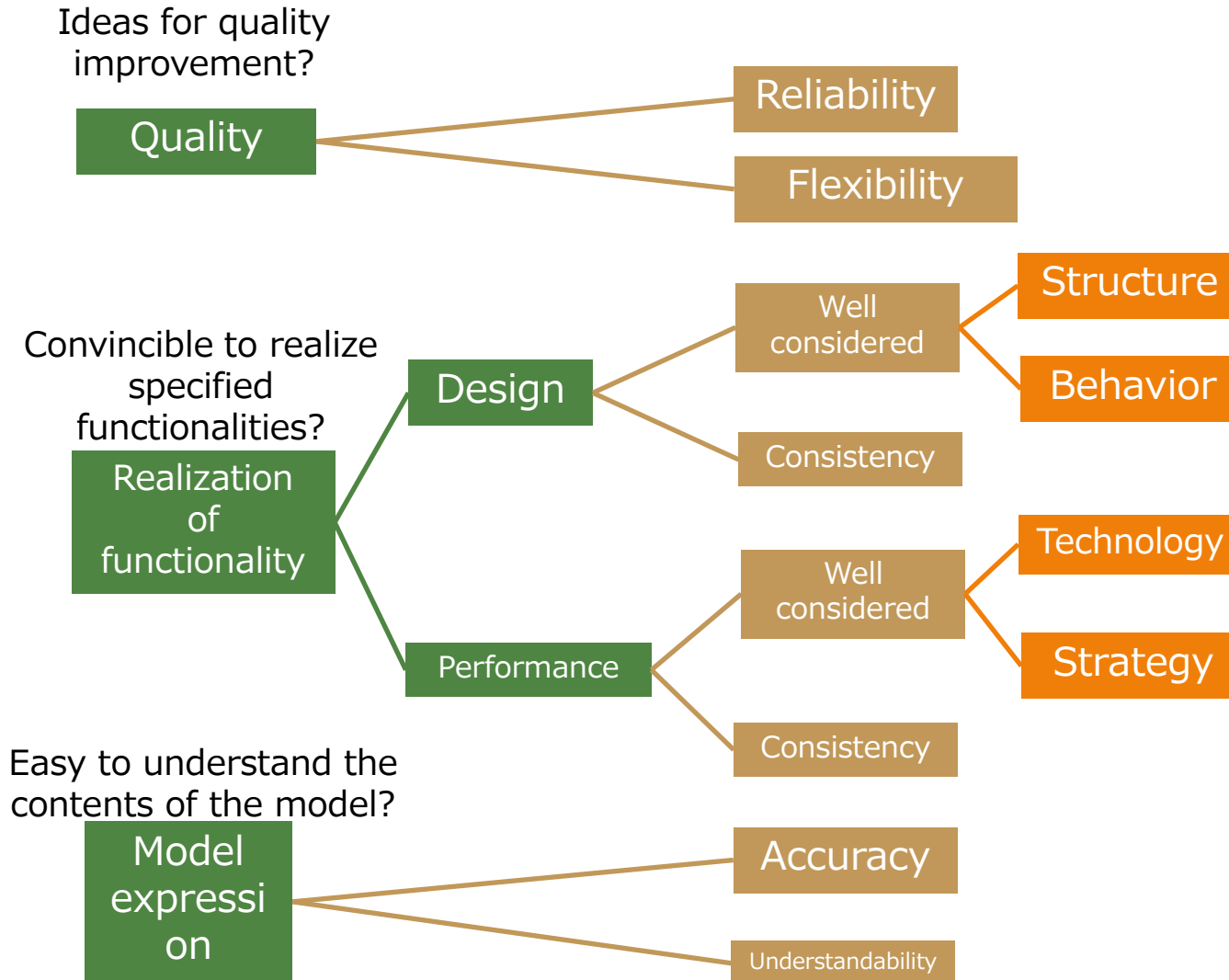
- Minimize criteria for model judgment
  - Easy for newbies
- Focus on “Graphical expression for functionality design”
  - Functionalities to be examined as model are provided from ET Robocon committee and the team describe HOW to implement the functionalities as model
  - Separate “Realization of functionality” and “Quality”  
(These criteria used to be scored together)

## 2. Criteria for model judgment

- Criteria for model judgment consists of “Model expression”, “Realization of functionality” and “Quality”
  - For developers, “Realization of functionality” has higher priority in model judgment



## 2. Model judgment items



### 3. Judgment criteria for “Quality”

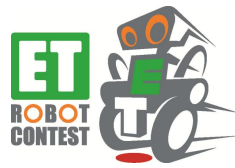
Category	Criteria	Sub Category	Judgment criteria	Rank	Description
Quality	Ideas for quality improvement ?	Reliability	Considered robustness of implemented functionalities ?	A	Very effective
				B	Effective
				C	Good idea, but not effective
				D	None
		Flexibility	Considered flexibility for potential changes or additions of requirements in design?	A	Very effective
				B	Effective
				C	Good idea, but not effective
				D	None

### 3. Judgment criteria for “Realization of functionality in design”



Category		Criteria	Sub Category	Judgment Criteria	Rank	Description
Realization of functionality	Design	Described well about realization of specified functionality ?	Structure	Structure of the system to realize specified functionality	A	Very effective
					B	Effective
					C	Good idea, but not effective
					D	None
			Behavior	How the system behaves to realize specified functionality	A	Very effective
					B	Effective
					C	Good idea, but not effective
					D	None
			Consistency	Consistency between structure and behavior	A	Very effective
					B	Effective
					C	Good idea, but not effective
					D	None

### 3. Judgment criteria for “Realization of functionality in performance”



Category		Criteria	Sub Category	Judgment Criteria	Rank	Description
Realization of functionality	Performance	Described well about realization of specified functionality?	Technology	Technologies to realize functionality	A	Very effective
					B	Effective
					C	Good idea, but not effective
					D	None
			Strategy	Strategies to realize functionality	A	Very effective
					B	Effective
					C	Good idea, but not effective
					D	None
			Consistency	Consistency between technology and strategy	A	Very effective
					B	Effective
					C	Good idea, but not effective
					D	None

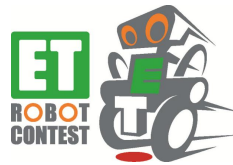
### 3. Judgment criteria for “Model expression”



Category	Items	Judgment criteria	Rank	Description
Model expression	Accuracy	Accuracy in terms of modeling language	A	Very effective
			B	Effective
			C	Good idea, but not effective
			D	None
	Understandability	Understandability of model expression	A	Very effective
			B	Effective
			C	Good idea, but not effective
			D	None



# 4. Subject



- One of the following four functionalities will be judged for “Realization of functionality”
  - How to perform line tracing
  - How to clear Look up gate
  - How to clear See saw
  - How to clear Garage
  
- Team chooses **one** of the four functionalities and describes how to realize it
  - No difference of judgment between functionalities
  - Only one (the first described) functionality is judged when multiple functionalities are described