The HuValue Tool for Product Design

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Eindhoven University of Technology – TU/e
The Netherlands
2020
Cultural Computing:

Attitudes
Norms
Values
Beliefs
Etc.

conscious


Attitudes
Norms
Values
Beliefs
Etc.

unconscious


“It is not the consciousness of men that determines their being, but, on the contrary, their social being that determines their consciousness.”

Karl MARX (1818-1883)
Big Questions:

How to design product/service systems based on human values?

and

How to convey these human values through their usage?
PhD Scholarship 2013-2018: Ministry of Science, Research and Technology in the Islamic Republic of Iran

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Professor of Constructive Design Research

Mathias FUNK
Associate Professor of Design with and for Data and Systems Behavior

PhD Thesis, 2018
Step-1: Human Values

Human Values Timeline (1890-2004)

Christopher Peterson & Martin E. P. Seligman
- Designed the Values in Action (VIA) Classification of Character Strengths.
- Created the Values in Action Inventory of Strengths (VIA-IS)

Shalom H. Schwartz
- Developed Basic Human Values Theory and Cultural Value Orientations Theory.
- Designed Theoretical model of relations among ten motivational types of value.
- Created Schwartz Value Survey (SVS) to study individual differences in value priorities.

Ronald Inglehart
- Director of the World Value Survey (WVS) to study value change in Global Perspective.

Geert Hofstede
- Created Values Survey Module (VSM) for comparing culturally influenced values and sentiments of similar respondents from two or more countries.
- Developed Hofstede’s Cultural Dimensions theory as a framework for cross-cultural communication.

Milton Rokeach
- Formulated the nature of values.
- Created the Rokeach Value Survey (RVS) for measuring personal and social values.

Robin Williams
- Identified Core American Values in 15 items.

Robert S. Hartman
- Created the Hartman Value Profile (HVP), a value-metric instrument, to measure an individual person’s propensity and capacity to value.

William A. Scott
- Created Personal Value Scales to measure personal values or moral ideals.
Step-2: Value Framework Design

Herman Dooyeweerd (7 October 1894, Amsterdam – 12 February 1977, Amsterdam) was a professor of law and jurisprudence at the Vrije Universiteit, Amsterdam from 1926 to 1965.

Step-3: Value Categories

Final Grouping (9 categories):

Figure 4-13: Labels and icons designed for the value grouping layout-4
Table 4.1: The HuValue framework including four themes, nine value groups, five key values for each value group in addition extra values. The rows are sorted based on themes alphabetically. Key values are sorted based on empirical ranking, and extra values are sorted alphabetically.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Value Group</th>
<th>Key value</th>
<th>Extra values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Meaning in life (a purpose in life)</td>
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<td></td>
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<td>Inner harmony (at peace with myself)</td>
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<td>Devout (holding to religious faith and belief)</td>
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<td></td>
<td></td>
<td>Virtue (Purity)</td>
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<tr>
<td>Nature</td>
<td>Ecology (The quality of caring for nature)</td>
<td>A world at peace (free of war and conflict)</td>
<td>Appreciation of beauty and excellence, Beauty, Care and concern for the environment, Eco-Friendly, Harmony with Nature, Magnificence, Sustainability</td>
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<td></td>
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<td>Unity with nature (fitting into nature)</td>
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<td>Protecting the environment (preserving nature)</td>
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<td>A world of beauty (beauty of nature and the arts)</td>
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<td>Waste avoidance (time, natural sources, opportunities, etc.)</td>
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<td></td>
<td>Responsible (dependable, reliable)</td>
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<td></td>
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<td>Self-discipline (self-restraint, resistance to temptation)</td>
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<td>Self-control</td>
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<td>Self-regulation</td>
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<td></td>
<td>Personal development (The quality of developing your abilities)</td>
<td>Wisdom (a mature understanding of life)</td>
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<td></td>
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<td>Intelligent (logical, thinking)</td>
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<td></td>
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<td>Independent (self-reliant, self-sufficient)</td>
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<td>Choosing own goals (selecting own purposes)</td>
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<td>Creativity (uniqueness, imagination)</td>
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<td></td>
<td>Pleasure (The quality of enjoying something)</td>
<td>Enjoying life (enjoying food, sex, leisure, etc.)</td>
<td>Cheerful, Effortlessness, Fun, Hedonism, Humour, Imaginative, Playfulness, Simplicity, Stimulation, Teasing, Zest.</td>
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<td></td>
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<td>Pleasure (gratification of desires)</td>
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<td>A varied life (filled with challenge, novelty, and change)</td>
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<td>An exciting life (stimulating experiences)</td>
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<td>Material comfort</td>
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<tr>
<td>Theme</td>
<td>Value Group</td>
<td>Key value</td>
<td>Extra values</td>
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<tr>
<td>Carefulness (The quality of caring for others)</td>
<td>Honest (genuine, sincere)</td>
<td>Altruism, Benevolence, Care and concern for others, Carefulness, Compassion, Courtesy, Empathy, Generosity, Goodness, Gratitude, Humanity, Humble, Integrity, Modesty, Moral, Patience, Philanthropy, Politeness, Selflessness, Temperance.</td>
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<td>Kindness (cordiality, tenderness)</td>
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<td></td>
<td>Loyal (faithful to my friends, group)</td>
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<td></td>
<td>Forgiving (willing to pardon others)</td>
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<td></td>
<td>Helpful (working for the welfare of others)</td>
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<td>Equality (equal opportunity for all)</td>
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<td>Social justice (correcting injustice, care for the weak)</td>
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<td>National security (protection of my nation from enemies)</td>
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<td></td>
<td>Social order (stability of society)</td>
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<tr>
<td>Society</td>
<td>Respect for others (The quality of connecting to others)</td>
<td>Healthy (not being sick physically or mentally)</td>
<td>Accepting my portion in life, Affection, Being together, Clean, Collective life, Conformity, Connectedness, Culture, Customary, Detachment, Individualism, Love, Moderate, Obedient, Privacy, Reciprocation of favours, Respect for tradition, Sense of belonging, Social intelligence, Social skills, Solidarity, Solitude, Teamwork, Tradition, Trust, Universalism.</td>
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<td>Family Security (safety for loved ones)</td>
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<td>True friendship (close, supportive friends)</td>
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<td>Honouring of parents and elders (showing respect)</td>
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<td>Mature love (deep emotional and spiritual intimacy)</td>
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<td>Successful (achieving goals)</td>
<td>Achievement, Authority, Competition, Fame, Leadership, Perfection, Preserving my public image, Richness, Sense of accomplishment, Social power, Status, Superiority, Uniqueness.</td>
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<td>Ambitious (hardworking, aspiring)</td>
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<td></td>
<td>Wealth (material possessions, money)</td>
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<td></td>
<td>Social recognition (respect, approval by others)</td>
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<td>Social power (control over others, dominance)</td>
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Step-4: Value Cards

**Carefulness**

This group is about: The quality of caring for others

Key values:
- **Honest**: (genuine, sincere)
- **Kindness**: (cordiality, tenderness)
- **Loyal**: (faithful to my friends, group)
- **Helpful**: (working for the welfare of others)

More values and related words:
- Moral, Humanity, Benevolence,公益性, Temperness, Gratitude, Considerate, Patience, Wisdom, Umbrella, Fairness, Modesty, Carefulness, Forgiving, Insights, Compassion, Empathy, Courtesy, Care and concern for others, Goodness

**Ecology**

This group is about: The quality of caring for nature

Key values:
- **A world at peace** (free of war and conflict)
- **Unity with nature** (fitting into nature)
- **Protecting the environment** (preserving nature)
- **A world of beauty** (beauty of nature and the arts)
- **Waste avoidance** (time, natural sources, opportunities, etc.)

More values and related words:
- Care and concern for the environment, Eco-Friendly, Sustainability, Harmony, Beauty, Magnificence, Appreciation, attitude and beauty and excellence

**Justice**

This group is about: The quality of treating fair and just

Key values:
- **Freedom** (freedom of action and thought)
- **Equality** (equal opportunity for all)
- **Social justice** (correcting injustice, care for the weak)
- **National security** (protection of my nation from enemies)
- **Social order** (stability of society)

More values and related words:
- Fairness, Democracy, Legal, Political, Security, order, Robust, Intellectual, Lawfulness

**Meaningfulness**

This group is about: The quality of searching for meaning in life

Key values:
- **A spiritual life** (emphasis on spiritual not material matters)
- **Meaning in life** (a purpose or life)
- **Inner harmony** (at peace with myself)
- **Devout** (holding to religious faith and belief)
- **Virtue, Piety**

More values and related words:
- Meaningfulness, Transcendence, Wholeness, Truth, Hope, Salvation, Forgiveness, Hope, Honest, Sympathy, Meaning of life, Inner peace, Tranquility, Chastity

**Personal development**

This group is about: The quality of developing your abilities

Key values:
- **Wisdom** (a mature understanding of life)
- **Intelligent** (logical, thinking)
- **Independent** (self-reliant, self-sufficient)
- **Choosing own goals** (seeking own purposes)
- **Creativity** (uniqueness, imagination)

More values and related words:

**Pleasure**

This group is about: The quality of enjoying something

Key values:
- **Enjoying life** (enjoying food, sex, Wisdom, Pleasure (fulfillment of desires)
- **A varied life** (filled with challenges, novel)
- **An exciting life** (stimulating, exciting, experience)
- **Material comfort**

More values and related words:
- Hedonism, Simulation, Playfulness, Simple, Imaginative, zest, Humor, Cheerful, Trend

**Respect for oneself**

This group is about: The quality of regulating yourself

Key values:
- **Self-control** (belief in one's own worth)
- **Responsible** (accountable, reliable)
- **Self-discipline** (self-restraint, to temper)
- **Self-regulation**

More values and related words:
- Self-awareness

**Respect for others**

This group is about: The quality of connecting to others

Key values:
- **Healthy** (not being sick physically or mentally)
- **Ambitious** (working together, aspiring)
- **Wealth** (material possessions, money)
- **Social recognition** (respect, approval by others)
- **Influential** (having an impact on people and events)

More values and related words:
- Love, Sense of belonging, Team work, Social skills, Social interaction, Community, Friendship, Culture, Customer, Membership, Collaboration, Help, Help together, Collaboration, Pluralism, Solidarity, Respect, Acknowledging one's position in the organization of society, Obedient, Respect for tradition
Step-5: HuValue

Using the tool for seeing anything (object/subject/situation) from a human value point of view
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HuValue

Using the tool for defining designer’s vision or identifying the user and other stakeholders
Using the tool as criteria for evaluating existing products or new concepts
Three main conclusions can be drawn:

- The HuValue framework, a comprehensive value framework to widen designers’ view on human values.
- The HuValue tool, a card-based design tool grounded on the value framework to facilitate using the framework in practice.
- The HuValue perspective, a design approach to apply the tool in a design process for seeing, analysing, ideating and evaluating from a human value point of view.


Thank you for your attention.

A door goes open to a new world…

HuValue tool can be purchased via https://huvaluetool.com/