Quantifying the relation between students' values and their educational choices (Beyond means – end chains)

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Abstract

The laddering method is used for interviewing students in order to predict their "deeper" goals for their life. The answers of the student are used to create the Attribute – Consequences – Values (ACV) diagram, and from it we move to the Hierarchical Value Map (HVM), quantifying the chains all the students' give to the interviewers with their answers. Knowing the set of values for each student group we can focus on their career, providing and promoting the appropriate courses for their career development.

Key words: means - end chains, laddering method, hierarchical value map (HVM)

I. THE METHOD

Assumptions

Products we buy are only **means** that serve deeper **ends**. The **ultimate end** to a consumer is the satisfaction of his/her **values**. There is always a **chain** that connects the means to the ends. Revealing the means-ends chains of consumers **binds products to values**.

What we do

A standard way to **reveal** those chains is **laddering**. Laddering consists in **interviews** where the interviewer asks the consumer questions about the product.

Laddering

Initially the consumer is asked to identify the attributes of the product. Let **A** be an **attribute** the consumer identifies. Then the interviewer asks: "why is **A** important to you?". Typically the consumers reveal the **consequences** of the attribute to the function of the product.

Attributes-Consequences-Values

If we call a consequence C, the interviewer asks: "why is C important to you?" The consumers are **probed** to reveal **deeper consequences** of the attributes. The interviewee finally reveals the value(s) that the consequences serve. Let's call a value V.

Quantification

Now we have revealed an **A-C-V chain**. Working on the ACV chains that the consumers reveal we **aggregate** their answers to diagrams which are called **Hierarchical Value Maps (HVM)**. Using the **HVM** we can have the relation of the appeal of the product to consumers' values.

· Results put to work

This aggregation we described offers marketing strategists a path to consumers' hearts. Now they can produce **advertisements** that aim to their hearts. They can also aim at different **groups of consumers**. **End of research**. (or so they say).

- But is it really the end?
- Rethinking a little

Each one of us has certain values. If the assumptions of the paradigm are correct, then persons with the same values will buy the same products. Our values define our consumption models. Is this conclusion plausible?

Checking the conclusion

We conducted a research in a **medium size store selling electrical and electronic devices** (Kotsovolos). We asked 100 persons if they had bought certain **gadgets from a list of 10**. Those persons belonged to one of two groups, A and B, of equal size (50 each).

The Groups

Group A consisted of (serious) prospective buyers of **Apple IPads**. **Group B** consisted of people asking about other devices (**refrigerators**, **washing machines**, **hi-fi equipment** etc).

A consumer model appears

45 persons (90%) of group A had 7 or more gadgets in the list. 40 persons (80%) of group B had 2 or less gadgets in the list.

Questions

So can we move to a **higher level of aggregation** – and abstraction? **Can we aggregate the results of different products' researches?** But different researches produce different values. The **list of values** is probably **too long and thus impossible to aggregate**.

Hopefully thinking

If we could have a **list of "end values"** to which researchers agreed we could **standardize our researches**. Now **aggregation would be possible**

Existing answers

There are some lists of values already accepted by the scientific community, like the **Rokeach** model, the **Schwartz** model etc. We can pick an existing model or **define a new one**. We can now ask questions that would **measure people's values**.

Form

Let **V1**, **V2** .. **Vn** be the elements of the value list. We can now ask respondents to **grade** each value in a scale of 0-10.

Value	V1	V2	 Vn
Grade	G1	G2	 Gn

This is the simple way.

We could elaborate on it providing questions that would reveal the "real" weight of each value for the respondent on a more objective way.

Laddering Up

Now we can **group respondents on the similarity of their values**. So we can find groups of people that will tend to have **similar consumption models**. So now we can find **groups of products** that will be bought by **groups of people**

II. DISCUSSION

Philosophical view

We could ask students about their **role models** in life. So now we could **relate** publicly well known **personas to values**. We could ask students about their **political preferences**. The list of possibilities is inexhaustible. There are many ways in which those relations could be studied and put to work. The **path is paved**. So let's leave the **exploitation** of those results to **marketing strategists**.

• From abstract to concrete

So, let's find students' values and group them. Let's try to **relate** those values to their **educational or professional choices**

Research questions

Wouldn't be interesting to see if let's say **medical students have similar values**. Wouldn't be interesting to see which values they are? Wouldn't be interesting to see the differences between the "value function" of let's say **law students** and **engineering students**?

Strings attached

We can also relate their **choices as consumers** to their values. We can also relate their values to **their parents' values** as they conceive them. So we could see e.g. how **parents influence their children's decisions** when they mature.

· Getting a bit philosophical

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III. References

- **1.** Thomas J. Reynolds and Jonathan Gutman (1988). Laddering Theory, Method, Analysis and Interpretation. Journal of Advertising Research Feb/March, 1988.
- 2. Thomas J. Reynolds Jerry C. Olson (2001). Understanding Consumer Decision Making The Means End Approach to Marketing and Advertising Strategy Lawrence Erlbaum Associates. Place of Publication: Mahwah, NJ. Publication Year: 2001 Taylor & Francis e library 2008.
- **3.** Veludo de Oliveira, T. M., Ikeda, A. A., & Campomar, M. C. (2006). Discussing laddering application by the means end chain theory. The Qualitative Report, 11 (4), 626 642. Retrieved from http://www.nova.edu/ssss/QR/QR11-4/veludo-de-oliveira.pdf
- **4.** Martine de Boer and Mary B. McCarthy (2002). Means End Chain Theory Applied to Irish Convenience Food Consumers. National University of Ireland, Cork (UCC), Department of Food Business and Development, Ireland 2002.
- **5.** Richard P. Bagozzi, Pratibha A. Dabholkar. Discursive Phychology (2000): An Alternative Conceptual Foundation of Means End Chain Theory. Psychology & Marketing 2000 John Wiley & Sons, Inc. Vol. 17 (7): 535 586 (July 2000).
- **6.** P. Puustinen and A. Kanto (2009). Rethinking the Analysis of Means End Chain Data in Marketing Research World Academy of Science, Engineering and Technology 54 2009.