European market segmentation report on consumer's needs, expectations and interests

USmartConsumer Project
www.usmartconsumer.eu

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1 Executive summary

Within the USmartConsumer project quantitative research was carried out in 7 European countries in order to understand the level of knowledge about Smart Metering. Furthermore, preferences, motivations and the willingness to pay for Smart Metering-related products and services were analysed. In total 1849 electricity customers were interviewed online. As part of this research different consumer groups were analysed.

Every participating country chose between 3 and 4 segments from the national sample according to various criteria. The segments are described and named appropriately according to the relevant values, socio demographic statistics and Smart Metering preferences. Subsequently, the potential for offerings for Smart Metering products and services and possible ways to properly address customers according to their characteristics were discussed.

It should be noticed that the conditions of the online survey led to a high proportion of respondents who showed at least some interest in Smart Metering services because otherwise they would not have filled out the questionnaire. Also, the topic of the survey affected the socio demographic characteristics of the sample: For example, the majority of the respondents in all countries (except of Poland, where younger people prevail) are in the middle age – between 40 and 59 years old. This obviously is the target group for Smart Metering products.

A striking feature of the samples from almost all countries excluding the United Kingdom, Finland and Poland is the predominance of male respondents. Men are often more interested in new useful technologies and are attracted to the possibilities of consumption monitoring. A lot of respondents are mature people, already aware of the necessity of energy saving and protection of the environment. The interests of these people are various and not only include professional success or a proper family life but also preserving the environment and other topics.

A lot of respondents have education levels higher than average in the participating countries. Concerning Smart Metering the main benefit for the vast majority of interviewees is the ability to overview electricity consumption. Even though they often take protection of the environment into account, they don't see the main benefit of smart meters as improving ecological conditions. The motivation to pay for smart meter solutions in order to reduce CO2 emissions is rather rare.

In every country's sample one to two prime target groups were usually observed. The main characteristics of these groups were high interest for new technologies and innovations, good adaptation skills, a certain desire to keep all options in life open, a positive attitude towards multicultural diversity, relatively good level of knowledge about Smart Metering, high willingness to pay for it as well as comparably low concerns about data security.

Representatives of the target groups are on average better educated, a little bit younger than respondents from other segments, often appreciate professional success highly and view future developments in a positive light. Typical examples for prime target groups are "Forward-thinking young elite" in Germany, "Call me Executive" in Spain, "Motivated optimists” “Go with the flow technophiles” in the UK, ”Independent green consumers” in Finland, “Curious-optimistic innovative-oriented”, “Altruistic, willingly, a bit idealistic” in Italy and “Responsible forward movers” in Poland. In some countries the need for Smart Metering must be activated first since currently there is very little willingness to pay for it – this is significant for Austria, where “Future-oriented open-minded technophiles” could be main target group. At this point though, they are not interested in Smart Metering technologies.

There are usually one or two customer groups with some potential that still should be activated. A lack of some important features like willingness to pay or level of knowledge about Smart Metering is often observed concerning these groups. As examples “Ecological thinking pessimistic anti-consumptionists” (lack of knowledge) and “Uncritical upper-class” (not well informed, low motivation to pay) in Germany, “The professional” (no willingness to pay) and “The senior” (low level of knowledge and motivation to pay) in Spain, “Consumerist achievers” (low willingness to pay), “Independent conservatives” (lack of knowledge) in Finland and “Adaptive bon-vivant individualists” (little willingness to pay) in Poland. Concerning these segments the approach to address them should in many cases include information campaigns with appropriate images according to people´s values. Subsequently different measures like advertisements, elaboration of products and services should be launched.

We also identified groups with the lowest potential for Smart Metering products and services. The main features of these groups are lower income and electricity consumption, average or low interest in technologies, a pessimistic life approach and no motivation to pay for Smart Metering. The only option to address these respondents could be the perspective of a reduction of their energy bills, since they don’t earn much money. Examples are “Hedonistic carefree seekers” in Germany, “Without compromises” in Spain, “Steady backbone” in the UK, “Self-centered socially disinterested hedonists” in Austria, “Pessimistic followers” in Finland, “Closed-pessimistic, passive” in Italy.

The segmentation analysis is a useful tool to define customer preferences. Actions in order to approach the customer segments can be carried out with more accuracy. Overall, almost every determined group can be offered Smart Metering services and products.

This report contains the main results of the statistical analysis of all segments.

2 Germany

2.1 Short Description of the Segmentation of Electricity Consumers in Germany

The sample used for the survey consists of 496 people. Only energy consumers from the North Eastern region of Germany (Mecklenburg-Vorpommern, Schleswig-Holstein and Hamburg) were interviewed. The sample solely includes customers from the Schwerin-based utility WEMAG AG. Additionally, all the interviewees are consumers of green electricity. The survey was conducted online between 10.08.2014 and 30.08.2014.

For the sample four segments were derived from the dataset. Segment 1 consists of 115 people; segment 2 of 109, segment 3 of 98 and the largest segment 4 includes 174 people.

2.2 Segment 1: "Ecological Thinking Pessimistic Anti-consumptionists"

Introduction

Representatives of segment 1 are very critical of a consumer-oriented and wasteful society and are willing to protect the environment. They are very pessimistic about the future and partially don't agree with the statement that everyone is responsible for his own actions. So their attitude is rather socially minded. These people have a distinct need for security and stability. Fun in life is not the most important thing for them. Eco anti-consumptionists are quite serious and have a critical attitude towards many life themes.

Additional Values and Beliefs

Representatives of segment 1 are moderately interested in new technologies and innovations. Therefore they can be an appropriate consumer group for offers of Smart Metering services. They don't find it difficult to adapt to change. A large part of this segment does not want to keep all options open in life. This finding may be related to their need for safety and stability that is mentioned above. Family is the most important value in life for a lot of respondents. Interestingly, they don't see a multi-cultural society in a very positive light.

Social Demographic Statistics

21,7 per cent of segment 1 are female, 75,7 per cent are male. This figure doesn't differ significantly from the average of the whole sample.

Respondents in segment 1 are between 23 and 84 years old, the average age is 50 years; that is slightly above the average value of the whole sample (49 years). The majority of them (56,5%) are between 40 and 59 years old. This is typically the age when highly educated people have already reached success at work and high income.

This segment is characterized by a very high percentage of people with a university degree ("Hochschulstudium"). It is the highest percentage among all segments in Germany. 24,3 per cent have the second highest educational level, which is called "Berufsausbildung" (apprenticeship). The average educational level "Abitur" (high school degree) as well as the lower levels "Realschule" and "Hauptschule" (equivalent to secondary school) represents only 18,3% of the segment. These results match the results of values and beliefs of this segment very well, since higher educated people usually have a more critical stance towards societal, environmental and economical topics.

The majority of the Eco anti-consumptionists are living together with one person (46,5%). A fifth of this segment lives in a four-person household (20,2%). Some live with two (13,2%) or four people (10,5%). Only a very small proportion are living alone or in large households with more than 5 members. In comparison to other segments their households are rather small. The majority of respondents probably live with a partner or a spouse without children.

The majority of respondents from segment 1 consume from 2000 to 3499 kWh annually. The consumption is relatively low but of course correlates with the household size mentioned above.

The representatives of segment 1 have a comparatively high income – more than 28 per cent earn more than 55 000 Euro annually.

Smart Metering Preferences

Respondents from segment 1 have a level of knowledge about Smart Metering that is below average: 52,2 per cent do not feel well informed. Concerning the ways of retrieving of smart metering information they prefer to see it on websites (49,5%) or on a smartphone / tablet app (27%). Compared to other segments the share of people who want to use the option of an in-home display is relatively low.

Eco anti-consumptionists strongly prefer to have their Smart Metering information presented as diagrams and charts. This can be explained by their analytical way of thinking which is typical for highly educated and critically tuned people.

The main benefit of smart meters for them is the possibility to overview their electricity consumption. Within this segment this motivation is above average, as is the number of respondents who don't see any benefits. Ecological motivation for using smart meters is above average for segment 1. Also, their motivation to reduce their electricity bill is higher than the average. They are concerned about data security more than representatives of other segments.

Concluding Remarks

Considering the relatively low level of knowledge about Smart Metering the first step to raise awareness is to carry out an information campaign. Since family is of high importance for them, family images can be used in advertising. The representatives of this segment can be offered services that bring energy savings and/or reduction of CO_2-emissions. To offer services and not products would be more effective for this segment. They are interested in technological innovations and can be a target group, but their potential should be still activated.

2.3 Segment 2: “Hedonistic Carefree Self-seekers”

Introduction

For representatives of this segment success at work is not that important, they highly appreciate a proper work life balance and want to have as much fun as possible. They are against a wasteful and consumer-oriented society and try to protect the environment in their everyday life. These people are not expecting that things will get better in the future. They also believe that everyone is responsible for their own actions. Security in life is not a major preference among Hedonistic carefree self-seekers.

Additional Values and Beliefs

These people are interested in new technologies and innovations and don’t find it difficult adapting to change. Representatives of segment 2 are also characterized through their distinctive desire to keep all options open. A lot of them believe that living in a multi-cultural society is a positive thing enriching their cultural life. The hedonistic carefree self-seeker does not necessarily need to retain control. He rather is an easy-going, relaxed person.

Social Demographic Statistics

The percentage of women in segment 2 is 23,9, 72,5 per cent are men. The share of women in this segment is slightly higher than in other segments.

The representatives of segment 2 are between 27 and 84 years old. The average age is 52,5 years. That is above average (49 years). People between 40 and 59 years of age are the majority (50,8%). This segment is characterised by a comparatively small number of young people under 39 (17,3%) and a large amount of people older than 60 (32,0%). This finding is quite surprising when considering that the lifestyle of these people is dominated by hedonistic values as well as the desire to have fun.

Almost 50 per cent of segment 2 holds a university degree. About 30 per cent of the hedonistic carefree self-seekers have the second highest level of education: “Berufsausbildung” (apprenticeship). The average educational level “Abitur” as well as lower levels “Realschule” and “Hauptschule” are underrepresented in this segment (16,5%). In comparison to other segments representatives of segment 2 have lower education levels. On the other hand, this segment still has a level of education that is above average compared to German society as a whole. This fact is due to the high educational level in this sample.

The majority of respondents in segment 2 live with one person (40,2%). The rest is distributed as follows: three person household (24,3%), single household (16,8%). Very few representatives of this segment live in large households with 5 or more members (only 4,6%). So the distinctive characteristic of segment 2 is a large number of relatively small households.

Representatives of segment 2 have relatively low energy consumption. The largest group (44,9%) consumes only 2000 to 3499 kWh annually. This is related to the relatively small household size. Their household income is relatively low. The majority of them (42%)

earn from 15 000 to 35 000 € annually. This correlates with the relatively low level of education. This also matches with the fact that Hedonistic carefree self-seekers do not see work and career as their main focus in life.

Smart Metering Preferences

Hedonistic carefree self-seekers know comparatively little about Smart Meters. More than half of them (51,4%) do not feel well informed. Concerning the ways of retrieving Smart Metering information, their preferences are distributed as follows: Online portal: 46,2%, Smartphone / Tablet App: 24,5%, In-home display: 15,1%, letter: 10,4%. Compared to other segments, preferences for in-home displays and letters are above average. For smartphone and tablet apps preferences are below average. This can be explained with the large share of elderly people and the relatively low level of income. It seems that not all respondents can afford to buy smartphones or tablet PCs or are not able to operate smart devices properly.

The representatives of segment 2 are not very interested in overviewing their energy consumption data based on tables and numbers or through charts. This can be explained by the fact that representatives of this segment generally don't want to pay for smart meter services even if it helped them to reduce their electricity bill (45%) or the CO2 emissions (40,4%). Nonetheless, the statistics show that the reduction of CO2 emissions is an important topic for Hedonistic carefree self-seekers and that it is more important for them than for representatives from segments 1 and 3. The greatest benefit of smart meters for these people is to protect the environment. The reduction of electricity bills is secondary. People from this segment are not worried about their energy company using their personal information through smart meters for marketing measures or for other commercial purposes.

Concluding Remarks

Since the representatives of segment 2 are ill-informed about Smart Metering, the first step would be to carry out an information campaign. Ecological motivation should be the main topic. On average these respondents have a relatively low income and live in small households, therefore they are not too interested in expensive products and should be offered cheaper options. The way for approaching them could be websites and letters. For them services that offer energy and money savings could be attractive. Since they don't like tables or diagrams they should instead be provided with bright images like traffic lights or speedometers. This segment has the lowest potential of all segments to engage with smart meters and shouldn't be considered as a target group.

2.4 Segment 3: "Uncritical Upperclass"

Introduction

For representatives of segment 3 a successful career is very important. They don't have critical attitudes towards a consumer-oriented society because they enjoy spending money on consumer goods. These people have reached financial well being and can afford to buy expensive, high-quality goods. Protection of the environment doesn't play an important role for them. Representatives of uncritical upperclass are relatively optimistic about the future. They are convinced that everyone is responsible for their own actions and have proved that wealth can be reached by individual effort. These people want to have a lot of fun in life while at the same time sufficient security and stability.

Additional Values and Beliefs

Representatives of segment 3 are interested in new technologies and innovations. On the other hand, it is difficult for them to adapt to changes. But at the same time they prefer to keep all options in life open which is undoubtedly contradictory. Possibly representatives from the critical upper class have already passed the period where raising a family is a central part of life. Therefore, their focus has shifted and now they want to enjoy life by themselves. Almost one quarter of all respondents state that cultural diversity is not always positive. Possibly they feel that such diversity represents a threat to their security and stability and can cause loss of control over life situations both of which are very important to them.

Social Demographic Statistics

Segment 3 has the lowest share of female respondents (13,3%) and accordingly, the largest share of male respondents (84,7%).

Respondents from segment 3 are between 25 and 72 years old. The average age is 47 years old, which is below average. The majority of people are between 40 and 59 years (62,2%). The segment is also characterized by a large proportion of people between 20 and 39 (24,3%) and the smallest proportion of older people above 60 (13,1%). They have a very high educational level – 54,1% hold a university degree. More than one quarter has apprenticeship ("Berufsausbildung"). Only 19,4% respondents have average educational level "Abitur" and the lowest ones "Realschule" und "Hauptschule".

The majority of respondents from segment 3 live either in a two person household (35,1%) or in a four-person household (27,8%). This means that a lot of them live with a partner or with children. A relatively high proportion (more than 10%) live in large households with 5 or more members. Segment 3 is characterized by a relatively high energy consumption – more than a quarter of the people consume more than 5000 kWh annually. Representatives of segment 3 have a very high income – almost one third, 32,9%, earns more than 55 000 € annually.

Smart Metering Preferences

The representatives of segment 3 are not very well informed about Smart Metering. Less than one third (31,6%) have a high level of knowledge about Smart Metering.

They strongly prefer to receive their Smart Metering information on their Smartphone / Tablet (47,4%). This is the highest value among all segments. Checking consumption data via web browser is preferred by 31,6%, which is the second highest value.

People from the Uncritical Upperclass would like to receive Smart Metering information displayed through figures and tables and don't prefer charts. For them, the main benefits of smart meters are the possibilities to overview their energy consumption and to reduce the electricity bill. Ecological motivation is not important for them. Accordingly, representatives of segment 3 don't want to pay for smart metering services in order to reduce CO2 emissions. They have on average low motivation to pay for it. At the same time they don't have a lot of concerns about data security, so this would not be a reason for them to refuse Smart Metering products and services.

Concluding Remarks

The representatives of this segment have a high income level and don't think too much about their energy consumption. Since they are not ecologically motivated, the overview of their energy consumption as well as remote control over several appliances can be attractive options for them. They are interested in new technologies and can be offered technical and high-quality products like Smart Home. Fun is an important value in their lives and therefore, Smart Metering should be like a technical toy for them. This segment can be one of the target groups but representatives don't feel a need for Smart Metering services yet, therefore this need must be generated first.

2.5 Segment 4: "Forward-thinking Young Elite"

Introduction

The last segment is the largest one and includes representatives of Forward-Looking Young Elite. For them, success at work is very important. These people have critical attitudes towards a consumer-oriented society and make an effort to protect the environment. They are very optimistic about the future in comparison to other segments and agree that everyone is responsible for their own actions. Representatives of Young Elite want to have as much fun as possible but have a distinctive desire for security and stability in life as well.

Additional Values and Beliefs

Representatives of segment 4 are very interested in new technologies and innovations. They also exhibit extremely good adaptation skills to changes and try to keep all options open in life. At the same time, it is extremely important to them to maintain control of all life situations. Family plays a very important role in their lives. A multicultural society as well as learning new things from other cultures is a central concept for these people.

Social Demographic Statistics

23,3% of segment 4 are female, 76,2% are male. The proportion of women is above average. Respondents from the Forward-Thinking Young Elite are between 25 and 77 years old. The average age is 46, which is significantly below the average (49). The share of young people under 39 is above average. The majority are between 40 and 59 years old.

Representatives of the Forward-Thinking Young Elite have a relatively high level of education. Compared to other segments the number of university graduates (43,1%) is not the highest, but compared to the German average the percentage is still very high. 36,2% per cent hold an apprenticeship. This is the highest value among all segments. The percentage of people with average and low levels of education is below average – 14,9%.

The distribution of household size is the following: 35,5% live in a two person household, 28,5% live in a three person household and 22,1% in a four person household. Only a small percentage live alone (6,4%) or in large households with 5 or more members (6,4%). The size of households in segment 4 is above average. This correlates well with the statement that family is the most important thing for them.

Representatives of segment 4 have average energy consumption, the majority of them consume between 2000 and 4250 kWh annually which is typical for households with two or three members. The household income is relatively low – 21,5% earn more than 55 000 Euro per year. But at the same time a large share of respondents – 28,5% - have an income less than 35 000 Euro.

Smart Metering Preferences

Representatives of segment 4 are very well informed about Smart Metering. Concerning the ways of receiving Smart Metering information they prefer websites (39,0%) and smartphone / tablet apps (38,4%).

The well-educated people from this segment prefer to view their Smart Metering data through figures, tables, diagrams and graphs, which indicates a strong analytical focus.

For them, the main motivation to use smart meters is transparency of energy consumption. Furthermore the reduction of electricity bills is another important issue. Ecological motivation doesn't play a very significant role. It is remarkable that only a small percentage of respondents from segment 4 don't see any benefit in using smart meters. It means that this could be the main consumer group for offering smart meter services to because representatives of this segment are already convinced by the benefits. Compared to other segments, they are more willing to pay for smart metering services if they help to reduce electricity bills and CO2 emissions. At the same time they don't have a lot of concerns about data security. Therefore, the Forward-thinking Young Elite is the most appropriate group to address to.

Concluding Remarks

Representatives of segment 4 are very well informed about Smart Metering and can be first movers for these technologies. A combination of services and advanced technical devices can be very attractive for them. They are interested in both the reduction of electricity bills and protection of the environment. When addressing them a combination of these two motives should be the most effective. These people have a strong preference for using websites and smartphone apps. They adapt very well to changes and can be multipliers who persuade others (family members, friends, acquaintances) into using Smart Metering services. Considering the fact that family is the most important thing in life it can be effective to use family images in advertisement. It is also worth using modern and advanced aspects of technology when carrying out advertising campaigns. This segment clearly is the main target group for Smart Metering services and products.

3 Spain

3.1 Short Description of the Segmentation of Electricity Consumers in Spain

For the Spanish sample, four segments were derived from the dataset. Due to the limited overall sample size, the segments are relatively small, which only allows us to make general conclusions about the segments. Segment 1 consists of 76 cases, segment 2 of 43, segment 3 of 30 and segment 4 consists of 24.

3.2 Segment 1: “Call me Executive”

Introduction

Typical representatives of segment 1 are senior executives in the middle-high or high-level class working many hours a day. To be successful at work as well as having a safe life is central to them. These people like to have control and are convinced that things will get better in the future. They have strong criticisms of a consumer-oriented society, maybe due to a high intellectual background, which makes them consider the problems even if they are not directly affected.

Additional Values and Beliefs

These people have a high interest in technology and innovation. Representatives of segment 1 don’t find difficulties in adapting to change and they like to keep all their options open. A wide amount of the people questioned strongly agreed with the idea of the family as the most important thing in their lives. They are aware of the importance of protecting our environment and think that it is positive to live in a multi-cultural society. These people strongly agree with the idea that everyone is responsible for their own actions and they need a safe and secure life without many changes.

Social Demographic Statistics

The population sample considered in the study is 30% women and 70% men. The population sample’s age varies from 20 to more than 60 years. Most of the people were of middle age (from 40 to 59). Regarding the level of education, there is a clear predominance of people post- and graduated from university (50%), followed by people having a vocational education (24%) or secondary school skills (21,3%).

Household size varies from 2 to more than 5 people. No one lives alone. The largest group (35,5%) lives in four person households. The range of energy usage per year varies from less than 2000 to more than 5000 kWh. The most common energy consumption is located between 2000-3499 kWh (33,8%). People in segment 1, who consume either less than 2000 kWh (5,4%) or more than 5000 kWh (9,5%), are a minority. About 40% of this population sample has an income of more than 40 000 €/y but only 1,3% earns more than 85 000 €/y. The largest group of respondents (24%) earns between 25 000 and 34 999 Euro.

Smart Metering Preferences

Level of knowledge about Smart Metering is quite distributed which means that in this segment there are both people who are informed about Smart Meters and people who are not informed at all. It is the segment which is best informed about Smart Metering. There are two favourite ways of retrieving Smart Metering information with very similar impact: website (32,9%) and in-home display (30,3%).

Many consumers want their consumption data to be displayed based on tables and numbers (86,8%). However, even more people prefer the consumption data to be displayed through charts (88,2%). The main advantage people see regarding Smart Metering is that it helps them to reduce their electricity bill (48,7%). This is the highest proportion among all segments. Possibly to overview electricity consumption is not as important for representatives of segment 1. The smallest proportion of people (10,5%) in comparison to other segments doesn't see any benefits of smart meters. 40% of people in segment 1 are willing to pay for Smart Metering services if they help to reduce electricity bills. The same percentage is willing to pay for Smart Metering in order to reduce CO2 emissions. Most of the people from segment 1 don't have a lot of concerns about data security.

Concluding Remarks

This segment is consists of successful people, middle-aged and relatively wealthy, committed to their jobs. They have a positive attitude towards life but are not willing to make significant changes. They are concerned about social problems such as climate change.This group is particularly located in medium and big cities and is interesting because they are aware of the importance of using energy in an intelligent way which means reducing costs and damage to the planet and almost half of this group of people would be willing to pay for smart meters.

The most effective arguments for segment 1 are to reduce electricity bills and the consumption of energy itself to reduce their CO2 emission. This segment prefers to visualize their energy consumption via in-home display, website and apps. Hence, it would be a good idea to develop these services.

3.3 Segment 2: "The Professional"

Introduction

Representatives of segment 2 could be a technician or young executive who likes his job but does not treat it as the central issue in life. He/she is committed to family while at the same time is able to take risks and search for new opportunities. These people are relatively optimistic about the future. They have strong criticisms towards a consumer society and maybe struggle with the effects of the economic crisis. They are also taking a critical stance towards a strong capitalistic system.

Additional Values and Beliefs

They are highly interested in technology and innovation and quite able to adapt themselves to changes. Actually, this is a more flexible group open to making changes in their lives. The whole population sample liked to keep all their options open. They are completely aware of the importance of protecting the environment. Representatives of segment 2 know that everyone is responsible for their own actions, are open-minded and consider living in a multicultural society as a positive thing. A remarkable feature of this young group is that they almost completely refuse the idea of needing a safe and secure life without changes.

Social Demographic Statistics

The gender distribution of segment 2 is: 23% female, 77% male. It contains the largest percentage of men compared to other segments. They are relative young. It is clearly divided in two main age groups. The larger group is formed by people between 40-59 followed by a group of people from 20 to 39.

Level of education is distributed quite uniformly. There is a larger number of postgraduate people (PhD or master), which represent 32,6% of the total closely followed by people who studied vocational education and training (27,9%) and graduated from university (25,6%).Number of people in household varies from 1 to 5. The most common is three (39,5%) or four person (30,2%) households. The range of energy usage per year varies from 2000 to more than 5000 kWh. The most common energy consumption is between 3500-4249 kWh (25,6%). The most common net household income is between 25,000-35,000 €/y (23,3%). 21% of segment 2 has income higher than 55,000 €/y.

Smart Metering Preferences

Regarding knowledge about Smart Metering, there is a differentiation of opinions. Half of this group states that they don't have enough knowledge on this subject while the other half feel informed about smart meters. Representatives of segment 2, being well acquainted with technology, prefer to get smart meter information via website (32,6%) and apps for smartphone and tablets (44,2%). Regarding consumption data, almost everybody agreed with the option for data to be displayed through charts (95,4%), as well as numbers and tables (90,8%).

For these people, the greatest benefit of Smart Metering is that it helps them to overview their energy consumption (48,8%), which is related to the second advantage of reducing electricity bills (25,6%). However this segment on average is not willing to pay for Smart Metering services, even if it reduces their electricity bill or CO_2 emissions.

Concluding Remarks

This segment is formed by mainly young people, used to technology, which can accommodate some changes in their lives. They can be found in many cities, towns or any other areas.

Segment 2 is well accustomed to technology so it is an important target group as they know the benefits of Smart Meters. They like to be able to overview their energy consumption which leads to cost reduction. The most effective way to provide the information would be by website services and smartphone /tablet apps.

3.4 Segment 3: "Without compromises"

Introduction

Representative of segment 3 could be young professional or student, for whom work is not a central issue in his life and family is a neutral thing. He does not need a secure or safe life and does not need to retain control. These people are convinced that things won't be better in the future.

Additional Values and Beliefs

The population of segment 3 is the youngest one so they are the most interested in technology. Everybody likes to keep their options open and do not find it difficult at all to adapt to change. This segment thinks our society is too consumer-orientated and wasteful. They want to have as much fun as possible in life. They all care about the environment agreeing with the idea that we should protect it. Living in a multi-cultural society is a positive thing and they consider that everyone is responsible for their own actions.

Social Demographic Statistics

The majority of respondents from segment 3 are male (57%), 43% - female. This population sample is mainly constituted of younger people, half of them are in the range of 20-39 years (49,7%). The larger percentage are people whose highest education level is graduated from university (≈ 37%). 23% of the sample finished secondary school, 10% have a professional education. People with only primary school studies are a minority (3,3%).

The majority of respondents live in 2 (30%), 3 (36,7%) or 4 (26,7%) person households. No one lives in households with more than 5 people. The most common energy consumption is between 2000-3500 kWh (36,7%). Nobody is known to consume more than 5,000 kWh. The range of annual incomes is very variable. 10% of respondents earn annually less than 15 000 €. One fifth, which represents the largest group, has an income of 35 000 – 45 000 €.

Smart Metering Preferences

A great amount of people from this segment (70%) consider they do not know about Smart Metering. Segment 3, well acquainted with technology, prefers to get the information via apps (46,7%) and in-home displays (30%). Regarding consumption data, most of people agreed with the option to have displayed it through charts (80%). A much smaller number prefer to get it based on tables and numbers (53,3%).

For this segment, the greatest benefit of Smart Metering is that it helps them to overview their energy consumption (36,7%). Secondly, they are aware that smart meter can help to preserve the environment (30%). For representatives of segment 3 this option is more important in comparison to other segments. At the same time one fifth don't see any benefits. 47% of people in segment 3 are willing to pay for Smart Metering if it helps them to reduce their electricity bill. 34% are willing to pay for Smart Metering in order to reduce CO_2 emissions. Half of this group is concerned about the fact that the energy company would collect too much information through Smart Metering devices and is worried about being their data being intercepted by third parties which could abuse it.

Concluding Remarks

This segment consists of younger people, who are studying, are unemployed or just starting their career. So the economic level is lower than in other segments. They are willing to accept changes in life keeping all options opened. Considering the unemployment rate that Spain is currently experiencing, this segment is large and relevant. People from this segment might not be living on their own and therefore lack their own income and household. On the other hand they are eager to receive smart meter information and would accept to paying for it.

A considerable amount of people of segment 3 are willing to pay for smart meter services when it helps them to overview the energy consumption or to reduce global warming emissions. Apps with visual and environmental arguments would be the key.

3.5 Segment 4: "The Senior"

Introduction

Senior persons in their 45-65's from any economic level who are not worried about work as they might have a permanent job and have already reached the top of their careers. Also there could be people close to retirement. The family is very important to them (they are probably parents whose offspring still live in home and consequently depend on them). They do not like changes that much. Instead, these people prefer a secure and safe life. They maintain a strong criticism towards a consumer society.

Additional Values and Beliefs

People belonging to segment 4 have a high interest in technology and innovation. These people are reasonably able to adapt to change and therefore don't find it difficult. The majority of them are willing to keep all their options open. This segment of people is consistent in the belief that everyone should protect our environment and considers living in a multi-cultural society as a positive thing. They agree with the idea that everyone is responsible for their own actions.

Social Demographic Statistics

This segment has a uniform distribution of age - half of the people interviewed were men, another half - women. The population sample's age varies from 20 to more than 60 years. Most of the people were of middle age (from 40 to 59). The level of education is distributed relatively uniformly. However, there is a higher percentage of people graduated from university (37,5%), followed by people who finished secondary (25%) or professional education (20,8%) whereas postgraduates and PhD's are the smallest group (12,5%). The household size varies from 1 to 5. Households with two people are the most common (37,5%). In this population sample, there are no households with more than 5 people.

The range of energy usage per year varies from 2000 to more than 5000 kWh. The most common energy consumption is between 2000-3500 kWh (29,2%). 55% of these population has an income up to 55 000 € annually. On the contrary, incomes higher than 55 000 €/y represent 25% of the population.

Smart Metering Preferences

A striking feature about the level of knowledge is that many people (67%) of segment 4 do not feel well informed regarding smart meters. According to the results, the most preferred way to retrieve Smart Metering information is in-home display (37,5%). However none of the answers were 'in text'. Letters depict a small amount (4,2%). Regarding consumption data, almost everybody agreed with the option for information to be displayed through charts (87,5%). For people in segment 4, the greatest benefit of Smart Metering is that it helps them to overview their energy consumption (70,8%). It is the largest percentage among all segments.

The majority of people are concerned about the fact that the energy company would collect too much information through this device and are worried about their data being intercepted by third parties, which could abuse it.

Concluding Remarks

This segment consists of middle-age/mature people with a considerable stability in their lives (job, family, etc.). They are not willing to make significant changes in life. They appreciate safety and security. This segment represents a large and relevant group in Spain. As they usually own their home, they could be an interesting target group for Smart Metering products and services. As segment 4 is not willing to pay for smart meter services even when it helps them to reduce their electricity bill, the main focus is to find out how much energy they are consuming and where.

This segment prefers to visualize their energy consumption via in-home display, website and apps. Hence, it would be a good idea to develop these services.

4 United Kingdom

4.1 Short Description of the Segmentation of Electricity Consumers in the UK

The UK sample derived four segments from the dataset. The segment memberships are small reflecting the small overall sample size. Segment 1 consists of 89 cases, segment 2 of 78, segment 3 of 59 and segment 4 consists of 50 cases. The sample had much higher levels of education than the UK population as a whole and this is reflected in the segment profiles with particularly vulnerable households unrepresented. Key variables used to derive the segments were those relating to attitudes to: technology, change, work life balance and optimism for the future. The following sections summarise the statistical analysis of all four segments including values and beliefs, socio-demographic profiles and preferences regarding Smart Metering.

4.2 Segment 1: “Go with the flow technophiles”

Introduction

These people are very interested in new technology, relish change and are not concerned about keeping life safe and secure. Work is not the be all and end all but is seen as part of life’s mix. They are not expecting life to get better in the future; it may even get a bit worse.

Additional Values and Beliefs

One of the most striking characteristics of this segment is their relish of change. People from this segment find it easy to adapt to change. They see multicultural society positive. On balance this segment is probably the most concerned with preserving the environment and against consumer orientated society.

Social Demographic Statistics

56% of this segment is female. The age profile is similar to the general UK profile with 23% between 20-39, 44% 40-59 and 33% over 60. Levels of education are the highest of any segment and much higher than for the UK as a whole with 88% qualified to degree or post graduate level compared to UK population totals of only 34% for 16-64 year olds (much lower for those aged over 65).

This segment has the highest percentage of single and two person households at 71%. Household income is less clustered than in any segments with a peak of 22% in the £20,000[1] to £27,900 range (average UK earnings for full time earner). This is the only segment with a significant number, 9%, with a household income over £68,000 which is again is more closely aligned with UK income profiles than other segments. This segment also had the most varied energy use with 9% using more than 5,000 KWh per year. In

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[1] Currency exchange rate is 0,74288 GBP/EUR at 11.02.15.

common with other segments 39% were not aware of their energy usage in terms of KWh.

Smart Metering Preferences

This segment had the highest awareness of Smart Meters with 61% agreeing to some degree that they were well informed. All segments indicated that an In home display (IHD) was their preferred way of retrieving smart meter data, this is unsurprising as UK legislation means that every smart meter will be installed with a free IHD. Go with the flow technophiles were the segment most likely to prefer other methods of accessing smart meter data with 28% preferring a website and 24% preferring a smart phone.

This segment was the most ambivalent in their preferences for the way that data is displayed with over 30%, the highest of any segment giving a neutral response to both options the probability is that this group is comfortable interpreting data in all formats.

In common with other segments this group indicated the biggest benefit they saw of smart meter data was to provide an overview of energy consumption; however 26% of this segment also stated that that the biggest benefit would be in reducing energy costs, the largest of any segment. There was a slightly higher percentage prepared to pay for services than in other segments with 35% prepared to pay to help reduce costs and 37% to help reduce CO_2 emissions.

There was a relatively low level of concern that energy companies would misuse data at only 38%, however 61%, the highest of any segment were concerned about data interception by third parties.

Concluding Remarks

This segment is unique in that it is primarily united by its love for technology and new things. Without any specific demographic boundaries this is a significant market segment.

Although there is a high awareness of smart meters there are opportunities to raise awareness of how you can get a smart meter installed now and the different services currently offered by different energy companies. The messages should be around having more information available and being something new.

Marketing to this segment will be constrained by the availability of services to install a smart meter and consideration will need to be given that there may be a need to change energy supplier in order to access a smart meter installation and that this may impact on the cost of supply.

4.3 Segment 2: "Steady Backbone"

Introduction

Technology is a necessary evil, it does a job but is nothing to get excited about, these people can change with the times but they do not relish change and like to feel that their lives are secure. Work is a means to an end. They are expecting life to go on much as it is now.

Additional Values and Beliefs

This segment is the least interested of any in technology. This is also the only segment where some respondents indicated that they found adapting to change is difficult. Family is very important to them and the majority agreed they want to have as much fun as possible. Although a lot of respondents agreed to some degree that society is wasteful, not all of them agree that everyone should protect our environment. This segment also had the lowest level of agreement on the value of a multi-cultural society.

Social Demographic Statistics

59% of respondents in this segment are female.

This cluster has the youngest age profile with 27% between 20-39, 37% between 40-59 and 36% over 60 years old. This segment has the lowest educational attainment levels although with 73% at degree level or above this is still much higher than the UK population as a whole. This segment is the only one with respondents with no qualifications (4%).

This segment has the highest percentage of single person households at 24%. Steady Backbone also has the second lowest income profile but is also the only group where some income data is unknown and at 30% introduces uncertainty. This segment also has a low awareness of energy use with 45% unable to provide an estimate.

Smart Metering Preferences

This segment is the least informed about smart meters with only 45% agreeing at any degree that they feel well informed. This is one of the segments most likely to want information by IHD and least likely to want information by smart phone (19%). This segment is the one most interested in receiving information by letter with 10% indicating that this would be their preferred method, more that twice the level indicated by any other segment.

There is no big preference between receiving information as tables (55%) or charts (60%) however this is the only segment where a significant number expressed a dislike of how data is presented with 18% disliking tables and 16% disliking charts.

Again the main benefit of smart meter data is perceived as providing an overview of usage with 23% thinking the biggest benefit is to help reduce energy costs. Only 13%, the lowest of any segment rate the ability to reduce CO_2 emissions as the biggest benefit. Despite the evaluation of benefits 22% are willing to pay for services to help reduce energy costs while 30% are prepared to pay for services to help reduce CO_2 emissions.

This segment is the most worried about energy companies collecting too much information with 51% indicating this was a concern, 59% were concerned about the misuse of their data by third parties.

Concluding Remarks

This segment is the least at home with new technology and the most distrustful of energy companies (who in the UK will be installing smart meters and providing the initial smart meter services).

They probably represent a sizable proportion of UK households but little appétit for change they will be the least interested of all segments in Smart meters.

However this is the segment that of the four could most benefit from saving money on their energy costs (lower incomes). This segment would be worth targeting with messages about saving money, free services, ease of use, and for Smart prepay- new easier ways to pay. As this group is happy to use IHDs standard offerings by energy companies would be most appropriate.

4.4 Segment 3: “Motivated Optimists”

Introduction

These people are interested in technology and really enjoy change although they also like to know that change will not threaten their security. They place importance on their work life and expect that life will get better in the future.

Additional Values and Beliefs

Initially motivated optimists are similar to segment one in that they are very interested in new technology and do not find it difficult to adapt to change. However this segment also places a high value on safety and security. This segment is the most work orientated and family is the most important thing in life for a lot of them. These would appear to contradict each other but it is likely that this is a group that is highly motivated to succeed at work, secure a good income in order to ensure a high standard of living for their family. This is also the segment that identifies most with self-responsibility agreeing that everyone should protect our environment, is responsible for their own actions and they always want to retain control.

Social Demographic Statistics

This is the only segment where males significantly outnumbered females with only 29% of respondents being female. The age profile for this segment is also distinctive with 51% falling within the 40-59 age range. This segment also has the largest household size, with 45% having at least three people in the household and only 10% being single person households. Highest levels of education were lower that for segment 1 with 79% having at least a first degree and this probably reflects the slightly older age profile.

This segment also has one of the highest household income profiles with 20% of households having an income between £44,000-£52,000 and only 7% having an income less than £12,000.

Smart Metering Preferences

This was the segment with the second highest awareness of smart meters, after technophiles, 60% feel well informed regarding smart meters. In common with other groups the first preference, 42%, was to retrieve smart meter data via an IHD, however 20% would prefer a website and 32%, the highest of any segment, would prefer to use a smart phone.

There was a slight preference in this group to have consumption data displayed as charts rather than as tables and numbers. Most interestingly this was the group that had the fewest neutral answers with 73% stating that they would like tables and numbers and 79% stating that they would like charts.

In line with their preference for being in control this was the segment where the largest percentage of people, 51% state that the greatest benefit of smart meters was to provide an overview of energy consumption, this was also the segment with the lowest percentage of people, 10%, stating that they see no benefit to smart meters. This was the group that is the most prepared to pay for smart meter services with 44% prepared to pay to help reduce energy bills and 42% prepared to pay to help reduce CO2 emissions.

This group was least worried about energy companies collection too much data at 37% with a typical 58% worried about data interception by third parties.

Concluding Remarks

This segment is unique in its optimistic attitude towards the future. This segment is not a large proportion of the UK population as it generally represents those with higher than average household incomes. However, if action follows the pattern of attitudes and beliefs exhibited by this segment this would be a relevant segment to target. They strongly believe in action by the individual both for personal benefits and to benefit wider society, they are interested in technology and have the education and income to both interpret data and take action on results.

Marketing and communication is probably best achieved though in-depth, informative, media articles and more general communications with a general message of 'staying in control' a subsidiary message relating to the environmental impacts of energy use is also likely to appeal.

This segment is likely to be early adaptors of smart meter services when these are offered by energy supply companies. There is a willingness to pay for services but any paid service would need to offer a much higher level of sophistication than free services provided by energy supply companies, either by allowing more detailed analysis of data or by offering data retrieval in more novel ways e.g. smart phones.

4.5 Segment 4: "Comfortable Later Lifers"

Introduction

These people are not over excited by technology but are happy to use it where it is perceived as worth while. Change is not a problem and can be invigorating; they are not big risk takers but are not totally hung up on security. Success at work is really not important they are not expecting life to get better but are not expecting it to get any worse.

Additional Values and Beliefs

This is the only segment where no one agrees with the statement that being successful at work is central to my life and this may reflect the generally older profile with a large number of retired households. On balance this is the group that most strongly agrees with the statement that our society is too consumer–orientated.

Social Demographic Statistics

This segment was most balanced with regards to the gender of respondents with 46% female and 54% male respondents.

This segment also had the oldest age profile with 72% of respondents over 49 years old.

Despite this older age profile 74% of this group are qualified to degree level or higher. This group also has the lowest household income profile with the greatest number of households in the £12,000- £19,999 bracket; this may be a reflection of the age profile and those on retirement income. Number of people within the household was very similar to that in segment two with 20% single people households and 36% with three or more people. Electricity consumption is below average – only 18,3% consume more than 3 500 kWh annually.

Smart Metering Preferences

This is the segment with the lowest awareness of smart meters with only 12% agreeing or strongly agreeing that they feel well informed about smart meters and 26% agreeing only partially. This segment expresses the highest preference for IHD with 50% preferring this method; however there is still an interest in other technology with 22% preferring a website and 20% smart phones.

Within this segment there was a preference for data to be displayed as charts with 74% agreeing that they wanted consumption data displayed in this was with only 56% wanting data displayed as tables and numbers. Within this segment 22% do not see any benefit to smart meters, and 24% consider that they help to preserve the environment as the greatest benefit; in both cases this is higher than any of the other segments. However the willingness to pay for services to help reduce CO2 emissions is only 32% lower than all but segment two. Well off later lifers have a mixed response to how worried they are energy companies collecting too much data 22% strongly agreed that this was a worry whereas 30% disagreed or strongly disagreed. The pattern was repeated for worries about third party data interception with a polarisation of opinions.

Concluding Remarks

Although not an exclusive membership this segment represents later lifers who are retired or approaching retirement. They are generally comfortably off.

This represents a growing sector of UK society with an aging population and 50% of adults already over 50 years old. It should be recognised that not all older retired people will be as comfortably off.

This group does place importance on the environment but it should be recognised that the term ‘environment’ may be equated with conservation and the visual environment and not be associated with energy efficiency. More testing of messages would be needed before launching a communications campaign to this group.

There is currently a low awareness of Smart meters within this group and given that there is a direct association in the UK between the installation of a Smart meter and the provision of free IHDs this could make this a good group to target for awareness raising. This is particularly pertinent as IHD’s are the preferred data delivery method for this group.

5 Austria

5.1 Short Description of the Segmentation of Electricity Consumers in Austria

For the Austrian sample, three segments were derived from the dataset. Due to the small overall sample size, the segments are relatively small, which makes them difficult to analyse. Segment 1 consists of 124 cases, segment 2 of 116, segment 3 of 63.

5.2 Segment 1: “Future-oriented Open-minded Technophiles”

Introduction

These people are very interested in new technology, have no fear of change, but want to keep life safe and secure. Occupational career is very important for them. They are expecting life to get better in the future and have a strong interest in monitoring in general.

Additional Values and Beliefs

This segment is characterised by a strong belief in the personal responsibility of each individual. The family is very important for them. In addition, this segment is interested in protecting the environment, but environmental protection is not the main focus of these people. In principle this segment is in favour of multiculturalism and tend to keep all options open.

Social Demographic Statistics

Representatives of this segment are rather male by trend (60,5% are male, 39,5% - female) and in all age classes. The majority of them are between 40 and 59 years old. Representatives of segment 1 are in all education levels, but rather rare in the low education level (only 24,2% have low levels of education “Hauptschule” and “Realschule”).

The majority of segment 1 lives in two person households (37,9%). It has also the smallest share of single households in the sample. 30,6% consume between 2000 and 3499 kWh electricity annually. This finding correlates with household size – it is typical electricity consumption of small households. The majority of respondents from segment 1 are in the middle and high income classes by trend.

Smart Metering Preferences

Like all other segments the future-oriented and open-minded technophiles have a modest level of knowledge about smart metering – 72% don’t feel well informed about it. The preferred way of retrieving smart metering information are website (51%) and conventional letter (23%). Respondents from this segment would like to receive Smart Metering information based on tables (86%) and charts (68%). They see the greatest benefit in monitoring energy consumption (51%). Reduction of electricity bills is in the second place (32%). Protection of the environment is not important at all. These people show hardly any willingness to pay for Smart Metering services that help them either to reduce electricity bills or to reduce CO2 emissions. The worriedness about the energy company collecting too much information through the smart meter or about third parties intercepting smart metering data and abusing is comparable to other segments.

Concluding Remarks

This segment is in favour of Smart Metering and monitoring, as they are relatively open-minded to new trends and technologies. In addition they have a stronger interest in monitoring consumption. But despite the principal interest in Smart Metering there is no pronounced willingness to pay for new services. Ecology and sustainability are not priorities for them. They believe in a better future by technological progress and not by alternative lifestyles. The segment can be targeted by technology-oriented messages. They see in Smart Metering an essential driver of a better future, which offers opportunities to make the everyday life more comfortable. The segment is interested in new services, especially in monitoring services, but there is no willingness to pay for them. Therefore new services seem to be a good instrument to increase customer loyalty.

5.3 Segment 2: "Ecology-oriented Open-minded Criticals"

Introduction

These people are committed to sustainability and are characterised by a criticism of society. To be hedonistic is not the main focus of their view of the world. They have a significant pessimism concerning the future and are advocates of a multicultural society.

Additional Values and Beliefs

The ecology-oriented and open-minded criticals have a strong belief in the social responsibility of each individual. The family is of importance to them, but not as important as for the other two segments. They feel a very strong impulse for protecting the environment.

Social Demographic Statistics

56% of this segment are male, 44% - female. This distribution is average. This segment is middle aged (40 – 59) by trend (51,7%) and in rather higher education levels (high school, university). The largest group has middle level of education ("Abitur").

Segment 2 is characterized by small size of households – 68% live alone or in a two person households. The largest group (29,3%) consumes between 2000 and 3499 kWh annually which is typical for small households. Representatives of segment 2 tend to be in the middle and high income classes.

Smart Metering Preferences

Like all other segments the ecology-oriented and open-minded criticals have a modest level of knowledge about Smart Metering – 73,3% don't feel well informed. In this segment the proportion of people, who do not see any benefit in Smart Metering, is the highest one (22,4%). Where any benefit was seen, the improved opportunity to overview the energy consumption is mentioned most frequently (51,7%). The preferred ways of retrieving Smart Metering information are website (52,6%) and conventional letter (28,4%). These people prefer to get Smart Metering information based on tables (87,1%). They show hardly any willingness to pay for Smart Metering services that help them either to reduce the electricity bill or to reduce the CO_2 emissions. The worriedness about the energy company collecting too much information through the smart meter or about third parties intercepting Smart Metering data and abusing is comparable to other segments.

Concluding Remarks

Ecology and sustainability are priorities for this segment, so that Smart Metering could be communicated to them as an essential part of the energy transition to make our world greener. In this segment there is certain level of scepticism concerning Smart Metering. These people hardly see any benefits of smart meters. Consequently there is no willingness to pay for new services.

5.4 Segment 3: “Self-centered Socially Disinterested Hedonists”

Introduction

These people are very self-centred not thinking about social trends and problems. They want to have as much fun as possible. They are not interested in new technology and environmental protection.

Additional Values and Beliefs

For the self-centred and socially disinterested hedonists consumption brings gratification. They are not interested in new technology. They have no significant interest in social developments. Occupational career is not important for them. These people have problems in adapting to new circumstances and are pessimistic about the future.

Social Demographic Statistics

The segment consists of younger people who have lower education levels by trend. There are more females than in the other two clusters – 47,6%. Representatives of segment 3 tend to live in rather small households – 77,8% live in one to three person households. Accordingly to household size their electricity consumption is also relatively low and lies between 2000 and 3499 kWh. Income classes are distributed uniformly between less than 14 999 Euro and 64 999 Euro.

Smart Metering Preferences

In this segment the proportion of people, who see the benefit of smart metering in the reduction of the energy costs (34,9%), is the highest one of all groups. The number of people who would like to get information via smartphone (27%) is higher than in other segments. The willingness to pay for Smart Metering services is slightly higher in comparison to other segments. Worriedness about the energy company collecting too much information through smart meters or about third parties intercepting Smart Metering data and abusing it is comparable to other segments.

Concluding Remarks

In this segment on the one hand people are not technology or ecology-oriented, on the other hand they stated slightly more frequently that they would be willing to pay for services. This segment seems to aspire to social approbation by having prestigious goods. Social approbation is more important for their decision making than strong personal beliefs and attitudes. If smart meter services have the status of a must-have within their community, they most likely would buy them. The fact that this segment consists primarily of people not in the high income class is a considerable obstacle to sell services to this target group.

6 Finland

6.1 Short Description of the Segmentation of Electricity Consumers in Finland

The Finnish sample size was 138, from which four segments were derived. Due to small sample size, the segments are rather small making them more difficult to analyse. The segment 1 consists of 41% of the sample and includes 57 persons, segment 2 of 25% and 35 persons, segment 3 of 18% and 25 persons and segment 4 consists of 16% and 22 persons.

6.2 Segment 1: "Independent Green Consumers"

Introduction

The people from segment 1 do not find at all difficult adapting to change and they strongly appreciate freedom of choice. They are convinced that society is too consumption oriented and wasteful. Respondents from this segment find success at work quite important and are optimistic about the future.

Additional Values and Beliefs

People from segment 1 can be considered very interested in new technology. They strongly want to retain control and also want their life to be safe and secure without many changes. Representatives of segment 1 feel very strongly about protecting the environment. The family is the most important thing in life for them. They emphasize the most that life should be fun.

Social Demographic Statistics

Males and females are equally distributed (both 49%) in this segment. The age distribution is rather old, 53% are 60 or older, 27% are 40-59 and 20% are 20-39. The second highest at 64% have at least bachelor's degree, 32% have secondary and 4% elementary.

In the segment there are a lot of single and two person households, 32% live in one person households, 48% in two person, and 14% live in 3 - 4 person households. The largest group consumes between 5000 – 9999 kWh (17%) and 46% consume at least 5000 kWh of electricity annually, while for 22% the consumption is unknown. The largest groups of segment 1 have income of 25 000 – 34 999 and 35 000 – 44 999 € (15 and 19% respectively), and 59% have an annual income of at least 25 000 € (while 30% didn't specify their income).

Smart Metering Preferences

Segment 1 is well informed as 76% at least partially agree that they feel well informed about smart meters, while 11% are neutral. The most preferred way of retrieving smart metering information is website (58%), followed by in-home display (19%) and smart phone (16%). The segment seems to prefer almost equally tables and numbers or charts (respectively 79 and 74% at least partially agree) to display consumption data.

The greatest benefit of smart metering for them is helping to overview one's energy consumption (56%), followed by helping to reduce electricity bills (32%).The willingness to pay for Smart Metering services is almost equal for services that help to reduce electricity bills and services that help to reduce CO_2 emissions (respectively 61 and 64% at least partially agree), while also a clear percentage is neutral (respectively 11% and 16%). Segment 1 seems to be somewhat worried about the energy company collecting too much information through the smart meter and about third parties intercepting and abusing Smart Metering data (respectively 38 and 36% at least partially agree), while also a large proportion is neutral (respectively 25 and 27%).

Concluding Remarks

The people in segment 1 are very interested in new technology, do not find it difficult adapting to change while value the freedom of choice very much and strongly want to retain control. They are convinced that society is too consuming and wasteful and that protecting the environment is important. Representatives of segment 1 also have the highest appreciation of having fun in their life. They feel well informed about smart meters, and strongly prefer website but also IHDs and apps. These people see overviewing their consumption as the main Smart Metering benefit but also have the highest appreciation of energy bill reduction. Their willingness to pay for services that help to reduce electricity bills is the second highest and willingness to pay for services that help to reduce CO2 emissions is the highest. They often have quite high annual electricity usage. This segment represents a large and relevant group in Finland and is one of the most interesting target groups for Smart Metering products and services, both free and paid. They favour new technology, have usually quite high consumption, want freedom of choice and control, think that consumption should be reduced and environment protected, and have the highest interest in Smart Metering services as indicated in willingness to pay. This segment can be approached with a marketing/communication campaign that addresses their appreciation of new (novelty) solutions and emphasises freedom of choice, better control over energy consumption and bill and ways to protect environment, while making all this “fun”. This segment should be offered services that make overviewing and controlling consumption, reducing energy bill, and protecting environment easy and effortless, while offering a certain amount of customisation (e.g. mass/self-tailoring the services) and gamification. The most suitable services include website and apps and can also include paid services. The high consumption levels, willingness to pay and appreciation of things central to Smart Metering make this segment a good target group for more extensive services allowing high consumer engagement.

6.3 Segment 2: “Consumerist Achievers”

Introduction

People in segment 2 do not find it difficult adapting to change. They value the freedom of choice quite strongly. Representatives of segment 2 are more neutral about society being too consumption oriented and wasteful. They find success at work important and are optimistic about the future.

Additional Values and Beliefs

People in segment 2 can be considered interested in new technology. They strongly want to retain control, while desire their life to be safe and secure without much change. Representatives of this segment feel very strongly about protecting the environment. They are also convinced that family is the most important thing in life. These people appreciate having fun in their life.

Social Demographic Statistics

Males and females are quite equally distributed (respectively 46 and 51%) in this segment. The age distribution is old, as 50% are 60 or older, 35% are 40-59 and 15% are 20-39. The highest educated as 63% have at least bachelor's degree, while 23% have secondary and 3% elementary.

23% of segment 2 live in single households, 69% in two person, and altogether 9% live in 3 - 5 person households. The largest group is between 3500 – 4999 kWh (23%) and altogether 37% consume 5000 kWh or more electricity annually. For 23% the consumption was unknown. The highest income segment, with the largest group 35 000 – 44 999 € (23%) and 72% have the annual income of at least 25 000 € (while 23% didn't specify their income).

Smart Metering Preferences

The level of knowledge on Smart Metering is the highest of the segments with 77% at least partially agreeing that they feel well informed about Smart Metering, while 14% are neutral. The most preferred option of retrieving Smart Metering information is website (49%), followed by smart phone (29%) and in-home display (17%). The segment seems to prefer almost equally tables and numbers or charts with very high numbers (respectively 86 and 80% at least partially agree) as forms of displaying consumption data. The greatest benefit of Smart Metering is helping to overview one's energy consumption (83%), followed by helping to reduce electricity bills (9%).

The willingness to pay for Smart Metering services is not very high and almost equal for services that help to reduce electricity bills and services that help to reduce CO_2 emissions (respectively 37 and 49% at least partially agree), while a large proportion are neutral (respectively 26% and 29%). The segment 2 seems to be somewhat worried about the energy company collecting too much information through the smart meter and about third parties intercepting and abusing Smart Metering data (respectively 37 and 31% at least partially agree), while also a large share is neutral (respectively 29 and 26%).

Concluding Remarks

The people in segment 2 are high educated, have high(er) income and they value success at work a lot. Family is important but they usually live in 1 or 2 person households. They are interested in new technology and appreciate the freedom of choice. These people do not find it difficult adapting to change, but still strongly need their life to be safe and secure without lots of changes and retain control (in this respect similar to segment 1). They are more neutral about society being too consuming and wasteful, but they strongly feel that protecting environment is important. Representatives of this segment also appreciate fun in their life. This segment is similar to segment 1 in all other values, but they do not think so strongly that society is too consumption oriented and wasteful, appreciate success at work more and appreciate having fun in life less. The segment 2 is very well informed about smart meters and prefer website and apps but also accept IHDs. They have the highest enthusiasm to have consumption data displayed in both ways, and highly emphasise overviewing their consumption as a smart meter benefit, but quite paradoxically place very low emphasise on preserving the environment. Their willingness to pay for services is not very high and clearly better for services that help to reduce CO2 emissions. These people often have average or quite high annual electricity usage. This segment represents quite a large and relevant group in Finland. They are an interesting target group for Smart Metering services. They are interested in new technology and solutions, are usually well educated with relatively high income and average to quite high electricity consumption, want freedom of choice and control, and think that environment should be protected. However, for the paid services to gain popularity in this group, the neutral persons should be persuaded by proper communication and marketing. This segment can be approached with a marketing/communication campaign that addresses their appreciation of new (novelty) solutions and emphasises freedom of choice, better control over energy consumption and bill, while protecting environment. Making all this “fun” can be used to certain extent. This segment should be offered services that make overviewing and controlling consumption and energy bill, and protecting environment easy and effortless, while offering customisation (e.g. mass/self-tailoring the services) and a certain amount of gamification. The most suitable services first include free website and apps. If the willingness to pay can be increased through increased knowledge and acceptance (using the marketing strategies mentioned above), also more sophisticated apps and IHDs could be offered with more enhanced core features appreciated by this segment.

6.4 Segment 3: “Pessimistic Followers”

Introduction

People in segment 3 do not find it very difficult adapting to change but also do not value the freedom of choice so strongly. They somewhat think that the society is too consumption oriented and wasteful. These people don't find success at work that important and feel distinctly negative about the future.

Additional Values and Beliefs

People in segment 3 can be considered interested in new technology. They are the least strict about retaining control, while still wanting their life to be safe and secure without much change. Representatives of segment 3 are less interested in protecting the environment compared to other segments. They are clearly the least inclined to say that family is the most important thing in life and that life should be fun.

Social Demographic Statistics

Males and females are equally distributed (respectively 48 and 48%) in this segment. The age distribution is leaned towards middle aged persons, 52% are between 40-59, 17% between 20-39 and 30% are 60 or older. The lowest at 44% have at least bachelor’s degree, while 36% have secondary, 4% elementary and 4% no education.

The largest “single” segment at 38% live in one person households, 29% in two person, and altogether 25% live in 3 - 5 person households. This is the lowest consuming segment, 29% consume between 2000 – 3499 kWh, 18% between 3499 - 5000 kWh and only 33% consume 5000 kWh or more. For 12,5% the consumption was unknown. The lowest income segment, with the largest group of 21% earning between 25 000 and 34 999 € and only 46% have the annual income of at least 25 000 € (29% didn’t specify their income).

Smart Metering Preferences

Level of knowledge about smart metering is low in this segment, with only 48% at least partially agreeing that they feel well informed, while 12% are neutral. The most preferred option way of retrieving smart metering information is website (40%), followed by app (24%) and in-home display (16%). Segment 3 is also the largest group preferring letter (12%). The segment seems to prefer tables and numbers over charts (respectively 72 and 56% at least partially agree, large 20% neutral group with the latter) for displaying consumption data. As to the benefits of Smart Metering helping to overview energy consumption is preferred (48%), followed by helping to reduce electricity bills (24%), largest proportion of “no benefit” answers (12%).

The willingness to pay for Smart Metering services is the lowest of the segments, for services that help to reduce electricity bills and services that help to reduce CO_2 emissions (respectively 32 and 36% at least partially agree), while 16% are neutral for both services. The segment 3 seems to be somewhat worried about the energy company collecting too much information through the smart meter and about third parties intercepting and abusing Smart Metering data (respectively 36 and 44% at least partially agree), while also a large share disagrees and only very few are neutral (respectively 4 and 8%).

Concluding Remarks

The people in segment 3 are less educated, have lower income and they don’t value success at work that much. Family is less important and they are often singles (but also live often in 2 to 3 person households). These people are quite interested in new technology, but do not value the freedom of choice and retaining control that much. They are less easy about adapting to changes and feel negative about the future. These people are more neutral about protecting the environment but somewhat think that the society is too consuming and wasteful. They have the lowest appreciation of having fun in their life. Representatives of segment 3 don’t feel very well informed about smart meters, and prefer website and apps but also accept IHDs and letter. They emphasise overviewing their consumption and saving on electricity bills as a smart meter benefit, but also contain a number that sees no benefit. Their willingness to pay for services is the lowest with a clear proportion of neutral answers. They often have average or quite low annual electricity usage. This segment represents a smaller but relevant group in Finland. They are the most challenging target group for Smart Metering services, especially paid ones. These people are quite interested in new technology and solutions, but usually have less income and are less interested to have different options available and in retaining control. They can be more pessimistic, do not value protecting the environment so much, and have quite low electricity consumption and willingness to pay. This segment can be approached with a marketing/communication campaign that start from “free and easy” and build up to more extensive options: first their level of knowledge and interest of Smart Metering services should be raised, persuading neutral and negative persons to better accept the services, and emphasizing that smart meter services can be a very positive thing considering the future. This segment can be less swayed by a wide range of options, customisation and gamification, although they can react positively to new technology and solutions. The services should provide savings in electricity bills with simple and effortless measures, not requiring large changes to their homes or daily life. Free website and apps as low cost options would be suitable. After the knowledge and interest is raised more extensive and expensive services could be introduced. However, the small household size and electricity consumption can pose an ultimate limiting factor for the interest and willingness to pay of this segment.

6.5 Segment 4: "Independent Conservatives"

Introduction

The people in segment 4 find more difficult adapting to change and appreciate the freedom of choice. They think quite strongly that society is too consumption oriented and wasteful. Representatives of segment 4 find success at work important. They are quite neutral about the future.

Additional Values and Beliefs

People in segment 4 are very little interested in new technology. They want to retain control and want their life to be safe and secure without much change. Representatives of segment 4 feel quite strongly that everyone should protect the environment. They think that family is important and want to have fun in their lives, although these are not very pronounced features.

Social Demographic Statistics

In this segment there are more females than males (respectively 50 and 41%). The age distribution is skewed towards older people with a clear proportion of younger respondents, 53% are 60 or older, 24% are between 40-59 and 24% between 20-39. The second lowest at 59% have at least bachelor's degree, while 27% have secondary, and 14% elementary education.

Household size is quite evenly distributed as 32% live in one person households, 36% in two person, and altogether 32% live in 3 - 5 person households. Annual electricity consumption leaned towards higher consuming households, 22% consume between 10 000 – 14999 kWh, and altogether 49% consume over 5000 kWh or more. For 27% the consumption was unknown. The 2nd lowest income segment, with the largest group of 18% earning 15 000 – 24 999 € and 55% have the annual income of at least 25 000 € (18% didn't specify their income).

Smart Metering Preferences

This is the least informed segment, with only 45% at least partially agreeing that they feel well informed about Smart Metering, while 55% partially to strongly disagree. The most preferred option of retrieving Smart Metering information is website (46%), followed by in-home display (27%) and app (14%). The segment equally prefers tables and numbers and charts for displaying consumption data (68% at least partially agree for both) with a notable number also disagreeing. The greatest benefit of smart metering is helping to overview energy consumption (77%), followed by helping to reduce electricity bills (23%). The willingness to pay for smart metering services is the highest for services that help to reduce electricity bills and also quite high for services that help to reduce CO_2 emissions (respectively 64 and 55% at least partially agree), with a notable number of neutral answers (19 and 14% respectively). The segment 4 seems to be the least worried about the energy company collecting too much information through the smart meter and about third parties intercepting and abusing smart metering data (respectively only 23 and 18% at least partially agree), with neutrals (respectively 18 and 27%).

Concluding Remarks

The people in segment 4 are averagely educated and have average income levels. They are both conservative and independent, in the sense that they value family and success at work, find it more difficult adapting to change, are neutral about the future and appreciate having freedom of choice. These people are not interested in new technology at all. They feel quite strongly that everyone should protect the environment and that society is too consumption oriented and wasteful. Respondents from segment 4 want to have fun in their life, but this is not very pronounced. They are the least informed about smart meters, and prefer website and IHDs but also can accept apps. These people place an emphasise on overviewing their consumption, but also recognise saving on electricity bills as a smart meter benefit. Their willingness to pay for services is the highest for services helping to reduce electricity bills and also quite high for services helping to reduce CO2 with a clear proportion of neutral answers. They often have quite high annual electricity consumption and a large percentage has very high consumption. This segment represents a smaller but relevant group in our country. They can be a very good target group for Smart Metering services, including paid ones. They want freedom of choice and control, value protecting the environment and although they are not interested in new technology and do not feel very well informed about smart meters. They have quite positive attitudes and high willingness to pay, and have often quite high electricity consumption. This segment can be approached with a marketing/communication campaign that raises their level of knowledge and interest of Smart Metering services while offering concrete solutions. This group shouldn't be approached by offering technology, but with easy options to overview ones energy consumption, save on electricity bills and protect to the environment, allowing freedom of choice (customisation, self-tailoring) and control with simple and effortless solutions that bring no large changes to their homes or daily life. Also emphasizing that smart meter services are a positive and non-invasive thing helping planning for the future can be effective. They should be offered easy to adopt solutions such as free website and apps, in parallel with more extensive paid services such as apps and IHDs, keeping in mind the "less technology but more freedom and control" aspect. After their level of knowledge and interest is raised, this segment can respond even more positively to new services. The relatively high levels of electricity consumption and initial willingness to pay form a good basis to offer new services for this group.

7 Italy

7.1 Short Description of the Segmentation of Electricity Consumers in Italy

Within the Italian sample, three segments were derived from the dataset: segment 1 consists of 144 cases, segment 2 of 91 and segment 3 of 83. Due to the small overall sample size (318 questionnaires), the segments are relatively small, which makes them difficult to analyse.

7.2 Segment 1: "Curios – optimistic Innovative-oriented"

Introduction

The consumers of this segment are optimistic for the future and want to get the most from life both in terms of their personal success and also in terms of fun. They are not afraid of the differences in life, which they do consider as an added value. In general they are well oriented to changes and innovation.

Additional Values and Beliefs

Representatives of segment 1 strongly agree with the statement "I am very interested in new technology and innovation". Therefore Segment 1 can be an appropriate consumer group for the offers of Smart Metering services. Family is the most important value in life for a lot of respondents. An interesting feature of his segment is that they don't see a multi-cultural society in a very positive light.

Social Demographic Statistics

This segment is the one characterised by the highest percentage of women: it is the only segment where women exceed 30% of the sample (30,8%). With regard to age distribution, this segment has the highest percentage of people aged between 40 and 59 years. The education level of consumers belonging to the segment 1 is fairly good, with a high percentage of university graduates (the university levels in Italy are laurea breve, laurea specialistica and laurea; 47,9% of consumers of this segment have a university degree). Segment 1 is also the segment with the lowest percentage of lower education level.

In this segment there is a higher percentage of singles (13,6%) and for families consisting of 5 or more people (7,1 and 2,9% respectively). Energy consumption of this segment is the lowest among the three segments (54,3% consume less than 3 500 kWh electricity annually) and, finally, it is the segment with the highest income level (more than half of the segment earns more than 35 000 Euro in a year).

Smart Metering Preferences

This segment is what is deemed to be more informed about smart meters (65,3% agree that they feel well informed, the highest rate compared to other segments). These people are interested in information about smart meters and they prefer modern systems for controlling energy consumption through the web (32,6%) and app for smartphones and tablets (30,6%), and with the use of charts (85,4%) and tables (91,7%). The greatest benefit of using smart meters is for these people is the possibility to overview their electricity consumption (62,5%) and reduction of electricity bills (21,5%). It is the group with the lowest proportion of people who don't see any benefits of smart meters. They consider smart meters information very important to reduce their energy consumption and, on average, to reduce CO2 emissions and are willing to pay for these services (above all to reduce the costs of the bills, 55,5% agree with this statement). They are the least worried about energy companies managing their data but are, instead, moderately worried that their data might misused by third parties.

Concluding Remarks

This segment probably does not represent a very broad target group numerically but, considering the social characteristics (age, education, income), they are very interested in products and services related to smart meters. This segment can be an interesting target group because they are willing to buy modern tools and services. In order to approach these subjects campaigns across the web and newspapers, specialized and generalists, would be useful. Through the information campaigns, the opportunity to have control over their consumption and to reduce energy costs should be provided. The most interesting products and services for this segment are electronic devices connected to the smart meters with remote control through the app for tablets and smartphones.

7.3 Segment 2: "Altruistic, Willingful, a Bit Idealistic"

Introduction

The consumers of this segment are relatively optimistic for the future. They are interested in a better society and also in a multicultural society and do not consider fun in life as important.

Additional Values and Beliefs

The interest of consumers in segment 2 in new technology and innovation is similar to other segments. A lot of consumers in this segment don't find it difficult to adapt to change. A large part of this segment does want to keep all options open in life and fairly agrees with the statement "I want to have as much fun in life as possible". Family is also fairly important in life for them. Consumers of segment 2 agree that everyone should protect the environment.

Social Demographic Statistics

This is the segment with the lowest percentage of women (only 27,8%). With regard to the age distribution, this segment has the greatest presence of elderly people over 60. The level of education is good overall with a high percentage of graduates, however consumers from this segment mainly have a high school degree – 48,4% ("Laurea", "Laurea specialistica", "Laurea breve").

It is the segment with the lowest percentage of singles and highest percentage of couples. Also in this segment, energy consumption values are quite low and the income is average.

Smart Metering Preferences

This segment considers itself relatively well informed on smart meters – more than a half agrees with this statement. In line with the other segments, consumers from segment 2 would also prefer to have information from their smart meters through modern systems (websites, tablet, IHD, etc.) with a preference for the websites (35,2%). This segment prefers fewer charts and considers information from smart meters very important to control their energy consumption. In general they are willing to pay for services which would enable them to reduce their bills and energy cost reduction however they are more willing to pay for the services to favour the reduction of CO_2 emissions. These people are concerned about the energy companies collecting too much information through the smart meters. However they are more concerned about third parties intercepting their personal data and abusing the information.

Concluding Remarks

Considering the social features of this segment (the care for the environment, the interest in diversity) and characteristics of age, income and education, this segment is a prime target group for a campaign on smart meters. Through the services and tools related to smart meters they can monitor their consumption and ensure the reduction of CO_2 emissions and hence can have more sustainable behaviour from an environmental point of view. Information campaigns should be targeted on ethical and environmental aspects involving associations of reference (environmentalist associations, consumer associations) to ensure third party status of information about products and services offered. The most interesting products and services for this segment may not be overly technical but should at least provide services through the web.

7.4 Segment 3: “Closed-Pessimistic, Passive”

Introduction

The consumers of this segment do not like changes. They fear the future and cultural changes. They are egoistic, and are interested in their personal life and in their own fun however they do keep all the doors open.

Additional Values and Beliefs

The interest of consumers in segment 3 in new technology and innovation is similar to other segments. It can be said that consumers belonging to segment 3 do agree on the importance of innovation and technology but do not consider it as priority in life. Consumers in this segment in general do not find it difficult to adapt to change. In general they agree on keeping all options open in life. Family is also important for the consumers of this segment. Consumers of segment 3 also agree that everyone should protect the environment.

Social Demographic Statistics

The gender distribution of this segment is very close to Segment 1 with approximately 30% women (but as already mentioned the gender distributions of the three segments is very similar). With regard to age distribution, this segment has the highest percentage of people aged between 20 and 39 years. It is the segment with the lowest level of education although it has the highest percentage of people with secondary school – 47% (“Liceo o instituto superiore”). In this segment, families are mainly made up of 2 (33,3%), 3 (30,9%) or 4 people (22,2%).

A very important feature of this segment is that it has a very high percentage of people who do not know their own energy consumption (44,4%). The majority of the segment consumes upto 3 500 kWh annually (40,7%). The income of this segment is medium, medium-low.

Smart Metering Preferences

This is the segment with the lowest level of knowledge about smart-meters and the services and tools associated with them – only 41% of them feel well informed. Among the different options for the provision of energy consumption data they prefer in-home display (31,3%) and the website (33,7%), this is the segment with the lowest percentage of preference for smartphones and tablet app (16,9%).

In general, consumers of segment 3 do not see benefits in the use of smart-meters, they do think that there may be advantages for energy savings but are not willing to pay for the services, especially to reduce CO2 emissions. They are not worried about data collection by the energy company but are worried about collecting data by third parties.

Concluding Remarks

Considering the social demographics and the fact that this segment has a low level of knowledge about smart meters and the benefits attached to them, this segment does not appear to represent a target group in the short term. However, it is crucial to implement information policies and to involve this segment, which represents a significant portion of the population. Information campaigns should be coordinated by public administrations and should involve all stakeholders: companies and associations representing (environmental organisations, consumers). Products and services for this segment should be targeted to explain in a simple way the advantages of smart meters starting, for example, by tools in personal pages or bills of individual users and through in-home tools and on the web.

8 Poland

8.1 Short Description of the Segmentation of Electricity Consumers in Poland

In Poland three segments were diagnosed from the dataset. The groups are relatively small (64, 49, 42 people) because of whole sample size. However it was possible to divide all respondents concerning their attitude to specific values, beliefs and preferred lifestyle.

8.2 Segment 1: “Responsible forward movers”

Introduction

This group of people finds it easy to adapt to changing situations. They are more focused than others on work and would like to have control of their lives. One can say this is a group of optimistic, adaptive people, typical of Polish transformation period. Usually open-minded, representatives of segment 1 believe that they have influence on the environment, economy and welfare – both in their individual life and in society as a whole. For Smart Metering and energy issues it is notable that majority of this group declares that environment protection is important for them and, secondly, that they want to control: know, meter and decide.

Additional Values and Beliefs

They are very interested in new technologies and innovations. A lot of them see themselves as easily adapting to change. It defines this group as “forward movers”. They think that everyone is responsible for his own actions. This package of beliefs creates a model of responsible but not conservative, optimistic, but not daring consumer.

Social Demographic Statistics

The majority of this group are women (60%), usually highly educated (89% have high school education). Typical Responsible forward movers were born in 80’ of 20th century (half of segment 1 are between 26 and 34 years old).

They do not differ from other segments in the number of household inhabitants – the majority live together with one person (38%). Over 50% of them declare a yearly income below 105 000 PLN[2]. Only 43% declared that they know what the energy consumption is in their household. The largest group (19%) consumes between 2 000 and 3 499 kWh annually.

Smart Metering Preferences

The awareness level of Smart Metering issues among Responsible forward movers is higher than in other segments. Almost 10% feel well informed. About 60% declares that

[2] Currency exchange rate is 4,18097 PLN/EUR at 18.02.15.

they at least “partially agree” with being well informed. The majority of this segment (69%) declared they want consumption data displayed on tables and numbers. A similar percentage declares reduction of CO2 emission as a drive to installing smart meter, even if they would have to pay for it. Personal data protection is a not big threat for this group.

Concluding Remarks

Responsible forward movers seem to be a segment of very reasonable, adaptive people. One can say it is a “mainstream” of aware consumers. They care about the financial condition of their households, but at the same time they care about environment and price is not the only factor in their consumer decisions. As it is a large group, it is worthwhile to address a large part of communications to them. Website tools, calculators and numbers are very important for them and they need to feel well informed and to be keeping control over their life, families and homes.

8.3 Segment 2: “Conservative Sceptics”

Introduction

Second segment consists mostly of people who do not want changes and have some difficulties to adapting to change. They are also sceptical about the future. On the other hand they are quite strongly dedicated to work, and safety and a secure life is the highest value for them. Like the previous group they would however like to keep control over their own situation. They are positively oriented towards environment issues, but with a model of sustainability rather than a revolution. These people seem to be a good target for communication of savings possibilities, but they are unlikely to be convinced about the need for innovation of itself.

Additional Values and Beliefs

These people are very interested in new technologies and innovations. Work is important for them, but in terms of safety and stability rather that success.

Social Demographic Statistics

Gender parity shows a small bias of men (53%). Age distribution shows predominance of young people between 20 and 39 years old (88%). The level of education is quite high – 74% have university degree. Among all segments, this one declared the lowest household income and family size 75% of this group does not exceed 3 people. Half of Conservative sceptics have no idea what energy usage per year they generate.

Smart Metering Preferences

The Majority of respondents from segment 2 do not feel well informed about Smart Metering. They pointed out website, smartphones and in-house displays as important options for retrieving Smart Metering information. They prefer charts rather than tables and numbers in terms of data presentation and they are sceptical about the necessity to pay for smart meter services. This group seems to be the most worried about their personal data protection.

Concluding Remarks

Conservative sceptics need safety. They care about home budgets, security and data protection. They are not happy when forced to participate in innovative actions, which can be potentially risky. Communications addressed to them should underline in the first line the possibility to control bills and the safety of home budgets. This group's needs may also align with energy poverty and social tariffs issues. They are not an ideal target for paid services.

8.4 Segment 3: „Adaptive Bon-vivant Individualists“

Introduction

This group of people differs from those previously described mainly in their attitude to work, social security and social responsibility. They want to live "here and now", not feeling that they should care too much about work, environment and general security. They like comfort and fitness, don't like pressure and obligations. However they rather easily adapt to changes. It is probably a group which likes innovations, modern devices, Internet and social media and "gadgets" - only if these things make their life easier and more comfortable. These aspects of Smart Metering should be addressed to them first.

Additional Values and Beliefs

Respondents are very interested in new technologies and innovations. One of the specific features of this segment is their attitude towards core values – a lot of them do not agree that work is a central value and don´t see the high importance of family life. They show a higher tendency than others to take risks and lower level of responsibility than others and need for control. At the same time, they are rather optimistic.

Social Demographic Statistics

Adaptive bon-vivant individualists are rather young people (over 50% below 35 years old). Majority of this group (61%) are women. Education level is below average – 67% hold a university degree, 21% have secondary education. Over 65% of them (which is significantly higher) declared they do not know their yearly energy usage. Household income and size for this group are higher than for others.

Smart Metering Preferences

Adaptive bon-vivant individualists feel sufficiently informed about Smart Metering. They chose website and in-home displays as two dominant tools for retrieving Smart Metering information. They want to use this data for bill reduction, however they are likely to pay for such information only if it helps to reduce payments. At the same time they do not want to pay in order to reduce CO2 emission. These people are worried about information collecting by companies, as well as personal data protection.

Concluding remarks

The typical representative of this segment likes comfort and good living. He cares less about work, responsibilities, plans, and control. This is possibly because they have a higher level of income than others. It is very likely that this group will react positively to smart-home appliances and services aimed at raising the comfort of life in their houses.

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