

- PACT -

1, 2, 3  
1 2 3

{sanghee21.lee<sup>1</sup>, joonhwan.kim<sup>2</sup>, hci.yim<sup>3</sup>}@samsung.com

## Designing User Experiences in Network Environment with Scenario-Based Design - PACT Analysis Approach to Conceptual Design -

Sanghee Lee<sup>1</sup>, Joonhwan Kim<sup>2</sup>, Jinho Yim<sup>3</sup>  
Samsung Electronics Co., LTD<sup>1 2 3</sup>

가 가

가

PACT

(Scenario-Based Design)

가

People, Activity, Context, Technology 4 가

. PACT

가

Keyword : Scenario-Based Design, PACT Analysis, User Experience Design, Conceptual Design, Network Environment

1.

(User Experience Design)

Interview)

FGI(Focus Group

(feedback)

가

(convergence)

(resource)

(network)

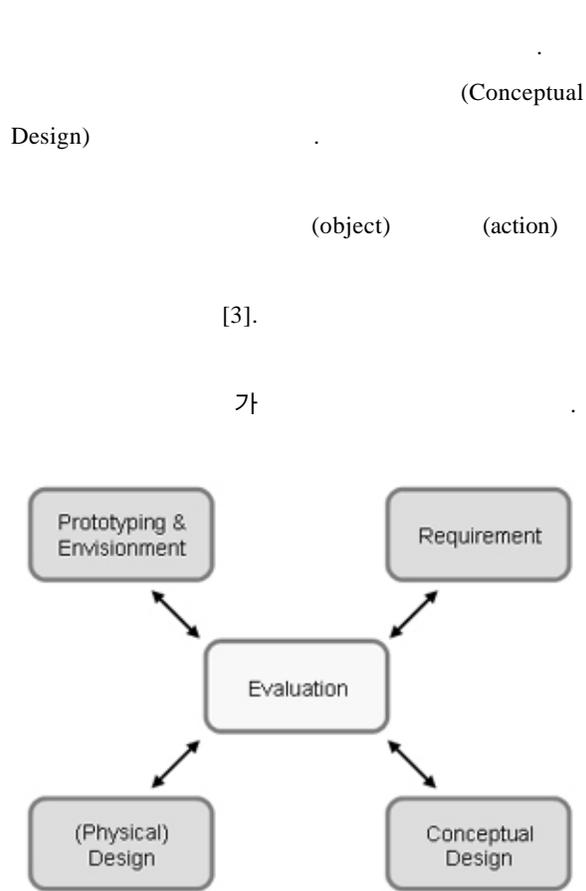
가

가

가

가 (1).

2



1. The Star Life Cycle (Adapted from Hix & Hartson, 1993)

Hix Hartson *Star Model*

4 가

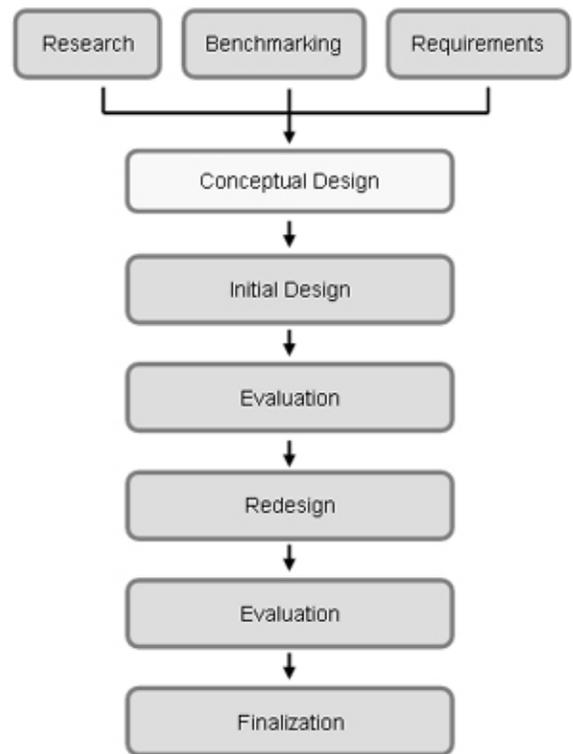
가

(Evaluation)

[6].

(Formality)

[9].



2. (User Experience Design)

(Scenario-based Design)

(technology)

[4]. (1)

; (2)

2.

가

; (3)

(User Interface Designer)

; (4)

(Easy to learn and effective)

가

가 가 ; (5)

(Behavior and Cognition)

(goal)

가

(Task Analysis)

(Performance or Error Rate)

3.

가 [10] [11].

가

가

가

가

PACT

가

Benyon Macaulay (Good Design) 가

(Good Design) 가

[3].

*“Scenarios are concrete stories about People (who will use the system) undertaking activities (what it will be used for) using technology (what is technically/logically feasible) in a context (the contexts of the interaction).”*

(Capabilities)

(Reaction)

가

가 [5].

가

Benyen Macaulay PACT

(People, Activity, Context, Technology)

[2]. PACT

가

(1) People: ( , , ), ( , , ),

Carroll

(2) Activity: (Goal), (Task), (Action), A/V(Audio/Video), (Mobile), 가 가 가 가 가

(3) Context: 가 , 가 가 가 가 가 1

(4) Technologies: ( PACT 4 가 ), ( , ), ( , )

3-1. 가

가 가

가 , 가 , 가

1. PACT

People	가 ( : 가 가 , - , ) ,
Activity	가 (action) (Goal)
Context	가 Activity ( : 가 , , , )
Technology	가 , ,

3-3.

3-2. PACT

PACT 가

가

PACT

가

가

4-2. 가

가

가 [7] (Information Technology)

4. 가

4-1. (Human-Computer Interaction)

[12]. [1].

(1) :

(Mood, Goals, Tasks, Perceptions, Expectation and Capabilities)

(Logic, Sound, Feel, Look, and Smell),

[8].

5. Benyen Macaulay PACT 가

[2] [3].

(1)

(2) 가

(3) PACT

(3) : (Context of Use)

(4)

가

6 .

- [1] Bardram, J., "Scenario-Based Design of Cooperative Systems Re-designing an Hospital Information System in Denmark," *Group Decision and Negotiation*, vol. 9, pp. 237-250, 2000.
- [2] Benyon, D., Macaulay, C., "Scenario and the HCI-SE design problem," *Interacting with Computers*, vol. 14, pp. 397-405, 2002.
- [3] Benyon, D., Macaulay, C., "A Scenario-Based Design Method for Human-Centered Interaction Design," in *Scenarios, Stories, Use Cases: Through the Systems Development Life-Cycle*, Alexander, I.F., Maiden, N. Ed., (John Wiley & Sons, Ltd., 2004), pp. 211-235.
- [4] Carroll, J. M., "Five Reasons for Scenario-Based Design," *Proceedings of the 32<sup>nd</sup> Hawaii International Conference on System Sciences*. IEEE Computer Society, PDF File (11pp., 207K), 1999.
- [5] Hasdogan, G., "The role of user models in product design for the assessment of user needs," *Des. Stud*, vol. 17, pp. 19-33, 1996 .
- [6] Hix, D. Hartson, D., *Developing User Interfaces: Ensuring Usability through Product and Process* (Wiley, USA, 1993).
- [7] Jarke, M., "Guest editorial: interdisciplinary uses of scenarios," *Requirements Engineering* vol. 3, pp. 153-154, 1998 .
- [8] Macdonald, A. S., "Developing a qualitative sense" in *Human Factors in Product Design*, Stanton, N., Ed., (Taylor and Francis Ltd, UK, 1998), pp. 175-190.
- [9] Rosson, M. B., Carroll, J.M., *Usability Engineering: Scenario-Based Development of Human-computer Interaction* (Morgan Kaufmann Publishers, USA, 2002), pp. 1-35.
- [10] Sanders, E. B., "Converging perspectives: product development research for the 1990s," *Des. Manage*, pp. 49-54, 1992.
- [11] Stanton, N. A., Young, M., "Ergonomics methods in consumer product design and evaluation," in *Human*

*Factors in Product Design*, Stanton, N. Ed., (Taylor and Francis Ltd, UK, 1998), pp.21-52.

- [12] Suri, J. F., Marsh, M., "Scenario building as an ergonomics method in consumer product design," *Applied Ergonomics*, vol. 31, pp. 151-157, 2000.