Art thinking beyond Design thinking

MAZDA Design: Car as Art

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Abstract

This research proposes the importance of art-thinking as compared with design-thinking, using a case study of Mazda. The Japanese automobile firm has been introducing a series of successful new products in the past few years, featuring art-thinking approach. Mazda publicly declares that "the car is art," and has been winning numerous design awards. In our definition, design-thinking tries to meet specific customer needs, while art-thinking pursues more fundamental values.

There are two critical differences between the two. First, art-thinking focuses more on fundamental values than specific customer needs. Artists try to express their emotions and beliefs. Second, with art-thinking, designers would not compromise themselves easily, partially because they pursue internal expression.

The purpose of this paper is to develop a theory of art-thinking and to investigate its actual application with in-depth study of Mazda. Design team at Mazda led by a charismatic design director, Ikuo Maeda, has been working on car design motivated by art-thinking. We have interviewed five chief designers and Ikuo Maeda to achieve these research purposes. We believe that this paper proposes the importance of a concept of art-thinking for social innovation, using empirical evidences from Mazda case.

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Outlines

1. Purpose
2. Theory: “Art Thinking” and “Mass Craftsmanship”
3. Case: MAZDA Design
4. Findings from the Case
5. Conclusion and Implications

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1. Purpose of our Presentation

To develop a theory of art-thinking and to investigate its actual application with in-depth study of Mazda.

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Contents

In Our presentation,

1. We propose theory of **"Art Thinking"** approach in product development.

2. Regarding technology, we also propose a concept of **"Mass Craftsmanship"**

→Go beyond existing theory of **"Mass Customization"**（Pine 1992）.

3. As a conclusion, we discuss advantages of **"Art Thinking"** approach compared to **Design Thinking**.

We also discuss conditions with which art-thinking approach could be successfully implemented.

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2.1 Theory of Art Thinking

A theory of Art Thinking approach, as opposed to Design Thinking approach

	Art Thinking	Design Thinking
Purpose	Expression of creators' ideas, emotions, beliefs and philosophy (Propose new customer needs)	Development of necessary functions (Meeting customer needs)
Technology	Mass Craftsmanship (Handmade authenticity-oriented)	Mass Customization (Cost Efficiency and utilizing IT-oriented)
Process	Try to achieve own philosophy (Limitless trial and error) Would not compromise themselves easily, partially because of pursuit the absolute.	Try to please customers (Done when customers are satisfied)
Value	Pursues more fundamental, especially, symbolic, authentic, and Spiritual values (Throsby 2001)	Pursues short term economic and social values

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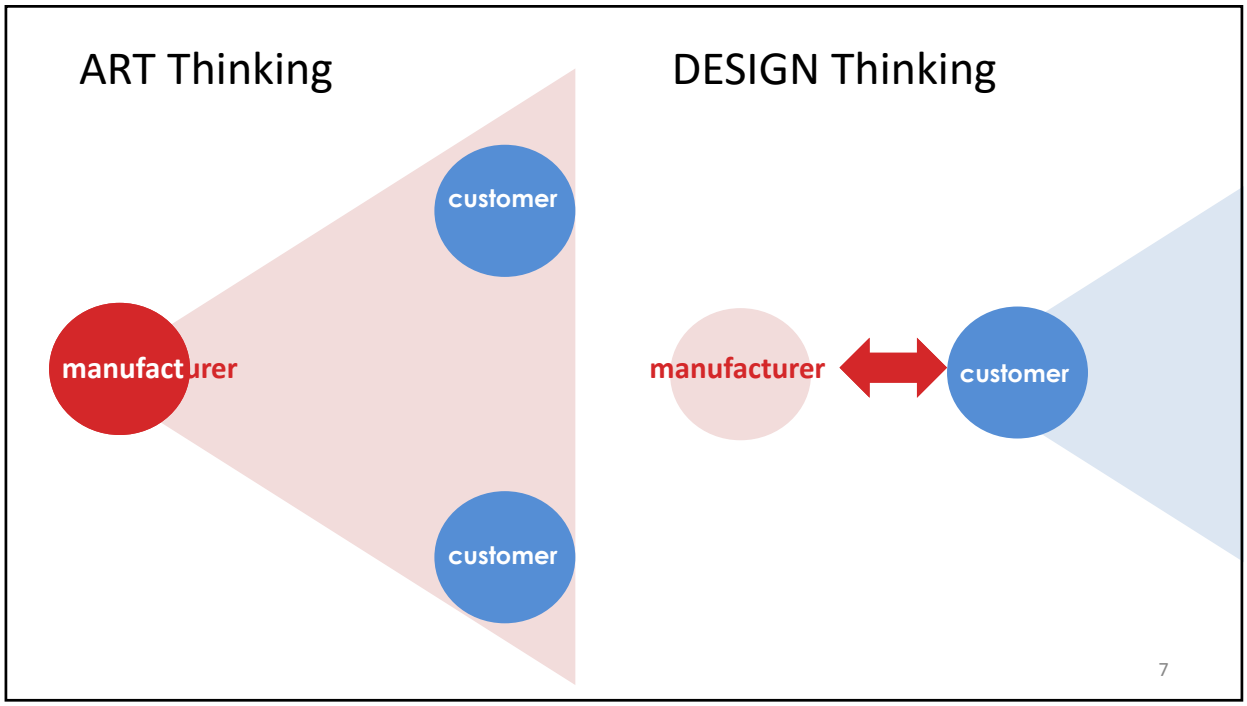


2.2 Mass Craftsmanship

→Producing goods and services using craftsperson's skill with his/ her spirit as expression or proposal of new customer needs with near mass production efficiency.

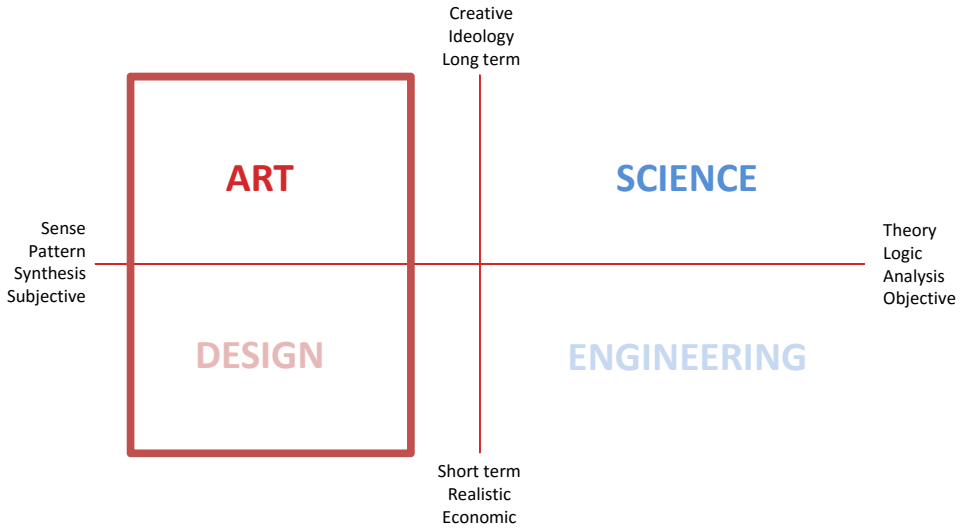
→Not individually customized but attract customers offering high crafted quality of the products.

Mass Customization

"The low-cost, high-volume, efficient production of individually customized offerings"

Pine, Joseph (1992) "Mass Customization The New Frontier in Business Competition"

2.3 Our Grand Framework



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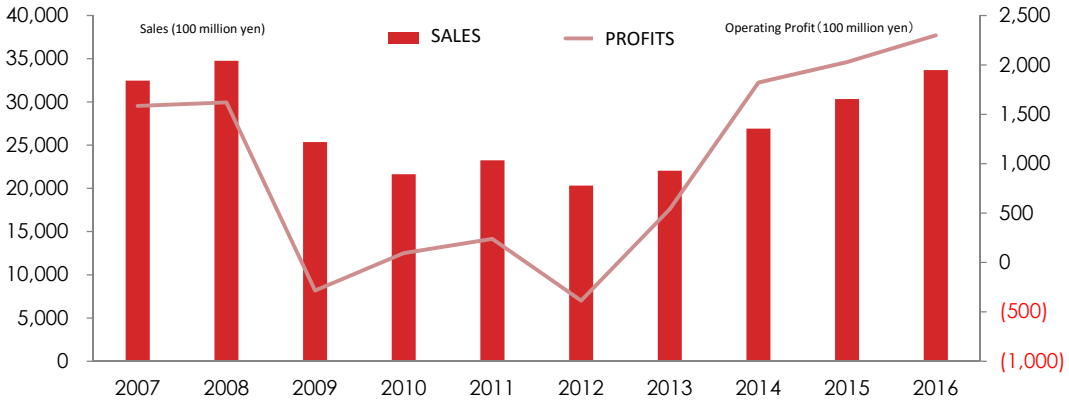
3.1 About MAZDA



MAZDA's Financial Performance

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Design Division at MAZDA

Design Divisions of MAZDA

- Design Development Promotion Group
- Advanced Design Studio
- Production Design Studio
- Design Modeling Studio

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3.2 Interview List

Name	Job title	Date of interviews
Mr. Ikuo Maeda	Executive Officer, Design Director	05/12/2013, 31/03/2015
Mr. Satoshi Tamatani	Chief Designer of MAZDA 6	31/03/2015
Mr. Masashi Nakayama	Chief Designer of CX5 and MX5	27/07/2015
Mr. Ryo Yanagisawa	Chief Designer of MAZDA2	27/07/2015
Mr. Yoichi Matsuzawa	Chief designer of CX3	27/07/2015
Mr. Yukiharu Asano	Master chief modeler	27/07/2015
Mr. Nobuhiro Yamamoto	Program Manager, Product Division	27/07/2015
Mr. Munenori Yamaguchi	Project manager, Product division	01/04/2015
Mr. Mitsuru Uematsu	Staff Manager, Hiroshima Plant	27/07/2015

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AWARDS in Japan and International competitions

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4.1 Findings 1
Strong Leadership and Concept

IKUO MAEDA

1959 Born in Hiroshima
1983 Join MAZDA, starting his career in product planning division
1987 Start working as a designer in California design Studio (-91)
1999 Ford's Track Design Studio as a chief designer
2001 Returned to Japan, chief designer for RX-8
2007 Chief designer for DEMIO
2009 Director of Design Division

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Experience

Starting career not as designer but a member of product planning division

-Unique career for car designers in Japan

Motivation

Pursuing global and historical value without compromising

-Changing image of Japanese & MAZDA cars

Leadership

His leadership can be found in his early 40s when he persuaded top managers to delay schedule of sales for better design. -Big efforts and challenges for better products

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MAZDA's

Design concept

1. MAZDA's "Soul of Motion" design embodies the dynamic beauty of wild life.
2. Design without passion won't imbue a car with soul.
3. Expert Craftsmanship that breathes life into cars.

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Pursuing aesthetics of dynamic and soulful movement of wild animals

Running = Moving =Driving / Mechanical but Lively

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Pursuing aesthetics inspired by Japanese traditional crafts

Joint study regarding expression of "KODO" with Japanese traditional artists

Introducing Japanese aesthetics and sensitivities to the world

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4.2 Findings 2: Mass Craftsmanship

- High level integration of "craftsmanship" and mass production
  --- Contemporary "Arts and Crafts movement" in manufacturers

Arts and Crafts movement =One of the most influential, profound and far-reaching design movements of modern times.

- High level integration of Artistic expression and engineering
  --- The Work of Art in Mass Production

Walter Benjamin, *"The work of art in the age of mechanical reproduction"*

- High level integration of Emotional expression and efficiency
  --- "Cultural Value" of Mechanics

David Throsby (2001) *"Economics and Culture"*

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Clay Modelers as Artists and Craftsman

・Clay modelers in Design Modeling Studio work with designers in production design studio for high level integration of artistic craftsmanship and mass production.

・Clay modelers are not the supporters of designers but identified as one of designers.

・Some clay modelers are educated as artistic designers

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The work of art by clay modelers

- Sensuous beauty created by human touch
- Creating space with a sense of unity through repeated fine-tuning

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Clay modelers also create **"Objet"** to discover and communicate the ideal artistic forms and surfaces among designers and engineers.

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4.3 Findings 3: Supports from Engineers

Big efforts for dynamic and stabled proportions by changing system layout

MX-5 (MIATA) case

- Lower hood height
- Windshield moved back by 3 inches
- Widen axle tracks

  New component design and layout as well as coordination among engine, transmission, suspension, brakes, air conditioner, radiator, etc.

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Supports from Process Engineers

Artistic craftsmanship to produce metal models beyond advanced engineering

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5.1 Conclusion and Implication 1

Strong Leadership and concept

Talented leaders who can create and propose customer values beyond customer needs

At Mazda there are;

- Super leader: Ikuo Maeda
- Talented Chief Designers
- Strong Concept *"Kodo: Soul of Motion"*

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5.2 Conclusion and Implication 2

Mass Craftsmanship

Technologies for mass-craftsmanship are successfully implemented supported by clay modelers, designers and engineers

At Mazda there are;

- Artistic clay modelers, Interior designers, expert fabricator, Master Painter
- Excellent process engineers who are motivated to achieve artistic design
- High-level technologies and passionate engineers
- Experts of mold manufacturing technologies & Paint technologies

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5.3 Conclusion and Implication 3
Go beyond "Perfection"

Limitless trial and error efforts can be implemented

At Mazda;

Thanks to Maeda's leadership, designers do not stop working, even when customers are satisfied, to achieve their own philosophy.

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5.4 Conclusion and Implication 4
Art thinking approach as Advanced Strategy

Art-thinking is effective when some conditions are met (when firms have enough capabilities).

We have found some key conditions and capabilities at MAZDA as discussed. But, if firms do not have these capabilities, design thinking approach may be more appropriate, because design thinking responds directly to customer needs.

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