Interaction Between Client and Design Consultant: The Stance of Client to Design Consultant and Its Influence on the Design Process

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• Research framework
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## Introduction

**Background**: Design competency

| Large Cap/ Large Proprietary Company | Small and Medium size Enterprise (SME) |
Introduction

Background: Design competency

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<tr>
<th>Large Cap/Large Proprietary Company</th>
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<td>▪ Operate their own industrial and engineering design teams</td>
<td>▪ Utilize external designers to gain competitive advantages as a business strategy</td>
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Introduction

Background: Relationship between Designer and Client (SME)
Introduction

Background: Relationship between Designer and Client (SME)
Introduction

Research aims

- What is the Relationship between client and designer in product development
- How does this relationship influence design process/outcome
Research Framework

How to measure the relationship between Clients and Designers/ design team?

- Relationship between designer-client: **Contract relationship**

→ **How client influences the design process and its outcomes?**
Research Framework

How to measure the relationship between Clients and Designers/design team?

- Client’s participation on design process

  Does client participate in the design process?

  - Yes
    - **Active coupling**
      - Client actively participate with the design team
  
  - No
    - **Passive coupling**
      - Client doesn’t participate with the design team

- Gericke and Maier (2011)
Research Framework

How to measure the relationship between Clients and Designers/ design team?

- Client’s participation on design process

“How client makes influence to design team?”

Does client participate in the design process?

Active coupling

Client actively participate with the design team

Yes

Passive coupling

Client doesn’t participate with the design team

No

- Gericke and Maier (2011)
### Research Framework

How to measure the relationship between Clients and Designers/ design team?

- **Client’s STANCE about design team:**

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<td>• Clients express ideas or intentions continuously to exercise their influence over the design team</td>
<td>• Clients accept and recognize the decisions made by the design team</td>
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Ex)
- • Reject design proposal
- • Provide further information to fulfill their intention
- • Put forward their own draft to modify and revise the design elements

Ex)
- • Accept design proposal
How to measure the relationship between Clients and Designers/ design team?

- Client’s **STANCE** about design team:
Research Framework

How to measure the relationship between Clients and Designers/design team?

- Client’s STANCE about design team:
Research Framework

How to measure the relationship between Clients and Designers/ design team?

- Client’s STANCE about design team:

  - Influence of client stance on design process and its outcome
Case Studies and Analysis

- Design Project Profiles
  - A joint collaboration with the design team of UNIST

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<th>Year of projects</th>
<th>2014 - 2016</th>
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<tr>
<td>No. of enterprises</td>
<td>Three</td>
</tr>
<tr>
<td>Type of enterprise</td>
<td>Technology-based (Inventor CEO)</td>
</tr>
<tr>
<td>No. of employees per enterprise</td>
<td>Less or equal to five</td>
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Case Studies and Analysis

Design Project 1: a recliner chair

- Client’s request
  “Design a recliner chair”
  - With the drawings, patent specifications, and test prototypes
Case Studies and Analysis

Design Project 1: a recliner chair

- Initiating the interaction and communication
- Analyzed structure of drawings and test prototype
- Conducted market research
- Reconstructed the chair with 3D CAD for development

Expressive stance

Receptive stance
Case Studies and Analysis

Design Project 1: a recliner chair

• Client rejected a new mechanism that the design team suggested – **Expressive stance**
• Reason: “The patented technology should be applied to create differentiation”

Expressive stance

Receptive stance

Project starts

Proposing mechanism modification (rejected)

Proposing three concepts
Type A (accepted)
Type B & C (rejected)

Detail design

Finalized design
Case Studies and Analysis

Design Project 1: a recliner chair

- Design team preferred Type B and C based on the market research, but they were rejected.
- Client adopted Type A to suit their preference
Case Studies and Analysis

Design Project 1: a recliner chair

- Expressive stance
- Receptive stance

1. Project starts
2. Proposing mechanism modification (rejected)
3. Detail design
4. Conducted detail design of structure
5. Finalized design
6. Proposing three concepts
   - Type A (accepted)
   - Type B & C (rejected)

- Conducted detail design of structure
- Finalized design
Case Studies and Analysis

Design Project 1: a recliner chair  

“Client’s stance?”

- The client intervenes in the overall process (Expressive stance)
- Expressive stance restricts design team’s capabilities: client didn’t agree the design team’s opinion and design solution

- Expressive stance restricts design team’s capabilities: client didn’t agree the design team’s opinion and design solution
Case Studies and Analysis

Design Project 2: a Multi-functional baby carrier

- **Client’s request**
  
  “Design a Baby carrier”
  - With the patent specifications

- **Baby carrier** that can be transformed into a wooden horse rider toy
  *The early prototype was made of wood by the client (inventor)*
Case Studies and Analysis

Design Project 2: a Multi-functional baby carrier

- Proposing early concept
- Development of concept
- Acceptance of the proposal
- Detail design
- Finalized design

Early structure was naïve as a commercial product: Design team proposed new design concept (more comfort, safe, easy to use)

- Client initially responded negatively (Expressive stance)
Case Studies and Analysis
Design Project 2: a Multi-functional baby carrier

The stance of client was changed
- His colleague trusted design team’s grounds (test studies, product reviews and market research) and convince him.
- The client accepted the idea (Expressive stance ➤ Receptive stance)
Case Studies and Analysis

Design Project 2: a Multi-functional baby carrier

- Project starts
- Proposing early concept
- Acceptance of the proposal
- Development of concept
- Detail design
- Finalized design

- With concept design, conducted concept improvement and detail design
- Finalized the design as a product
Case Studies and Analysis

Design Project 2: a Multi-functional baby carrier

• The designer’s ability can be utilized when the client trusts the design team. (Receptive stance)
Case Studies and Analysis
Design Project 3: A radiation shielding Garment

- Client’s request

“Design a Radiation shielding garment”
- Product design based on the client’s patent

- Developed new radiation shielding garment for nuclear power plants’ workers
- Used the shielding materials that the client developed, Flexible, easy to fabricate, high shielding performance against radiation
Case Studies and Analysis

Design Project 3: A radiation shielding Garment

- Development of early concept
- Demand by client: Change the direction of development
- Development of new concept
- Detail design
- Finalized design

- Developed concept of shielding garments
- Module design: increased usability and cost effectiveness
- Wear a higher level module depending on the radiation dose
Case Studies and Analysis

Design Project 3: A radiation shielding Garment

- Client requested for changes in design direction: to develop medical equipment (Expressive stance)
- Client acknowledged potential merit in medical equipment market
Case Studies and Analysis

Design Project 3: A radiation shielding Garment

- Expressive stance
- Receptive stance

Project starts

Development of early concept

Demand by client: Change the direction of development

Development of new concept

Detail design

Finalized design

- Detail design and Prototyping
- Finalized design
The client took an **expressive stance**: the potential in the medical market.

**Receptive stance** in development process: the design team ensure autonomous activity.
# Findings and Conclusions

Insights from the case studies

The effects of the client's stance

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Discussion

Issues and Further study

• Identifies a joint collaboration between SMEs and design team
  - For a company that has design competence, the relationship can be different

• Focuses on the relationship between clients and the design team
  - Any relationship between a superiors and design team in a product development
  - Interactions between a number of teams in product development projects

• How to convince the client? (expressive stance to receptive stance)
Thank you!
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