Estimating WTP based on attribute placement in a customer preferences classification scheme (Kano)

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Abstract: I will need your help to interpret results.

I assume that a given level of classification (according to Kano; “basic”, “performance”, “excitement”) of an attribute, in this case programs, reflects its marginal value towards the overall value of an indivisible and overall outcome, in this case broadcast content (constituted by those programs).

If it holds true that the classification of an attribute as “excitement” is a foundation for differentiation, one would expect a comparably higher marginal value contribution than if that same attribute is only classified as “basic” or “performance”.

This is, as this study shows, definitely not the case.

An interpretative discussion of my study results will hopefully help me in further progressing this work.
Agenda

- Problem statement and introduction
- Results
- Interpretation
Problem statement: (Compulsory) payment for public TV.

• What if, not the current amount, would one be willing to pay at the end of the day as a fee for a current public TV content?

• What program content does one expect from a fee-based television service? And what overall fee and why would one be willing to pay for this content?

• What program content could one possibly do without? And what overall fee and why would one expect for this waiver?
Overall WTP could be measured, e.g., by a price sensitivity approach. Example: price/fee readiness for the current broadcasting program of Swiss public TV.

- **Fair price** per year: 241 CHF - 250 CHF (Mean - Median)
- **Just acceptable** price per year: 300 CHF - 311 CHF (median - Mean)
- **Expensive price** per year: 400 CHF - 402 CHF (median - Mean)

- For comparison:
  **Current reception fees**: 286 CHF
The price/fee readiness for an «own» selection and valuation of program elements is generally lower than the prices which have to be paid today.

- **Fair price** per year: 185 CHF - 200 CHF (Mean - Median)
- **Just acceptable** price per year: 244 CHF - 247 CHF (median - Mean)
- **Expensive price** per year: 300 CHF - 327 CHF (median - Mean)

- For comparison:
  - **Current reception fees**: 286 CHF
How is this problem related to tourism?
The common denominator is the «basket good» character and its related optimisation challenges (attributes and associated WTP).
Assumption 1: The attractiveness of each and every single program («offer») can be measured by allocating each one of them to a customer preferences classification scheme.

- **Offer to be rejected**: leads to dissatisfaction if present, but not to satisfaction if absent.
- **Insignificant offer**: is irrelevant both in the presence and in the absence of an offer. It therefore cannot create satisfaction, but does not lead to dissatisfaction.
- **Basic offer**: is so fundamental and natural that it becomes conscious only with non-fulfillment (implicit expectations). If corresponding basic requirements are not fulfilled, dissatisfaction develops; if they are fulfilled, however, no satisfaction develops.
- **Service offer**: one is conscious; such a offer eliminates dissatisfaction or creates satisfaction depending on the extent of fulfilment.
- **Excitement offer**: creates a benefit that someone does not necessarily expect. Such an offer causes enthusiasm or delight when present, but no dissatisfaction when absent.

Source: Berger et al. (1993)
Example of such a classification.
**Assumption 2:** The position of each program element ("offer") in the classification scheme determines the level of specific marginal value and fee readiness (and its variances).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mathematical Representation</th>
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<tbody>
<tr>
<td>An good is described by an n-dimensional vector of attributes</td>
<td>( \tilde{z} = (z_1, z_2, \ldots, z_n) )</td>
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<td>The observed expenditure maximizes the consumer benefit at a given time and place.</td>
<td>( C(\tilde{z}) = c(z_1, z_2, \ldots, z_n) )</td>
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<tr>
<td>The implicit value of an attribute is obtained by the expenditure differential with reference to this very attribute.</td>
<td>( \frac{\partial c}{\partial z_i} = p_{zi}(z_1, z_2, \ldots, z_n) )</td>
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<tr>
<td>The marginal implicit expenditure function thus takes on the following form and specification.</td>
<td>( \ln TC = \alpha + \phi_1 PROG1_{INDIFF} + \phi_2 PROG1_{BASIC} + \ldots + \phi_4 PROG1_{EXCIT} + \delta_1 PROG2_{INDIFF} + PROG2_{BASIC} + \ldots + \delta_4 PROG2_{EXCIT} + \ldots + \epsilon )</td>
</tr>
</tbody>
</table>

In red: base case
How are the slopes going to be positioned? Which class of preference classification is associated with the highest marginal valuation? Let’s hypothesize potential curve slopes.
Agenda

• Problem statement and introduction

• Results:
  – Which class of preference classification is associated with the highest marginal valuation?
  – What can we derive from the curve shapes?

• Interpretation
The top 10 program elements.

- News at prime time
- Documentaries
- Swiss films, incl. in-house productions
- Nature and technology magazines
- Consumer (protection) magazines
- Special news programs
- Broadcast of major international sporting events
- Broadcast of sports events with Swiss participation (athletes)
- Broadcast of sports events taking place in Switzerland
- Swiss detective films and series, incl. in-house productions
The mid range program elements.
The bottom 10 program elements

- Foreign series
- Quizz shows
- Comedy shows
- Culture magazines
- Philosophical talks
- Music (recordings like live)
- Talk shows
- Talk clubs
- Yellow press magazines
- Broadcast contributions («windows») of other media companies

Legend:
- Offer to be rejected
- Insignificant offer
- Basic offer
- Service offer
- Excitement offer
News at prime time

![Graph showing marginal differences in Willingness to Pay (WTP) for program elements:]
- Basic Offer
- Service Offer
- Excitement Offer

Marginal differences range from -40 to 40.
General news broadcasts outside of prime time
Special news programs (news events)
Special interest news (such as finance, weather, etc.)
Business and political magazines

![Graph showing marginal differences in WTP for program elements]
Health magazines

![Graph showing marginal differences in WTP for program elements. The x-axis represents Basic Offer, Service Offer, and Excitement offer, while the y-axis represents marginal differences in WTP.](image-url)
Nature and technology «magazines»

![Graph showing marginal differences in WTP for program elements]

- Basic Offer
- Service Offer
- Excitement offer
Culture magazines

![Graph showing marginal differences in WTP for program elements]

- Marginal differences in WTP for program element
- Basic Offer
- Service Offer
- Excitement offer
Consumer (protection) «magazines»

The diagram shows the marginal differences in WTP for program elements across Basic Offer, Service Offer, and Excitement offer. The x-axis represents the different offers, while the y-axis shows the marginal differences in WTP. The graph indicates a rise in the marginal differences for the Service Offer and a decline for the Excitement offer, suggesting a shift in consumer preferences or valuations.
Sports magazines
Talk «clubs» (such as media, culture, etc.)
Political discussions

![Graph showing marginal differences in WTP for program elements]

- Basic Offer
- Service Offer
- Excitement offer
Broadcast of major international sports events (independent of Swiss participation)
Broadcasts of sports events with Swiss participation (athletes)
Broadcast of sports events taking place in Switzerland
Documentaries (series)

![Graph showing marginal differences in WTP for program elements]

- Basic Offer
- Service Offer
- Excitement Offer
Documentaries about «locals» (SRF bi de Lüt, etc.)
Swiss films, incl. inhouse productions
Swiss detective films and series, incl. in-house productions

[Graph showing marginal differences in WTP for program elements across different offers: Basic Offer, Service Offer, Excitement offer.]
Foreign films, incl. «Hollywood» productions
Detective films and series

![Graph showing marginal differences in WTP for program elements.](image-url)
Children's programs

![Chart showing marginal differences in WTP for program element across Basic Offer, Service Offer, and Excitement offer.](chart.png)
Quizz shows

![Graph showing marginal differences in WTP for program elements: Basic Offer, Service Offer, Excitement Offer. The graph illustrates a decrease from Basic Offer to Service Offer, and an increase from Service Offer to Excitement Offer.](image-url)
Comedy Shows

![Graph showing marginal differences in WTP for program elements]

- Basic Offer
- Service Offer
- Excitement Offer
Music (shows, programs, concerts, etc.)

![Graph showing marginal differences in WTP for different program elements: Basic Offer, Service Offer, Excitement offer. The graph displays various data points indicating the WTP differences.]
«Yellow press» magazines

![Graph showing marginal differences in WTP for program elements.]
Broadcast contributions («windows») of other media companies
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- Interpretation: HELP!
Thanks for your attention