



Alternate Endings – A Tale of Two Surveys and Order Effect, Priming, and Other Biases

Gomathi Sadhasivan

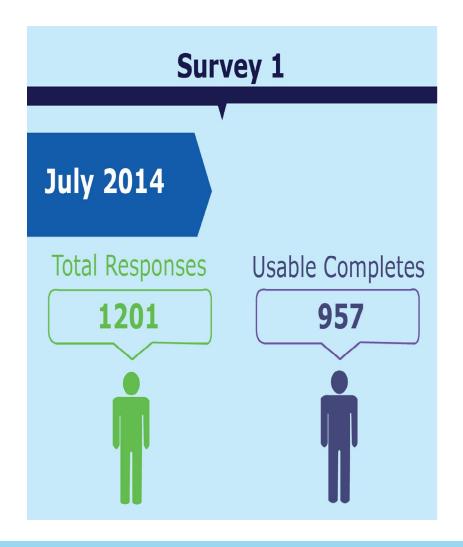
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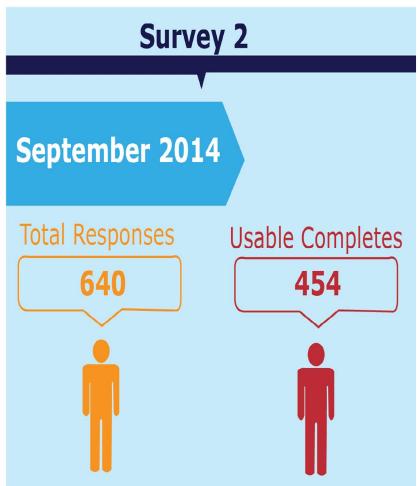
# **Context**

Home Automation Systems		
Consumers	Utilities and Third Parties	
Control Comfort Convenience Peace of mind	Enabling technology Potential revenue stream	



# **Surveys**





# **Largely Similar Surveys**

#### SAME

- Awareness
- Interest
- Features desired
- Likelihood to purchase
- Current penetration of related technologies
- Purchase and subscription channels
- Impact of utility endorsement on likelihood to purchase

#### **DIFFERENT**

- Order
- Visual
  - Priming on Energy & Security

# **Survey 1**

A Home Automation System lets you control your heating and cooling, appliances, lighting, security monitoring and/or control of gates, doors, windows, and/or other systems in your home, to provide improved convenience, comfort, energy efficiency and security. There are several offerings and configurations available in the market that can do some or all of these things.



### **Survey 2**



A Home Automation System offers customers a single unified solution to automate and control various aspects of their homes to provide improved convenience, comfort, efficiency, and security.

The following are examples of some of the features offered by such systems:

Entertainment - whole house audio for music, home theater with surround sound, ability to stream web video content from sites like YouTube, Netflix etc.

Information - "virtual personal assistant" to obtain news headlines, weather reports, sports scores, keep track of your appointments, routine home and car maintenance schedules etc.

"Telecare" - reminders to take medication, track doctor's appointments, remote health monitoring, and medical alerts for seniors or other vulnerable members of the family

Communications - whole house intercom, wi-fi, email, telephone etc.

Lighting - one touch settings to automate lighting intensity by type of use such as brighter lights for working or cooking, auto blind/curtain and dimmer lights when watching a movie, set on/off schedules for security, dawn/dusk automation etc.

Indoor climate control - control heating and cooling schedules based on time of day, month of year and annual including season change, temperature and humidity.

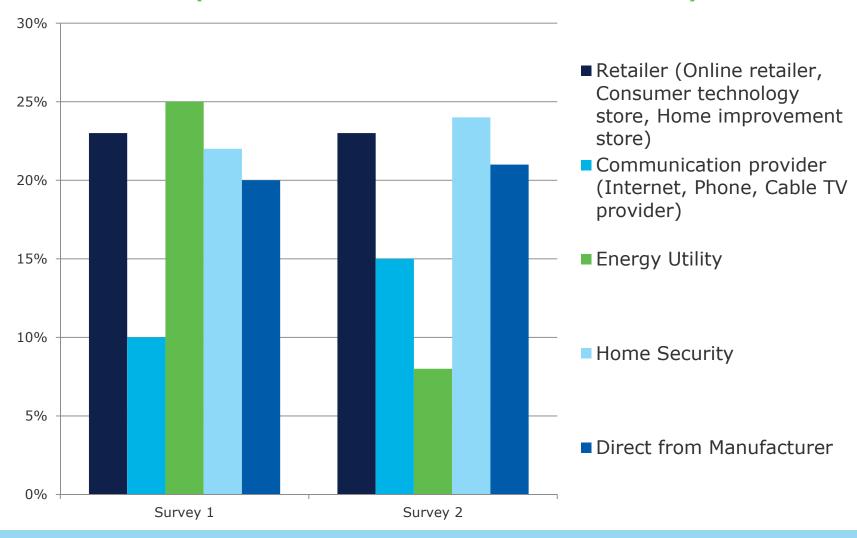
Security - remotely monitor and/or control doors, windows, blinds etc,.one touch settings to activate motion sensors and security cameras, turn on/off interior/exterior lights as desired, close blinds, and automatically lock all the doors when away, emergency notifications etc,

Energy management - monitor energy usage from appliances to heating and lighting at home or remotely, automate usage to take advantage of lower prices for energy at certain times or avoid times with high energy prices etc.

There are several offerings and configurations available in the market that can do some or all of these things.

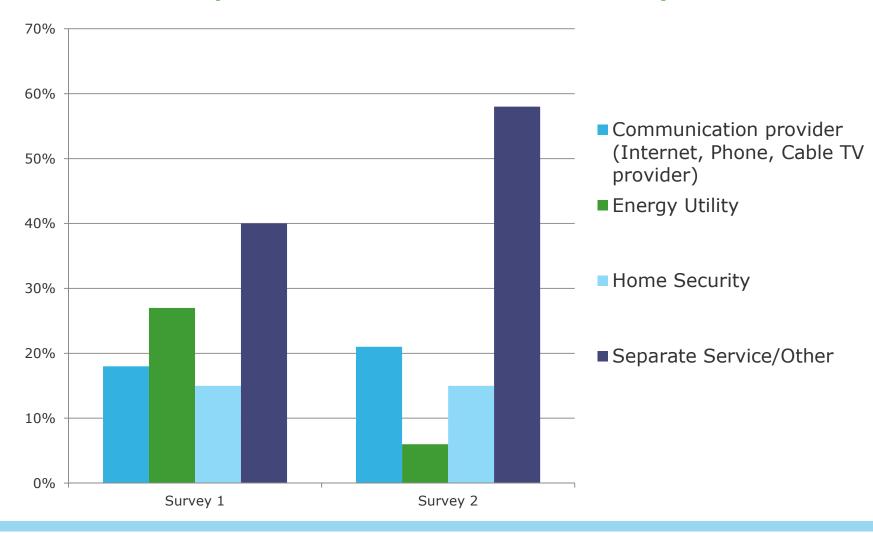
## **Impact of survey differences**

#### **Preferred purchase channel for home automation systems**



# **Impact of survey differences**

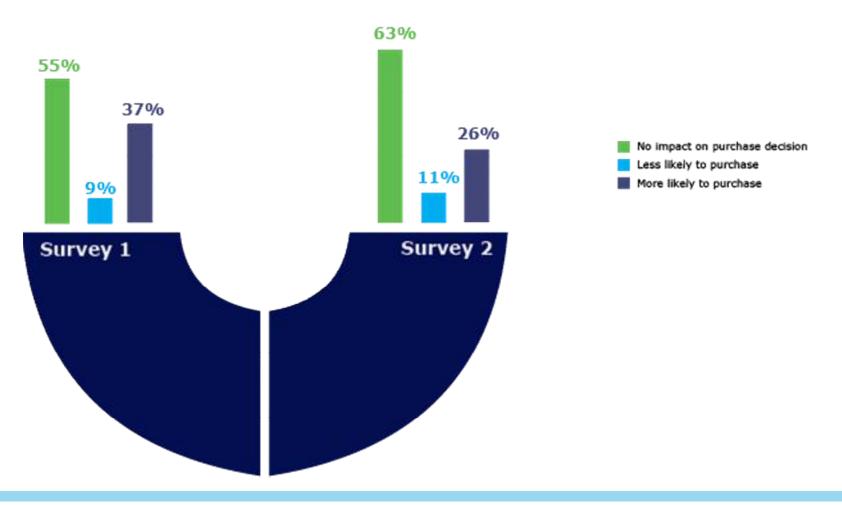
## Preferred subscription channel for home automation system services



DNV·GL

# **Impact of survey differences**

Impact of utility endorsement on likelihood to purchase home automation systems



# No discernible impact of survey differences on responses

#### Awareness of home automation systems and related terms

# **Survey 1, Question 9**

**Survey 2, Question 1** 

72%	Smart Appliances
63%	Smart Home
50%	Home Automation Systems
42%	Home Energy Management
27%	Smart Grid
24%	Connected Home
15%	Internet of Things

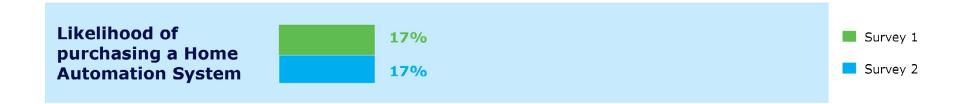
72%	Smart Appliances
66%	Smart Home
42%	Home Automation Systems
37%	Home Energy Management
29%	Smart Grid
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15%	Internet of Things

# No discernible impact of survey differences on responses

Interest in home automation systems (% 4, 5 on a 1-5 scale) Survey 1 – Q11, Survey 2 – Q2



Likelihood of purchasing a home automation system (% 4, 5 on a 1-5 scale) Survey 1 – Q15, Survey 2 – Q14



# **Takeaways**

- Order matters
  - BUT...the effects are manifested only on questions that are directly impacted by the substance of the change
- Visuals are good
  - BUT...using accompanying text with clear descriptions in addition to the visuals is recommended.

# **Questions?**

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