Consumer Perspectives on Wearable Devices

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Highmark Business Innovation
Today’s 10 minute presentation!

People don’t want medical care.

Rather they want the absence of sickness.

*Medical Care and device demand is simply an input used to keep sickness away or at least minimize it in my daily life.*

I am irrational

I value my time—like a LOT

I am the center of my universe

I want to look cool

I value my money—like a LOT
Technology suggests that there is hope that you can be better than you are right now.

What is the value of knowledge gained through technology?
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**Physiological Needs**
- Food, water, warmth, rest, health

**Safety Needs**
- Security and Safety

**Belongingness and Love Needs**
- Intimate relationships and friends

**Esteem Needs**
- Prestige and feeling of accomplishment

**Self Actualization**
- Achieving one’s full potential

**Performance Maximization**

- Chronically Ill
- People in Between
- Super Fit
What is the value of knowledge gained through technology?

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Safety Needs
- Security and Safety

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- Intimate relationships and friends

Esteem Needs
- Prestige and feeling of accomplishment

Self Actualization
- Achieving one’s full potential

I care. And I’m cool.
What is the value of knowledge gained through technology?
Behavioral Economics –
I am irrational
Irrational!

* Limited understanding = suboptimal decisions (asymmetric information)
* We would rather have pleasure now, than later. We would rather put off the pain for later (or never), than now.
* People are prone to biases impeding good decisions
* We are overly optimistic
* We make decisions on feelings versus cognitive calculations
* We are non compliant because breaking rules makes us feel like we are in control.

Imperfect information + irrational human = uncertain outcomes
Or a diabetic who wants the cookie and doesn’t want to know her levels, right now anyway

Or an MS patient who believes that pushing harder will make him stronger

Or a 500 pound man who had parents in their 90s and thinks his heart is protected by genetics
Behavioral Economics – I value my time. Like A LOT!
Time use on an average work day for employed persons ages 25 to 54 with children

- Working and related activities: 8.7 hours
- Sleeping: 7.7 hours
- Leisure and sports: 2.5 hours
- Household activities: 1.1 hours
- Eating and drinking: 1.0 hours
- Caring for others: 1.3 hours
- Other: 1.7 hours

Total: 24.0 hours

NOTE: Data include employed persons on days they worked, ages 25 to 54, who lived in households with children under 18. Data include non-holiday weekdays and are annual averages for 2013. Data include related travel for each activity.

**Attention Span Statistics**

* Attention spans have shrunk by 50% over the past decade.

<table>
<thead>
<tr>
<th>Attention Span Statistics</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>The average attention span in 2013</td>
<td>8 seconds</td>
</tr>
<tr>
<td>The average attention span in 2000</td>
<td>12 seconds</td>
</tr>
<tr>
<td>The average attention span of a gold fish</td>
<td>9 seconds</td>
</tr>
<tr>
<td>Percent of teens who forget major details of close friends and relatives</td>
<td>25%</td>
</tr>
<tr>
<td>Percent of people who forget their own birthdays from time to time</td>
<td>7%</td>
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<tr>
<td>Average number of times per hour an office worker checks their email inbox</td>
<td>30</td>
</tr>
<tr>
<td>Average length watched of a single internet video</td>
<td>2.7 minutes</td>
</tr>
</tbody>
</table>
Behavioral Economics – I value my MONEY. Like A LOT!
Data sources

- BLS OES
- Dynamically calculated (IRS)
- Rental estimates by kwellia.com
- U.S. Dept of Agriculture’s Food Plans
- BLS CE Public Use Micro Data
- Childcare Aware of America
- BLS CE Public Use Micro Data
- BLS CE Public Use Micro Data

San Antonio

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Income</td>
<td>$69,924/yr</td>
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<tr>
<td>Taxes</td>
<td>$11,293/yr</td>
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<tr>
<td>House rent</td>
<td>$18,538/yr</td>
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<tr>
<td>Food costs</td>
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<tr>
<td>Utilities</td>
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<tr>
<td>Child care</td>
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<tr>
<td>Healthcare</td>
<td>$4,133/yr</td>
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<tr>
<td>Transportation</td>
<td>$7,830/yr</td>
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<tr>
<td>Money left</td>
<td>$2,806/yr</td>
</tr>
</tbody>
</table>
Behavioral Economics – I want to look cool (or, don’t make me look like a dork)!
Vanity versus true function
How Innovation is applying this to our MS Fatigue Forecast

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Rather they want the absence of sickness.

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What we are working toward
Thank you