**Supplementary online Material**

**Supplementary Table 1: Scenario Descriptions for Study 1**

|  |  |  |
| --- | --- | --- |
|  | **Asset-Builder** | **Service-Provider** |
| **Augmentation** of human employees by FLSR | On your way to the new gate, you stop at a duty-free shop. Whilst shopping, you see a new service robot, Max. Max will help you find the products you are looking for.  Hence, Max assists you and employees of the duty-free shop, who are otherwise often disrupted from their normal duties by passengers who are looking for products. | During your stopover, you have to go to a new departure gate. The airline you are traveling with has a new service robot, Max. Max will help you find your new gate. After scanning your boarding pass, Max will bring you to the gate, where airline staff will handle your boarding process.  Hence, Max assists you and airline employees, who are otherwise often disrupted from their normal duties by passengers who cannot find the gate. |
| **Substitution** of human employees by FLSR | On your way to the new gate, you stop at a duty-free shop. You have completed your shopping and you want to pay.  The duty-free shop has a new service robot, Max. Max will complete the full check-out process (i.e., assisting in paying and check-out for your duty-free shopping), just as it was previously done by employees of the duty-free shop. | You have reached your new departure gate and you are boarding your connecting flight.  The airline you are travelling with has a new service robot, Max. Max will complete the full boarding process, including scanning your boarding pass, just as it was previously done by employees of the airline. |
| **No role** (no FLSR) | On your way to the new gate, you stop at a duty-free shop to do some shopping.  The duty-free shop has hired more staff. They will 1) help you, 2) assist you to find the products you are looking for, and 3) complete the check-out process (i.e., assisting in paying and check-out for your duty-free shopping). | The airline you are travelling with has hired more staff. They will 1) help you, 2) direct you to your new gate, and 3) complete your boarding process. |

**Supplementary Table 2: Scenario Descriptions of Study 2**

|  |  |  |
| --- | --- | --- |
|  | **Humanoid Service Robot** | **Self-Service Machine** |
| **Experience service** | When you enter the restaurant, you are welcomed by a service robot. The service robot assigns a table to you and takes the orders from you. The service robot can also be contacted in case of any questions/complaints and is used for checking out.  Thus, the service robot performs all tasks, which were previously done by a human employee (waiter), who used to work for the restaurant. | When you enter the restaurant, you are welcomed by a self-service machine. The self-service machine assigns a table to you and takes the orders from you. The self-service machine can also be contacted in case of any questions/ complaints and is used for checking out.  Thus, the self-service machine performs all tasks which were previously done by a human employee (waiter), who used to work for the restaurant. |
| **Credence service** | When you enter the branch of the insurance agency, you are welcomed by a service robot. The service robot also assists you to find the right insurance solution, set up the contract, responds to any questions/complaints, and other parts of your transaction.  Thus, the service robot performs all tasks, which were previously done by a human employee (insurance adviser), who used to work for the insurance agency. | When you enter the branch of the insurance agency, you are welcomed by a self-service machine. The self-service machine also assists you to find the right insurance solution, set up the contract, responds to any questions/complaints, and other parts of your transaction.  Thus, the self-service machine performs all tasks which were previously done by a human employee (insurance adviser), who used to work for the insurance agency. |

**Supplementary Table 3: Constructs and Items *(R indicates reverse coded)***

|  |
| --- |
| ***Service Experience*** *Adapted from Brakus et al.’s (2009) Brand Experience Construct*  This company makes a strong impression on my visual sense or other senses.  I find this company interesting in a sensory way.  This company does not appeal to my senses. (R)  This company induces feelings and sentiments.  I do not have strong emotions for this company. (R)  This company is an emotional company.  I engage in physical actions and behaviours when I use this company.  This company results in bodily experiences.  This company is not action oriented. (R)  I engage in a lot of thinking when I encounter this company.  This company does not make me think. (R)  This company stimulates my curiosity and problem solving. |
| ***Brand Usage Intent*** *Yoo and Donthu (2001)*  It makes sense to use this restaurant/insurance agency instead of any other brand, even if they are the same.  Even if another brand has the same features as this restaurant/insurance agency, I would prefer to use this restaurant/ insurance agency.  If there is another brand as good as this restaurant/ insurance agency, I prefer to use this restaurant/insurance agency.  If another brand is not different from this restaurant/ insurance agency in any way, it seems smarter to use this restaurant/insurance agency. |
| ***Openness-to-Change*** *(World Values Survey)*  It is important to this person to think up new ideas and be creative; to do things one’s own way. (Self-direction)  It is important to this person to be rich; to have a lot of money and expensive things. (Power)  Living in secure surroundings is important to this person; to avoid anything that might be dangerous. (Security)  It is important to this person to have a good time; to “spoil” oneself. (Hedonism)  It is important to this person to do something for the good of society. (Benevolence)  Being very successful is important to this person; to have people recognize one’s achievements. (Achievement)  Adventure and taking risks are important to this person; to have an exciting life. (Stimulation)  It is important to this person to always behave properly; to avoid doing anything people would say is wrong. (Conformity)  Looking after the environment is important to this person; to care for nature and save life resources. (Universalism)  Tradition is important to this person; to follow the customs handed down by one’s religion or family. (Tradition) |
| ***Preference for Ethical/Responsible Service Provider*** *Ramasamy and Yeung (2009)*  I believe that businesses must make efforts to behave in a socially responsible manner.  I would pay more to buy products from a socially responsible company.  I consider the ethical reputation of businesses when I shop.  I avoid buying products from companies that have engaged in immoral actions. |
| ***Perceived Ethical and Societal Reputation*** *Stanaland et al. (2011)*  This company is committed to well-defined ethics principles.  This company ensures that their employees act in a legal manner.  This company plans for their long-term success as well as society’s.  This company plays a role in our society that goes beyond the mere generation of profits. |
| ***Perceived Innovativeness-Responsibility Fit*** *Janssen et al. (2014)*  This service technology is created in a responsible way.  This service technology is created in accordance with ethical principles.  This service technology was created from a sustainability perspective.  This service technology was created in accordance with moral principles.  This service technology is eco-aware.  This service technology allows for a comfortable life while preserving the planet.  This service technology is not synonymous with excess and abundance. |
| ***Perceived Innovativeness*** *Kunz et al. (2011)*  This company is dynamic.  This company is very creative.  This company launches new products and creates market trends all the time.  This company is a pioneer in its category.  This company constantly generates new ideas.  This company has changed the market with its offers.  This company is an advanced, forward-looking firm. |

**Supplementary Table 4: Construct validity and reliability statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Constructs and Items | | Item Loadings | Average Variance Extracted | Composite Reliability |
| Perceived Innovativeness | | | 0.94 | 0.99 |
|  | This company is dynamic. | 0.99 |  |  |
|  | This company is very creative. | 0.99 |  |  |
|  | This company launches new products and creates market trends all the time. | 0.96 |  |  |
|  | This company is a pioneer in its category. | 0.99 |  |  |
|  | This company constantly generates new ideas. | 0.96 |  |  |
|  | This company has changed the market with its offers. | 0.99 |  |  |
|  | This company is an advanced, forward-looking firm. | 0.95 |  |  |
| Perceived Ethical and Societal Reputation | | | 0.65 | 0.88 |
|  | This company is committed to well-defined ethics principles. | 0.91 |  |  |
|  | This company ensures that their employees act in a legal manner. | 0.79 |  |  |
|  | This company plans for their long-term success as well as society’s. | 0.87 |  |  |
|  | This company plays a role in our society that goes beyond the mere generation of profits. | 0.87 |  |  |
| Service Experience | | | 0.52 | 0.90 |
|  | This company makes a strong impression on my visual sense or other senses. | 0.79 |  |  |
|  | I find this company interesting in a sensory way. | 0.84 |  |  |
|  | This company does not appeal to my senses. (R) | 0.79 |  |  |
|  | This company induces feelings and sentiments. | 0.81 |  |  |
|  | I do not have strong emotions for this company. (R) | 0.70 |  |  |
|  | This company is an emotional company. | 0.78 |  |  |
|  | I engage in physical actions and behaviours when I use this company. | 0.74 |  |  |
|  | This company results in bodily experiences. | 0.73 |  |  |
|  | This company is not action oriented. (R) | 0.64 |  |  |
|  | I engage in a lot of thinking when I encounter this company. | 0.84 |  |  |
|  | This company does not make me think. (R) | 0.79 |  |  |
|  | This company stimulates my curiosity and problem solving. | 0.86 |  |  |
| Perceived Innovativeness- Responsibility Fit | | | 0.51 | 0.87 |
|  | This service technology is created in a responsible way. | 0.78 |  |  |
|  | This service technology is created in accordance with ethical principles. | 0.83 |  |  |
|  | This service technology was created from a sustainability perspective. | 0.74 |  |  |
|  | This service technology was created in accordance with moral principles. | 0.82 |  |  |
|  | This service technology is eco-aware. | 0.73 |  |  |
|  | This service technology allows for a comfortable life while preserving the planet. | 0.81 |  |  |
|  | This service technology is not synonymous with excess and abundance. | 0.53 |  |  |
| Preference for Ethical/Responsible Service Provider | | | 0.56 | 0.84 |
|  | I believe that businesses must make efforts to behave in a socially responsible manner. | 0.72 |  |  |
|  | I would pay more to buy products from a socially responsible company. | 0.84 |  |  |
|  | I consider the ethical reputation of businesses when I shop. | 0.87 |  |  |
|  | I avoid buying products from companies that have engaged in immoral actions. | 0.84 |  |  |
| Brand Usage Intent | | | 0.69 | 0.90 |
|  | It makes sense to use this restaurant/ insurance agency instead of any other brand, even if they are the same. | 0.88 |  |  |
|  | Even if another brand has the same features as this restaurant/insurance agency, I would prefer to use this restaurant/ insurance agency. | 0.87 |  |  |
|  | If there is another brand as good as this restaurant/ insurance agency, I prefer to use this restaurant/ insurance agency. | 0.88 |  |  |
|  | If another brand is not different from this restaurant/ insurance agency in any way, it seems smarter to use this restaurant/ insurance agency. | 0.87 |  |  |

NOTE: Openness-to-Change is not included as it is not treated as a conventional (latent) construct. The values for it represent each respondent’s position on the Schwartz value circumplex and are computed using Dobewall and Strack’s (2014) procedure.

**Supplementary Table 5: Effect coefficients for Study 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Direct effects on: | | | Indirect effects on Service Experience via: | | | |
| Perceived Innovativeness | Perceived Ethical and Societal Reputation | Service Experience | Perceived Innovativeness | | Perceived Ethical & Societal Reputation | |
| Asset-builder | Service-provider | Asset-builder | Service-provider |
| Augmentation | -0.0042 | 0.0695 | -0.0075 | 0.001 | -0.004 | 0.3 | 0.012 |
| Substitution | 0.1779\* | -0.1940\* | -0.0652 | 0.057\* | 0.021 | -0.083\* | -0.075\* |
| Value Creation Model | 0.0501 | 0.2473\* | -0.1853\* | - | - | - | - |
| Perceived Innovativeness | - | - | 0.3217\* | - | - | - | - |
| Perceived Ethical and Societal Reputation | - | - | 0.4277\* | - | - | - | - |
| Openness-to-Change | -0.0644 | -0.0561 | -0.1238\* | - | - | - | - |
| Covariates: |  |  |  |  |  |  |  |
| Experience with FLSRs | -0.3477\* | -0.3731\* | -0.0656 | - | - | - | - |

NOTE: \*effect is statistically significant

**Supplementary Table 6: Effect coefficients for Study 2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Direct effects on: | | Indirect effect on Brand Usage Intention via: | |
| Perceived Innovativeness- Responsibility Fit | Brand Usage Intent | Perceived Innovativeness- Responsibility Fit | |
| Credence | Experience |
| Humanoid FLSR | -0.3634\* | 0.0399 | 0.190\* | 0.141\* |
| Service type | -0.1594 | -0.1818\* | - | - |
| Perceived Innovativeness- Responsibility Fit | - | -0.4553\* | - | - |
| Preference for Ethical/Resp. Service Provider | -0.0265 | -0.0254 | - | - |
| Covariates: |  |  |  |  |
| Experience with FLSRs | 0.0121 | 0.0890\* | - | - |
| Experience with a self-service machine | -0.1296\* | -0.0839\* | - | - |
| Visiting restaurants | -0.0558 | 0.0179 | - | - |
| Experience with insurance agencies | 0.0106 | -0.0016 | - | - |

NOTE: \*effect is statistically significant

**Supplementary Table 7: Correlation table and average variance extracted**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Service Experience | Perceived Innovativeness | Perceived Ethical and Societal Reputation |
| Service Experience | **0.718** |  |  |
| Perceived Innovativeness | 0.588 | **0.969** |  |
| Perceived Ethical and Societal Reputation | 0.682 | 0.583 | **0.804** |
|  | Perceived Innovativeness- Responsibility Fit | Brand Usage Intent | Preference for Ethical/Responsible Service Provider |
| Perceived Innovativeness-Responsibility Fit | **0.712** |  |  |
| Brand Usage Intent | 0.698 | **0.828** |  |
| Preference for Ethical/Responsible Service Provider | 0.029 | -0.008 | **0.751** |

NOTE: figures in the diagonal are √AVE; all other figures are correlations.

**Supplementary Material 1: Preliminary study results**

A preliminary study was conducted with 85 randomly chosen participants (average age=35.7 years, 42.4% female) from the UK. They were asked to imagine the following situation: “Imagine that you are currently having a stopover at an airport whilst flying to a holiday destination. You are using the airline that you usually or frequently fly with”. Using a between-subject design, role of FLSRs was manipulated in this scenario, whereby an artificially intelligent humanoid FLSR was presented as either assisting human airline staff during a check-in process (i.e. augmentation), or entirely replacing human staff to complete this process autonomously (i.e. substitution). A one-way ANOVA was used to test the effect of the main manipulation (role of FLSRs) on the service experience, based on the data collected in the preliminary study (n=85). Given the small sample size, equality of variances was tested for, and confirmed (Levene’s W(2, 82)=.366; p=.695). The ANOVA results showed that the main effect is significant (F=4.591; p<.05). Overall mean differences were observed between substitution (m=.023), augmentation (m=.307), and the control group (m=-.492); a Tukey’s post hoc test showed that service experience was significantly higher (p<.05) when a robot is used for augmentation, compared to the control group (i.e. no robot involvement). Service experience did not significantly differ between the augmentation and substitution of human employees by FLSRs.