The Development of AIM, an Idea Generation Support System for Products with affecting experience

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KEER2007@SAPPORO 2007.10.11
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1. Development of products with affecting experience
1. Development of products with affecting experience

Background in the development of products with affecting experience

User
Growing level of satisfaction

Developer
Need for innovative planning

Systematization of planning process to develop products with affecting experience
Facing problems in the development of products with affecting experience

1. Themes for brainstorming tends to be vague.

2. “Affecting experiences” for users are hard to be defined.

3. “Affecting experiences,” which are built in an idea, are hard to be focused on in subsequent development process.
AIM, an idea generation support tool for products with affecting experience.

AIM, the acronym for Associative Idea Map, is a tool to aim at generating affecting experience.

Keyword sheet

Idea expansion sheet
1. Development of products with affecting experience

Scope of application of the AIM in development process

Uppermost process

- Study the direction of products and services

Requirement definition

- External design

- Internal design
2. Devisal process of the AIM
2. Devisal process of the AIM

Devisal process of the $AIM$

- Modeling of affecting experience mechanism
- Elaboration of affecting experience elements
- Selecting combinations of elaborated keywords that are prone to be affected
2. Devisal process of the AIM

Devisal process of the *AIM*

- Modeling of affecting experience mechanism
- Elaboration of affecting experience elements
- Selecting combinations of elaborated keywords that are prone to be affected

*AIM*
Modeling of affecting experience mechanism

2. Devisal process of the AIM

Object

- Painting by a famous artist
- Have been pursuing

Perception (quality)

Self

- Finally get it
- Have been pursuing

Object that affecting

Empirical database (values)

Object that does not affecting

Background information

Heartstrings
Necessary elements for evoking affecting experience

- values
- quality
- experience

have been pursuing
painting by a famous artist
finally get it
2. Devisal process of the AIM

Devisal process of the AIM

- Modeling of affecting experience mechanism
- Elaboration of affecting experience elements
- Selecting combinations of elaborated keywords that are prone to be affected

AIM
Selecting affecting experience elements

2. Devisal process of the AIM

400 real-life affecting experiences
Elaborating affecting experience keywords

2. Devisal process of the AIM

117 affecting experience keywords
2. Devisal process of the AIM

Example of keywords

Values:
- have been pursuing
- have had a special feeling for it
- not expecting much

Quality:
- scarcity
- beauty in nature
- good quality of its material

Experience:
- finally get it
- it was by accident
- broadened my views

Versatile and accessible keywords
2. Devisal process of the AIM

Combination of keywords that are prone to be affected

values

quality

experience

What combination of keywords would evoke affecting experience?
2. Devisal process of the AIM

**Devisal process of the AIM**

- Modeling of affecting experience mechanism
- Elaboration of affecting experience elements
- Selecting combinations of elaborated keywords that are prone to be affected
Allocation each affecting experience keyword

Affecting experience keywords

“0” or “1” was allocated according to whether each keyword is applied to each affecting experience example.

Quantification Theory Type III was employed to figure out the strongly reacting axes.
2. Devisal process of the AIM

Classification of affecting experiences

Cluster analysis to classify affecting experiences.
Selection of keywords representative of each group

Figured out the keywords with a higher appearance ratio.

Three groups of affecting experiences
2. Devisal process of the AIM

Keyword sheet for affecting experience elements
Consideration of idea expansion procedures

Two idea expansion sheets include idea expansion procedures.
3. How to use the AIM
Targeting product to use the AIM:

Car navigation system
3. How to use the AIM

Select keywords:

- values: *have been pursuing*
- quality: *authentic*
- experience: *it was by accident*
Conjure up images:

- **values**: have been pursuing
- **quality**: authentic
- **experience**: it was by accident

**If it’s a car navigation system…**
Create seeds of ideas:

- Information about my secret idol
- Real superstar
- It's displayed by accident

Create a good story by crossing the keywords
Entitle ideas:

Superstar detecting
car navigation system
Develop scenarios:

Michio, who is a big fan of major leaguer Ichiro, is going on a drive in Nagoya. After a while, the car navigation system shows information about “the pork cutlet restaurant where Ichiro frequented when he was a student.” The pork cutlet which developed Ichiro’s strong shape is now available here. Michio forces himself to park the car, and enters the restaurant.
4. Effects of the AIM and its future
Effects of the AIM

1. Efficient development of products with affecting experience
2. High contingency of ideas
3. Visualization of the steps for idea expansion
   - Easier data administration
   - Possible to divide the works of idea expansion
4. Possible to expand ideas from user viewpoints
Future development of the *AIM*

1. Clarification of characteristics of keyword patterns for affecting experiences
2. Idea expansion based on some other emotional experiences
3. Further refinement according to various purposes of its users’
   - Compile a database of expanded ideas
   - How to evaluate the expanded ideas
Thank you!

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