

Master's Thesis
Academic Year 20XX

Practice of Design Thinking Workshop to Develop
“Media Innovator” Leading Creative Society

Graduate School of Media Design,
Keio University

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A Master's Thesis
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MASTER of Media Design

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Abstract of Master's Thesis of Academic Year 20XX

Practice of Design Thinking Workshop to Develop
“Media Innovator” Leading Creative Society

Category: Design

Summary

In recent years, sensors are small enough and their prices are getting lower. Sensors have change to be eccentrically located. The Internet change transfer of large data. Thereby, large scale sensor networks have been constructible.

In this kind of sensor network, we need to consider load balancing, network redundancy and data reliability. Using P2P technology is one of the solutions for load balancing and network redundancy.

In this paper, we introduce how to ensure sensor data reliability on the system. Approach way is detect fault and grant reliability metadata to the sensor data. In fault detection, make a group by location and reliability. This group is used for reduce the processing time. User can use reliability point for select request data. Experimental result shows this approach can grant reliability correctly over 90%.

Keywords:

Design Thinking, Creative Society, Workshop, Innovation, Education

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1.

Introduction

The Graduate School of Media Design (KMD)¹ was established to train talented individuals to work on the global stage building and running new industries for the coming “creative society,” a world in which the driving force of the economy will be creativity rather than productivity or efficiency. “Creativity” is the ability to produce new ideas, expressions, and processes.² These new creations and the activities inspire give rise to an economic base with the power and energy to bring forth innovative technologies and enrich human societies. The work of the individual is paramount in the creative society; consumers lead creative activities. Collaboration is all-important. Individuals innovate, mutually recognizing a diversity of values and making personal, imaginative contributions that collectively result in extraordinary achievements and capacities.

The way in which we produce value from cultural and social resources will change in the creative society. Advanced digital technology provides a basis from which to redistribute resources across the globe, and in doing so, restores the creativity of human beings. Technological progress produces value from creative activities in everyday life and increases the number of creative individuals, who produce value through their activities. As networks expand, the barriers to redistribution of cultural and social resources disappear, enabling resources to be shared freely. Creativity will be a valuable activity within our day-to-day lives, and people will fully embrace the ability to share and to express themselves. We are currently witnessing numerous events that hint at the new economic activities to come. Indeed, the fostering of the creative industries and cultural industries

that use creativity as a source of economic activity has, in many countries, become a matter of national strategy.

At the Graduate School of Media Design, we call these future leaders “media innovators.” We implement projects that create media, content, and services as international collaborations among industry, academia and government, and in the process we train the media innovators of tomorrow. The School features a state-of-the-art communications environment and a broad, collaborative network with some of the world’s foremost universities. The main campus is in Hiyoshi with satellites in Osaka and Singapore as well. Both Japanese and English are our official languages and we welcome students from around the globe. Together with our highly experienced and insightful faculty members, students learn the skills they need to lead the creative society in this diverse community.

Media innovators harmonize and integrate skills in the four basic areas of design creativity, technology creativity, management creativity and policy creativity. In addition, the curriculums are designed so that each student masters advanced professional skills in one or two specialized areas. It also features a practical program that we call “Real Projects.” These are intensely collaborative projects in which students work with media innovators who possess different skills than they have to address problems that impact their societies and communities, and in the process, learn how to articulate a clear vision and cooperate to solve the real world problems. Our objective at the Graduate School of Media Design is to develop leaders who will be able to combine the four creativities of design, technology, management, and policy to drive projects on the global stage.

Through “Real Projects”, KMD creates new media that go beyond the parameters of conventional mass media. This fusion of technology and media has the potential to significantly reshape our everyday lives. The content extends to physical artifacts and environment, and it ultimately influences our social systems. We learn and practice the five skills of fieldwork, strategic planning, brainstorming, prototyping, execution, and verification as we develop, verify, commercialize and

establish companies and organizations to exploit innovative content and technologies. As we do so, we emphasize the global impact of our work in areas such as standardization and institutional reform.

The Graduate School of Media Design looks forward to receiving applications from potential students who are ambitious and passionate about becoming media innovators and are eager to gain the global perspective needed of the future leaders of the creative society.

How to refer documents

This style is based on Chicago Manual of Style³ with Harvard Bibtex Citation style. Please see the document as below. <http://tex.loria.fr/bibdex/harvard.pdf>

Notes

- 1 <http://www.kmd.keio.ac.jp>
- 2 Inakage, Masa (2007) " Media design aesthetics: emotional and entertaining experience design for the ubiquitous society, " in *Proceedings of the 2nd international conference on Digital interactive media in entertainment and arts, DIMEA '07*, pp. 1–1, New York, NY, USA: ACM.(Inakage 2007)
- 3 <http://www.chicagomanualofstyle.org>

2.

Related Works

2.1. Shifting to Creative Society

A WHOLE NEW MIND

Daniel Pink¹ said that the future belongs to a different kind of person with a different kind of mind: artists, inventors, storytellers-creative and holistic "right-brain" thinkers whose abilities mark the fault line between who gets ahead and who doesn't. Drawing on research from around the world, Pink outlines the six fundamentally human abilities that are absolute essentials for professional success and personal fulfillment-and reveals how to master them. A Whole New Mind takes readers to a daring new place, and a provocative and necessary new way of thinking about a future that's already here.

2.2. Design Thinking Workshop

IDEO

We also ate rice ² and bread.

d-school

Also Pink³ said something about creativity ⁴

SDM

Recently SDM is also conducting design thinking workshop in the Collaboration Complex⁵. But *ias Tsukuba* (Figure 2.1)⁶ has not conducted design thinking workshop yet.



Figure 2.1: Shopping center *iasTsukuba*

Table 2.1: state of your mind

when	where	who	what
Bad	Good	Very Good	Good Good

Notes

- 1 Pink, Daniel H. (2006) *A Whole New Mind: Why Right-Brainers Will Rule the Future: Riverhead Trade* (Pink 2006)
- 2 Tokuhisa, Satoru, Takaaki Ishizawa, Yoshimasa Niwa, Kenji Kasuya, Atsuro Ueki, Sho Hashimoto, Kazuhiko Koriyama, and Masa Inakage (2009) “ xtel: a development environment to support rapid prototyping of “ ubiquitous content”, ” in *Proceedings of the 3rd International Conference on Tangible and Embedded Interaction*, TEI '09, pp. 323–330,

Cambridge, United Kingdom: ACM. (Tokuhisa, Ishizawa, Niwa, Kasuya, Ueki, Hashimoto, Koriyama and Inakage 2009)

3 Pink (2006)

4 Sugiura, Lee, Ogata, Withana, Makino, Sakamoto, Inami and Igarashi (2012) “ PINOKY: a ring that animates your plush toys, ” in *Proceedings of the 2012 ACM annual conference on Human Factors in Computing Systems, CHI '12*, pp. 725–734, New York, NY, USA: ACM.

Uriu, Namai, Tokuhisa, Kashiwagi, Inami and Okude (2012) “ panavi: recipe medium with a sensors- embedded pan for domestic users to master professional culinary arts, ” in *Proceedings of the 2012 ACM annual conference on Human Factors in Computing Systems, CHI '12*, pp. 129–138, New York, NY, USA: ACM.

These creative articles written by KMD researchers were accepted by CHI '12 conference paper.

5 Graduate School of System Design and Management, Keio University
<http://www.sdm.keio.ac.jp/>

6 *iiias Tsukuba* is one of largest shopping center located in Tsukuba city. <http://tsukuba.iiias.jp>

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I am indebt to Professor Naohito Okude for guiding not only about research but with many aspects of my life.

References

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- Pink, Daniel H. (2006) *A Whole New Mind: Why Right-Brainers Will Rule the Future*: Riverhead Trade.
- Sugiura, Yuta, Calista Lee, Masayasu Ogata, Anusha Withana, Yasutoshi Makino, Daisuke Sakamoto, Masahiko Inami, and Takeo Igarashi (2012) “PINOKY: a ring that animates your plush toys,” in *Proceedings of the 2012 ACM annual conference on Human Factors in Computing Systems*, CHI '12, pp. 725–734, New York, NY, USA: ACM.
- Tokuhisa, Satoru, Takaaki Ishizawa, Yoshimasa Niwa, Kenji Kasuya, Atsuro Ueki, Sho Hashimoto, Kazuhiko Koriyama, and Masa Inakage (2009) “xtel: a development environment to support rapid prototyping of “ubiquitous content”,” in *Proceedings of the 3rd International Conference on Tangible and Embedded Interaction*, TEI '09, pp. 323–330, New York, NY, USA: ACM.
- Uriu, Daisuke, Mizuki Namai, Satoru Tokuhisa, Ryo Kashiwagi, Masahiko Inami, and Naohito Okude (2012) “panavi: recipe medium with a sensors-embedded pan for domestic users to master professional culinary arts,” in *Proceedings of the 2012 ACM annual conference on Human Factors in Computing Systems*, CHI '12, pp. 129–138, New York, NY, USA: ACM.

Appendix

A. Example Codes

```
<config>
<system>
<class>DefaultCompareClass</class>
</system>
<evaluate>
<compare_single_observation_point>
<function method="compareMax" recital="Temperature maximum threshold value"
type="Temperature"> <argument class="double">40.8</argument>
</function>
<function method="compareMin" recital="Temperature minimum threshold value"
type="Temperature"> <argument class="double">-41.0</argument>
</function>

<function method="compareChange" recital="Temperature change amount error"
type="Temperature"> <argument class="double">17.0</argument>
<argument class="int">1</argument>
</function>

<function method="compareConstant" recital="Temperature constant error"
type="Temperature"> <argument class="int">1</argument>
</function>
```

```
</compare_single_observation_point>
```

```
<compare_neighbor>
```

```
<function method="compareNeighbor" recital="Temperature neighbor error"
```

```
type="Temperature"> <argument class="double">2.0</argument>
```

```
</function>
```

```
</compare_neighbor>
```

```
<compare_wide_area>
```

```
<function method="compareWide" recital="RainFall wide area error"
```

```
type="RainFall"> <argument class="double">10.0</argument>
```

```
</function>
```

```
</compare_wide_area>
```

```
</evaluate>
```

```
</config>
```