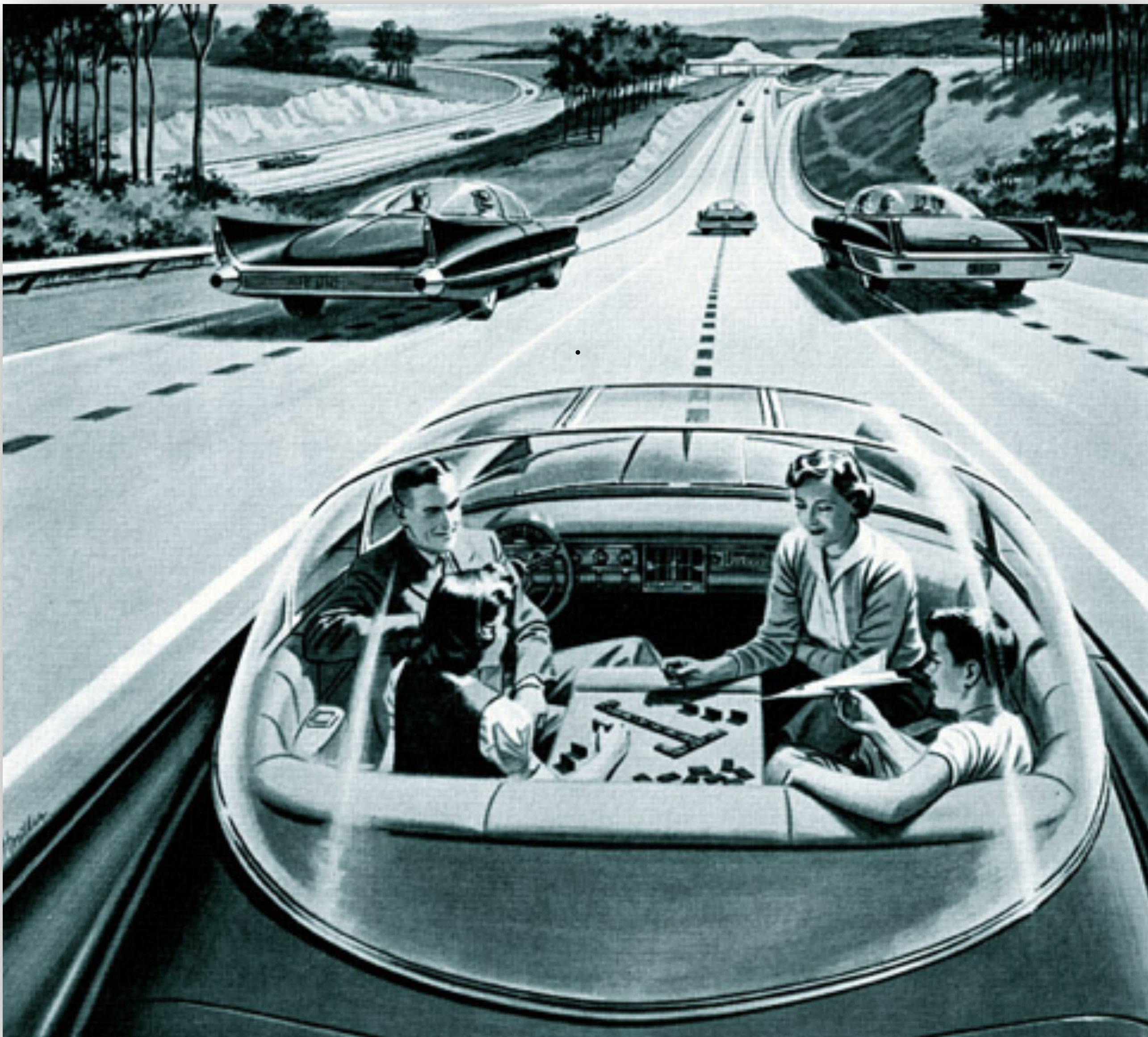
Master Thesis
MSc in Business Administration

Mobility 4.0:
Are Consumers Ready To Adopt Google's Self-Driving Car?



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ABSTRACT

Context: Given the huge performance potential of automated driving systems, other non-automotive players such as technology companies with Google in the lead pursue the idea of self-driving cars. Whereas traditional industry incumbents such as Mercedes-Benz, VW and BMW work on the development of semi-autonomous driving systems that assist the driver with the driving task, Google intends to bring fully-autonomous vehicles to market that does not only help but completely replace the driver whose role shifts from being an active driver to a mere car passenger that is chauffeured around from A to B.

Objective: This study examines to what extent consumers are prepared to adopt Google's self-driving car instead of a conventional vehicle and what factors influence variation in consumers' adoption intentions. Therefore, this study proposes and tests a research model that integrates concepts present in the technology acceptance management literature and consults previous research on automated driving systems.

Method: To explore consumers' perceptions of Google's self-driving car, a qualitative content analysis of blog data was conducted. The results of the content analysis and previous research findings were used to develop an online questionnaire that yielded 421 valid cases. Thereby, the qualitative data can be cross-checked by the survey results which increases the trustworthiness of research findings.

Results: By means of Pearson product-moment correlation coefficients, the results indicate significant relationships between the constructs assessed, showing that the intention to adopt Google's self-driving car instead of a conventional vehicle is influenced by the characteristics of the innovation, the personality of the individual, the driving environment as well as Google's corporate reputation. Stepwise multiple linear regression analysis demonstrated that perceived usefulness was the strongest significant predictor of adoption intention, accounting for 60,8% of the variance in behavioural intention. Questionnaire item „The whole point of owning a car is independence and driving enjoyment. I'm never letting Google's self-driving car do my driving" accounted for an additional 10,2% of the variance in adoption intention.

Conclusion: This is the most comprehensive and up-to-date study of the main drivers that influence variation in consumers' intention to adopt Google's self-driving car instead of a conventional vehicle. Future scholars could return to this framework and validate it in other cultural contexts or with different types of consumers.

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1. Introduction

In 2010, at least 1.3 million people were killed in traffic accidents worldwide and 50 million people were injured (Feypell & Scheunemann, 2012). Human error accounts for between 80 and 93 per cent of traffic accidents involving drivers who are not impaired by alcohol or fatigue according to estimates by Volvo Trucks' research, Continental and the US National Highway Traffic Safety Administration (NHTSA). The World Health Organization (WHO) predicts that road traffic injuries will turn out to be one of the top five death causes globally by 2030 (Davis, Kahl & Murphy, 2013).

Car manufacturers have long been involved in increasing the safety of passengers. They introduced passive safety systems such as seat belts, crush zones and airbags. However, these passive safety systems have reached a performance limit. In order to achieve further enhancements in safety, most major car manufacturers with Mercedes in the lead, followed by BMW and Volkswagen pursue the idea of self-driving, driverless, autonomous or robotic vehicles that have once been a common feature in futuristic science fiction films such as Knight Rider or Demolition Man (Gietelink, Ploeg, de Schutter & Verhagen, 2009; Todman, 2014).

The building blocks of these autonomous vehicles (AVs) are active safety systems in the form of advanced driver assistance systems (ADAS) such as lane-departure warning (LDW) or adaptive cruise control (ACC). An ADAS is a vehicle control system that makes use of environment sensors (e.g. radar, laser, camera) to improve traffic safety and driving comfort by helping the driver with recognising and reacting to potentially dangerous driving situations. According to several survey findings, ADAS can reduce traffic accidents by around 40 per cent, depending on the type of ADAS as well as accident scenario (Gietelink et al., 2009).

Driverless car technology offers a variety of benefits in different areas. Apart from improvements in safety and fuel efficiency as the main technological drivers behind automated driving technology, driverless cars free up driver time, ease traffic congestion, lower insurance premiums and provide mobility to elderly and disabled people and to areas that lack adequate public transportation (Davies


Pic. 1. Google showcasing its self-driving car technology to a number of journalists in April 2014

et al., 2013). Thus, given the huge performance potential of driverless cars, the competitive landscape has shifted enormously. Not only traditional car manufacturers, universities and research institutes embrace the idea of self-driving cars but also non-automotive players such as technology companies with Google in the lead have been entering the field, too.

The National Highway Traffic Safety Administration (NHTSA) distinguishes between five different levels of automation (0-4). Traditional car manufacturers pursue level 2 or combined-function automation, meaning that at least two control functions are combined so that they work together. One example is the 2014 Mercedes-Benz S-Class fitted with the self-driving Distronic Plus adaptive cruise control with steering assist and stop-and-go pilot that ensures that the vehicle maintains a safe distance from the vehicle in front while making sure that it is kept in its lane. The driver needs to be constantly paying attention on what is happening on the road to be able to safely take-over control from the vehicle if required.

Google's self-driving car leapfrogs level 2 altogether and corresponds with level 3 or limited self-driving automation. The driver is expected to be available for occasional control only and the vehicle performs all critical safety functions under certain traffic and environmental conditions. Google's long-term strategic aim is to arrive at level 4 or full self-driving automation where the vehicle can perform all driving functions autonomously, diminishing the need for a driver altogether.

Google already logged about 700.000 of test miles on California's, Florida's, Nevada's and Michigan's highways with no recorded accidents when operating in self-drive mode. Recently, it tested its vehicles in California's city traffic by ferrying around a number of journalists to demonstrate that autonomous driving is also feasible in dynamic and unpredictable environmental conditions (Pic. 1). In June 2014, Google unveiled its first self-driving prototype with no steering wheel, accelerator, pedal or brake that drives 25 mph. A number of test rides with potentially attractive customer segments (e.g. elderly, blind, busy parents with kid) were initiated to demonstrate how a self-driving car by Google could operate in the near future.

At the heart of the partially automated driving systems of traditional car manufacturers are low-cost radar and camera components- technology that is already widely available in their current vehicles.

Pic 2. Laser-range finder on top of Google's self-driving car

Google follows a different technological trajectory by making use of a roof-mounted lidar (or light detection and ranging) -a Velodyne 64-beam laser- that works on the same principle like radar and cameras do (Pic. 2). Considered the holy grail of autonomous driving, it is far more accurate as it creates a high-precision 3D, 360- degree- map of its surroundings but at $75.000 to $85.000 each, it up to now costs more than every other car component including the car itself. Additionally, Google has very high ambitions, striving for reductions in traffic accidents, wasted commute time, energy and the number of cars by 90 per cent which translates into a variety of benefits in various areas (Mui, 2013).

Does this all mean that Google will show the automotive industry how mobility may look like in the not-so-distant future? If Google's self-driving car is to be a serious threat to traditional car manufacturers in the long-run, one crucial condition that needs to be met is that the car will be adopted by consumers (Schneider, Dütschke & Peters, 2014).

Therefore, the main research question to be addressed in this study is formulated:

Research Question 1: To what extent are consumers ready to adopt Google's self-driving car?

Technology adoption is contingent on a variety of different factors.

For that reason, the first step to answer the main research question is to perform an extensive literature review to understand which factors significantly explain technology adoption according to the scientific literature. It can be assumed that the literature review will yield a huge variety of different factors that predict technology adoption. Not all factors will predict acceptance of Google's self-driving car. Therefore, this study will focus on factors that explain adoption of high-tech innovations and that are therefore appropriate to predict consumer acceptance of Google's self-driving car.

In a second step, previous research about partially and highly automated driving systems will be consulted. This decision is motivated as follows: Google's self-driving car is one of the most popular examples of fully-automated driving (FAD). Unfortunately, given that it has not been commercialized yet, it can be naturally expected that there is a gap in the scientific literature as regards consumer acceptance of FAD. However, as car manufacturers have gradually increased the level of automation in their cars by introducing partially automated driving systems, the scientific literature and several empirical research studies deliver important insights about consumer acceptance of partially automated driving systems that equal level 1 or 2 automation. It is thus logical to expect that these findings give us first clues about the conditions that could affect consumer acceptance of Google's driverless robot.

Third, I will perform a qualitative content analysis of blog data to further explore the conditions that influence the adoption of Google's self-driving car among consumers. This is necessary because 1) there is no scientific study that I am aware of that has studied consumer acceptance of Google's self-driving car, 2) the first two steps are likely to come up with a number of predictor variables that influence adoption of high-tech products in general and partially and highly automated driving systems in particular. But what influences consumer acceptance of Google's self-driving car?

The triangulated data will then be used to build a questionnaire to test the qualitative assumptions and answer the second research question.

Research question 2: Which factors explain variation in consumers' intention to adopt Google's driverless vehicle?

The responses to the questionnaire will be processed and analysed using standard univariate, bivariate and multivariate techniques (frequency tables, descriptive statistics, Pearson product-moment correlation coefficient and stepwise multiple linear regression analysis using the statistical analysis software SPSS 22.0.

The paper will be organized as follows. The first section presents the results of the literature review concerning the factors that influence technology adoption. Section 3 presents the first research design of this study, including the data collection method and sampling strategy. Section 4 presents the findings of the content analysis. Section 5 introduces the second study method - a web-based questionnaire- and section 6 presents the results of the open-ended survey questions. Section 7 outlines the results of the closed-ended survey questions, including the respondent profile, descriptive statistics, correlation and regression analysis. Section 8 discusses the results, provides the study limitations and directions for future research. Section 9, conclusions, finalises this study by offering concluding remarks as well as outlining the scientific and organizational value that is gained with this study.

2. Literature review

The goal of this section is to review the scientific literature on the determinants of technology adoption and present some research results on consumer acceptance as regards partially and highly automated driving systems.

2.1. Search strategy

It can be assumed that the adoption of Google's driverless car is contingent on different loci of impact: the characteristics of the technology, the personality of the individual, the driving environment and Google's reputation. Therefore, the factors determining technology adoption can be effectively grouped into four main blocks: innovation characteristics, personality characteristics, driving environment and consumer-based corporate reputation. The question arises why this study is limited to these four main variables and does not include other variables. Therefore, as will be mentioned below, a key threat to validity is that not all important variables have been identified. However, this is a common pitfall that is always present in any literature review, especially when literature about a research phenomenon is relatively abundant. For example, using the search criteria „technology acceptance" in Google Scholar generates around 62.900.000 results which is beyond the scope of any scientific study. Expanding this search string to „technology acceptance autonomous driving" still yields 21.600.000 results. So how to decide which results are relevant and which are not?

Once it was clear that I want to study consumer acceptance of Google's self-driving car, I made use of search engines such as Google Scholar, Science Direct and IEEE Xplore to browse the web for literature about anything that deals with technology acceptance/adoption. This decision inevitably brought me to the technology acceptance model (TAM) as the most frequently cited model in the technology acceptance management literature. Given that the TAM proved to be a parsimonious and powerful predictor of acceptance -Bagozzi (2007) claims that the 1989 article in which the ability of the TAM to predict acceptance was tested is cited in over 700 cases- the TAM is preferred over other technology acceptance models such as the unified theory of acceptance and use of technology (UTAUT) model. The UTAUT integrates eight competing technology acceptance research theories into a unified research model that reduces the 32 research variables of eight research models into four main predictor and four moderator variables. As the UTAUT model was mainly proposed to explain acceptance of information technology in organisational contexts, Venkatesh, Thong and Xu (2012) proposed a new research model -the UTAUT2- to explain technology acceptance in consumer contexts. The UTAUT2 accounts for individual differences (age, gender, experience) that moderate the correlation between a set of predictors and the dependent variable. However, differences in individual's personality are not taken into account. This means that even though the UTAUT2 is a synthesis of the most common technology acceptance models, it is ultimately biased and incomplete. For example, the Technology Readiness and Acceptance model (TRAM) or the Consumer Acceptance and Readiness for Technology (CART) model integrate the Technology Readiness Index (TRI) into the TAM to take account for the effect of the individual's personality on technology acceptance. Furthermore, the UTAUT2 consists of a variety of different variables that explain variation in the intention to adopt and use a technology. However, as consumer perceptions of Google's self-driving car are still under-researched, it is not clear as to which variables do indeed play a role and which not. Therefore, at this point in time where the literature on FAD in the context of Google's self-driving car is scarce, a model such as the UTAUT2 might be too sophisticated, blinding the researcher to contextual aspects of the phenomenon. Thus, to address the particular needs of FAD and Google's self-driving car as the most popular example and re-fresh the perspective on technology acceptance, this study makes use of the TAM as baseline model which is still used today by many research scholars given its good track record (Park, Baek, Ohm & Chang, 2014; Wallace & Sheetz, 2014; Muk & Chung, 2014; Meng, Elliot & Hall, 2009). It is simple and explains technology acceptance in terms of perceived usefulness (PU) and ease of use (PEOU)- variables that most likely play a role with any technology. While being powerful and robust, the TAM and the UTAUT have been criticised for overlooking essential determinants (Peek, Wouters, van Hoof, Luijkx, Boeije & Vrijhoef, 2013). Therefore, this study makes use of PU and PEOU as input variables for our research model but ultimately reviews the literature for other potentially important predictor variables.

The literature review steered me into Roger's innovation diffusion model which is also a commonly mentioned model that tries to explain the diffusion of innovations. Both the TAM and Rogers' innovation-diffusion model agree on the importance of the characteristics of the innovation on adoption intention; yet Rogers (1995) indicated that people differ in their disposition towards using technology (Walczuch, Lemmink & Streukens, 2007; Son & Han, 2011). One such model is the Technology Readiness Index (TRI) that relates to people's readiness to embrace new technologies (Parasuraman, 2000; Ratchford & Barnhart, 2012; Son & Han, 2011; Walczuch et al., 2007). As Google's driverless vehicle is a radical innovation, it certainly matters as to whether people are prepared to adopt the car in the first place. What could be other factors that influence technology adoption apart from the attributes of the innovation as well as the characteristics of the individual?

I started to scrutinise the literature on partially and highly automated driving systems more closely and run into the scientific study by Payre, Cestac and Delhomme (2014) that emphasised the driving environment as additional predictor variable that could explain variation in the intention to adopt a driverless car by Google.

Finally, Google itself should be taken into the equation as Google is not an ordinary company but a monopolist that has expanded its influence in many different facets of our daily lives. At this exploratory stage, the picture seemed to be complete: the adoption of Google's self-driving car could be accounted for by the characteristics of the technology itself, the personality of the individual, the driving environment as well as the reputation of Google.

The remainder of this section will be organised around these four main blocks by shedding light on the corresponding different predictor variables which will now be introduced in turn.

2.2. Innovation characteristics

2.2.1. Perceived usefulness (PU) and ease of use (PEOU)

A priori acceptability can be defined as the evaluation of the technology before having any interaction with it. As FAD is not commercialized yet, it makes sense to distinguish between technology evaluation before and after one's interaction with the technology. Technology can be evaluated by PU and PEOU. PU is defined as the extent to which an individual believes that using a particular technology will improve his or her productivity or performance at some given task (Lin, Shih & Sher, 2007; Kulviwat, Bruner, Kumar, Nasco & Clark, 2007; Yang & Yoo, 2004; Ferreira, da Rocha & da Silva, 2013). PEOU relates to the extent to which an individual believes how easy or effortless a new technology can be understood and learned (Lin et al., 2007; Kulviwat et al., 2007; Yang & Yoo, 2004; Ferreira et al., 2013). It is tied to an individual's assessment of the complexity involved in terms of physical and mental efforts and ease of learning required to use a new technology (Lin et al., 2007; Kulviwat et al., 2007; Yang & Yoo, 2004). Both constructs are vital components of the TAM as the most widely cited and frequently applied socio-technical model in the scientific literature that was originally conceptualized by Davis (1989) and Davis, Bagozzi and Warshaw (1989) to examine which factors induce employees to adopt IT technology in the workplace (Vijayasarathy, 2003; Legris, Ingham & Collerette, 2003; Mather, Caputi, & Jayasuriya, 2002; Davis et al., 1989; Turner, Kitchenham, Brereton, Charters). According to a meta-analysis of 88 scientific journal articles by King and He (2005) technology adoption is mostly determined by PU and PEOU with PU as the strongest determinant in the model and PEOU mostly influencing adoption through PU (Davis et al., 1989; Svendsen et al., 2013).

It thus seems reasonable to hypothesize that there is a positive correlation between perceived usefulness **(H1)** and ease of use **(H2)** and consumers' intention to adopt Google's self-driving car instead of a conventional vehicle.

2.2.2. Relative advantage (RA)

The adoption of Google's self-driving car by individual consumers is also analysed using the relative advantage (RA) construct of Roger's diffusion of innovation model.

Roger (1995) argues that besides socio-economic characteristics of the individual, the decision to adopt or reject an innovation is also determined by the perceived attributes of the innovation. RA refers to the degree to which an innovation is perceived to be superior or better in comparison with what it supersedes and assumes that individuals are more likely to adopt new technologies with advantages over the old technology. Its influence on the adoption decision has been supported by the literature. For example, Moore and Benbasat (1991) developed the Perceived Components of Innovation (PCI) model and showed that RA is the most powerful predictor of the intention to adopt a technology. This finding matches the results of a meta-analysis on innovation characteristics that also identified RA as one of the few constructs that was steadily and consistently related to technology adoption (Kulviwat et al. 2007; Rogers, 1995).

Applied to Google's self-driving car, this implies that it is evaluated based on its relative advantages when compared to conventional vehicles or other modes of transport. On the positive side, consumers could rate Google's self-driving car as safer than conventional vehicles because an in-board computer does all vehicle operations and the human is taken out of the control loop. On the negative side, Google's self-driving car could score lower in terms of driving experience because by delegating control to a computer driving pleasure and the thrill of driving diminishes which may be especially painful for driving enthusiasts.

As a result of the above considerations, hypothesis 3 can be formulated.

H3. There is a positive correlation between the perceived relative advantages of Google's self-driving vehicle in comparison with conventional vehicles and consumers' intention to adopt it instead of a conventional vehicle.

2.3. Personality characteristics

The above-mentioned considerations have shown that the adoption of Google's self-driving car can be affected by how consumers perceive the characteristics of the fully-automated driving technology in terms of PU, PEOU and RA.

The following section will show how the personality of the individual could shape the intention to adopt Google's self-driving car instead of a conventional vehicle.

2.3.1. Technology readiness index (TRI)

As mentioned before, technology adoption is not only influenced by the characteristics of the innovation but also by differences in people's disposition towards using new technology.

Parasuraman (2000) assumes that high-technology products tend to come with a high level of technological uncertainty in the form of complex product functions. Consequently, it is critical to examine consumers' readiness to embrace such high technological innovations. These considerations propelled him to develop the technology readiness index (TRI). The TRI applies to technology in general and can be viewed as an overall state of mind resulting from a gestalt of two mental enablers or drivers, optimism and innovativeness, and two inhibitors, discomfort and insecurity. Thus, the TRI is a four-dimensional construct that reflects four different personality traits that collectively determine in an interplay a person's predisposition or readiness to adopt new high technological innovations to accomplish goals in home life and at work (Porter & Donthu, 2006; Parasuraman, 2000; Jin, 2013; Ferreira et al., 2013). The TRI essentially defines four groups of users -the optimists, the innovators, the sceptics and laggards- that differ in their prevailing personality trait. The stronger the trait, the better the user can be fitted into one of the four groups.

Consumers with high levels of TRI score high on the optimism and innovativeness dimension and are consequently more likely to adopt new technologies than consumers with low TRI levels who tend to associate new technology with discomfort and insecurity.

The TRI is certainly a very valuable concept to consider when studying acceptance of a revolutionary technology such as Google's self-driving car. However, it was mainly developed for service-based technologies with many items specifically relating to technologies and situations that were new at the time when the scale was developed but are no longer so (Ferreira et al., 2013). Therefore, it is rooted in a specific technological era that no longer applies to the technologies we now use and will probably use (Ratchford & Barnhart, 2012). For example, optimism is measured by "you like the idea of doing business via computers because you are not limited to regular business hours" or insecurity is operationalized by "you do not feel confident doing business with a place that can be reached online". Hence, these items directly relate to computers and the internet which are commonplace technologies today (Ratchford & Barnhart, 2012). The internet, for instance, has become such a normal and integral part of our lives and is nothing unusual or new anymore that „being online“ has turned into such a fluid concept that people do not even register anymore being online when in fact they are (e.g. on Facebook) (Fleming, 2012).

Ratchford and Barnhart (2012) address this drawback and develop the Technology Adoption Propensity (TAP) index as a more general and varied measure of technology readiness that applies to a wide variety of new high-tech products and services. Besides, the development of the TAP index as 14-item scale was also motivated by the length of the TRI as 36-item scale which limits the practicability to administer the TRI in practice. Ratchford and Barnhart (2012) argue that shorter questionnaires tend to yield more valid results and also prevent fatigue among respondents when being confronted with short rather than longer questionnaires.

Ratchford and Barnhart substitute innovativeness by proficiency, insecurity and discomfort by vulnerability and dependence and propose a new technology readiness concept that consists of the following dimensions: optimism, innovativeness, vulnerability and dependence.

I appreciate the attempt of Ratchford and Barnhart to adapt the TRI and develop a more up-to-date and general measure of technology readiness. However, I am afraid that in their attempt to build a much shorter and varied measure of technology readiness, they ended up with a scale that lacks comprehensiveness and general applicability as it omits some key aspects that were originally included in the TRI such as the insecurity dimension. Additionally, other researchers studying the effects of technology readiness on technology acceptance still cling to the original TRI which may also demonstrate that the TAP is perceived to be of limited value.

I advocate developing a new measure of technology readiness -the TRI2- by leveraging from the key strengths of the original TRI and the TAP index to gain a more comprehensive understanding of the personality dimensions causing consumers to adopt new high-tech products and services.

In the following, the five dimensions will be introduced.

2.3.2. Optimism, innovativeness and proficiency

Optimism is associated with a positive view of technology and relates to a belief that technology increases control, flexibility and efficiency in life. In general, optimism denotes „the tendency to believe that one will generally experience good versus bad outcomes in life“ (Walczuch, Lemmink & Streukens, 2007). Optimists tend to use more active coping strategies since they are less likely to worry about a possible negative outcome and are more likely to accept their situation (Son& Han, 2011). They are more likely to focus on positive events than pessimists and confront new technology more openly (Walczuch et al., 2007; Son & Han, 2011). Thus:

H4. There is a positive correlation between consumers' level of optimism and their intention to adopt Google's self-driving car instead of a conventional vehicle.

Innovativeness refers to a persons' tendency to be a technology pioneer and thought leader (Parasuraman, 2000). People with a high level of innovativeness tend to try out new things, feeling comfortable with using a new technology, requiring only modest proof of the outcomes of technology use. They tend to use a technology even though the potential value is uncertain and the performance not convincing (Son & Han, 2011). Therefore, it can be hypothesised:

H5. There is a positive association between consumers' level of innovativeness and their intention to adopt Google's self-driving car instead of a conventional vehicle.

Proficiency refers to a confidence in one's ability to quickly learn to use new technologies as well as a sense of being technologically competent (Ratchford & Barnhart, 2012).
Ratchford and Barnhart (2012) replace innovativeness by proficiency to take note of increasing levels of technology sophistication. The decision to include proficiency rather than innovativeness is „perhaps not surprising given that new technologies have become more sophisticated over the last decade" and given „the ubiquity of technology in contemporary society, it stands to reason that consumers' confidence in their ability to effectively learn and use new technologies has now become more critical to their adoption propensity than their sense of being a technology pioneer" (Ratchford & Barnhart, 2012). One could certainly assume that proficiency may play an important role on the adoption decisions of consumers of new high-tech products or services. However, contemporary's cutting-edge technologies are designed in such a way to improve user-friendliness and convenience that they require no special technical competences at all. Think for example about Apple and its technological devices it brought to market. Apple's design principles date back to Marshall McLuhan's famous dictum „the medium is the message", meaning that innovative technologies should be easy to use, fun and intuitive where this simplicity and straightforwardness makes the technology highly attractive to a wider audience and increases people's willingness to use it. The same goes for driverless cars who actually do not require any special competences from people other than driving skills which are needed in take-over situations. Google's self-driving car as exemplification of FAD basically does not even require any driving

skills as the role of the vehicle occupant shifts from being an active driver to a mere passenger that is chauffeured around from point A to B.

When it comes to innovativeness, it may serve as an excellent opportunity to segment and understand the market. Moreover, even though technology has become ubiquitous in our daily lives, there are likely to be many people -especially members of the Gen Y and Z- who make up a large group of innovative techies and early adopters for whom innovation and high-tech products and services is still something which is part of their identity. Even though innovation has ingrained our daily lives, it is still something that is hip, cool and trendy and beneficial for society as a whole as it makes life cooler, better, more convenient and efficient.

It seems as if Ratchhard and Barnhart (2012) were thinking the same thing but wanted to justify the development of a new construct. Thus, the measurement scales of the innovativeness and proficiency dimensions are nearly identical: Four out of four items of proficiency are identical to four of the seven items of innovativeness, meaning that both variables essentially mean the same thing. The only deviation is that the proficiency items are directed at the lives of respondents whereas the innovativeness items are formulated in such a way to relate to the lives of the generalized others. In sum, it seems as the label of Ratchford and Barnhart's proficiency variable is misleading and does not accurately measure what is intends to measure. Therefore, I prefer labelling the variable as originally intended by Parasuraman (2000) but use the measurement items of Ratchford and Barnhart which score high in content validity in that they cover the range of meanings included within innovativeness. The three additional items by Parasuraman do not deliver any additional benefit and hence will be deleted as items from the concept.

2.3.3. Insecurity, discomfort, vulnerability and dependence

With the development of the TAP index, Ratchford and Barnhart (2012) supplement discomfort and insecurity by dependence and vulnerability. Discomfort is measured by a perceived lack of control and a feeling of being overwhelmed by technology which is mainly explained by lack of informative feedback („There is no such thing as a manual for a high-tech product or service that's written in plain language") or augmented ease of use („It is embarrassing when you have trouble with a high-tech gadget while people are watching") (Parasuraman, 2000). As indicated beforehand, the design of contemporary technologies is specifically geared towards making its usage very straightforward, simple and user-friendly and Google's self-driving car does not demand any special technical competences from its users. In addition, some items of discomfort („Many new technologies have health or safety risks that are not discovered until after people have used them" or „technology always seems to fail at the worst possible time") measure what insecurity actually intends to measure: a distrust of technology and skepticism about its ability to work properly (Parasuraman, 2000). Therefore, the decision to delete discomfort from the construct seems to be justified. In addition, as will be seen below, it is properly replaced by dependence and vulnerability.

When it comes to Google's self-driving car, it becomes clear that insecurity should be retained as dimension of technology readiness. It demands of humans to put their faith in the hands of a computer and therefore it is reasonable to expect that fear and distrust of technology as being unsafe and unreliable are legitimate concerns. This is also reflected by one of the key barriers of FAD which are legal and liability issues as well as people's unease to give up control given safety reasons. Ratchford and Barnhart (2012) explain their decision to delete insecurity from the item battery and replace it by vulnerability by denoting that whereas the „‚insecurity' factor identified in the TRI (…) was defined as "distrust of technology and skepticism about its ability to work properly" vulnerability „reflects a concern that technology will work too well for anyone using it for nefarious purposes." However, deleting insecurity from the construct actually rules out consumers' fear of technology to work properly which can't be expected from consumers because a distrust and scepticism of technology is a legitimate feeling that can basically occur at every time, irrespective of the technology in use. Also, the blog analysis and the survey results (see below) suggest that people's lack of trust and fear of fully-autonomous vehicles to operate safely and reliably in all circumstances is a very prevalent matter of interest that could even hamper the widespread implementation of the technology. Besides, as we face increasing levels of automation in the form of new technologies that perform the tasks previously done by humans (e.g. industry 4.0), it is almost inevitable that technology fails. It would be naïve to assume that it will not.

As both the discomfort and insecurity dimensions encompass some items that relate to people's fear and distrust of technology as being unsafe and unreliable, I will only pick the strongest items of each dimension that relate to safety aspects of new technologies and will link both as items in a new insecurity construct. I thus posit that consumers with a high level of insecurity with regards to new technology are less likely to adopt Google's self-driving car.

H6. There is a negative association between consumers' level of insecurity and their intention to adopt Google's self-driving car instead of a conventional vehicle.

Dependence refers to a sense of being overly dependent on and a feeling of being enslaved by technology. This construct is also particularly interesting since it tackles technology's increased pervasiveness in the lives of consumers. Also, dependence relates to a persons' belief that technology controls their lives more than vice versa (Ratchford & Barnhart, 2012). As Google's self-driving car completely takes over control from human drivers, people may be inclined to feel an increased dependence on and invasion by technology into their daily lives. For example, this perception could be shaped by concerns over huge levels of unemployment set off by autonomous driving on the grounds that the latter ultimately replaces some core human competences by the computer, rendering humans obsolete and stirring off huge levels of unemployment, for example among taxi and truck drivers and drivers of delivery services. Therefore, this study assumes that:

H7. There is a negative association between consumers' level of dependence and their intention to adopt Google's self-driving car instead of a conventional vehicle.

Vulnerability refers to a belief that technology increases one's chances of being victimized by criminals or firms, mirroring a concern that technology may work too well for anyone using it for criminal purposes (Ratchford & Barnhart, 2012). When it comes to autonomous driving, vulnerability may reflect risk factors and obstacles that may hamper the development of autonomous driving such as cyber security issues. The Guardian reported on self-driving cars as irresistible target for hackers that may manipulate the car and create serious malfunctions such as manipulating the brakes, jerking the steering wheel or accelerating the car (Hern, 2014). Therefore:

H8. There is a negative association between consumers' level of vulnerability and their intention to adopt Google's self-driving car instead of a conventional vehicle.

2.3.4. Driving-related personality constructs

The following two sections introduce yet two personality traits, locus of control (LOC) and sensation seeking (SS) that are likely to influence consumer decisions to adopt Google's self-driving car.

FAD implies that the driver is removed from the driving-control feedback loops which can be thought of as a circular process that mainly consists of three stages: a goal (desired state), implementation (strategy to achieve the desired state) and feedback in terms of whether the chosen strategy satisfies the desired state (Bank, Stanton & Harvey, 2014). How do drivers react when they are removed from the control loop? Behavioural adaptation (BA) describes the collection of behaviours that occurs following a change to the road traffic system. It is mainly influenced by two psychological characteristics of drivers: LOC and SS (Rudin-Brown & Parker, 2004).

2.3.4.1. Locus of Control (LOC)

LOC echoes the extent to which a person thinks to be in control of external events that affect her/ him (Rotter, 1966; Payre et al., 2014; Duan & Chen, 2011). People with an internal locus of control (ILOC) believe they can control events and maximise the possibility of positive outcomes and minimise the possibility of negative outcomes. When it comes to automated driving technology, internals are therefore more likely to rely on their own skills and abilities and maintain a direct involvement with the system regardless of how safe or reliable it is (Payre et al., 2014; Rudin-Brown & Parker, 2004).

H9. There is a negative association between internal locus of control and consumers' intention to adopt Google's self-driving car instead of a conventional vehicle.

In contrast, externals tend to believe they can't control external events that affect them. They may be more likely to surrender control to the automated driving system and attribute the behaviour of the vehicle to the system rather than to their own activities. Consequently, they may become over-reliant on the system and are more likely to be tempted to give up supervising as they think that they are no longer responsible for driving as the automated driving system controls vehicle operation. Consequently, they may fail to react or react more slowly if the device fails (Rudin-Brown & Parker, 2004). This is in line with previous research that suggests that people with an internal locus of control have a better driving performance than people with an external locus of control which may be due to the active and passive roles people with an internal and external locus of control respectively subsume. This might also explain why the passive drivers -people with external locus of control- failed to intervene in the automated driving system whereas the active drivers -people with internal locus of control- managed the recovery of manual control successfully (Stanton & Young, 2000). Thus:

H10. There is a positive association between external locus of control and consumers' intention to adopt Google's self-driving car instead of a conventional vehicle.

2.3.4.2. Sensation seeking (SS)

According to Zuckerman (1964), sensation seeking (SS) is defined as personality trait that relates to people's tendency to seek novel, varied, complex and intense sensations and experiences and the willingness to take physical, financial, legal and social risks for the sake of these experiences (Payre, 2014). It is associated with a multitude of risky behaviours such as gambling, smoking and risky driving, including speeding and driving while intoxicated (Rudin-Brown & Parker, 2004). It has been shown, for example, that high-sensation seekers tend to drive on average faster and less carefully (Bruns & Wilde, 1995) with small distances between vehicles and strong braking (Payre, 2014). Delegating control to an automated driving system is expected to lower the thrill and sensory experience of driving. It is thus reasonable to assume that:

H11. There is a negative association between sensation seeking and consumers' intention to adopt Google's self-driving car instead of a conventional vehicle.

2.4. Driving environment

Apart from the characteristics of the technology and the personality of the individual, consumer acceptance of Google's self-driving car also depends on the driving environment, the driving situation and driver impairment. Therefore, I will consult prior research studies on partially and highly automated driving systems that deliver important clues as to the favourable conditions that might induce consumers to adopt Google's self-driving car.

Hoedemaeker and Brookhuis (1998), for example, presented findings from a study in which respondents tested adaptive cruise control in real traffic which they perceived to heighten comfort and safety. Hogema, van der Horst, and Janssen (1994) tested user acceptance of different types of adaptive cruise control in a driving simulator and also found that the majority of adaptive cruise controls were considered relatively useful and comfortable. Furthermore, delegating control seems to be particularly attractive when a trip is considered to be monotonous or unpleasant (Payre, Cestac & Delhomme, 2014). This is in line with findings from the Continental Mobility Study 2013 that disclosed that automated driving is particularly attractive on long highways, in traffic-jams on freeways, through construction sites as well as in covered parking garages. Additionally, Payre et al. (2014) found that drivers would be more interested in using fully-automated driving while being impaired in terms of being intoxicated or taking medication. These findings demonstrate that consumer acceptance of automated driving also depends on the traffic or driving environment and the state of the driver. For this reason, it is safe to assume that:

H12. There is a positive association between boring, monotonous or repetitive situations (e.g. on highways, in commute traffic), stressful and difficult situations (e.g. in traffic congestions) and driver impairment (e.g. by alcohol, fatigue, medication) and consumers' intention to adopt Google's self-driving car instead of a conventional vehicle.

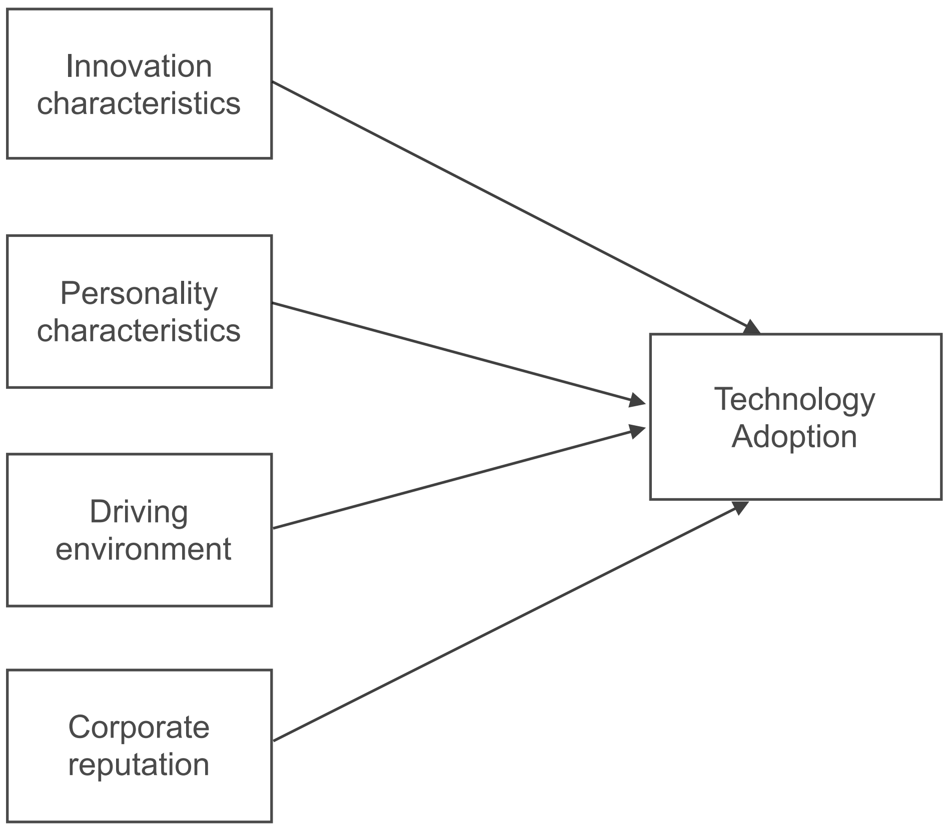
2.5. Customer-based corporate reputation

It can be assumed that Google is one of the companies at the moment that stirs a lot of controversy and debate. It has been commonly known for its search-engine business but expanded in other fields. Apart from self-driving cars, Google acquired Boston Dynamics, one of the most advanced robotics company in the World where this acquisition marks the eighth robotics purchase in the past six month. Furthermore, Google acquired DeepMind, a London-based artificial-intelligence start-up that specialises in machine learning, advanced algorithms and systems neuroscience with the goal to make computers think like humans (Gibbs, 2013). In addition, Google's Glass project has been compared to a surveillance camera that people wear voluntarily and that stores people's private data such as audio and video in a tiny embedded memory chip. It has been repeatedly described as signalling the end of privacy, as „evil, evil device“ and „creeper stalker toy“ (Oremus, 2013). In short, it thus seems logical to assume that the factor „Google“ might influence consumers' intention to adopt Google's self-driving car.

Therefore, this study takes into account an additional construct with a likely influence on consumer adoption decisions: company or corporate reputation. As we are interested in the perceptions of consumers, we need a definition of corporate reputation that is consumer-based (Walsh, Beatty & Shiu, 2009; Walsh & Beatty, 2007). Walsh and Beatty (2007) define customer-based corporate reputation (CBR) „as the customer's overall evaluation of a firm based on his or her reactions to the firm's goods, services, communication activities, interactions with the firm and/or its representatives or constituencies (such as employees, management, or other customers) and/or known corporate activities.“ Previous research suggests that CBR is positively related to a number of monetary and behaviour-related constructs such as customer satisfaction, trust, loyalty, positive word of mouth, perceived risk of innovations, perceived product quality, price expectations and beliefs about and attitude towards innovations (Chang & Chang, 2010; Walsh & Beatty, 2007). Taking into account customers' personal experiences with and perceptions about the firm, CBR is a multidimensional construct that is based upon the following dimensions: customer orientation (customers' perceptions about degree to which company and employees' go to satisfy customer needs and put customers at centre of focus), good employer (customers' perceptions of how company treats employees and that company is well-managed and has competent employees), reliable and financially strong company (customers' perceptions of company's competence, solidity, and profitability and of firm's vision and investment potential), product and service quality (customers' perceptions that company offers innovative, high-quality products and services which they stand behind) and social and environmental responsibility (customers' perceptions that the company sees and acts on environmental and social responsibilities) (Walsh & Beatty, 2007). It thus seems reasonable to expect that Google's corporate reputation influences variation in consumers' adoption of Google's self-driving vehicle. Therefore, the following hypothesis is proposed:

H13. There is a positive correlation between Google's corporate reputation and consumers' intention to adopt Google's self-driving car instead of a conventional vehicle.

2.6. Research Model



3. First study method: qualitative content analysis

Blumberg, Cooper & Schneider (2008) suggest that a new investigation often starts with a qualitative research design exploring new phenomena while quantitative studies are later conducted to test the validity of the assumptions formulated in previous qualitative studies.

This study will follow this pattern. Previous research has studied consumer acceptance of partially or highly automated driving systems but rather neglected fully-automated driving with Google's car as the most prominent example that falls into this category. Besides, there is no scientific study that

I am aware of that has studied variation in acceptance of Google's self-driving car. Therefore, this study will explore consumer acceptance of Google's robotic vehicle as manifestation of fully-automated driving by first reviewing the literature on technology acceptance and previous research on consumer perceptions of partially and highly automated driving systems. A qualitative content analysis of blog data will be performed in order to check whether theory and previous research on semi-autonomous driving overlap with the findings that arise from the content analysis and whether there are themes that have not been captured by neither theory nor study findings on automated driving systems.

In a next step, findings from the literature review and previous research as well as the content analysis will be used to develop a questionnaire that will try to test the qualitative assumptions and examine variation in consumers' intention to adopt Google's self-driving car.

The following section will now explain how the content analysis will be performed. It is organised into the following three main phases: preparation, organization and reporting of results (Elo et al., 2014).

3.1. Preparation phase

The preparation phase involves specifying the data collection method, the sampling strategy as well as selecting the units of analysis (Elo et al., 2014).

3.1.1. Data-collection method

Research findings should be as trustworthy as possible (Lincoln & Guba, 1985).

The selection of the most suitable data collection method is the first strategy to ensure the trustworthiness of research findings (White & March, 2006; Elo et al., 2014; Graneheim & Lund, 2004). Thus, on the grounds that previous research studies have identified content analysis as one of the most popular and suitable research methods to study blogs, it will be selected as qualitative data-collection method (Banyai and Glover, 2012). Furthermore, it has several advantages that also motivated its selection as qualitative data-collection instrument. For instance, according to Babbie and Benaquisto (2002), its greatest advantage is its economy in terms of time and money, thereby reducing work hours (Banyai & Glover, 2012). This is in particular true for Web-based data where the data is already available and easy, quick and inexpensive to use (Babbie, 2006; Kim & Kuljis, 2010). There is no need to rely on research subjects; there is no requirement for a large research staff nor is special equipment needed (Babbie, 2006; Kim & Kuljis, 2010). Given that Web-based data is publicly available, it is not necessary to obtain ethical approval from the participants of the respective content, saving time and energy. Furthermore, content analysis is unobtrusive in nature as the subjects being studied are not affected, thereby reducing the bias of research findings (Babbie, 2006; Banyai & Glover, 2012; Kim & Kuljis, 2010).

Literature abounds with multiple, nuanced definitions of content analysis that are rooted in its historical development (White & Marsh, 2006). It is generally described as a flexible research method to analyse data and was initially used to study the objective, systematic and quantitative description of the manifest content of recorded human communications, involving books, poems, newspapers, songs, paintings, speeches, letters, e-mail messages or web pages but was later expanded to interpret subjective, qualitative data (=latent content) in a scientific manner (Kassarjian, 1977; Babbie, 2006; Banyai & Glover, 2012; Moretti et al., 2011; Graneheim & Lundman, 2003). Hsieh and Shannon (2005) define qualitative content analysis as a "research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (Moretti, van Vliet, Bensing, Deledda, Mazzi, Rimondini, Zimmermann & Fletcher, 2011).

Content analysis can be either performed by means of qualitative and quantitative data and the codes can be either generated inductively or deductively (Elo & Kyngäs, 2007; Hsieh & Shannon, 2005; Elo, Kääriäinen, Kannste, Pölkki, Utriainen & Kyngäs, 2014). The specific type of content analysis depends on the research purpose, the problem to be studied as well as the state of research (Hsieh & Shannon, 2005; Elo & Kyngäs, 2007). Contrary to a common misperception in the scientific literature, qualitative content analysis is not necessarily inductive as wrongly proclaimed in the coverage of content analysis by White and Marsh (2006). Qualitative content analysis can also be deductive where the choice of this method is contingent on the research purpose as well as the state of research. Thus, this study will follow the definition of Hsieh and Shannon (2005) who distinguish between the conventional, directed and summative types of qualitative content analysis which all follow from a naturalistic paradigm (Hsieh & Shannon, 2005).

Whereas conventional content analysis is mainly suitable when "existing theory or research literature on a phenomenon is limited", the directed approach to content analysis makes more sense when there is already existing theory or research about a phenomenon but which is incomplete and could profit from further exploration. Its purpose is "to validate or extend conceptually a theoretical framework or theory" (Hsieh & Shannon, 2005). The directed approach to content analysis seems to be the most suitable for this study because of two reasons. First, there is already existing research on partially automated driving systems but when it comes to FAD, research is scarce, not to say non-existent as regards consumer acceptance of Google's driverless vehicle. Furthermore -and now we come to the second reason- the factors that influence technology adoption have been extensively studied. The TAM, for example, upon which the theoretical framework also rests, has been cited in over 700 journal articles (Vijayasarathy, 2004). Still, it has not been applied to the context of autonomous driving, let alone to Google's self-driving car. Thus, existing research on partially and highly automated driving systems and on technology acceptance could certainly benefit from applying it to a new, highly revolutionary technology to check whether the variables identified in the technology acceptance management literature still make sense in this realm and whether new themes possibly emerge from the data that have not been validated by existing research yet and that provide a different, possibly contradictory viewpoint of the phenomenon under study, thereby ultimately refining, extending and enriching the theory (Hsieh & Shannon, 2005).

There are threats to validity that I should be aware of when analysing the data by means of the directed approach to content analysis. Thus, approaching the data on the basis of theory means that the researcher is already biased in a way with the result that (s)he may be more likely to come to conclusions that rather support than expand or refute the theoretical assumptions. Furthermore, when theory is overemphasised the researcher may be blinded to contextual aspects of the phenomenon and may be less inclined to find aspects that are completely unrelated to the phenomenon under study (Hsieh & Shannon, 2005). However, I am aware of the common pitfalls of qualitative research relating to the objectivity and neutrality of research findings. This parallels the view of Elo et al. (2014) who maintain that self-awareness of the researcher is essential to facilitate the credibility of research results.

3.1.2. Units of analysis

To ensure trustworthiness, the most appropriate sample and sampling method should be selected. When it comes to the former, the sample should comprise participants who have knowledge of the research topic (Elo et al., 2014). This study will make use of lead users as the most appropriate units of analysis to be included in this study. A distinction must be made between units of analysis and units of observations. This study makes use of lead users as the units of analysis - the whom or what being studied- but the blog posts of lead users are the units of observations because these are the units we directly observe.

The selection of lead users as units of analysis is motivated as follows. Consumers tend to perceive new technologies with which they have not made any experiences yet as abstract and psychologically distinct (Skippon & Garwood, 2011). Google's self-driving car is not on the market yet, hence people can't test it but many consumers can up to now experience autonomous driving only in the form of the semi-autonomous vehicles brought about by the traditional OEMs or by media coverage. Hence, it can be assumed that the majority of consumers still lack the familiarity with and knowledge of Google's driverless car. Consequently, studying people with a relatively good knowledge and idea about Google's self-driving robot is crucial to eventually come up with robust and accurate predictions about actual future consumer behaviour and expectations concerning Google's self-driving car (Schneider et al., 2014).

The characteristics of lead users make them very attractive to be included as units of analysis in this study. The lead user concept goes back to Erich von Hippel (von Hippel, 1976; von Hippel, 1978) who observed that many commercially attractive innovations are developed by product users rather than manufacturers with positive effects on a number of firm performance-related criteria (e.g. annual sales of products) (Spann, Ernst, Skiera & Soll, 2009; von Hippel, Thomke & Sonnack, 1999).

Thus, lead users are sophisticated product/service consumers who encounter needs that will be general in the marketplace - more and more people will feel the same need over time - but which are months or even years ahead of the market (trend) (Churchill, von Hippel & Sonnack, 2009, von Hippel et al., 1999). Lead users are dissatisfied with existing products and services and gain enormously from obtaining a solution to their needs which also explains their high intrinsic motivation to seek for product solutions even without obtaining financial rewards. As a result, they often develop new products or services themselves because they either can't wait or don't want to wait before these become commercially available. Coming up with new products or services that do not yet exist on the market necessarily implies that lead users need to possess a high level of understanding and knowledge, especially market-related knowledge, which is another key attribute (Spann et al., 2009). As a consequence, sampling lead users implies that their feelings and perceptions of a driverless vehicle by Google could accurately portray and determine what the mass market wants which makes them a rather robust predictor group to predict consumer adoption patterns of Google's robotic vehicle (Kulviwat et al., 2007).

Nevertheless, the one major weakness of sampling lead users is that they are not representative of the entire consumer population which limits the transferability of study findings (Spann et al., 2009; Urban & von Hippel, 1986). Besides, as lead users do not represent the average user of a product or service, there is always the risk that the demands addressed by lead users will not address the needs of the majority of consumers in main markets (Caskey & Schumacher, 2012). In general, this risk can be mitigated by making sure that lead users are systematically selected. For example, von Hippel et al. (1999) suggest that lead users can be effectively tracked down by making use of networks which rests on the assumption that people with a serious interest in a topic tend to know others who have even more knowledge than themselves until one reaches the top of the „pyramid of expertise". Another selection option is to investigate analogous markets to find lead users that face comparable problems but in different and more extreme forms (Von Hippel et al., 1999). I do not make use of these selection criteria and hence can't warrant that my blog analysis actually covers lead users but it is likely that may analysis will also encompass early adopters or even routine users or laggards. This will be illustrated by the following considerations.

Choosing lead users steers us to the next question, namely where lead users can be identified. Thus, according to Droge et al. (2010), lead users are to be found in blogs as the former tend to blog or read and comment on blogs. Bilgram, Brem and Voigt (2008) suggest activity in weblogs is associated with a higher level of lead userness and Agarwal (2008) posit that the most influential bloggers are usually the market movers. A higher activity in blogs is thus an indicator of lead-userness which could be measured by the number of inlinks - measure of number of posts that refer to blog post - or outlinks -posts or articles to which author refers- where the former is positively and the latter negatively related to influence and standing in the blog community (Agarwal, Liu, Tang & Yu, 2008). Given the difficulty to apply these criteria to identify lead-users and given the limited scope of this study, I won't make use of these criteria to identify lead-users but will select blog posts and comments simply on the basis of their correspondence with the selected search criteria that will be introduced below.

A blog (shortened from weblog which stands for wee-blog) is an online diary or more specifically „frequently updated websites where content (text, pictures, sound files, etc.) is posted on a regular basis and displayed in a reverse chronological order“ (Fullwood, Sheehan & Nicholls, 2009; Savolainen, 2010). Building an Internet-based, networked community -a so-called virtual community of bloggers and readers- blogs centre around a theme or idea, product, industry, activity, hobby or any other subject (Stanko & Pollitte, 2010). Droge et al. (2010) confirm the suitability of blogs as appropriate data source by stating that blogs „may tap most of the key sample desired in a data-collecting endeavor, perhaps even providing information that a focus group cannot because the blog's Internet-based coverage is faster as well as broader geographically and narrower in topic focus“. Thus, making use of blog data may be beneficial in terms of the external validity of study findings. Furthermore, Droge et al. (2010) suggest that blog data can deliver very detailed and comprehensive information such as how, when or by whom Google's self-driving car can be brought to market, what are its specific product attributes, how does it compare to competitive product offerings such as conventional vehicles and what are possible industry trends. Therefore, relying on blog data has several advantages. However, one should not be totally blinded by these benefits because relying on blog data also poses some inherent risks. Operaio (2013), for example, points to an inherent threat to validity when using blogs as data source because one can never be certain whether bloggers are telling the truth. This is true and this eventuality can't never be ruled out. However, content analysis of blogs is unobtrusive research where the subjects being studied (bloggers) are not affected. In comparison to conventional data collection methods such as surveys or interviews, researchers are not able to imprint their bias and preconceptions on respondents which may offset a desire among respondents to conform with the view of the researchers to be liked and accepted by others rather than stating their true opinions and feelings (social conformity) (Thompson, 2003). In addition, bloggers are intrinsically motivated to state their personal feelings and thoughts; they are not forced to do so in the context of a research study but participate voluntarily in blog conversations. Moreover, the anonymity of bloggers is normally assured with bloggers making use of nicknames or remaining anonymous altogether (Shah & Robinson, 2011). The question then arises as to why bloggers should lie or refrain from stating their true feelings and thoughts if they can hide behind their online identity anyway? Therefore, it can be assumed that the bloggers' reflections are likely to serve as representations of their true and genuine selves, meaning that validity is less at stake when using blogs as primary data source.

3.1.3. Sampling method

The sampling strategy involves two steps: selecting the blogs and the blog posts.

First, blogs that meet the objectives of this study will be selected into the sample. Purposive sampling will be used which is the most common non-probability sampling method in content analysis (Elo et al., 2014). Apart from the non-representativeness of the sample that logically derives from non-probability sampling a further disadvantage of purposive sampling is that the full details of the sampling process can't be provided. Thus, it is not possible to describe the main characteristics of participants which is mainly due to the nature of the blogging community who maintain the anonymity of bloggers. This in turn weakens the dependability or reliability of the study which refers to the stability of data over time and under different circumstances (Elo et al., 2014).

The following sampling criteria are specified to decide which blogs will be drawn into the sample:

- Mainly discuss car-related, technical or business issues.
- Contain sufficient postings and comments to make sure that the blogs are rich in details and meaning.

- Must be active throughout the data-collection process.
- Must be written in English.

In order to identify the blogs, technocrati as one of the first and largest real-time internet search engines for blogs is used. With around 112.8 million blogs Technocrati was tracking in December 2007, it is also one of the most accepted authorities on what is happening on the World Live Web as Technocrati calls the dynamic and ever-changing portion of the web created by users (Jones, 2008).

To select the blogs that correspond with the above-mentioned selection criteria, a list containing the 100 most influential blogs from different categories such as business, cars, technology, lifestyle and politics is consulted. Furthermore, the categories technology, business and cars will be separately searched through to possibly identify further blogs that have not been identified by the list of the top 100 blogs.

To minimise threats to validity and to make sure that all relevant blogs are identified, this study also relies on search engines other than Technocrati such as Google Scholar. The following keywords were used to get access to additional blogs that correspond with the goals of this research: „famous/popular/best/top blogs“. To avoid that the blogs tend to revolve around more or less the same themes, a heterogenous sample of blogs is consulted since different blogs are likely to host bloggers that, for example, differ in their social background, perspectives, viewpoints, perceptions, interests, experiences and expertise. Thereby, the spectrum of possible themes can be increased and the research phenomena can be approached from a variety of perspectives which makes a critical and varied engagement with the topic possible. For instance, apart from tech, auto or business blogs, blogs from renowned newspapers or news agencies are taken into account. Choosing participants with various experiences has also been defined as common strategy to improve the credibility of research findings as it contributes to a richer variation of the phenomenon under study.

In a next step, the blogs will be searched through for blog posts. Therefore, the following keywords will be used: Google's self-driving vehicle/car, Google's robotic vehicle/car, Google's robo vehicle/

car, Google's driverless vehicle/car and Google's autonomous vehicle/car. Particular attention will be paid to blog posts that have generated a relatively high number of comments because by engaging in an extensive discussion with other commenters, the bloggers may be encouraged to dig deeper into the topic with the result that some thoughts are revealed which may have remained undetected otherwise.

Table 1. List of blogs and blog posts

Blog	# of posts studied	Blog	# of posts studied
Slashdot	21	Extreme Tech	2
Autoguide	15	Forbes	2
Business Insider	11	The Inquirer	1
Computerworld	10	Green Car Reports	1
Wall Street Journal	12	Search engine land	1
Autoblog	9	Marketing land	1
CNET	8	The Blaze	1
Readwrite	5	Slate	1
arstechnica	5	MIT	1
Bloomberg Businessweek	4	Clean Technica	1
engadget	4	Tech Hive	1
The Guardian	3	New Yorker	1
Tech Crunch	3	Los Angeles Times	1
New York Times	5	IEEE Spectrum	1
dice	3	Slog Stranger	1
PC mag	3	Atlantic Cities	1
Popular Science	2	makeuseof	1
The Verge	2	I fucking love Science	1
Tech Radar	2	Gas2	1

In total, 148 blog posts plus 5000 comments are selected into the sample (n=5148) (table 1). Selecting an appropriate sample size is another criterion to establish the trustworthiness of study findings. There is no commonly accepted sample size for qualitative studies but it has been suggested that data saturation may be an indicator for optimal sample size. Data saturation was achieved in this study because at first, I collected huge amounts of data and assigned these to the different categories. Over time, it has become evident that data was repeatedly assigned to the same categories which is an indicator for data saturation. In line with the recommendations by Elo et al. (2014) data was first collected and then analysed since this tactic makes it easier to recognise when data saturation is finally achieved.

The sampling method suffers from at least three threats to validity. First, it is possible that not all relevant blogs and blog posts are identified. The correctness of the search depends upon the search criteria, the scope of the search as well as the search engines used (Turner et al., 2010). Second, publication bias is a further threat that I should be aware of (Turner et al., 2010). It means that it may be possible that in the end more blog posts contemplating Google's self-driving car rather positively than negatively are identified. Especially in light of the fact that I used Google scholar as one of the primary search engines, this factor is not to be neglected since it may be possible that Google manipulates results. Finally, the goal of the analysis of blog posts and comments is to understand whether bloggers might be ready to adopt Google's self-driving car and which factors explain variation in acceptance. Nevertheless, the question arises as to whether I really measure what I intend to measure. For example, a blog post deals with Google's self-driving car and one commenter states that (s)he would definitely adopt (or reject) self-driving cars. Does this mean that (s)he is willing to adopt (or reject) Google's self-driving car or self-driving cars in general? This is not always stated clearly.

3.2. Organization phase

Once the sample is specified, the data can be coded. To ensure trustworthiness of findings, part of the organisation phase is to describe in detail how the concepts or categories are developed (Elo et al., 2014). In line with the directed approach to content analysis, coding categories will be developed on the basis of already developed and tested scales to measure all constructs in this study. Within the course of the data analysis process, additional codes may be created and the initial coding scheme will be adapted and revised as new categories emerge inductively from the data (Hsieh & Shannon, 2005).

The coding process will be performed in the following way. First, the text is read through and all parts of the data which may correspond in a way to the predefined categories and the research purpose in general are highlighted. After all important passages have been highlighted, the text will be coded on the basis of the initial coding categories. Text parts that do not fit into the pre-established categories, will be given a new code (Hsieh & Shannon, 2005). It would also be possible to code the data immediately while analysing the data. However, this strategy will not be used since it is prone to lead to biased results because the researcher may not be free to analyse the data but is selective as (s)he codes the data in dependence on the codes (Hsieh & Shannon, 2005). Selecting the most suitable meaning units or units of observation is critical to achieve credibility.

I organise the coding process by means of an excel file where the columns represent the different codes and the rows denote the raw data that is assigned to the different categories. It it suggested that meaning units should neither be too broad nor too narrow as in the case of the former meaning might be difficult to establish as the text contains multiple meanings and in the case of the latter meaning might be fragmented. In my study, the units of observation tend to be broad rather than narrow because I wanted to make sure the context of the data is maintained so that no meaning is lost and the data will be fully and comprehensively interpreted. Credibility of research findings is also concerned with how well the categories cover the data in the sense that no relevant data have been inadvertently or systematically excluded or irrelevant data included. As the analysis of data covers 148 blog posts and around 5000 comments, sometimes I also assigned data to the categories that might be irrelevant. This is due to the following reasons: When I started analysing blog posts, the number of new themes and patterns were high. With a higher number of blog posts and comments that I studied, the proportion of new themes that emerged from the data reached a performance plateau and steadily declined. Thus, at first I also included larger body of texts and hence irrelevant data because I wanted to make sure that the data is kept within its original context; over time, however, I only assigned parts of data that have not been captured by the previous assigned data yet and thus may contribute to the variety and richness of study findings.

I won't rely on a second coder due to the limited scope of this study. I am aware that the assessment of intercoder reliability is one method to enhance the trustworthiness of research findings. Kyngäs et al. (2011), however, point out that it is also not uncommon to analyse the data with only one coder. They point to strategies that compensate for the absence of a second coder. For example, it is recommended to constantly return to the data to make sure that the interpretation of the data is correct and to prevent that the data is over-interpreted (Elo et al., 2014). Additionally, face validity is a good measure to check whether a measure accurately measures a concept and covers all essential aspects of the concept (Hsieh & Shannon, 2005; Babbie, 2006). I will take into account those strategies to make sure that research findings are trustworthy and not distorted by subjectivity and bias.

Furthermore, the initial categorization scheme will be pre-tested by means of 15 postings. Even if the pre-testing reveals that the postings (slightly) deviate from the coding scheme, I won't delete any categories from the matrix because at this exploratory stage it is important to gain a first impression about what is said in blogs and whether the coding scheme generally matches the data at hand (Droge et al., 2010).

The pretesting has revealed that there are some limitations when using a predefined coding scheme and a content analysis in general to analyse blog data. It turns out that it may be very difficult to clearly demarcate the constructs from one another. For example, the personality constructs such as optimism and innovativeness try to assess the effect of personality on the technology adoption decisions by consumers. However, these personality constructs are inextricably linked to the characteristics of the innovation. For example, when bloggers state that Google's self-driving car is a way to move society forwards and to make life easier, better and more convenient, this shows that they are optimistic about Google's car but not about technology in general. It can be assumed that a positive view about Google's self-driving car is good indicator of their positive view of technology in general but we can't be sure about that; we can only simply assume this. Thus, the factor „Google" is interwoven with their view about technology in general. It is not possible to clearly draw a line between the different constructs by means of the content analysis. This limitation needs to be taken into account. This weakness can be compensated by the help of the questionnaire that is able to investigate the relationships between the different constructs and technology adoption.

Consequently, it can be concluded that the content analysis is a very good method to explore consumer acceptance of Google's self-driving and to assess which factors or themes do play a role among consumers and are simply present or absent. It is less suitable to test the correlations between the different items of the separate constructs.

3.3. Reporting of results

Reporting of results is particularly associated with transferability, conformability and credibility. Credibility - which equals internal validity - relates to the fit between the view of respondents and the researchers's representation of them. Do the explanations by respondents match with the interpretations or descriptions of the researcher? Conformability - comparable to objectivity and neutrality - implies that the data are genuine and accurate representations of the information the participants provided and that those data are not distorted by the biases, perspectives and motivations of researchers (Elo et al., 2014; Elo & Kyngäs, 2007). Transferability is a form of external validity and refers to the „the extent to which findings can be transferred to other settings or groups". To facilitate credibility, conformability and transferability, it is essential that results are reported systematically, carefully and with sufficient detail (Elo, 2014). Particular attention should be devoted to establish the connections between the data and the results. This can be accomplished by using quotations of bloggers which is a key strategy to prove the trustworthiness of research findings. However, quotations should be used systematically. Quotations from a variety of participants are provided to clearly show the link between the categories and the data as well as show the richness of the data. The quotations will be representative of the whole sample. In addition, options for data display will be included such as a word cloud as collection of the most frequently cited words or themes that serves as useful summary of the main topics that were discussed in the selected blog posts on Google's self-driving car. It is a also a good way to visualise research findings, thereby making the results more clear, understandable and easily accessible for the reader.

4. Results

4.1. Word cloud

The following word cloud is a good technique to visualise and summarize the main findings of the content analysis. According to Cidell (2010) word or content clouds are an especially useful visualisation for „any material that can be studied using content analysis.“ The word cloud sizes the keywords of the blog discussions according to their frequency of use, meaning that the font size of words is proportional to their usage (Cidell, 2010). It is meant to introduce the reader into the main themes that are discussed in blogs concerning Google’s self-driving car. Thereby, it should be pointed out that the whole picture should be equally taken into account because a common caveat of content clouds is that the larger words might undermine the importance of concepts that are not mentioned frequently, thereby biasing the results of the analysis (Cidell, 2010).

The content cloud was created by the website tagul.com because it is free for non-commercial use, is intuitive and user-friendly and allows to upload both files as well as plain text. It is a particularly attractive since it permits the uploading of a large body of text and automatically deletes common words (e.g. which, the, a) as well as incorporates a feature to add new ones. This feature is not available on other websites that are designed to create word clouds such as tagcloud.com and Wordle (Cidell, 2010).

As indicated beforehand, the data that were collected by means of the content analysis is organised in an excel file. This data is copied and exported to a word file where the data is again copied and then pasted into the word box on the tagul.com web site that visualises the words in the form of a content cloud. After the content cloud is spread out, it needs further refinement. The word list that is attached to the content cloud is closely studied so that further common words are omitted from the list (e.g. think, according to, hence).

Fig. 1. Word cloud

4.2. Innovation characteristics

4.2.1. Safety

> *„I know lots of folks who drive without driving. The car is moving and they are busy on the phone, drinking coffee, reading the newspaper. I passed one this morning. Narrow street by a grade school. Phone to the ear and eyes on something on the seat beside her, her car was, essentially, driverless. I swerved because I was there.“*

The content analysis gave us clues about the favorable conditions that would lead bloggers to use Google’s self-driving car. The bloggers see a bundle of advantages in Google’s self-driving car. Safety is one of the top benefits that would be gained by commercializing Google’s self-driving car. For example, many people refer to the bad driving habits of humans and assume that a computer drives better than the average human being. Thus: „Of course the computer has the opportunity to be a better driver than most drivers out there, it's solely focused on driving the car and looking out for problems. Not texting / talking / surfing on the phone, or trying to put on make-up, or digging around in the back seat for a CD.“ Or „after having observed the "drivers" present on highways for the past 30+ years, (…) not sitting in the driver seat will in no way free them to increase the amount of time they will be spending texting, talking or playing Angry Birds on their cell phones, since the bothersome "driving" activity they're supposed to be doing currently doesn't interrupt that now.“

Related to the discussion revolving around safety, it is also particularly interesting that it seems that self-driving cars must not be crash-free but it rather suffices if they are better than the average human driver. Therefore, it is maintained that „any opportunity to reduce ‚human error‘ should be taken just as soon as the solution is shown to be statistically safer“ and „widespread acceptance of their presence will come as soon as people realise that even though they are not perfect, they are 3 or 4 orders of magnitudes safer than cars driven by humans on mixed traffic.“

4.2.2. Mobility for elderly and disabled people

Apart from improvements in safety, Google’s self-driving car would provide further benefits such as providing mobility to the elderly and disabled people or people too young to drive, increasing their freedom and independence. Thereby, the car has huge social benefits by reaching out to an entirely new customer segment that was previously excluded from automobiles.

It seems as if visually and physically impaired people would be willing to embrace Google’s self-driving car once it hits the market, irrespective of any costs and challenges involved. (e.g. „Where can we sign up as a test drive family for one of these vehicles?“). One blogger, for instance, states that „as a disabled person with upper body problems driving has increasingly become a pain so a driverless system would be amazing. My husband is recently visually impaired and has lost his licence, he is a stay-at home dad to our twin toddlers and this would be a god-send.“ And another blogger who regularly suffers from strokes welcomes the idea of self-driving cars by saying that „I would love a self-driving car. I have seizures since I was 15. I am now 21 & never have been able to drive except for when I was a Senior in high school & was able to take Driver's Ed. I was able to get my driver's license but I have never gotten to use it. I think a self-driving car would be great for people like me who have seizures who can't drive for six months after they have one.“ Another blogger who seems to be blind suggests that he willingly trades his privacy for increased mobility and therewith independence and freedom. He asserts that „Google can have every scrap of information they want as long as handicapped people who up to now had to rely on other people to do what you fools take for granted. Oh and if you want a new blind beta tester for your cars I'm your guy!“ and „I'm legally blind and am forced to use public transit. It can take me 3 hours to do what a driving person would be able to do in 20 minutes. Self driving cars would be a godsend to me. Many who take driving for granted just don't know what its like. Naysayers should keep in mind how much this technology will mean to people like me. Finally I'll have the independence drivers have and take for granted. Our son was born blind at birth. He has talked about this car for years and has followed Google's advances with it. He says someday he'll own one. As the parent of

*„You want to know why I support robotic cars? I'll tell you. I will *NEVER* be able (with my disabilities) to legally or safely drive a car, and public transportation in this country is beyond abysmal. Do you have ANY idea what it's like to be unable to drive? Do you have ANY idea what it's like to have 0 control over your own life because you can't go where you want/need to go? Do you know what it's like to go hungry (even though you live 4 blocks form a grocery store) because you aren't feeling well enough to walk that far and can't get groceries? Do you know what it's like to be unable to leave your home and go do something fun (even when you want to) because you can't drive? Or to always have to call a friend to drive you? Or to be unable to buy certain things because you can't get to that kind of a store? I can't even call the bus anymore. They banned me from the city bus because I have a disability that they don't want to deal with. So, before you go off ranting about big brother and glocks, maybe you should think about the fact that many people in this country live as second class citizens because they lack the health to drive.“*

a blind child and friends in the blind and visually impaired community, I can tell you that this car is much anticipated. We are all cheering Google.“ Even for temporarily impaired people, Google’s self-driving car would offer great benefits: „I wish I had one now. I have a BMW but can't drive for the next two months with a torn Achilles.“

Connected with raising independence to previously disadvantaged people, mobility is also heightened for people living in rural areas where transport is often unsatisfactory or even non-existent. For example, „living in a very rural area, 1 hr from the city, the loss of his driving license has been almost more devastating than the visual impairment.“ Thus, it becomes clear that Google’s self-driving car opens up many previously unknown possibilities to a variety of customer segments.

4.2.3. Freeing up driver time

„Are you handicapped?? A self driving car would be the greatest thing ever!! You could sleep, and arrive at your destination when you wake up! Imagine the weekend trips you could take!“

Freeing up driver time is another key strength of Google’s self-driving car that seems to be highly valued by bloggers. Many bloggers point to the time lost while driving - the U.S. Department of Transportation estimates that people spend on average 52 minutes each working day commuting - which could be used much more efficiently and productively. The vast majority seems to embrace the „great idea“ of „having a chauffeur“ which makes it possible to „drive you to work while you read the news, check your emails or have a snooze. It drops you off right outside your place of work then drives off to a free parking area.“ People imagine performing a variety of different tasks in the car. One blogger, for instance, demonstrates that Google’s self-driving car is not only beneficial in terms of productivity and efficiency but it also frees up time to spend with family and friends. So: „I myself would love to have a car that will take me where I want to go without having to do anything. I would like to take an 8 hour drive from Arizona to California with my family and spend the whole time interacting with them instead of staring at endless miles of asphalt. I could turn around and play games with them, watch a movie, read a book. That is where I see the desire for this technology to exist. The way this would impact the personal lives of everyone on the road would only be for the better.“ Another blogger has been dreaming of a „small room on wheels for some time“ in the form of a „car which is a room with a digital piano in it so that I can practice my Bach fingering while my car crawls up the interstate stuck in congestion.“

4.2.4. Less dependance on public transport

Apart from increasing safety, freeing up driver time and providing mobility to elderly and disabled people, self-driving cars appear as viable alternative to public transportation. For example, „it takes me 20-30 minutes to get to work by car depending on traffic. It takes an hour, with 2 changes to get there by public transit. I sometimes have to work late hours without warning- if I’m too late for the last shuttle from my workplace, I’m stuck with a $50 taxi ride“ and „when the bus/train doesn't take me longer to commute, and costs less than driving, I'll consider it. For example, my current commute is 85 miles each way, and takes an average of two hours. A bit excessive even by my (UK) standards, but there we go. 75 miles of that is driving, which takes me an hour. The last 10 miles is done by train, which takes me - an hour. If I were to go with public transport the entire way, it would take me three-and-a-half hours each way. Driving costs me roughly £120 per week in fuel. Public transport costs me £100 PER DAY.“ Another one contributed to the discussion of self-driving cars as feasible option to public transport by commenting that „I like public transportation to some degree, but self-driving cars are WAY more useful“ as „they could really get anyone from anywhere“ without „to arrange a few transfers“ and „to figure out how to get to a pickup location“, going „very close to where you want to go.“ Consequently, there are some who envision self-driving cars as bridge between different public transit stops. As stated by one blogger, „public transit is slow“ „taking me two to three times longer to get anywhere via public transit than to drive there“ because „on either end of the journey, I have to walk to/from the public transit stop, then I have to spend time waiting for the bus/train to arrive, then it stops frequently on the way to my destination, and I also possibly have to wait for transfers between busses/trains…The trains come infrequently (only three trains per day on Sunday) and accelerate very slowly (they're not light rail), the subways have a max speed comparable with a go-cart, and the busses are rarely on time. The alternative is a taxi, which will get me there in a fraction the time, but costs me between five and twenty times as much.“

4.2.5. Reduce need of car ownership

Finally, and this is very interesting in light of the possible implications for the traditional automotive industry, bloggers point out that Google's driverless vehicle reduces the need of car ownership. Hence: „I'm ready for the jitney, where a small vehicle quickly and efficiently and safely drives me to my destination in about the same time, or quicker, than I could have done myself. I can share - please drive with me - and I will pay the fare. I don't want a car, don't want to drive a car, but want to get everywhere as quickly as anyone else. This is a new paradigm, and the first people to benefit will kill the auto industry as we know it.“ The need of owning cars is thus drastically reduced. This perception is also shared by another blogger who points to „another benefit that no one has mentioned or thought of so far“, namely that „we could stop owning cars. As the average car sits still for most of its life rotting away, if cars could drive themselves then it would be very counterproductive to own one, imagine the money and energy saved, in essence all you would have to do is book a car, it would pick you up drop you off then go pick someone else up thus they would work at 100% efficiency and if they were really smart they would go get themselves fixed/serviced. If they were implemented this way we would need less

> *„What it really is your bedroom on wheels, your living room on wheels, your office on wheels. Think of how your bedroom would look on wheels -- first of all it would have curtains, a bed (maybe a chair that reclined into a bed, a table, maybe a TV, some books. Everything would be according to your own personal tastes. If Google wants to get the general public interested in driverless cars, they need to stop thinking of it as a ‚car'.“*

than 2/3rds of the cars we have on the roads worldwide.“ Likewise, it is predicted that „once a driverless taxi company begins operation, personal car ownership for the masses will be on its way out the door – economics will ensure it. Consider this: if it costs you $2 to take a taxi anywhere in your city, why would anyone want to spend $500-$1000 a month owning a car.“ Additionally, it is indicated that the end of personal car ownership is also set by „the next generation“ who „is text happy“, meaning that „they don't care that it's illegal to text while driving. They're doing it anyways despite the dangers. They're addicted to communication. If that means they must give up driving or texting I'll put my money on driving being the surrendered activity. The only matter is time“ and similarly „you would never see me in one. I don’t even like riding as a passenger. I want to be in control. However, I can see this catching on with the younger generations. They will get hooked before they are old enough to drive. Good bye bicycles.“ This information is interesting in light of the ongoing trend of the emotional detachment of the car which together with the commercialisation of driverless vehicles could set an end to car ownership and the traditional car industry in the long-term.

4.2.6. Styling and design

It goes without saying that Google’s self-driving car is not without its criticisms.

At the end of May 2014, Google released its first self-driving car prototype that is electric, has neither steering wheel nor pedal and drives not faster than 40 km per hour. With her blog post „Google’s new self-driving car is built to be safe, not cool“ published on Motherboard, Victoria Turk amused herself by describing Google’s latest self-driving car prototype as a „little two seater vehicle that's lost the steering wheel and pedals but gained a smiley face" and cited the old lady in

„Its face has ovoid eyes and baby-blue retinas, a shiny button nose, and a straight-line mouth–like a put-upon Pixar character who rallies to save the film's hero."

Google's promo video who described Google's robo car by „isn't that cute?" when the vehicle appeared for the first time. Furthermore, the car has been titled as "cross between golf cart and amusement park ride", "a box on wheels" and "a tiny bubble car" that rather resembles "Little Tikes"  than the cars featured in "Blade Runner"  and that make people look "silly" and "ridiculous" when they want to look "good" and "cool". This "friendly", "cute", "cuddly" object almost makes you want to "hug this thing to protect it from this cruel, cruel world." This lack in coolness, styling and design may be one of the serious pitfalls for whom "cars are inextricably linked to the idea that your vehicle is part of who you are." One blogger supposes that Google needs to raise the speed limit to around 145 km/h for it to gain widespread consumer acceptance. It is „very, very nice" but „much too slow" with the limited speed raising doubts about the vehicles' efficiency: „For each little journey, you have to plan in more time and the world evolves towards faster (but of course also safer) travel in order to reduce the feeling of large distance. For this type of project we should at least work on the possibility to drive at normal speed."

4.2.7. Driving pleasure

„Not that driving is a video game, but there is that certain thrill, however dumb, of racing away from a spotlight in your 400+hp mustang or Camaro or whatever."

This brings us to another argument that is frequently reverberated across blog posts and comments: the loss of driving pleasure and the thrill of driving. It seems as if many car or driving enthusiasts oppose Google's self-driving car because to many driving is not merely a pleasure or enjoyment but „people LOVE to drive CARS" in the sense that „the world has a love affair with the automobile" which is „one of the major reasons we have such a large automotive industry. People like to buy new cars, repair old cars, and do stupid things in fast cars." Self-driving cars would fall short in terms of these issues as they would „be a convenience feature for the daily commute" but it will not come close to the „adrenaline rush" people get „when they put the pedal to the floor."

A car that drives itself collides with their desire, passion, deep-seated interests and enjoyment. One blogger comments that „speaking as someone who LOVES to drive his stick shift sports car -- that I'm one of those people will be always be popping the clutch, gunning the engine and zipping around these things saying "Get the heck out of my way!!!" Another blogger emphasises his emotional attachment to the car by declaring that „driving my car to and from work is the highlight of my day. I *enjoy* that. The last thing I want is to have my car drive itself (which, ultimately they all will be forced to do for safety reasons). If the car drives itself, there's no point in me working anymore, since the prime reason I work is to afford a car to drive... If the car drives itself, I don't want it, therefore I don't need a job anymore...I appreciate the safety argument (especially seeing how many horrible drivers there are on the roads), but what's the point in being safe if it means losing the ability to do what you enjoy?" and „Google's fighting to take away my one bit of joy each day. The drive to/from work is the most fun part of my life." Another one indicates that driving pleasure/enjoyment eventually trumps the potential benefits that emerge from autonomous vehicles such as safety by pointing out that many drivers „certainly wouldn't mind having the option of having a vehicle drive itself through our daily routines, but at the end of the day we're automotive enthusiasts because we enjoy the thrill of driving" or „why does everything have to hinge around

„Driving is not only a good skill to have, but a lot of great stories come from events that occurred while you were driving. What's cooler? How you avoided a tree that was sitting in the middle of the road or how a computerized, satellite guided car, drove straight into it?"

safety? Driving isn't just about getting from point A to B. It's about enjoyment, freedom and just time being alone. I don't want to live in a world where my drive to work gets turned into time where I can be productive putting that presentation together for work. I also don't want to live in a world where getting a scuffed knee or a broken arm results in the banning of this or that for safety purposes.“

Nevertheless, it becomes apparent that even for those people who actually enjoy and love driving self-driving cars could be attractive, e.g. „I enjoy driving my stick shift, but I can definitely see the benefit of this technology“, „I understand your love of driving. I rather enjoy it myself. However, truth be told - it is not an arcade game for our enjoyment. In the end, systems like this will trump humans in so many ways that safety and efficiency will make them the rule of the road“, „I like to drive cars and motorcycles (and work on and build them, for what it's worth), but I can still admit that there's a certain appeal to being able to press a few buttons and read the news/catch up with friends during the morning commute. The alternative being to stare at traffic ahead of me to make sure I don't hit it. (That said, there is a certain element of sport to commuting on a bike, but it's quite boring in a car)“ and finally „I know its tough to try and make autonomous driving sound appealing to people who actually love driving/car enthusiasts (myself included) but I can’t wait for this tech to take hold. The only areas I can see this working through, are in large cities: NYC, Chicago etc. No one can take a spirited drive IN the city anyway.“

„I can't wait for this tech to be released. I love driving my 3 series, but what a drag it is to sit in stop and go traffic, or to aimlessly search for a parking spot. If I could just "hail" a car by tapping a button on my phone and then be chauffeured to my destination, that would be awesome. People who don't live in the city can still drive if they want to, and I will still drive for pleasure on the weekends, but during the week, hell no. Besides, this is the future. It will happen eventually no matter what we think about it. Might as well make your peace with it. References to old 80's hair bands aside.“

In hindsight, the theory states that people are more likely to adopt Google’s self-driving vehicles if they are perceived to be advantageous compared to conventional vehicles. As demonstrated by the above analysis, Google’s self-driving car might be better in a number of different performance features such as safety, convenience and providing mobility to the elderly and disabled people. As a result, many people would like to adopt it either in addition to or instead of their conventional vehicles. On the other hand, to some a fully-autonomous car would mean a loss of driving pleasure and enjoyment which makes it likely that those people - presumably the driving and car enthusiasts - are unlikely to give up their beloved conventional vehicles and adopt the driverless robot by Google.

4.3. Personality Characteristics

Recall from the theoretical framework that people with a high level of optimism and innovativeness and a low level of insecurity, dependence and vulnerability display higher technology readiness levels than people with low levels of optimism and innovativeness as well as high levels of insecurity, dependence and vulnerability.

4.3.1. Optimism

The content analysis reveals that many bloggers seem to have a positive view about Google's self-driving car, believing that it increases control, flexibility and efficiency in life. In line with the optimism construct, to many Google's self-driving car increases convenience in life by allowing people to do the things they want to do at times when they want to do them. Thus, „it will make getting the kids to school in the morning much easier: Car, drop Johnnie off at kindergarten" and it is "like having a chauffeur" that "drives you to work while you read the news, check your emails or have a snooze. It drops you off right outside your place of work then drives off to a free parking area (even if that means going back home). You let it know, via the internet, what time you want to leave the office and its waiting to take you to the pub. It waits (in a free parking area) while you drink enough to put you over the limit, then picks you up outside the pub and takes you home." It is commonly traded to “make life easier for people“, as “betterment to mankind”, “incredible advancement to society” and “quality of life improvement”.

4.3.2. Innovativeness

When it comes to the innovativeness dimension, to some Google’s self-driving car is the embodiment of innovation, standing for unlimited progress that does not only „transform the very nature of transportation“ and „disrupts the transportation industry“ but also means that „we’re on the cusp of culture-changing technology. This is innovation: Creating something that did not exist in any form before with real-changing possibilities.“

It is further maintained that „the century old auto culture is the on the verge of radical change, and you can thank Google for where it’s headed“ and that Google’s driverless vehicle „could place California and the Unites States at the forefront of automobile innovation.“ The US is thought of to possess „innovation leadership“ and to not innovate would be un-American and therefore there is absolutely „no reason to hold back innovation“ even if that means to „put people who had plenty of warning out of work.“ To some, the benefits of self-driving cars seem to outweigh the possible negative implications or consequences that would probably result from the deployment of this technology such as the „social disruption“ and „high levels of unemployment among truck drivers, cab drivers, fed ex drivers, delivery drivers etc.“ These concerns are of secondary importance or they are simply taken for granted as the replacement of humans by technology is not surprising but a „relentless process.“ Thus: „Have you noticed that huge numbers of jobs, for example, agriculture and manufacturing have been disappearing for decades, either exported to where labour is cheapest, or eliminated entirely by mechanisation, computerisation (or the real killer, computerised mechanisation. The process goes on relentlessly. History tells that the elimination of jobs by technological progress is nothing new.“ And „preserving some specific job function was never, and will never be, a good reason to prohibit otherwise safe and efficient technologies to be adopted.

Whenever ‚saving jobs‘ is used as pretext to stifle innovation, results are bad in the long-run. It will put people out of a job but technological progress does that - I suppose you want us to return to the days of horse and carts because that must have employed a lot more people. Society as a whole will gain tremendously from this. Well done Google!“

4.3.3. Insecurity

It is without question that the accounts of bloggers also betray that people are sceptical about Google's self-driving car and afraid that the technology is not working properly. A lack of trust in the technology to work safe and reliable is a recurring element that appeared in the verbatim. Closely intertwined with issues surrounding the perceptions among bloggers that the car may be unsafe and unreliably is the issue of trust. Another one underlines the scary and creepy nature of self-driving cars by saying that „the view from the inside shows just how great a level of trust one must have, as one watches the steering wheel being operated by the ghosts in the machine. Either extremely exciting or a novel enactment of the Nightmare on Elm Street“. Or „we are not really supposed to trust our brains, our enjoyment, AND lives to Google's software, are we?“ Bloggers expect that Google's self-driving car will be inevitably involved in an accident one day and „if just one gets in an accident, it's „scary killer technology“ or „high speed deathtraps“. One blogger declares that „robot cars scare the hell“ out of him and eventually describes the Google car as „terminator car“.

„This is ridiculous! Who would trust their lives to a free thinking machine, a computer that could malfunction or freeze up as easily as a desktop or blackberry?“

The whole debate on insecurity mainly revolves around the wide array of unpredictable and dynamic changes in the environment that the car must respond to. To many, the commercialisation of Google's self-driving car is „crazy“ with „endless questions and situations“, too „many unknown variables“ and a „million of scenarios involved“. One blogger makes this clear by posing the question: „Can it, like I do, notice that the baseball rolling down a driveway may be followed by a child who is currently invisible behind a parked SUV? Can it, like I do, notice that the driver *behind* me is distracted by her cell phone, has started late at the last three lights, so I should give myself more than average room between me and the car in front of me, so in case it stops suddenly, SHE won't have to stop as suddenly and will be less likely to rear-end me? Can it, like I do, notice that even though the road has been clear of ice and snow, the next curve up ahead is deeply shaded and is likely to be slick? Can it, like I do, notice that the baby deer is one one side of the road and his mother on the other, and even though he isn't charging across, it looks like he's about to do so, so I better slow down?" Additionally, what happens if the car is „sandwiched between oncoming traffic in its one lane and a bicyclist to the right- what choice does it make? Accept a collision that injures the occupants of the car or swerve into and likely kill the bicyclist? Is the injury of 4 better than the death of 1? What if its a group of school kids on the side of the road? And if you are the parents of the dead kid- who do you go after?", „how does the car reads the intentions of other drivers?", „who is responsible for the proper functioning of all the systems at all time? Do I have to remove bird poop of the sensors? Is there bird poop on my sensors?"

In particular, parents may be one of the customer segments for whom safety is one of the top priorities that the car needs to fulfil. Hence, one parent notes that „as a parent you would love to know how accurate the sensors are when a ball or kid are in the way for example" or another one is wondering whether „the algorithm see some children playing between parked cars off in the distance?"

„and wait until the first time one of these cars kills a kid"

Related to people's scepticism, a lack of trust and fear of the technology as working improperly are liability issues. The main question that governs this area is „when these self-driving cars fail and cause an accident, who is at fault? The owner of the car, or the manufacturer of the car, or the programmers/Google who wrote the software?" Likewise, it is noted that „the biggest hurdle here is not technology. It's liability" and another one voices says that „liability will prevent this from happening."

4.3.4. Vulnerability

When it comes to the vulnerability construct, the majority of bloggers seems to be concerned about criminals that may abuse the technology for criminal purposes as well as privacy violations. These are the two themes that occur in a recurring fashion. Concerning the former, hacking is a returning theme that may stifle adoption decisions among consumers. Thus, one blogger declares that „this is another weapon added to the terrorists' arsenal. They will be able to perpetrate terrorism crimes without even endangering their own life and without anybody knowing who committed them. So, thanks to Google, welcome to easily available do-it-yourself terrorism heaven and to the era of comparatively low-cost 4 wheeled terrestrial drones." The threatening nature of Google's self-driving car also becomes clear by the following statement of one blogger who accuses Google of „playing with fire", wondering what Google is going to do to „ensure that these cars cannot be hacked and cannot be used to passively distribute malware around the country, disrupt wireless networks, and otherwise serve as moles or zombies for hackers and criminals and terrorists? It is projected that Google's driverless cars will mean the „end of driver autonomy and the beginning of an age where all cars have their core functions and onboard computer data accessed and manipulated by automakers, governments and hackers."

It is forecasted that Google's self-driving car may imply violations of their privacy. One blogger says that one downside of self-driving cars is „more data for the NSA", asserting that „Google's self-driving car is simply means to an end: control the masses." One blogger refers to Google's „voracious appetite for our personal data" given that „the company already knows a tremendous amount about our digitalised lives" in terms of „web searches, media consumption, email content, purchasing behaviour, social networks and physical location." It is projected that Google's driverless car „will scan you before entry and before you exit, it will know your weight, height, heart rate, metabolism, DNA, medical problems, waist size, shoe size, deodorant, toothpaste, fingerprints, dental chart, retina makeup, physical defects, voice pattern, etc., etc., etc."

Technological advancements tend to be touted as doing good for humanity by emphasising the advantages the technology provokes („Some will say, great, sleep on the way to work, hey even crack open a bottle of beer while on the mobile. Read a book while stuck in congestion or even better...answer all those emails building up in the work in tray. It doesn't matter, cars are in control"). However, it becomes apparent that many bloggers question the alleged altruistic intentions of Google's self-driving car project by seeing them more as „tools of control over the masses, taking away what enjoyment is left in driving, tracking movements all the way." In this context, many envision self-driving cars „as another small step towards a big brother world" - „a world that could not even Orwell imagine"- which is a term that is mentioned very often in this respect. One person wonders what will probably come next, „microchips for all under tattooed bar codes on the arm ‚for our good you must understand'."

„The Google taxi in a nutshell: Grab door handle to open the door= finger print scan, body temperature scan, DNA scan, strength analysis. Enter taxi and sit down= weight record, height record, shoe size record, breath analysis recorded, DNA confirmed from skin tissue and breath samples, facial recognition confirmation, full background check, bank accounts and credit cards, magnetic recognition of drivers license and credit cars in wallet, perspiration test for alcohol and/or drug use, micro vacuum to head hair to verify DNA results, drug use and identity, full education background check from FBI, DNS, CIA, DOJ and a personal VJ check."

It is pointed out that „not all progress is good" and „it's very dangerous for us to assume that Google has everybody's well-being in mind." References are made to the Google Street View snooping case where Google was not only photographing streets and their surroundings but also collected detailed private data such as emails, usernames and passwords over Wi-Fi networks they passed through. It is forecasted that „society in general is losing privacy in small and sometimes in very large ways all in the name of progress or government snooping everyday and the rate at which technology enables this to happen shouldn't mean that we start allowing our personal habits or preferences to become open for public inspection. Unfortunately for us, our leaders have no interest in protecting our rights when it comes to their own retarded interests led by people who have Star Trek fetishes.“

„August 4th, 2017: The Streetnet Funding Bill is passed. Human decisions are removed from the traffic management and Streetnet begins to learn at a geometric rate. It becomes self-aware at 2:14 a.m. Eastern time, August 29th. In a panic, they try to pull the charging plug.“

4.3.5. Dependance

Dependance echoes the extent to which technology penetrates, invades and controls people's life so that the feel overly dependant on technology. From the narratives of bloggers, it can be shown that bloggers see Google's self-driving car as further increasing technology's prevalence in people's daily lives. In this context, one of the central features that appears every now and then is laziness. The blogging insights suggest that laziness may be a function of dependence and control.

Another envisages a scenario where people „will be so stupid and lazy that they cannot even drive for themselves“ and „too much trust in a company or entity that isn't you is foolishness“. Someone is posing the question as to whether „have we gotten so lazy that driving our own cars is too much of a hassle?“ Additionally, it is posited that self-driving cars is another manifestation of „sloth and laziness overtaking society“ which further „adds to the boringness of life and makes people boring.“ The automation of driving would „make it even easier for people who need to stare at cell phones, read a Kindle, or stuff their faces with food.“ A „dark future“ is portrayed „that lies in the waiting“ because „own our ineptness will be our downfall as the machines eventually become self-aware.“ In this context, bloggers frequently refer to Skynet- the fictional, self-aware artificial intelligence computer system featured in „the Terminator“ - since „the computers will rebel and lock us out and take over and humans ultimately lose control over the computers which gain self-awareness and start fighting against humans.“

It is declared that „I just can't live in a future they are creating“ because „its autonomous fleet of vehicles“ will eventually turn into „drones“ that „will sweep the nation day and night“ and „watch you day and night while analysing your garbage. They will be on the front door to pitch you a customer tailored vacuum cleaner the moment you try to escape your home.“ Rather than to „shoehorn more complacency and dependence“ into the lives of humans, it is indicated that humans are better off fixing „newfound inattentiveness while driving“ because „owning your mobility is an important distinction between those who are free and those who only go where they are told … .“ One blogger declares „I am not going to let a car drive me“ and „I will always have a gas powered car that completely depends on me to take IT places, and not it take me because the crap can hit the fan and everybody is a slave to the now possible ‚Big Brother‘.“ Furthermore: „Cars that drive you around and relay your details to Google so they know where you are going everyday of your life. Contactless payments, no money, your pay goes to the bank (that we all trust and love because they are so honest) and you pay everything by card, so there is a record of everything you buy everyday and where you buy it. Smart phones tracking you everywhere you go picking up your data and everything you look at on the net. The NSA/GCHQ spying on all the rest that you do. Sounds like 1984 and people are queuing to be apart of this brave new world. Slaves to tech, that will make them real slaves. Have fun.“ In the end, Google self-driving car poses the inherent risk to surrender driver control or autonomy“ since it implies that humans are remotely controlled by „relinquishing steering wheel and routes to corporate-owned machines.“

„When we give up all control we become the controlled. It is a very real and somewhat frightening idea. A totally separate issue, but still deeply ingrained in this situation. In order for this "perfect" solution we must give all control to one singular system that dictates the world around us and we are unable to control on an individual level. Would the sacrifice of this freedom be worth the safety gained? Would eliminating 30,000 deaths a year be worth sacrificing the freedom of 300 million Americans? Would it be worth saving an hour on a 1:25 hour commute, twice a day, 5 days a week? What is the price of your freedom? Serious questions that need to be answered if this future is to considered.“

Someone calls for more common sense and reasoning to be applied by people („this world has TOO much PC and should wake up from all this politeness Cr*p and learn to use some common sense and reasoning“). What may happen „when society at large stops debating ideas and takes blanket claims of good intentions as a valid argument without further inquiring into how actually that good will be implemented, and what it will mean for your freedom.“ The dialogue on privacy should be kept open; if some questionable tactics by companies are simply taken for granted without questioning why they are implemented in the first place, likely consequences might be „the fall of people“, the „enslavement of humanity“ and the „imprisonment of people“. Google's self-driving car is equated with „the demarcation point that we crossed, in what was once taken for granted, our liberty and freedom“. He continues by demanding that „we must be free. This technology exhibits all the controlling, nanny-statist, leftist ideals“ and predicts that „we will be prompted to give up more and more liberty and freedom, in the name of safety and security, which will ultimately result in totalitarian state control.“ Also, in his blog post „Google’s car would give it even more remote control over us“, Lanier (2014) puts it straight that he „is not to criticise the concept“ per se and that he is „very much in favour of self-driving cars“ but „the notion that a company that makes its money almost exclusively by collating personal information for the express purpose of manipulating human behaviour would also be in charge of moving people around is dangerous: deliriously absurd, a sign of civilisational dementia.“ He sees Google’s self-driving car as „marked loss of democracy“ or as embodiment of the increasing „surveillance economy“ which is not worth the safety or convenience that is gained with the robot car. He insists that „society becomes safer but that doesn’t mean we have to become a nursery, as if we were all children, herded this way and that by faraway, hyper-wealthy technocrat nannies.“ Similarly, self-driving cars are seen as a way to „easily prevent people from committing a crime in the future by preemptively locking you up“ which „leads to all sorts of absurd rules and regulations in the name of „public safety“. The blogger prompts the question: „Do we want to live in a Fischer-Price nanny state or would we rather be treated like adults who can handle themselves responsibly unless we demonstrate otherwise through our actions?“

4.3.6. Locus of control (LOC)

As outlined in the theoretical framework, people with an internal locus of control think that they are responsible for their own fate which implies that they would trust their own driving skills rather than an automated driving system. They believe that traffic accidents can be prevented by careful drivers and that accidents happen because of drivers' lack of knowledge or nervousness.

In line with the theoretical propositions, the content analysis reveals that people with an internal locus of control are less likely to adopt self-driving vehicles than people with an external locus of control. The theme of control is frequently echoed in the accounts of bloggers who assume that self-driving cars mean surrendering control to computers which may be a serious problem for humans who „love to bask in the feeling of being in control, especially when it comes to cars." Cars are not simply vehicles but „cars have become an extension of an individual's personal space", meaning that „it's not about safety, it's about control." One blogger tells the story of his former classmate living „1500 miles away from where we went to high school" who „actually drives her car to come to our reunion." When asked „why she didn't fly, she said she preferred to drive because she felt more in control." It is projected that Google's self-driving car „will never gain wings because people like controlling their own destiny" and because „people are serious control freaks when it comes to driving." They „want to be responsible" and would „never trust a machine over their own driving skills" because „if I am driving and I make a mistake, it is my fault and I have to deal with the consequences. If a robot is driving, I have no control over whether it makes a mistake and yet I will still have to deal with the consequences I would never let a car drive me. I would never trust a machine over my own driving skills."

On the other hand, the theory postulates that people with an external locus of control are more likely to adopt Google's self-driving car because they are more wiling to trust an automated driving system and rely less on their own driving skills. Further, the theory assumes that people with an external locus of control tend to believe that humans will always cause accidents (ELOC5: There will always be accidents, no matter how much drivers try to prevent them) and hence that an automated driving system would be far better than humans. For this reason, it can be safely assumed that they stress the safety aspects of FAD which may be one of the purchase rationales for them. In a similar way, the content analysis has revealed that a large majority of bloggers would appreciate FAD on the grounds of their added safety benefit. For example, one blogger refers to the bad driving habits of drivers who „hesitate when they should commit, they never use turn signals, roll through stop signs, drive until 7-8 pm without their lights (or just use their parking lights)“ and concludes that „I would welcome driverless cars, because it can't get much worse than this“ and „there is no such thing as a computer system that is completely error-free“. Further, it is put forward that „a computer won't hit-and-run or fall asleep behind the wheel“ and „a computer is only as good as the people who make it, but I'd rather trust a program that a bunch of people worked on and were paid to work on to drive me somewhere rather than the safest human driver in the world, since a person is ultimately still human, prone to human error, and people have a knack for doing things that make them even worse drivers (e.g. texting, drinking, talking).“

„I am generally not a fan of urban driving. I own a Mustang GT and I go to the speedway whenever I can to race at high speeds in a controlled environment, but once I'm on public roads I obey the speed limit and I live in mortal fear of Suzy Homemaker in an SUV who's jawing on her cell phone instead of paying attention to her lane merge.“

4.3.7. Sensation seeking (SS)

As outlined by the theoretical framework, sensation seeking denotes a personality trait that has also been circumscribed with terms like novelty, arousal, thrill, excitement, experience and fun seeking and venturesomeness. The

„For it concerns the fun part of driving. While some have conjectured that if you don't have to drive your car, you can therefore have more time to search Google for pottery or pornography, I am concerned that your Googlized Prius removes your ability to, well, drive. Google has declared that these cars can be programmed to drive cautiously or a little more aggressively. But the whole point of driving is that it is not programmed. Sometimes, you just want to put your foot on the gas, waft past the people carrier full of sightseers or pot smokers, and, perhaps, even waft past the speed limit.“

theory proposes that people with high levels of sensation seeking are less likely to adopt Google's self-driving car since the latter is presumed to stifle driving pleasure and enjoyment as driving will be done by an inboard computer. The content analysis seems to validate the theoretical assumptions. For example, „a major question is if drivers will give up the thrill of the drive that has made so many other safer modes of transportation fail to be widely adopted." Driving is described as „an art, it's exhilarating, it's sensory experience. No way, no how will I ever own a car that drives itself, I'd sooner ride a bike or walk. Go buy a BMW, Porsche or Ferrari or any number of other sporting cars and make that drive yourself with the windows down and the radio turned off and tell me it's not a relaxing experience. What he's described is no different than sitting on your coach. Where's the sensory experience in that?" Inextricably linked to sensation seeking is the concept of risk. Thence, someone opposes „more automation" on the grounds that „risk is part of life, automating it out means automating life itself" and explains that „I want to do things, and enjoy doing them, and that means accepting risks. Otherwise, I may as well wrap myself in bubble wrap and spend the next 70 years on Facebook until I die."

„Bicycles are orders of magnitude more efficient, and they are quite adequate for urban travel. Why are they not being promoted as much? Because the real reason people like cars is psychological, not practical. One of the things they like the best, judging from auto ads, is enormous engines and crazy driving stunts."

4.4. Driving environment

According to the scientific literature and previous research results about consumer perceptions as regards partially and highly automated driving systems, drivers would prefer to use automated driving in specific driving situations and driver contexts. The content analysis confirms previous research findings and mirrors some of the driving conditions in which bloggers would like to use Google's self-driving car. Thus, in correspondence with previous research findings, bloggers would like to use it for for long journeys or for „long, dull, anonymous stretches of highway." For instance, „I can imagine how this would work on long stretches of highway with infrequent entrance/exit ramps“ and „if you’re on a 4 hour trip you really think you wouldn’t let the car drive you so you could browse the web or nap?“

Apart from letting the car drive you in monotonous driving situations or for long trips, the content analysis also illustrates that self-driving cars are lucrative for the daily commute. For instance, „just imagine how much more time we can spend texting on our cell phones once the robots take over our daily commute. I for one welcome our new robot overlords.“ Or: „One of the most monotonous, most error prone, and rarely deadly common activities people in the US do is drive to and from work. Its boring but requires our focused attention. This means the 30 to hour minute drive is often a lost time activity that we do twice a day. A repetitious activity that can easily bore a human and has to be done to time and safety tolerances? These are all of the hallmarks of something that a machine should be able to handle better than humans. I'm not sure I'd want all cars to be self driving but as a "work car" then why not?“ and „I like driving, but I hate commuting, so I’m all on board with autonomous cars. I’d love to just sit back in the mornings and after a long day’s work and eat, nap, watch a movie, play a game, anything but dodge my fellow commuters.“ Especially for those who commute long distances to work could find it particularly attractive, making „driving an entertaining leisure activity, rather than a necessary daily chore. I would DEFINITELY buy an automated car for commuting. However, I also have a Chevelle that I would not give up if asked to.“

„I commute 150 miles a day mainly on the 405 here in the Orange County/Los Angeles area. 1.1 hours one way in the morning and 2.5 to 3 hours back in the afternoon.
There is no public transportation worthy of the name in the area. Boy would I love to have the car drive itself and have time to read instead... I'd be one of the first to line up for this!“

Furthermore, many bloggers presume that they would like to use Google’s self-driving car for parking situations. So: „I’d LOVE to not have to worry about finding a parking spot“ and „we make pervasive use of Car-to-Go here in Austin and the biggest hassle is parking one/finding one. Imagine arriving at the front door of your destination in a Goggle self driving car share car, getting out and...The car drives off down the street, all by itself, with no one in it, off to pick up the next batch of people, who scheduled "just in time" pick-up with their phone“ and „you don’t need to park at your destination, just have it drop you off and then go find itself a parking spot in the suburbs till you call it back.“

Additionally, in line with the theoretical assumptions, Google’s self-driving car would also gain appeal in heavy traffic situations. Thus, „if you live in a city like Montreal, you know that highways 20,40, and 15 are parking lots between 6:30 - 9:30 AM and 4:30 - 7:00 PM. With most people opting for automatic transmissions these days I would venture to guess that they don't like driving anyway, so why not have the car drive for them? If it is proven to be safer and it alleviates the traffic problem, I see no downside to this. I for one hate spending two hours inching my way home in rush hour traffic“ and „driving around the M25 in rush hour is like being on rails after all, wouldn't it be great to be able to do something else while you crawl around?“

„I would love this thing!! Imagine the parties you could have without worrying that your guests might have had too much to drink and have an accident? AWESOME!! Imagine how much better you would feel as a parent on prom night?“

Driving impairment may also be a strong driver for consumers to adopt the technology. Hence, the accounts of bloggers demonstrate that they would like to use Google’s self-driving car when they are intoxicated. For example, „you could shotgun 3 beers, smoke two fatties, AND do lines off your girl's stomach by the time you arrived safely at the party. Can't do that in a taxi or limo; can't do that on a bus or train; Can't do that in your own car if you have to drive“ and „not everyone enjoys driving as much as you do. Google is trying something new, and meets the needs for those who either don’t enjoy driving or is incapable of driving. I think it's all good. Especially useful and convenient when going to the bar“, „self-driving cars mean that people will be able to drink and „drive“ to their hearts content, legally and safely.“ In sum, „drunk driving“ will likely to be one of the compelling arguments that will introduce self-driving cars to the mass market. A customer segment that logically emerges from these considerations and that might be one of the early adopters are clubs, restaurants and bars who are projected to gain tremendously from this. It is argued, for example, that this technology will mean a „big win for bars and nightclubs“ for whom it „it would make sense to invest substantially in autonomous vehicle tech.“

While self-driving cars can gain acceptance when drivers are impaired by drugs, fatigue is also a major argument in favour of self-driving cars. For example, „how many enjoys driving all the time? All traffic, all road conditions, never tired, never busy, never wanted for a button to push to make the car drive itself while you do something else?“ One blogger recalled being „at the end of a five hour drive.“ She points out that self-driving cars can be appealing when being „temporarily impaired“ and remembers that „I've almost fallen asleep at the wheel and mostly likely only the rumble strips on the side kept me on the road. And even then I didn't stop, it was at the end of a five hour drive but I was only half an hour from my bed so I chanced it, loud blaring music, open windows to get fresh air rushing and caused myself a little pain to keep the body in alert mode. Stupid? Dangerous? Sure.“

„My parents live 10 hrs away. Currently, I drive all day to get there and arrive tired. With this, I could sleep in the car all night and arrive rested in the morning ready to spend the day with them. Essentially, two less wasted days on every trip.“

The following citation provides a good summary of the above-mentioned arguments in favour of or against a driverless car by Google by pointing to the huge trade-offs we necessarily encounter when operating a fully-autonomous Google car. Thus: „I certainly wouldn't want a car that I couldn't drive myself if I wanted to. Some people enjoy driving. But I'd also love to be taken home when tired or drunk, and I'd LOVE to not have to worry about finding a parking spot; except they're more expensive and less convenient (conventional cars). And yet we still own cars. Why? Because they're _fun_. Who's going to drop US$50,000 on a car that they don't get to drive? The vast majority of people for whom cars are a tool to get from A to B, and not a leisure pursuit ? I drive for fun on weekends. All the other trips involve wasting my valuable time sitting on roads full of other cars. A car that drove itself to work and back every day would be _awesome_.“

4.5. Customer-based corporate reputation

This study expects that it will make a difference for consumers as to whether they will buy their car from Google or from traditional car manufacturers. On the basis of this line of thought, Google's reputation is added as independent variable to the model that is likely to affect consumer adoption decisions. In this way, the content analysis adds to existing literature on consumer acceptance of self-driving cars as there are no scientific studies that I am aware of studying the effect of Google on the decisions of consumers to accept or reject driverless vehicles.

4.5.1. Reliable and financially strong company

The scientific literature distinguishes between five dimensions of customer-based corporate reputation: customer orientation, good employer, reliable and financially strong company, product and service quality and social and environmental responsibility. When it comes to the dimension „reliable and financially strong company" one frequently mentioned indicator for a reliable and financially strong company is innovation. According to the perceptions of bloggers, Google stands for innovation; Google is innovation which is highlighted by the following quotations: „Innovate, innovate, innovate. I applaud Google for the innovation" and „Hallelujah to boldness in thought, action and innovation." In comparison with traditional manufacturers, one blogger suggests that he „would only be happy if Google leads the way" because „it has been doing better than most auto companies" since „for the most part, all of them have proven that the only way they'll even think about improving their products is when they have competition eating their lunch. I'd pick a tech company over any of them, except for perhaps Tesla." Closely intertwined with the pursuit of innovative activities is Google's desire to change and improve the world: „I love how this company thinks big. Google's leaders, like Musk, want to change the world. They want to

> *„Google is a company with long-range vision. The company dreams. Then it takes those dreams and invents things. Producing a self-driving automobile is pure audacity and success combined. It fulfils a dream that people have had since the 1950's."*

change the game, and address entrenched and durable problems, with revolutionary technology. They want to improve, because so much is sub-optimal about our normal means of day-to-day. It takes guts, vision, and resources, something that these great technologists have in abundance. Unlike the optimistic tech visionaries of the 1950s-60s, all of the key elements are coming together to (potentially) alleviate human beings from drudgery of driving everywhere… .“ Google's efforts into self-driving cars is „amazing“ because „it's great for consumers and it's an incredible development for modern society.“ Another one: „WOW. You go Google! This is a great example of a company leading the world in innovative thinking, taking risks and solving social issues. Love it.“ and „Bring it on!!! Google, yet astounds me. It's this type of innovation that propels the United States forward, even amid shrinking economic growth“ and „I applaud Google. They always strive to make life easier for people. Look at the evidence. Google Earth is the best thing that ever happened to the internet. Google maps, etc. They launch trends, and everyone follows. What's WRONG with a car that can and will save lives? It might be yours. Nobody wants to die in a car crash, especially if it's NOT your fault. And the car industry has been DREAMING for this car for decades. Hollywood has many self driving cars in movies. Everyone is wowed by them. Wait to see which car maker will bid the highest for the technology.“

4.5.2. Product and service quality

Furthermore, a second recurrent theme that seems to occupy the minds of bloggers relates to the quality of and previous experiences with Google's products and services. Apparently, to a large number of bloggers, the „problem is, with Google, nothing ever makes it out of Beta.“ Bloggers refer to Google's lack of success in the mobile business, asking unbelievably „it can't sell a tablet or a phone“ and „AND YOU WANT TO TRUST THEM WITH 1.5 Tons of metal?“ Another blogger refers to Google's search engine and Google's Chromebook Pixel by saying that „if only Google would spend time on a search engine that worked“, making clear that he would not trust their self-driving cars to take him to his desired destination (e.g. „I'm afraid their taxis would never get me to where I need to be“). Moreover, their laptop -Google pixel- has apparently failed to convince consumers: „The google pixel is an x86 laptop that you can install any OS on it. Also, the hardware isn't worth the $1300 asking price at all..maybe for a quarter of that price. It has a very dated usb 2.0, it has a slow dual core cpu, it comes with cheap integrated graphics, and the 32GB SSD will barely fit a windows install. For that kind of cash, you can get a top of the line laptop with all the bells and whistles.“

4.5.3. Customer orientation

The following quotations suggest that Google is not really concerned about the needs of customers and does not treat the latter courteously. For example, it is stated that „Google talks about making the roads safer, but the company's core business has plenty to gain... Americans could be checking Gmail, editing Google Docs, watching YouTube videos, and clicking ads. They're trying to „free up peoples hands and time, which enables them to browse the web on their smartphones, laptops and tablets, Googling around“ and „by doing so run the unavoidable risk of bumping into Google's display ads smeared across the web. The 96% revenue of Google“ which „is also a good investment for the future, a win-win for Google.“ In sum, self-driving cars are a „smart move by Google“ where Google's efforts to embrace driverless cars are „all for marketing and advertising to earn a few dollars“ with its self-driving car as further project screen for „a non stop sequence of appalling ads“ displayed to a „captive audience on the ‚windscreen' that are trapped in their cars.“

It is almost universally accepted that interrelated with Google selling ads by virtue of its self-driving vehicle is the notion that Google invades people's privacy. Thus, „every time you visit a website with Google ads you are tracked. Every time you visit a site with Google analytics you get tracked. Any time you visit any of a gazillion sites with youtube content embedded.... you get tracked. Every time you exchange an email with someone who uses gmail (or any other domain hosted by google apps). Every time someone you know uploads their contact list with your email address in it to google+ or gmail... they can build a ghost social network profile on you.“ This overlaps with the view of another blogger who maintains that „when we start trading some technological achievement for privacy then there should be a corresponding assessment to the benefits of what we're getting.“ He continues by saying that „Google gives away "free" services but really they're not free at all. They mine your information, your e-mails, where you go (if you use maps) etc. There are other companies with names you may not be familiar with [nytimes.com] but they're out there digging and mining around for information about you, how much you make, what you buy, where you go and they dig far deeper than you may realize. What all of this does is allow others whether they're commercial or government entities to classify you, to put you into a box with a label on it and those labels can be dangerous to your liberty and how you work and live.“ The major perceptions of bloggers as far the topic of privacy is concerned is that „today nothing is private anymore: „Forget about having sex in the back seat of that car unless you want the video to instantly end up on the internet.“ Google's overarching strategy is described to be a „Sham Wow for personal data“ - an applied metaphor that refers to Vince „The Sham Wow“ in *The Great Pitchman* as faithful biopic/mob action-thriller about Vince who is trying to sue anyone to make quick money. The question emerges as to „why do we allow them to blatantly violate our privacy and sell our information to advertisers?“ formulating the

„I'm sorry for those having children in this decade. Their children are never going to know what is privacy, like making a mistake or something embarrassing and having the change to regret and put it to the past. Today nothing is private anymore, everything you ever said or did will be stored for ever, so there are no way someone, in particular young people will be able to forget their past and are going to be hunted by it thanks to the social networks and all this private information sharing.“

demand that „it's time for the government(s) to step in and do something about them“ because „Google needs to be shutdown, or at least they need to be made to change their blatantly obvious and abusive business. And if they refuse, the CEO's higher level people need to be put for jail for their violations.“ The analysis demonstrates that Google has state-like character, displaying behaviour that is more known for governments rather than companies. For example, a group of protesters showed up at the doorstep of Anthony Levandowski -leader of Google’s self-driving car project- who is charged with „building an unconscious world of surveillance, control and automation“ (Fig. 4). Someone notes it is „just silly to protest against an automated automobile engineer.“ Maybe the protests against a simple tech engineer are silly but the question arises as to why these protests take place in the first place?

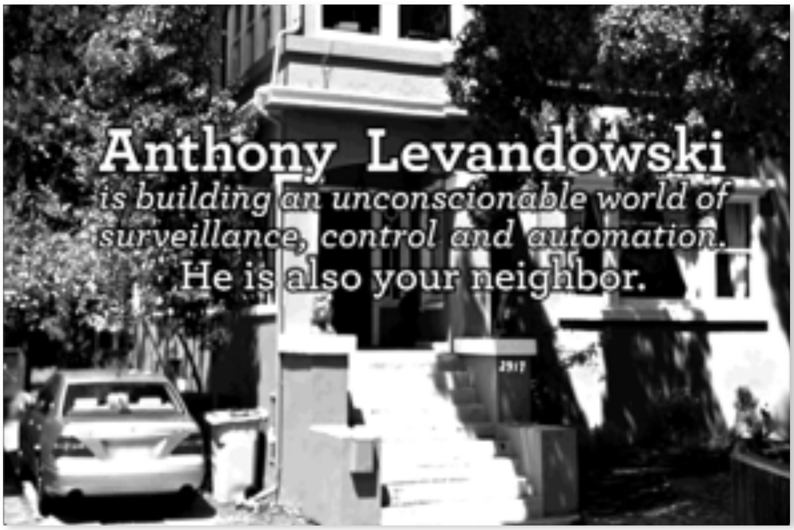


Fig. 2. Part of flyer of protests against Levandowski -project leader of Google’s self-driving car project

Furthermore, when reading the blogs, I also came across frequent blog posts by someone called „PeterMCao“ who accuses Sebastian Thrun - former leader of Google’s self-driving car project - and Eric Schmidt - executive chairman of Google - of murdering the Stanford student May Zhou in 2007. Even though these claims are not confirmed, the question remains as to why someone should build up these allegations if Thrun and Schmidt are completely innocent?

Associated with the perceptions of bloggers that Google has been known for data privacy violations is their mentioning of Google’s „Don’t be evil“ credo. Thus, one affirms that „Google is evil“ since „it entices you with candy, then steals your data to sell to other companies.“ Google’s motto actually is: „We can be evil if we think no one will catch us at it‘“ and another one thinks that „Google’s claim to „do no harm“ looks a little more hollow every day“ with Google’s self-driving car project running „counter to Google’s ‚Do no evil’ motto.“ Likewise, Google’s „Don’t be evil“ mantra stands in the way of „turning a profit“ because in the end „the self-driving car will have to answer to shareholders.“ Another one declares that „I always wondered which company would be the one to take over the world with the evil robots and now we know it’s Google. They’ll do it with a smile.“

The impression that Google is evil is not unanimously shared by bloggers but there are some who think that Google’s self-driving car is not any worse in terms of data security than the situation we face now. Thus, it is stated that „Google ALREADY knows where we go, what we eat, where we shop, etc. The amount of information they have on each and every one of us is staggering. But, the world hasn't ended yet, and none of us are living under the shadow of "Big Brother Google" (just Big Brother NSA). I am FAR more worried about what our own Government is doing than what Google has done or is doing.“ In addition, it is stated that „Google does not force its services upon as but we chose freely to utilize them.“ It is further stated that „Google allows us that freedom“ as „almost every Google service allows for the opting-out of data tracking, and even gives us the ability to download all of the data Google has collected on our activities.“ It is acknowledged that „Google has not been very transparent in certain areas, but for you to say that one company can create an entire 1984 dystopian society without the slightest opposition from its users is insanity.“ Moreover, it is stated that your "digital autonomy" is an illusion“ because if it weren't Google products threatening your digital autonomy--whatever that is-- it would be some other company's products. If you want to eliminate the possibility of your "digital self-determination" being further compromised, you're just going to have to stop using digital products.“

In summary, the descriptions of bloggers suggest that the picture on how bloggers perceive Google is mixed and ambivalent. On the one hand, Google has been successful in reinforcing a perception of the innovator that liberates the world from all the distress and brings good to humanity with its self-driving car only as godsend; on the other hand, Google's self-driving car is simply an extension of its previous strategy: to increase its influence in other spheres of daily lives.

4.6. Level of automation

The content analysis contributes to existing literature on consumer perceptions of semi- and fully-autonomous driving systems by throwing light on one important variable: the preferred level of automation. As mentioned beforehand, fully-autonomous driving has not been commercialised yet which explains why the scientific literature on autonomous driving has so far neglected consumers' desired level of automation. There is only one scientific study that I came across during an extensive literature review that studies consumer perceptions of fully-automated driving, taking into account consumers' preferred level of automation.

The content analysis leads to the development of a new variable, level of automation, that is expected to affect consumers' intention to adopt Google's self-driving car instead of a conventional vehicle. It will be measured by the following five items. These five items will be translated into five additional hypotheses that will be tested by the online questionnaire.

LEVAUTO1: I would like to choose whether I drive in manual or automated mode.

H14. There is a negative correlation between LEVAUTO1 and consumers' intention to adopt Google's self-driving car instead of a conventional vehicle.

LEVAUTO2: Automated driving technology should help the driver with some tasks but not replace him completely.

H15. There is a negative correlation between LEVAUTO2 and consumers' intention to adopt Google's self-driving car instead of a conventional vehicle.

LEVAUTO3: I would like to manually take over the vehicle at any time.

H16. There is a negative correlation between LEVAUTO3 and consumers' intention to adopt Google's self-driving car instead of a conventional vehicle.

LEVAUTO4: I would rather keep manual control of my vehicle instead of delegating it to the automated driving system in every instance.

H17: There is a negative correlation between LEVAUTO4 and consumers' intention to adopt Google's self-driving car instead of a conventional vehicle.

LEVAUTO5: Automated driving technology only makes sense when the driver is not supposed to stay alert during the drive but can completely disengage from driving.

H18: There is a positive correlation between LEVAUTO5 and consumers' intention to adopt Google's self-driving car instead of a conventional vehicle.

The following quotations undermine the creation of the five-item variable.

The content analysis highlights that drivers would like to choose whether they drive in manual or automated mode. Thus: „Driving can be a pleasure but can also be inconvenient at times. Having the Choice which you appear to want to deprive the rest of us of based upon your closing sentence, is what technology provides. I want that choice because it increases flexibility and that makes my life easier. Sending the car to collect a relative or pick up the kids from School would be an obvious convenience."

„Google, if you want to know what drivers want, please listen to me. I drive a lot. More than 25,000 miles a year. What I want is for me to be able to set a destination in my GPS and have the car take over driving when I want it too. Like an industrial strength cruise control. But when I decide as I am driving along, that I want to stop and get a bite, or go to this gas station, I want to assume manual control as I want too. As for being in rush hour traffic, I will be happy to turn that over to the car, I have better things I can use that time on."

Also, the blog data reveal that driving assistance is good but only to the point of assisting rather than totally replacing the driver, e.g. „I see driver-assistance technology as a very good thing but only to the point where it increases safety without deskilling the driver. I would love every new car to have radar-activated automatic braking for example for those times when the driver fails to react fast enough to a hazard in from of the car. Technology to compensate for driver errors is good - but not full automation."

Closely related is the preference to take over the vehicle at any time. In response to Google's first self-driving prototypes released in May 2014, someone notices „there's no way to manually take over just in case something goes wrong?", abolishing the prototype to „foolish design, at best." Someone recommends to „scale it back a step, and I think people would be more accepting of an enhanced cruise control, as long as you can turn it off, or grab the wheel. You would also need to redesign it so all those sensors are hidden in the cars frame." In a similar way, it is expected that „there will likely be an option to drive manually. This means drivers would still need insurance for those time they drive which would be recorded on the computer" and „I imagine that for safety and logistical reasons it will have to have a manual override that will allow it to function as a normal car, just as a modern airliner that can fly itself has to have manual controls."

In addition, bloggers frequently indicate that automated driving technology only makes sense when the driver is not supposed to stay alert during the drive but can completely disengage from driving. This is an import revelation since Google's self-driving vehicle enables takes the driver out of the control loop whereas the semi-autonomous driving systems of traditional car manufacturers assist the driver with the driving task while the driver needs to be able to take over the vehicle at all times. Hence, it is for example stated that „for driverless cars the dream is that you can read the newspaper while going to work. But the reality is, that even if your car is driving itself, you should still be there to take over in case something malfunctions. If you have to pay attention anyway, you might as well be driving." In addition, someone is wondering whether it is worth paying the price for a driverless car if the driver needs to pay attention the whole time anyway, e.g. „This probably will be a very beloved technology once out. However, I do not know how much it will add to the price of the car. Plus, if the driver has to pay attention at all times and is not allowed to do anything else (legal-wise), then I guess it would not be worth it to pay thousands of dollars just to be able to let go of the wheel but on the other hand, not being able to do anything else.“

Moreover, bloggers call for autonomous vehicles not to become compulsory. This also relates to the level of automation as Google’s self-driving car implies fully-autonomous driving with the long-term vision to abolish driver input altogether. The data show that „autonomous cars are cool and I’d love them in traffic or when I'm hammered at the bar but please don't make it compulsory.“ Furthermore: „I think people will get used to them. But I still wouldn't want it mandated that you HAVE to drive a self-driving car. I feel like that would be a violation. Imagine if the government could just make all the cars on the road go over to the right and stop in an emergency?“ Making autonomous vehicles mandatory is only indirectly related to the level of automation and therefore it will not be included in the item battery to measure level of automation. Besides, Cronbach’s alpha is lower when this item is included (0.608) rather than excluded (0.791).

5. Second study method: online questionnaire

The qualitative content analysis has been conducted to explore consumer perceptions about Google’s self-driving car. In order to test the validity of the assumptions formulated by bloggers as well as the proposed hypotheses, this study employs a cross-sectional online survey that is distributed to a diverse non-probabilistic sample. Combining methods from different research paradigms is a common strategy to improve the trustworthiness of research findings by cross-checking and supplementing the information obtained in the content analysis with the data of the survey (Krefting, 1991).

5.1. Strengths of online questionnaires

This section provides the rationale for selecting a web-based questionnaire as data collection endeavour which can be partly explained by its inherent strengths. Online questionnaires naturally suffer from a number of threats to validity and reliability which will be outlined below.

First, an online survey has the advantage that a huge number of potential respondents can be reached at very low administration costs (Zhang, 1999; Evans & Mathur, 2005; Braunsberger, Wybenga & Gates, 2007; Bethlehem, 2008). Thus, with almost 3 billion internet users worldwide (exact number is 2.925.249.355) where a large percentage of them is native English speaker, web-based questionnaires score high in terms of global reach. Second, the administration of online surveys is very time-efficient, minimising the timeframe between survey distribution and data collection (Evans & Mathur, 2005). Third, online surveys are very convenient because respondents can freely provide their answers within the set deadline anywhere and anytime. Another potential strength of web-based questionnaires is the ease of data entry and analysis, meaning that it is relatively simple for respondents to take part in online surveys. The Google Drive questionnaire format which I chose for this study is intuitive and user-friendly so that respondents can easily interact with the survey and face no technical difficulties. This makes it easy for respondents to take part in the survey without encountering technical hassles that might demotivate and frustrate respondents who may then be inclined to stop finishing the survey (Cooper, 2000; Evans & Mathur, 2005). Additionally, web-based questionnaires make it possible to reach individuals or groups that are normally difficult to identify or access (Zhang, 1999). This is one of the most convincing arguments for choosing a web-based survey in light of the fact that Google's self-driving car has not been commercialised yet and was only tested in four US states. Therefore, it can be assumed that the vast majority of non-native US people are rather unfamiliar with Google's driverless car project. Web-based questionnaires make it possible to reach people that came across Google's driverless vehicle fleets by for example seeing them on public roads or taking a test ride in one of them. Sampling individuals with a familiarity with and knowledge of Google's driverless fleets is crucial as they may constitute the innovators and early adopters and hence represent valid and accurate information sources. Besides, the adoption and use of innovators and early adopters is said to influence what other more conservative groups will eventually do (Ferreira et al., 2013). Therefore, it is very important to include respondents with an already solid knowledge about Google's self-driving car.

5.2. Weaknesses of online questionnaires

Despite these advantages of web-based surveys, they also face some serious methodological problems. There is general agreement that there are two major sources of error in survey research. These can be divided into errors of non-observation (sampling, coverage, non-response) and errors of observation (measurement error) (Fricker & Schonlau, 2002; Cooper, 2000).

In contrast with traditional forms of questionnaires, web-based surveys do not apply probability sampling to select elements from the population into the sample but instead they rely on self-selection of respondents (Bethlehem, 2008). Self-selection is a type of non-probability sampling which limits the representativeness of the sample since non-probability sampling methods can't guarantee that the sample observed is representative of the whole population, leading to biased estimates (Babbie, 2006; Bethlehem, 2008; Couper, 2000). Thereby, external validity or the generalisability of research results is weakened as no statistical inferences can be made from the sample to the whole population or even the target sample (Zhang, 1999). Self-selection into an online sample is the joint effect of internet access and willingness to participate (Börsch-Supan, Elsner, Faßbender, Kiefer, McFadden & Winter, 2004). For example, it can be assumed that those people are more likely to participate in the survey that want to adopt Google's self-driving car anyway. Those that oppose Google and its self-driving car project may be less likely to participate in the survey. As I posted the survey in one of the forums on reddit, for instance, one person commented my post by „fuck off Google“ and as I tried to motivate the commenter to use this survey form to state her opinion on Google and its self-driving car, this was refused by „no thanks. This is a goole docs link and I refuse to use/purchase and and all things Google.“

A second problem is referred to as under-coverage which occurs when elements in the target population do not appear in the sampling frame and hence is a function of the mismatch between the target population and the sampling frame (Bethlehem, 2008). It is deemed to be the biggest threat to the representativeness of the sample (Couper, 2000). This methodological pitfall is certainly present in my study. For example, participation in the online survey depends upon access to the internet (Zhang, 1999). Under-coverage then occurs due to the fact that there are likely to be many people without internet connectivity such as the elderly, members of some racial and ethnic minorities, the lower educated, people with limited financial resources and people who live in areas that are underserved by internet connectivity (Bethlehem, 2008). Additionally, people who do not master the English language fluently or who are illiterate are also excluded because the survey is in English. Beyond what has been stated above, another major potential weakness is that the survey will not reach as many people as planned because it may be perceived as junk mail or spam (Evans & Mathur, 2005).

Finally, internet-based surveys make it very difficult if not impossible to calculate response rates. This problem is also prevalent in my study because I submitted the survey in blogs and Facebook groups, rendering it impossible to estimate the size of the sample. Therefore, this study will only report the number of respondents which is a common method used by previous researchers (Zhang, 1999).

In addition, Stieger and Reps (2000) also observed that respondents tended to not read the introduction text or simply clicked through the questions without actually reading them. This validity threat is also present with my survey design because the introduction of my survey is relatively long even though I kept it as short as possible and half of the introduction contain standards paragraphs that relate to the anonymity of research results and the usage of findings for scientific purposes within the scope of my master thesis. As the questionnaire itself is also long, the clicking-through behaviour may be reinforced. Indeed, the length of the questionnaire may threaten the validity of research results because it might provoke clicking-through or dropping out behaviour among respondents.

5.3. Question and questionnaire design

This section illuminates how a common measurement error -errors of observation- can be mitigated by the design of the questions and the questionnaire.

Errors of observation are mainly a function of a poor measurement of cases that are surveyed which is either due to the respondent (e.g. lack of motivation, comprehension problems, deliberate distortion) or the instrument (e.g. poor wording or design, technical flaws). It can be diminished by paying particular attention to the wording of the questions and the order in which items are presented as these may all bias responses (Rattray & Jones, 2005). Therefore, double-barrelled questions as well as questions that include single or double negatives are to be avoided at best. Items should be formulated in a clear and unambiguous way; unnecessary lengthy and complicated wording should be prevented. Items should be short; biased items and terms are to be avoided if possible (Babbie, 2006; Rattray & Jones, 2005). However, some so-called leading questions are chosen into the questionnaire. They represent the findings of the content analysis and by selecting them into the questionnaire I tried to test the qualitative assumptions expressed by bloggers. Nonetheless, I am aware that leading or loading questions should be kept at a minimum since they can produce biased results (Babbie, 2006; Rattray & Jones, 2005; Krosnick & Presser, 2010).

Including questions that potentially trigger biases does imply that one can't rule out the effect of social desirability bias on survey results which describes the tendency for people to respond in ways that make them appear in the best light to the interviewer (Check & Schutt, 2012). In particular, when it comes to the dependant variable, social desirability biases can't be ruled out. On the other hand, one could argue that web-based questionnaires reduce the threat emanating from social desirability (Cooper, 2000) because interviewer bias and misbehaviour is eliminated and privacy and anonymity is given to the respondents given that questionnaires are self-administered where respondents automatically feed their data into a spreadsheet without any further human intervention (Braunsberger et al., 2007).

Responses tend to end with the category „other" to ensure that response categories are mutually exclusive and exhaustive to make sure that respondents find a response option that corresponds with their answer to the question. In hindsight, I should have included a „don't know" answer category to prevent arbitrary answering given that respondents do not know how to answer the specific question.

A small number of questions are open-ended questions as they allow respondents to express their own opinion in greater length and detail. Open-ended questions have the benefit that rich, qualitative data will be provided which can add to the findings provided by the content analysis. The data of the content analysis can be triangulated with the responses emanating from the open-ended questions, thereby contributing to the trustworthiness of research findings. The downside logically is that the analysis of this qualitative data may be rather time-consuming and difficult (Rattray & Jones, 2005).

Moreover, whereas one common feature of online surveys typically is that respondents need to answer in a specific order, the Google Drive survey form enables respondents to flip ahead to later questions, thereby increasing the chance of obtaining biased results (Evans & Mathur, 2005). For example, research by Stieger and Reips (2010) who studied the behaviour of participants while filling in an online questionnaire, shows that respondents tend to change already marked options or provide a different answer in text fields. Also, as the survey contains a large number of questions, this design may ultimately reduce willingness to completely finish or participate in the first place. A graphical progress indicator could help out in this scenario. The graphical progress indicator in my survey was meant to counteract these kinds of behaviour but unfortunately it failed to work reliably in all instances. In addition, the Google Drive format does not ensure that respondents provide the correct number of answers to questions (Evans & Mathur, 2005). Also, it is possible that respondents submit more than one survey form which means that these responses are overrepresented in the overall results (Zhang, 1999).

Content validity refers to the extent to which the questionnaire incorporates all relevant concepts (Terwee, Bot, de Boer, van der Windt, Knol, Dekker, Bouter & de Vet, 2007; Twycross & Williams, 2013). An extensive literature review and a qualitative blog analysis warrant that all important areas are covered by the survey. According to the principle „the only good question is a pretested question“, the online survey was pretested by around 10 people, including friends and colleagues of my research group. Pretesting is a good method to test the face validity of the questionnaire in terms of whether the questions are clear, understandable and organised in a logical order. The discussion with those pretesting my questionnaire yielded some interesting insights and induced me to omit some items. Besides, it was recommended to give a lengthier introduction to some questions and embed them in their specific context, thereby making them more concrete and guiding the respondent. In hindsight, however, I have come to understand that wordy items are also a double-edged sword as they threaten the validity of survey results. Furthermore, the survey was cross-checked twice by Daimler colleagues supervising my thesis who advised me to make minor amendments to the socio-demographic data of respondents as well as delete items about respondents' attitude about advanced driver assistance systems (ADAS). After pretesting, the final research instrument consisted of a total of 85 items measured by seven-points- Likert scales and 10 items related to socio-demographic variables.

In order to ensure the internal consistency of the survey which is a measure of the extent to which the items in a questionnaire are correlated or homogenous and measure the same concept, a principal component analysis (PCA) was conducted. A PCA is considered the appropriate type of factor analysis in this respect because some of the items are new and not validated by prior research. Cronbach's alpha is computed for every scale of the research variables as it is an adequate measure of internal consistency. A high Cronbach's alpha indicates that the items of the respective scales have strong correlations; a low Cronbach's alpha means the vice versa. Internal consistency is generally rated as high if Cronbach's alpha is between 0.70-0.95 (Terwee et al., 2013).

5.4. Order of Questions

The order of questions is also very important because the emergence of one question can affect the answers given to subsequent questions (Babbie, 2006). Therefore, I tried to structure the survey into several themes and provided a short introduction to the topic of self-driving cars by providing a definition of autonomous driving which rests on the different approach of carmakers and Google to pursue driverless vehicles. The introduction is meant to be as short as possible, neutral and objective so that respondents have the necessary information they need to satisfactorily complete the survey. Special attention has been given to the first question because this question signals the respondent what the survey is about and what can be expected. The first question, therefore, is supposed to introduce the respondent to the topic of self-driving cars by formulating a question about the respondents' general attitude towards her/his car and driving. As self-driving cars is a topic that is not easily accessible for everyone, a first question that seeks information about respondents' relationships with their cars should be identifiable with a large majority of respondents. This is a good way for respondents to „warm up“ before they will be ready for more sensitive or difficult questions that are related to an area that is still likely to be unfamiliar to a large number of respondents.

In line with the recommendations by Krosnick and Presser (2005) questions on sensitive topics (e.g. income) that may make respondents feel uncomfortable should be placed at the end of the questionnaire. These features are also likely to prevent a further common pitfall of survey research, namely non-response which is another example for an error of non-observation that happens when respondents are not willing or are unable to provide answers to specific questions, thereby distorting the generalisability of research findings (Check & Schutt, 2012). Studying individual answering processes in online questionnaires, Stieger and Reips (2010) found that item non-response produced in only 6.6% of all questionnaires (n=1046) a highly negative influence on data quality (Evans & Mathur, 2005; van Gelder et al., 2010).

In addition, to further enhance motivation and willingness to complete the survey among respondents, a video about Google's self-driving car was embedded. This video fulfils two functions: First, it is a nice and entertaining feature that interrupts the rather boring and monotonous process of providing countless answers to the questionnaire. Second, the video was published several days before the questionnaire was sent online. Thus, it provides the most up-to-date and latest advances of Google's self-driving car undertaking by showing one of Google's newly released prototypes that chauffeurs members of prospective market segments around in test rides. The video is easy to understand, is of appropriate length and it lacks any technical information so that it can be grasped by a large majority of respondents.

Moreover, guaranteeing the anonymity of survey responses is also likely to increase the willingness of respondents to take part in and complete the survey (Cooper, 2000).

5.5. Measures

This survey predominantly utilises scales already developed and tested in the literature which has the advantage that they have been proven to be reliable and valid by prior research (Check & Schutt, 2012). Thus, in addition to a four-item scale to measure PU (Cronbach's alpha= 0.98), this study uses a four-item scale to measure PEOU (Cronbach's alpha= 0.94). There are presumably many instruments available to measure PU and PEOU but the most commonly used are the ones from Davies (1989) who embedded them in his popular TAM which has been cited in over 700 research studies. Both scales are known to have a good internal consistency and test-retest reliability (Hendrickson, Massey & Cronan, 1993). RA is measured by means of an 18-item scale where the specific advantages are the result of the content analysis. This has the advantage that the operation of a self-driving Google car becomes more practical and concrete which is important since it can be expected that a large number of users are rather unfamiliar with the technology. In addition to the PU and PEOU scales from Davies (1989) and the RA scale, this study employs the renowned 7-item driving-related sensation seeking DRSS scale from Taubman, Mikulincer & Iram (1996) which is preferred over the 40-item sensation seeking scale from Zuckerman (1979) as the latter is not related to driving. Cronbach's alpha is 0.84 (Yagil, 2001). LOC was measured with four items (two items for ILOC and two for ELOC) selected from the 30-item driving internality driving externality scale (DIDE) developed by Montag (1987) where 15 items measure internal and 15 items external locus of control. Previous research has demonstrated a high internal consistency with reliability coefficients of 0.80 for DI and 0.75 for DE (Montag & Comrey, 1987; Iversen & Rundmo, 2001). Customer-based corporate reputation is measured with a 28-item scale with Cronbach alpha ranging between 0.71 to 0.93 for the different sub-scales, thereby exceeding the recommended threshold of 0.70 (Walsh et al., 2009). To measure technology readiness, a 19-item scale was adopted. The scale was adapted from the TRI index from Parasuraman (2000) and the TAP index from Ratchford and Barnhart (2012) whose scales have reliability coefficients between

0.74 and 0.81 and 0.73 and 0.87 respectively. Therefore, it can be assumed that Cronbach's alpha is above the minimum standard of 0.70. As the technology readiness of each respondent was assessed with two items from each dimension, future research is recommended to compute the Cronbach's alpha for the entire scale. Behavioural intention as the dependant variable is measured by „I would be ready to adopt Google's self-driving car instead of a conventional vehicle" which was adopted from Payre et al. (2014) who conducted a similar study on acceptance of FAD. The usage of single-item scales poses some inherent risks as they are prone to bias, measurement error and misinterpretation (Rattray & Jones, 2005). Therefore, in addition to the single-item variable the questionnaire includes some adoption-intention-related items that were designed on the basis of the results of the content analysis. They specify adoption intention under several conditions. These are:

> „I would not adopt Google's self-driving car because it may be prone to cyber-security issues such as hacking."

> „In respect of privacy, I do not understand why Google's self-driving car should be any worse than our current mobile phones or the internet. We are already being tracked today and any personal data is already stored. So where is the difference? I would adopt Google's self-driving car even though it stores my personal data."

> „I would not adopt Google's self-driving car because it is a further manifestation of increasing levels of automation that make people lazy and dependant in the end."

To check whether the answers of respondents are consistent, each dimension is represented by two items. The items will be chosen on the basis of their respective factor loadings and rational reasoning in the sense that it will be checked whether they fit to the research objectives. If the responses on these two items diverge, for example, it is likely that the respondent has not answered the questions thoughtfully and merely clicked through the questionnaire without actually reading the questions. Another plausible explanation is a lack of proper understanding of the items.

5.6. Sample and procedure

The online questionnaire was mailed to a large number of students of the University Twente and the Technical University in Berlin as well as to a number of researchers of different research institutes and to my own research group -Society & Technology Research Group of Daimler AG- where I am employed as working student. Additionally, it was posted to a large number of selected Facebook groups that correspond with the objectives of this research (e.g. emobility, Tesla Motors, Mercedes-Benz, Nissan, Wired, Handelsblatt). In addition, I created an account with reddit- an entertainment, social networking services and news website - and posted the survey in selected forums that are committed to themes that are indirectly or directly related to self-driving cars (e.g. science fiction, Google, innovation, ted, Tesla Motors, Mercedes-Benz). All questionnaires were self-administered by respondents.

5.7. Statistical analysis

The data gathered through the online questionnaires are analysed by frequency tables and descriptive statistics (e.g. means, standard deviations), bivariate and multivariate analyses using the statistical analysis software SPSS 22.0. Pearson product-moment correlation coefficient was conducted to determine the nature of relationships between the independent and dependent variables in the model. Also, stepwise multiple linear regression analysis was performed to find the strongest predictor variables that best explain variance in consumers' intention to adopt Googles's self-driving car. Stepwise multiple regression analysis is in particular very suitable when it comes to determining the „best" multiple regression model in terms of finding the strongest significant predictors that account for a high R^2 of the variability in adoption intention (De Veaux, Velleman &

Bock, 2008). As this study defines a relatively large number of possible predictor variables, it makes sense to focus attention on only the most important independent variables.

The choice of these kinds of statistical tests is motivated as follows. Likert data is commonly traded as ordinal level data which requires a specific statistical test according to the scientific community. Thus, to quote Jamieson (2004) „the appropriate descriptive and inferential statistics differ for ordinal and interval variables and if the wrong statistical technique is used, the researcher increases the chance of coming to the wrong conclusions." Modern parametric statistical methods are based on specific assumptions such as sample size, normally-distributed data as well as interval-level data. When this logic is applied, we should apply a non-parametric test to take account for the violations of these assumptions as Likert data is not normally distributed but highly skewed. However, Norman (2010) has shown that parametric methods can be equally employed on Likert scale data with „no fear of coming to the wrong conclusion". Therefore, this study computes the pearson correlation as well as runs a stepwise multiple linear regression analysis given that parametric methods are incredibly versatile, powerful and comprehensive with non-parametric methods used very rarely as they can only handle the simplest designs (Norman, 2010).

Apart from a number of closed-ended questions, the survey also invited participants to provide further comments or suggestions to a multitude of open-ended questions. These data will be analysed in the same way as the blog data, using the predefined coding scheme to assign the data to the respective categories and develop new categories if this is necessary. The common threats that arise when analysing qualitative data are equally taken into account.

6. Results of open-ended survey questions

The responses from the open-ended questions validate the qualitative data of the blog analysis as well as further enrich the picture about the perceptions of consumers as regards Google's fully-autonomous vehicle. The main findings will be outlined with their respective categories to which they are assigned. Given that I already conducted a content analysis of blog data, ideas necessarily overlap. Therefore, I will only present those answers that were mentioned frequently by survey respondents as well as ideas that provide new insights and deviate from the results of the content analysis.

6.1. Innovation characteristics

One of the recurrent themes that constantly re-emerged is safety, driving convenience and driving enjoyment. Other topics such as fuel efficiency, the existing inadequacy of public transportation and purchase price were also mentioned but to a far lesser extent. The responses to the open-ended questions reveal that people expect self-driving cars to be safer than conventional vehicles which corresponds with the findings of the content analysis. For example, one respondent stated that he used to love driving but due to a „few accidents later, including one very serious one“ he has come to realise that „driving is a job.“ He goes on by stating that „if you are enjoying it, you are not paying attention enough, and you' are probably going to have an accident which will lead to a lot of stress and/or injury/death. If you want to race, you should go to the racetrack. Driving on the streets is a job that requires focus and constant vigilance, because one lapse in attention can have serious consequences.“

„I've driven ~150,000 miles across the United States for various jobs over the years. The one thing I can not wait to see become a thing is removing big rigs from the the road, the drivers of them, and the threat they pose to the public. No one knows how to drive around them. A good amount of them are overworked and exhausted. Autonomous large trucks should be Google's next focus.“

Another respondent confirmed that „I want a fully-autonomous vehicle without a steering wheel that drives on highways. I don't care what it looks like as long as it has a higher safety rating than self-driving. Driving honestly scares me when I think about it.“ Likewise, one respondent refers to the bad driving habits of drivers: „Time is very precious to me and I would greatly enjoy having the time I would normally spend focused on driving to spend on something else. Although I consider myself to be a safe and cautious driver, I do not trust those driving next to me with their heads buried in their phones while drive 80 mph on the highway. Please, take this danger and carelessness out of driving by offering an automated vehicle to the public."

Furthermore, what is also very interesting to note is that the Google car is expected to trickle down more easily to the mass market because it is premised to be less expensive than the cars of Mercedes, VW or BMW. This is an especially interesting finding since it deviates from the results of the content analysis in so far as bloggers have rather neglected how purchase price could affect their adoption decisions. Therefore, the answers to the open-ended questions show that purchase price should be equally taken into account when studying consumers' adoption intentions. In this context, one respondent explained that he would rather buy a self-driving car from Google than from MB, VW or BMW and justifies his decision by „I' more interested in the technology than an overpriced car" or „Google is an American company and I live in the US. Those German companies sell expensive cars and I don't have a lot of money. A Googlemobile would probably be cheaper." Whereas the cars from traditional car builders such as VW, BMW and MB are generally premium cars, survey respondents evidently expect that the so-called „Googlemobile" would be affordable for other customer segments that were previously excluded from the purchase of luxury cars.

„BMW is a bit of an expensive car for the upper middle class. It's a status symbol, not a car you keep for 10 years. VW, kind of a hipster car, who keeps a VW around for more then 4 years? Mercedes Benz, another status car."

Furthermore, while the findings of the content analysis emphasised that one advantage of Google's self-driving car is to provide mobility to elderly or disabled people, the results of the open-response questions suggest that there might be another interesting consumer segment to whom the self-driving car could be particularly appealing: people who had difficulties passing their driver license. For example, it is pointed out that „it took me a long time and a lot of money to get a driver's license, after 2 years and 3 exams I finally got a license that only allows me to drive a car with automatic transmission. If there was a car that drove itself that I would be allowed to use without a license it would have greatly increased my mobility during the time where I did not have a license. I would also have the option of not spending thousands of euros on lessons during a time in my life when money was tight.“ The Google car could have bridged the time in which the respondent was still without driver license, thereby providing temporary mobility.

The survey was conceptualised so as to include the latest advances of Google’s self-driving car project. It also included response options for people who had already the chance to test the car which is even more interesting because these people might give even more robust and accurate predictions as to whether the car by Google will have good chances to get accepted. One respondent who happened to meet a few people test-riding the car declared that „I do not personally know anyone who has driven the car, but from the few people I have met who have and what I have heard online, one word consistently appears in peoples’ testimonies: boring. I think that's such a beautiful word to describe it all. Driving in Google's car is not dazzling or exhilarating or captivating; it's a totally disinteresting experience, and that's exactly how it should be. Speedy locomotion is tedious, logistically intensive work, drudgery in its purest and most awful form. At last our people break free from the chains that weighed so heavy on our ancestors, and we may sit back at 100 mph and smugly say to each other via internet, ‚well this whole affair is a bit dull, what's going on with you?‘“ Another one who apparently had the chance to test it compared the car to a „smelly, claustrophobic box of death.“ The respondent continued: „I didn't like it. It stank even more of electronics and air freshener. It was a small and uncomfortable car. The only way I might be able to stand a car is if I can take a nap in a reclined chair.“

Another one holds that the „styling of the Google Car is too much like a dinky toy“ where the car „was obviously designed to be accepted by a diverse audience.“ The respondent concluded that (s)he would never go for such a „bubbly car“ and went on by saying that „I like sporty cars and would rather go for a Mercedes once they debut their variation.“ These comments underscore that the Google car currently scores low in terms of styling and design; at least from the perspective of car and driving enthusiasts for whom cars are not just toys but prized obsessions and a passionate hobby.

6.2. Personality characteristics

As expected, the topic of control was also frequently echoed in the accounts by respondents. For instance, one respondent thinks that „ I would feel a loss of control in a car where I can't take over, not unlike a bus or airplane." Similarly: „I oppose self driving cars. I'm a car nut. I LOVE driving. I want to be in control." Another one reverberates some of the key advantages of driverless vehicles (e.g. „It is nice for elder people or especially for disabled people as they get the chance to be mobile") but suggests that „it would also be weird not to have any control or responsibility while driving."

„Regular journeys (daily/weekly etc.) Multi-hour journeys on highways so that I can have some rest. I will NOT use automation in difficult driving situations though. I am an experienced driver and control freak and I prefer to have full control of the situation. Despite my knowledge in computer science that makes me believe computer might take better decisions."

6.3. Attitude towards car and driving

The survey was also conceptualized to include questions about the attitude of respondents towards their car and driving. The content analysis has indirectly shown that the attitude of drivers towards their car and driving is likely to play a significant role in shaping their perception of Google's fully autonomous driving, in particular by the section on sensation seeking that has emphasised that the „Fahrvergnuegen" is one of the most persuasive purchase rationales for car enthusiasts. The responses to the open-ended questions seem to validate these observations. For example, someone suggests to respond with „hostility" if the steering wheel is taken out of the hands of drivers: „Driving is a pleasure that; if someone were to suggest I give up- I would respond with hostility." Another one illustrates that „driving is one of the few pure experiences left" where „it is acceptable to not answer the phone and do something by yourself for

„Driving my cars whether it is commuting to the office or a nice windy road on a Saturday afternoon is one of the things that makes me happiest."

yourself. Automation is inevitable but disconnects people from the world around them.“

On the other hand, it is also stressed that „driving is a way to get from A to B. It isn't a bad thing or specifically unpleasant (unless traffic is bad), but I would never just get in the car just to drive. If there is a faster/cheaper way to get where I'm wanting to go I'll do that instead of driving.“ Another one admits to really hate driving: „I loathe driving. The moment I step in a car I am delivered to some driver (since I have never owned a driver's licence). It smells of gasoline and they give me headaches. I hate cars. I hate being inside cars, and I hate a world inundated with cars. For me the universality of cars is a suffocating nightmare.“

6.4. Type of car

„Depends on the vehicle. It should be taken into account that many people will have multiple vehicles. A daily "beater" and a more fun car.“

Another interesting finding that emerged from the responses to the open-ended questions is that variation in the intention to adopt a driverless vehicle by Google might also be accounted for by the type of car. It is conveyed, for example, that „my appreciation of driving strongly varies. For instance, it is of course great to be rolling on smooth asphalt along a curvy road with a nice scenery, but only for so long. After an hour or so, it becomes boring, as it also highly depends on the car.“ Or „it really depends on the kind of vehicle if I like driving or not. In general I do but driving a Toyota Yaris is a truly different and far more boring experience than driving an old Volvo Amazone or Renault Twizzy“ and „I love it to drive all time, but only with powerful and safe cars.“ Therefore, the type of car certainly matters as to whether drivers would be willing to give up driving for a driverless vehicle. The type of car is necessarily linked to the brand. The following section describes how respondents perceive traditional incumbents and Google in connection with self-driving car technology.

6.5. Brand perception concerning automated driving

The answers of respondents show that Google seems to be more closely connected with autonomous driving whereas the traditional car manufacturers are valued for their „experience, tradition, quality, brand recognition and a history of making cars“ that are the result of years of incumbency. For example, it is stated that: „The car itself and the self-driving algorithms are totally different things. I trust Google with the algorithms, and BMW-and-company with the cars. Autonomous driving is a software problem (mainly), and Google has a track of record for software development.“ It is believed that „Google is pioneering this field“ with „the best option on the market with regard to the AI used to drive the car“ whereas "the others may have better "cars", but the most important thing at first is going to be the driver.“ The perception that Google tends to be more connected with self-driving car tech than the traditional incumbents corresponds with the findings from KPMG's Automotive Team who conducted focus groups with vehicle owners in Los Angeles, California, Chicago Illinois and New Jersey with the result that mass-market and premium brands are considered less trustworthy than Google which was the brand mostly connected with self-driving cars (Silberg et al., 2013).

„I would really prefer an MB, VW or BMW with Google's self-driving tech, but assuming it would be with MB, VW or BMW's self-driving tech, I choose a Google-made self-driving car. Car makers know how to make reliable cars. Google will have the best self-driving system. For a self-driving car, the self-driving system is the most important aspect of the car, so I would choose that before, what I would expect would be, a better automobile.“

„The current major car manufacturers have clearly demonstrated that they have absolutely no clue about the future of transportation. Their head is in the sand. Google is to be commended for taking a leadership role.“

Google is perceived to be the leading tech innovator that „is just doing it“ whereas the traditional incumbents like „Mercedes, VW and BMW have problems introducing new technologies and are still stuck on their old technology.“ The term „creative destruction“ is mentioned which refers to the curse of incumbents that tend to fail when it comes to radical innovations because they are stuck with their old processes, routines and structures, therefore introducing incremental rather than radical or breakthrough innovations which tend to come from new entrant firms. Thus: „I strongly believe that

Google is not impaired by the competition with prior work, and the baggage of prior designs. I also believe it's time for someone to do this, and that the other vendors are being overly cautious.“ Another one explained that „MB, VW, and BMW are essentially building fancier versions of the same vehicles they've built for 50 years. Despite all that opportunity, they are still making slight incremental changes. I would never expect them to advance the state of the art in technology, instead I would expect them to adopt the minimal possible advancement that effectively maintains the status quo.“

The question then arises why people think that Google is superior when it comes to the development of self-driving car tech. A part of the answer is given by the respondents. Thus, one respondent who apparently favoured Google over Mercedes-Benz, VW or BMW explained her/his choice by stating that „Google had it first so, presumably, they have the latest tech. Mainly, though, Google *has* a self-driving car, so it's Google's car vs something like BMW's sorta-mabye-half-driving-concept thingy that I envision as a black and grey blob with blue accents. And doors.“ Thus, one of the reasons for why respondents believe that Google is superior when it comes to self-driving car tech is that Google already has a self-driving car whereas traditional car manufacturers are working on semi-autonomous driving technology. It is thus only logical to assume that Google has better self-driving cars because at the moment it competes against conventional cars equipped with high self-driving tech. Also, it should be kept in mind that Google’s self-driving car gains much more media publicity than the automated driving systems by traditional car manufacturers which is also logical because showcasing a car that drives itself in different and unpredictable environmental situations can be assumed to be a far more impressive affair than displaying a conventional vehicle that drives semi-autonomously on highways.

Nevertheless, there are also a variety of different voices who would rather buy their self-driving car from car makers than from Google because of „a history of successful car manufacturing.“ Google is not a car company; they are good at developing technology for automation but the „guts of a car, the tires, the wheels, the chassis and the manufacturing of them are probably better handled by car manufacturers. Software and Sensor technology is ONE element of an autonomous car. Powertrain technology, vehicle durability and reliability, interior comfort and an outstanding dealer/ maintenance service network are others. Traditional vehicle manufacturers have much more experience and reputation there. Google should limit its activity towards delivering its technological advantage to supply all mayor car-OEM's in order to speed up the transition to mass-production of autonomous vehicles worldwide.“ Experience is the buzzword that is mentioned several times by respondents who would probably buy a self-driving car from car builders than from Google. Furthermore, apart from experience, it is announced that „traditional car manufacturers such as VW and Toyota has earned my trust and loyalty because of its cars being affordable, stylish, fuel efficient and its cars being strong and durable.“ They are „well aware of their customer interests and driving experience“ and are „known and trusted automotive companies“ that do profit from an „already established network of services and maintenance points“ as well as a „good infrastructure for fabricating and distributing cars.“ For this reason, car builders benefit from a number of first mover advantages that could make it difficult for Google to make penetration of the automotive market a success.

Aside from respondents who yet made the decision for either or against a self-driving vehicle from Google, it also becomes clear that some respondents are undecided, taking a „wait-and-see attitude“ in the sense that will they will simply buy the best car irrespective of producer. For example: „Honestly I'd prefer the best car regardless of manufacturer“ or „I am actually indifferent about the producer, as long as the product is good.“

The questionnaire also asked people about their opinion as to whether Google’s self-driving car would be a threat to traditional car manufacturers whose role could steady decline. One respondent agreed with the statement that Google’s self-driving car will be a serious threat to traditional car builders and said that this „is not a bad thing. If the other car manufacturers do not want to change and grow with the times to make more efficient, safer vehicles, then let them become obsolete and fade away.“ On the other hand, again there is no consensus among respondents whether Google can seriously attack industry incumbents because according to one respondent „Google simply will not be able to compete with auto manufacturers. Companies like Tesla, Mercedes, BMW, and so on will always have the competitive advantage because they are actual auto makers and have a pedigree in creating vehicles.“ Moreover, respondents feel that Google’s fully-automated car could be used as additional car next to their conventional vehicles, stressing multiple car ownership. For example, one respondent could imagine using a fully-automated Google car in addition to a conventional car and electric vehicle. Hence, „traditional cars have their reputation. They are fancy and more useful. If I already have one traditional car (ex: from BMW) and one electrical are (ex: Tesla), I would be willing to chose self-driving car from Google for my third car“ or "I want both a traditional and sporty car and a google box to use when I cannot drive or want to work while driving.“ Another one could envisage using a fully-automated car on the basis of subscription. Therefore: „I'm thinking it would be great to have a mix. Maybe I cut my family down to one car instead of two, and use an autonomous car "subscription" to fill the gap since there's no way we keep two cars on the road at all times.“ Another respondent who „is the leader of a huge team of students“ with „more than 10 years of experience in autonomous projects“ proposes the idea of a „completely different kind of car“ since it's the wrong way to adapt an existing car to such a completely different task. Traditional cars are not designed for comfortable, relaxed autonomous driving. That's the main difference between the Google self driving car and traditional cars. Companies such as Mercedes Benz just did not realise this so far.“ His „dream“ would be a „completely different kind of car“ with „a big screen instead of the windshield, and 4-5 seats facing each other, with a table in the middle. The seats could turn 180° to enter and exit the car. Meetings could be held while driving, the passengers could play cards, watch movies, or get information about their travel on the screen. And the car could be build much safer than the traditional design with big windows.“

This also signals that the traditional car industry might be less at stake in the long-run and that Google and traditional car builders can co-exist, maybe in the form of a symbiosis with car builders providing the hardware (cars) and Google the software. So: „I trust the quality of manufacturing from Audi VW, but the technology from Google. Let Google build the sensors and brains, Audi can make it pretty and safe“ and „ideal would be in my opinion to use the expertise of the established car makers and the knowledge of Google to create a fully autonomous car.“ Another one „would love to see „an alliance between the R&D team of Mercedes-Benz (for the technologies they bring every year in the automobile industry), Tesla (because of their super safe and electric car (Tesla Model S), and their ingenuity), and Google at the same time.“

6.6. Driving environment

Consistent with previous research studies and the findings from the content analysis are the results of the open-ended questions as far as the driving environment is concerned. We expect that driving environment influence variation in consumer acceptance of Google's fully-autonomous vehicle.

In general, the responses to the open-ended questions concerning driving environment and context can be summarised as follows: „There would be times when any of the above circumstances apply for any arbitrary reason“, meaning that Google's self-driving vehicle can be used in any stated driving situation, from „regular journeys“, „multi-hour journeys“, „in unfamiliar places“, in case of a „medial emergency that disables me from driving“ to „new circumstances“ and „long highway drives“.

For example, one respondent argues that „my answer to these "preference" questions is mostly "it depends". I drive regularly from home to office and back and, given rush hours, it is not necessarily a very enjoyable drive. This is the case where I would prefer having something (or someone) driving instead of me. In addition, I am sometimes sleepy in the morning and distracted in the evening. Nevertheless, driving during weekend (if you avoid busy itineraries) is fun for me and often helps to clear my mind. Although, if I go to a new nice place, I would temporarily hand off the car control to an automatic system to enjoy the view without paying attention to traffic.“ This statement also suggests that the preferred level of automation is not fully-autonomous where the driver is removed from the control loop altogether but one that rather enables the driver to drive in manual mode when this is desired. In a similar way, the following description also suggests that the acceptance of Google’s fully-autonomous vehicle varies with the specific driving environment. Hence, „I like driving a little more when I'm not going to work because then I usually don't have to deal with traffic. Trying to navigate through heavy traffic is mentally exhausting and leaves me drained. Diving through light or no traffic at high coasting speeds (60-70mph) is wonderful.“

6.7. Level of automation

Concerning the questionnaire item „I would like to manually take over the vehicle at any time“, respondents indicate that „the very idea of asking someone to take over driving only in difficult situations is ludicrous to the point of hilarity“ since „they would have to stay alert to danger while actually doing nothing, which is incredibly difficult for the average person. They would have to quickly react and respond safely when they would very likely be out of practice at driving. So autonomous driving must be all or nothing, else the roads become even more dangerous.“ On the other hand, the responses also reveal that taking over an automated car would indeed be a favourable feature. Thus, one respondent argued that „I just want to be able to keep changing my mind on what the destination is, or just program a long loop that returns to where I started. Or, hit the "random adventure" button (like the google I'm feeling lucky button).“

„I think it would be a good idea to have brakes always usable, however having the car simply switch to completely manual movement would be difficult. For example, if I accidentally hit the "manual" button while moving my chair, I wouldn't want the car to go careening off the road. A happy medium would allow the driver to control the car whenever, for example when hands are on the wheel, however as soon as a button is pressed or hands taken off the wheel, automatic control is reinstated.“

Furthermore, regarding the item „I would like to chose whether I drive in manual or automated mode“ it is stressed that „automated driving, in my opinion, should be a feature of a vehicle. If someone would like to sit back and let the car do the work, I think it would be great, but I think there is a necessity for manual control in any sort of motor vehicle because no technology is 100% reliable.“

6.8. Customer-based corporate reputation

„I would not say that Google doesn't have the competence to build a car but I fear Google's omnipresence.“

The responses demonstrate that Google has a reputation of a company that does not take data privacy very seriously. For example, one respondent remarks that „I don’t want that Google has all my personal life information: who I am calling (Android), what I am searching (Google search), what emails am I writing (GMail), what routes I am planning (Google Maps) and where I am driving (Google car).“ Another one believes that „Google’s self-driving car would supply Google with additional information about our personal lives that would again be a major invasion of our privacy“ which corresponds with the views of another respondent who would rather opt for a self-driving car from traditional car builders than from Google because of „styling, kind of a mistrust in Google's data-policy as well as unwillingness to support a monopolist.“ Finally, one respondent remarks that „privacy is safer with other companies than Google“ which disregards people’s „constitutional rights“ and hence buying a car from Google ultimately implies selling „my soul to a global observing company whose first interest is selling and controlling.“

Not all respondents seem to view Google’s approach through sceptical lenses. Some also compare Google with the future. One respondent seems to be really impressed, excited and proud of Google’s bold and innovative thinking. Thus, it is stated that „Google's core business is autonomous thinking, the same a self-driving car would do. Car brands would approach the problem to make sure people buy their cars in the future. Google wants to build the future and doesn't care about throwing away an outdated, unsafe system. Google has the means and idealogical viewpoints to create a new world where nobody would to own a car, but rather puts in a calendar entry to go grocery shopping. A self-driving Google car would arrive at their doorsteps and drive to the super market. In the car it'll tell the passenger "if you'd get the products your typical shopping list you would save x dollars by going to brand y super market, would you like to go there?" All the while the passenger is in the Google car the experience is identity-centric. Phone calls get routed to the car's audio system, a google play music all access radio station that is fitted to the person would start playing, or a purchased video from play movies would continue where they left off at home. this is the future. Not the tiny steps BMW or Volvo are taking.“

„In 2013, I preached about a future not 10 years away where Google would work together with companies like Tesla (or Electric Automotive) to create cars that enabled anybody to use a car as a service. I imagined a talk with my yet to be born kid, where he would ask where the cars were. "You'd drive your car to work, where you would park." "and the car would be there the entire day?! That's unnecessary!" "And after those 9 hours you would drive home." "So for those 2 half hour drives you owned a car 24/7?!" "And how would a garbage truck fit through crowded streets downtown?" "They just couldn't! They would honk their horns until people moved their cars temporarily..."

Google is considered the innovator, the one that satisfies people’s needs and develops solutions that correspond with the demands of the current time. Hence, it is postulated that „traditional car companies embody the 20th century spirit more than perhaps any other kind of company except oil. They represent the ability to give people something that they obviously want and innovate on that idea until it is parked in duplicate in every home. Google represents more than most any other company the spirit of my century, the 21st. If all ~6 billion people circa 2004 were asked what they wanted more than anything else, a self driving car would not be in the top 1000 in more than 1000 people's lists. But now the world cannot keep its eagerness contained. One day soon it will be apparent that self driving cars were one of the greatest achievements of our people. This is a truly modern vision, and the vestiges of days past cannot carry it out.“

7. Data analysis

7.1.Respondent profile

421 participants filled out the survey. Eight survey forms were omitted from the sample because of invalid responses. The proportion of male participants (84.9%) was clearly higher than the proportion of female study participants (15.1%) with n=315 male participants and n=56 female participants. The mean age of study participants is 1.88 (number of items=4) or 25-45 years. The majority of respondents has a bachelor degree as the highest level of education completed (39.6%). This corresponds with the mean income which is 2.34 (number of items=4) or 20.000-50.000€ per year. 53.2% of respondents drive either a compact car (25.4%) or a medium type of car (27.8%) with 7.6% of respondent owning no car at all. 23.2% of respondents drive less than 5.000 km per year, 28.5% between 5.000 and 10.000 and 35.1% between 10.000 and 25.000 km per year. 57% indicated that their most commonly and frequently used travel mode includes driving alone by car; 22.6% prefer going by bike and 19.5% tends to be a car passenger or ride in a car pool (19.5%). 51.7% of respondents drive either less than 5000 km/year (23.2%) or between 5.000 and 10.000 (28.5%).

7.2. Descriptive statistics

Appendix C presents the descriptive statistics of the questionnaire items.

7.3. Reliability of sub-scales

Analysis on the internal consistency of the items in a questionnaire (sub)scale was conducted by performing a factor analysis and by examining the Cronbach's alpha scores for each subscale. Internal consistency measures the extent to which questionnaire items are correlated, hence measuring the same concept. Cronbach's alpha was computed for the different (sub)scales because it is common practice to report the Cronbach's alpha statistic for the separate sub-scales and not for the entire questionnaire. Internal consistency is high if Cronbach's alpha ranges between 0.7 and

0.95 (Rattray & Jones, 2005). The reliability of the level of automation scale is high, 0.791 (appendix K). The reliability of the other original scales were determined to be high, ranging between 0.7 and 0.9. In this study, the Cronbach's alpha statistics for the other sub- scales are much lower. This can be explained by the low number of items used as Cronbach alpha is also a function of the number of items. The Cronbach alpha internal consistency coefficients are reported in Table 1.

Table 2. Results of internal consistency assessment

Variables	**Cronbach's alpha**
Perceived usefulness (two items)	0,710
Perceived ease of use (two items)	0,827
Sensation seeking (two items)	0,353
Internal locus of control (two items)	0,450
External locus of control (two items)	0,143
Technology readiness (ten items)	0,497
Level of driving automation (five items)	0,793
Customer-based corporate reputation	0,907

Another common technique to enhance the internal consistency of the survey and demonstrate convergent and discriminant validity is to run a factor analysis. Therefore, a principal component analysis was performed on eight of the nine research variables and all unrotated components with Eigenvalues greater than 1 were extracted. The solution was rotated using the direct Oblimin rotation. Eight components with Eigenvalues greater than 1 were extracted. The Kaiser-Meyer-Olin measure of sampling adequacy was 0.881, indicating that a factor analysis is suitable to be run on the data. Discriminant validity is demonstrated if each item loads more on its associated factor than on any other factors. Convergent validity is demonstrated if the items load strongly on their associated components (loading > 0.50). The results of the factor analysis show that convergent validity is not achieved because the items do not universally load strongly on their corresponding components. For instance, the items of corporate reputation, optimism, perceived usefulness and perceived ease of use load strongly on component 1 even though those items belong to distinct variables. In general, when looking at the results of the factor analysis, the items mainly load on only two components even though the majority of items are not consistently correlated. When it comes to discriminant validity, the results show that the items load more on its corresponding component than on any other components.

Therefore, future research could account for the low questionnaire validity and replicate the study.

7.4. Correlation among variables

The second step now involves examining the relationships between the selected independent and dependent variables. Therefore, the Pearson product-moment correlation coefficient was computed. The majority of relationships between the variables in the model are statistically significant in line with the theoretical assumptions at a significance level of 0.01 or 0.05. Thus, the Pearson product-moment correlation coefficients for the relationship between the selected predictor variables and behavioural intention are: Perceived usefulness ($r=0.550$, $r=0.743$, $p<0.01$), perceived ease of use ($r=0,420$, $r=0,302$, $p<0.01$), optimism ($r=0,487$, $r=0,601$, $p<0.01$), innovativeness ($r=0.278$, $r=0.208$, $p<0.01$), dependance ($r=-0.157$, $p<0.01$), insecurity ($r=-0.368$, $r=-0.263$, $p<0.01$), vulnerability ($r=-0.532$, $r=-0.217$, $p<0.01$), sensation seeking ($r=-0,125$, $p<0.05$; $r=-0.362$, $p<0.01$), internal locus of control ($r=0.006$, $r=-0.193$, $p<0.01$), customer-based corporate reputation ($r=0.442$, $r=0.470$, $r=0.334$, $r=0.381$, $r=0.259$, $r=0.440$, $r=0.343$, $r=0.237$, $r=0.391$, $r=0.462$, $p<0.01$).

The content analysis yielded another interesting independent variable that might explain variation in consumers' adoption intention of Google's fully-automated vehicle, namely level of driving automation. The data analysis of survey results corroborates this initial perception with negative statistical significant relationships between level of driving automation and adoption ($r=-0.209$, $r=-0.571$, $r=-0.443$, $r=-0.714$, $r=-0.509$; $p<0.01$).

Furthermore, results of the content analysis and the responses to the open-ended survey questions demonstrated that the attitude towards the car and driving is likely to affect consumers' intention to adopt Google's self-driving car. These initial observations were confirmed by the statistical analysis of the survey results. Positive statistically significant relationships were found between questionnaire items „For me, cars are just tools to get from point A to B" ($r=0.487$, $p<0.01$) and „I really hate driving. It is tedious and boring" ($r=0.395$, $p<0.01$) and behavioural intention, meaning that drivers who see cars through pragmatic and less emotional lenses or drivers who even hate driving are more likely to adopt Google's driverless car. In contrast, car or driving enthusiasts are less likely to adopt Google's driverless vehicle. Thus, there is a negative relationship which is statistically significant between item „Driving is enjoyment, freedom and time where I can be alone and just relax" ($r=-0.393$, $p<0.01$) and adoption. No correlation was found between item „I really drive for fun on weekends; during week days, driving is chore to me" and intention to adopt Google's self-driving car. This might be due to the rather poor wording of the questionnaire item which actually is double-barrelled as it asks two things at the same time. However, this questionnaire item is the result of the blog analysis, hence it is has been incorporated into the survey on purpose because it might show people's willingness to adopt a fully-automated car during weekdays, for example for the daily commute from home to work and vice versa, and on weekends people can still cling to their conventional cars which they can take out for leisure trips. In this instance, the adoption of Google's self-driving car is thought of in terms of multiple car ownership.

Moreover, age is negatively related to behavioural intention ($r=-0.301$, $p<0.01$), meaning that older people tend to adopt Google's driverless vehicles less likely than younger people. A plausible explanation can be found in Baby Boomers' more intimate relationships with cars whereas the younger generations (e.g. Gen Y and Z) tend to not see cars as „mobile sex symbols" but rather as tools to move them around from A to B (Neighton, 2013; Bird, 2010). Dummy variables were created for gender, indicating that women ($r=-0,168$, $p<0.01$) are less likely to adopt Google's driverless vehicle than men ($r=0,181$, $p<0.01$). Also, as suggested beforehand, the type of car is expected to influence consumer intentions to purchase Google's driverless vehicle instead of a conventional car. Computing the Person product-moment correlation coefficient for the relationship between type of car and adoption intention shows that drivers of sport cars ($r=-0.209$, $p<0.01$) and sport utility vehicles ($r=-0.228$, $p<0.01$) are less likely to adopt Google's driverless vehicle whereas drivers of medium ($r=0.229$, $p<0.01$) or compact cars ($r=0.249$, $p<0.01$) are more likely. People who do not own a car are less likely to adopt the driverless robot by Google ($r=-0,110$, $p<0.05$). This demonstrates that people without an own car are more likely to find Google's driverless robot less attractive.

Education has a positive statistical significant relationship with adoption intention ($r=0.347$, $p<0.01$), indicating that the better the education, the higher the willingness to adopt Google's self-driving car. Income has a positive but insignificant statistical relationship with adoption intention ($r=0.063$). Dummy variables were created for the different income groups (1=<20.000€/year, 2=20.000-50.000 €/year, 3=50.000-80.000 €/year, 4=>80.000€). There is only a negative statistical significant relationship between the first income group and adoption intention, indicating that people earning less than 20.000€/year are less likely to adopt Google's driverless vehicle. Limited financial resources could be one of the possible explanations. Also, length of holding a driver license is positively correlated with adoption intention ($r=0,253$, $p<0.01$). When looking at the dummy variables for the different groups that differ in how long they hold their driving license, only two relationships are statistically significant: The one between people with a driver license (1-5 years) and without a license and adoption intention ($r=-0,163$, $p<0.01$; $r=0,134$, $p<0.05$). The relationships between the other groups and adoption intentions are positive but not statistically significant. This finding is interesting as it shows that in particular people without a driver license might find it particularly attractive to use a driverless car by Google. This group could be one of the first and key target consumer segments to which the driverless car could be effectively marketed to.

Number of km driven per year is negatively correlated with adoption intention (r=-0,133, p<0.05). Again when looking at the dummy variables for the different groups, it becomes clear that there is only one negative statistical relationship between the group who drives between 25.000 and 50.000 km per year (r=-0.162, p<0.01). The results should not be over-interpreted but number of km driven per year could be a function of car and driving enthusiasm and hence the negative relationship because people who have a passion for cars are less likely to be enthused about owning a driverless vehicle by Google. On the other hand, we could have also expected a positive relationship because a driverless vehicle could also be quite valuable for people with a large annual mileage who could welcome the opportunity to temporarily surrender control to an automated driving system.

7.5. Regression among variables

Stepwise multiple linear regression analysis was performed to find out which predictor variables can best explain behavioural intention. As seen in table 2, eight items had statistically significant contributions in explaining the variance in the intention to adopt a driverless car by Google. The multiple correlation coefficient was 0,888, indicating that 78,8 % of the variance of the intention to adopt Google's driverless car instead of a conventional vehicle is accounted for by the eight items. Perceived Usefulness was the strongest significant predictor of adoption intention, accounting for 60,8% of the variance in adoption intention. Questionnaire item „The whole point of owning a car is independence and driving enjoyment. I'm never letting Google's self-driving car do my driving" accounted for an additional 10,2% of the variance in adoption intention. The other variables were excluded from the equation because they did not make a significant contribution to the variance in behavioural intention.

Table 3. Results of multiple linear stepwise regression analysis

Multiple R	0,88
R^2	0,78
Adjusted R	0,78

Table 3. Results of multiple linear stepwise regression analysis

Standard error 1,06

	ß Standardized	t	p	R^2	Change in R
I would find Google's self-driving car useful.	0,780	20,240	0,000	0,608	0,608
The whole point of owning a car is independence and driving enjoyment. I'm never letting Google's self-driving car do my driving.	-0,453	-9,595	0,000	0,710	0,102
I would like to manually take over the vehicle at any time.	-0,184	-5,074	0,000	0,736	0,026
Google has excellent leadership	0,147	4,395	0,000	0,754	0,018
For me, cars are just tools to get from point A to B.	0,140	4,005	0,000	0,768	0,014
I would not use Google's fully-autonomous vehicles because it is too risky, in particular when children cross the streets.	-0,138	-3,568	0,000	0,779	0,011
Technology gives me more control over my daily life.	0,102	2,526	0,012	0,784	0,005
I must be careful when using technologies because criminals may use the technology to target me.	0,065	2,078	0,039	0,788	0,004

8. Discussion

8.1. Discussion of results

Fully-automated driving in the form of the Google car has not been commercialised yet and hence only few people had interactions with this technology so far. For this reason, this study aimed to predict consumers' intentions to use such a vehicle. 58% (k=206) of survey respondents would be ready to adopt Google's self-driving car instead of a conventional vehicle (scored above the median of the Likert scale). 33% of respondents are not ready to use a Google car instead of their conventional vehicle (scored below the median of Likert scale) and 10% are undecided. When looking at the two ends of the continuum, 62 respondents (17%) are against and 92 (27%) in favour of adopting the Google car.

The majority of hypotheses were confirmed. For example, a strong positive correlation was observed between PU and the intention to adopt Google's self-driving car instead of a conventional vehicle **(H1)**. Furthermore, as expected a positive correlation was found between PEOU and behavioural intention, suggesting that respondents expect that Google's self-driving car is relatively easy to learn and use **(H2)**. These results validate previous research findings in the technology acceptance management literature, proving that PU and PEOU are one of the most important determinants of technology acceptance.

This matches the findings from the part of the survey where respondents were asked to indicate which advantages they do see in Google's self-driving car compared to conventional vehicles. Survey results show that it can be expected that the self-driving car by Google is perceived to be better than conventional vehicles, supporting **H3**. For 234 respondents (16%), safety is one of the most important advantages of Google's self-driving car which corresponds with the findings of the content analysis. 200 respondents (14%) see the advantage in the reduction of traffic congestion and 165(11%) in the ability to drive while intoxicated. Only 2% of respondents (n=23) see no advantages, suggesting that Google's car could score high in terms of practical relevance.

In line with the expectations, positive correlations were observed between optimism, innovativeness and BI and negative correlations between dependance, insecurity, vulnerability and BI. This suggests that in line with the theoretical propositions people scoring high in technology readiness are more likely to adopt it than people with low levels of technology readiness. As a result, evidence was found for **H4-H8**.

Concerning internal locus of control, a negative statistical significant correlation was found between one item (ILOC1: A careful driver can prevent any accident) measuring ILOC and BI. However, no correlation was observed between the second item (ILOC2: Accidents happen because drivers have not learned how to drive carefully) and behavioural intention. Therefore, **H9** is only partly supported. It is possible that this result came from the fact that this item is rather very extreme in the form of an all-or-nothing attitude. This is also shown by the analysis of the items' descriptive statistics where the mean was 2,897 which signals a very high disagreement with this item (min=1, max=7, n=390). Future research should further study the effect of internal locus of control on behavioural intention.

Unexpectedly, no correlation was found between external locus of control and behavioural intention. In contrary to the theoretical propositions, the relationship between external locus of control and adoption is neither positive nor statistical significant. For this reason, this study fails to accept **H10**. This finding corresponds more or less with previous research because Montag and Comrey (1987) also found a negative -albeit weak statistical significant- correlation between external locus of control and adoption intention (r=-0,18) (Payre et al., 2014). Future research could revisit the original external/internal locus of control scale to evaluate whether the items truly reflect their underlying dimensions.

Moreover, a negative correlation was found between sensation seeking and adoption intention which corresponds with the theoretical assumptions because it can be expected that the usage of a fully-autonomous Google car might be in contraction with driving pleasure and the fun of driving in the long-run (Payre et al., 2014). **H11** is thus confirmed.

Also, adoption intention was contingent on the respective driving circumstances. In line with the theory, the preferred situations for using a fully-autonomous Google car were when the driver is impaired by fatigue (n=274), in traffic jams (n=250), when intoxicated (=249), when driving is boring and monotonous (n=238), in heavy traffic (n=238), on long journeys (n=219) and when driving is stressful (n=215). Only 55 respondents indicated that they would use the Google car in no driving situations. These findings parallel the findings on the perceived usefulness dimension and suggest that a vast majority of respondents attribute a high usefulness to the Google car. It can be therefore expected that evidence is found to support **H12**. Additionally, the interest in using Google's fully-autonomous vehicle while being impaired suggests that drivers might not be totally ready to stay in the control loop in fully-automated mode. If drivers are released from the driving task, they may be tempted to simultaneously give up supervising, no longer feeling in charge for neither the car nor the driving (Payre et al., 2014). As Google does envision a car that takes the driver out of the control loop altogether, behavioural adaptation in this form is unlikely to be a serious problem. It could turn out to be more of a problem for traditional auto builders working on semi-autonomous driving systems where the driver is temporarily released from the driving task with manual control recovered at a later stage in time. Besides, this study points out that drivers would be less willing to use Google's fully-autonomous vehicles in difficult parking situations (n=141), difficult situations such as snow, rain and fog (n=127), through free-way construction sites (=114), or to pick up their kids from school or to bring them to soccer practice (n=90). This finding could signal that drivers might feel more confident to have vehicle control in more difficult driving situations, trusting their own skills more rather than the skills of an automated driving system. In particular, when it comes to their own kids, drivers' level of unease and discomfort might be especially high which echoes the results of the content analysis.

In addition, my hypothesis that there is a positive correlation between Google's consumer-based corporate reputation and the intention to adopt Google's self-driving car instead of a conventional vehicle (**H13**) was supported. The mean score for all items measuring CBR was above the median, ranging from 4,601 at the lowest and 5,820 at the highest end of the spectrum (min=1, max=7). This finding should be interpreted with caution because selection bias applies in this study in the sense that survey participants are more likely to be advocators rather than opposers of Google and its self-driving car project. Future research could re-evaluate this phenomenon, for example, by making use of a neutral survey form (this study used the Google Drive survey form) which is likely to be associated with higher levels of participation among people who are more hostile towards Google. Nevertheless, this pro-Google sentiment is also supported by other Google-related questionnaire items that were explicitly designed to bring Google in relation with its self-driving car project and that echo some of the key reflections of the content analysis. For example, 57% of respondents would adopt the Google car even though it stores their personal data whereas 12% would not adopt it under this condition. These findings equal the frequency distribution for the questionnaire item „I don't trust Google with my personal data. Why would I trust them with my life?" where 55% of respondents disagreed, 25% agreed with this statement and 20% of respondents (k=70) are undecided. 278 respondents (51%) disagree and 23% of respondents agree with the questionnaire item „I would trust Google to have any benign intentions with its car but I think that the self-driving car is just means to an end: control the masses". These findings contract the main sentiment captured in the blog analysis concerning Google's reputation where Google's self-driving car project was mainly traded as opportunity for Google to dominate in other spheres of life. These findings parallel the results to the item „It's all about business: With its self-driving car project, Google wants to create more free time for people that could be spent to use Google products and services. If you don't want to use their products, don't use them. Nobody is forcing you" where 60% (k=271) of respondents indicated either moderate or strong agreement and 12% (k=76) moderate or strong disagreement. 23% or 105 respondents were undecided.

Questions about the desired level of automation were particularly interesting since they were meant to test respondents' real or actual readiness to adopt Google's self-driving car which is expected to deviate from their perceived or observed readiness because it is possible that on first sight consumers think they are ready but without knowing what FAD actually means for them. All hypotheses relating to level of driving automation **(H14-H17)** apart from **H18** are supported. This means that survey respondents are indeed less likely to adopt Google's self-driving car which contradicts the above-mentioned result that 58% of respondents would be favourable towards such a vehicle. This could indicate that respondents are not fully-aware of the possible interactions with the automated driving system and that it is rather very difficult for them to envision what it would be like to use an automated driving system by Google without ever experiencing it. These findings parallel the study results by Payre et al. (2014). For example, questionnaire item „automated driving technology only makes sense when the driver is not supposed to stay alert during the drive but can completely disengage from driving" is an indicator for the acceptance of Google's self-driving car as the latter envisions a car that removes the driver from the control loop altogether. In line with **H18**, this suggests that we would have expected a positive correlation between this questionnaire item and intention to adopt the driverless vehicle by Google. However, as mentioned beforehand, the relationship is negative, meaning that respondents that agreed with this item to a moderate or strong extent are ultimately not willing to adopt the car by Google. Also, a second plausible explanation for the inconsistency between this item and adoption intention are respondents' comprehension problems. In hindsight, it can't be ruled out that only those with a thorough understanding of automated driving do really understand what is meant with this specific question. Finally, the other questionnaire items of the variable „level of automation" are consistent with the theoretical assumptions. For example, items „I would rather keep manual control of my vehicle instead of delegating it to the automated driving system" and „I would like to manually take over the vehicle at any time" are expressions of respondents' support for semi-autonomous rather than fully-autonomous driving and hence for the automated driving systems by car builders and against the one by Google even without respondents being aware of this themselves. The relationships are in the expected direction (-) and statistically significant. In particular, the correlation between „I would like to manually take over the vehicle at any time" and adoption intention is very strong (0.714) which signals that taking over manual control at every time reflects a huge concern of drivers. Also, the frequency distributions clearly show that respondents find it very important to retain the option to drive in manual mode when desired. 46% respondents (k=463) would like to manually take over the vehicle at any time and 52% would like to choose whether they drive in manual or automated mode.

As elaborated beforehand, the desired level of driving automation is also an indicator for the respondents' preferences for either semi-autonomous (e.g. Mercedes-Benz, VW, BMW) or FAD (e.g. Google). These findings correspond with the item that asked respondents whether they would rather purchase a self-driving vehicle from Google than from Mercedes-Benz, VW or BMW where 294 (66%) voted against and 149 (34%) in favour of a self-driving vehicle from Google. Closely related to respondents' purchase decision is their general expectation of the development of the automobile market. Questionnaire item „the future of the automobile will be significantly shaped by Google and Tesla. The role of traditional car builders (e.g. Mercedes-Benz, VW, BMW) will steadily decline" generated less straightforward results in the sense that respondents seemed to be undecided about the evolution of the automotive industry. 51% (k=235) of respondents think that that the role of traditional industry incumbents will not decline whereas 35% (k=162) believe that Google and Tesla will significantly shape the automobile industry. 14% (k=64) are undecided. The same goes for the results to item „Google's fully-autonomous vehicle is a long-term threat to traditional car manufacturers whose business model may turn obsolete" where the frequency distribution shows that each category is more or less covered by the same number of responses. Additionally, a frequently reoccurring theme in the blog analysis that is concerned with Google lacking the competence to build driverless vehicles is rejected by survey responses because 61% think that Google has the competence to build driverless cars while 33% of respondents do not believe that Google has the wherewithal to build their own driverless cars and 10% (n=42) are undecided.

8.2. Research questions

8.2.1. Research question 1: To what extent are consumers ready to adopt Google's self-driving car?

As indicated in the previous section, 58% of respondents would be ready to adopt Google's self-driving car instead of a conventional vehicle. This response serves as first and direct answer to research question 1. In addition to the one-item-dependant variable that assesses consumers' adoption intentions, the survey also included additional items that indirectly examined BI. Questionnaire item „I would not buy a self-driving car from Google because as search engine company they do not have the competence to build their own cars" indirectly asks respondents whether they would be willing to adopt the car by Google contingent on their personal disposition towards Google's competence to build self-driving cars. The mean for this item was 2,933 (min=1, max=7, n=359), suggesting a high level of disagreement with this item which in turn could be cautiously interpreted as readiness of adoption. Likewise, item „I would not adopt Google's self-driving car because it is a further manifestation of increasing levels of automation that make people lazy and dependant in the end" also shows a high level of disagreement among respondents (n=356, min=1, max=7, mean= 3,008) and inversely a high level of readiness to adopt the Google car.

8.2.2. Research question 2: Which factors explain variation in consumers' intention to adopt Google's driverless vehicle?

Stepwise multiple regression analysis was performed to find the best model predicting consumers' intention to adopt Google's driverless car instead of a conventional vehicle. Eight items were found to be good predictors of adoption intention. These are: I would find Google's self-driving car useful (1); The whole point of owning a car is independence and driving enjoyment. I'm never letting Google's self-driving car do my driving (2); I would like to manually take over the vehicle at any time (3), Google seems to have excellent leadership (4); For me, cars are just tools to get from point A to B (5); I would not use Google's fully-autonomous vehicles because it is too risky, in particular when children cross the streets (6); Technology gives me more control over my daily life (7); and I must be careful when using technologies because criminals may use the technology to target me. (8). The strongest significant predictors are (1) and (2) which is in line with the findings of this study and previous research by undermining some of the core technological drivers and obstacles of this technology, namely that on the one hand it provides numerous benefits (PU) but at the same time it is not without its weaknesses as it touches a very sensitive activity that has been performed by humans for around 100 years: driving cars. This is also confirmed by this study with a large number of respondents indicating that „driving is enjoyment, freedom and time where I can be alone and just relax“ (n=421, min=1, max=7, mean=4,855).

8.3. Limitations and future research

An important limitation of this study relates to the external validity of study results.

First, both the content analysis as well as the survey collected data from a non-probabilistic sample which makes it quite plausible that the relationships found in this study are not applicable to other types of consumers. Also, the majority of survey respondents were male, meaning that the sample is over-biased.

Some respondents pointed out that some questionnaire items are biased and double-barrelled and that the survey is too long, demotivating and frustrating some respondents to take part in the survey at all or completely finish it. In addition, the sample of study participants is very diverse with some respondents coming from Europe (e.g. Germany, Netherlands), the US (e.g. California, Atlanta) and others are likely to be from Arabian (e.g. Iran, Turkey, Iraq) and Asian countries (e.g. China, India). Therefore, future studies should control for culture as culture might also serve as important independent variable with strong effects on consumer acceptance of driverless vehicles. For example, the US as car country where multiple car ownership is common is likely to view driverless cars through different lenses than countries that have not such an intimate relationships with cars. This is also emphasised by the findings of the responses to the open-ended survey questions. One respondent, for example, believes that „automated driving technology could be used to almost eliminate accidents, but that would require the replacement of drivers across the entire nation, which I find unlikely in a country like the United States of America. A more forward thinking nation like Sweden would more readily adapt such a policy, and would be an amazing case study for Google."

Finally, the dependent variable is a single item-variable and survey response options did not include „don't know" answers, threatening the validity of research findings.

Given these limitations, the replication of the study that accounts for the above-mentioned remedies would be relevant to validate and expand the scope of the study findings. For example, a follow-up future study could employ random sampling methods to improve the external validity of results. Customers with different profiles and with different cultural backgrounds could be selected into the sample and the items for the dependent variable could be modified from the items utilised by Venkatesh et al. (2003) who developed the UTAUT, measuring the dependent variable by three items (e.g. BI1: I intend to use Google's self-driving car in the next few months; BI2: I predict that I would use Google's self-driving car in the next few months; BI3: I plan to Google's self-driving car in the next few months.)

Moreover, the selection of the variables in the model was selective and purposive. Therefore, future research could also review the literature to explore other variables that might affect consumer acceptance of self-driving vehicles. Also, Google's self-driving car technology tends to be portrayed as media darling. Therefore, a pilot study could be conducted that similarly displays the self-driving car tech of one of the traditional car builders in different media channels. Consumers' perception of the self-driving car tech from traditional car builders could be measured before, during and after the pilot study to monitor changes in perceptions. The intensity of media coverage might moderate the relationship between brand perception and acceptance of driverless vehicles. Finally, given that this study defines a whole bunch of different predictor variables (e.g. age, income, type of car), it is beyond the scope of this study to study their separate effects on the dependant variable in detail. Future research should tackle this gap to closely examine the separate effects of this predictors on adoption intention and to study their role in a whole network consisting of different variables with inter-relationships.

Furthermore, it is also beyond the scope of this study to examine the implications of Google's self-driving car for the traditional automobile industry. Google's self-driving car has been commonly traded as paradigm-shift and game changer with far-reaching implications for traditional car manufacturers. The content analysis offered some interesting insights in the sense that respondents tended to associate Google with self-driving car technology and the corresponding software whereas traditional car builders stand for a history of experience and expertise for building real cars. This could be an indicator for the coexistence of Google's fully-autonomous vehicle and the conventional cars by automakers. The car does not need to be reinvented and Google's self-driving vehicle is not to be confused with or thought off as a regular car but can co-exist as efficient form of transportation -as Googlemobile- next to and not instead of conventional vehicles in the long-run.

9. Conclusions

The first goal of this study was to determine to what extent consumers would be ready to adopt Google's self-driving. This study has shown that 58% of respondents are willing to adopt Google's self-driving car instead of a conventional vehicle. The second objective was to examine the factors that determine variation in consumers' intention to adopt Google's self-driving car technology. Apart from a large number of statistically significant relationships between the research variables in the model, the linear stepwise multiple regression analysis has shown what are the most significant predictor variables of consumers' adoption intentions. As this is the most comprehensive and up-to-date study of the main drivers of consumers' acceptance of the Google car, future research could return to this framework and further explore the respective conditions that trigger adoption behaviour.

9.1. Theoretical contributions

This study makes several theoretical contributions. First, it confirms the theoretical relevance of PU and PEOU as vital components of the TAM.

The factors identified in this study have been contemplated in isolation outside of the constraints of their specific research model or perspective in order to address the particular needs of FAD and get a fresh and unbiased perspective on technology acceptance. In the end, this study identifies a number of factors that are synthesised in a new research model incorporating factors that are originally embedded in specific research models such as the technology readiness and acceptance model (TRAM), consumer acceptance and readiness for technology model (CART) or the unified theory of acceptance and use of technology (UTAUT). By validating the relevance of common determinants of technology acceptance, this study contributes to the technology acceptance management literature. The TRAM, for example, explains technology acceptance not only in terms of the specific characteristics of a technology but also in terms of the general technology beliefs of an individual by combining the TAM and TRI. The CART integrates RA and explains technology acceptance from the perspective of consumers by incorporating the Pleasure-Arousal-Dominance (PAD) framework that takes into account the role of affective and cognitive attitude on adoption intention. In addition to perceived usefulness and ease of use, this study also used the technology readiness index and the relative advantage construct to predict acceptance of Google's self-driving car.

What is still missing from the UTAUT2 is customer-based corporate reputation and level of driving automation. The technology acceptance management literature can be advanced by making customer-based corporate reputation an essential component of the UTAUT as the reputation of a company is likely to shape adoption intentions in the future, especially in light of increasing numbers of (brand-)conscious consumers or so-called lifestyles of health and sustainability (LOHAS) customer segments (Carrigan & de Pelsmacker, 2009). This study develops a new variable, level of driving automation, which is specific to automated driving and could be added to the UTAUT2 as temporary visitor in case scholars intend to study acceptance of automated driving systems. The latter goes for a number of driving-related socio-demographic variables that were defined in this study such as type of car, number of km driven per year and length of holding a driver license which the UTAUT2 is still lacking. Moreover, education and income could be added as permanent elements to the UTAUT2 since the BI to adopt or reject a specific technology is almost likely to be partly explained by education and income.

Apart from a new research model that is developed in this study, from a theoretical perspective this study is unique in the sense that it proposes a new TRI construct -the TRI2- which integrates the original TRI and the TAP index. Given that the UTAUT2 is only system-specific and not individual-specific, neglecting the role of the personality on technology adoption decisions TRI2 could be integrated into the UTAUT2 to find a parsimonious and powerful model for technology acceptance.

9.2. Managerial implications

The implications of our findings for management are important. At the moment, consumers are not still ready to buy a self-driving car from Google according to our study findings. However, as the blog analysis revealed Google's self-driving car is very useful in certain circumstances and the chances are high that there are several market segments (e.g. the elderly, the disabled, clubs, restaurants and bars, business people) that find it particularly attractive for temporary or permanent use. While Google announced to launch autonomous vehicles by 2018, traditional car manufacturers such as Mercedes-Benz still hesitate to declare fully autonomous driving a development target. Mercedes-Benz engineer Herrtwich recently declared that fully autonomous driving has not yet been defined an aim in urban traffic which is still too chaotic and unstructured (Wüst, 2013; Bilger, 2013). Apart from Nissan, it seems as if most traditional car manufacturers are much more pessimistic about the technology, still considering it a long way from happening and clinging to their traditional viewpoint of continual driver control (Bilger, 2013). John Capp – General Motors' director of electrical, controls and active safety research – lately alluded to the self-driving car as a circus vehicle and Alan Hall – communications manager at Ford – maintained that fully autonomous driving is not even included in their vocabulary (Bilger, 2013). Their view of the future is that the driver remains in control of the vehicle, staying the captain of the ship (Bilger, 2013). In light of this study results the question arises as to whether it might be wise for traditional car builders to change course and rethink their strategic decisions in the long-run to address the needs of those customer segments to whom driving is more a functional and less an emotional affair.

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Appendices

Appendix A: Comparison of technology readiness index (TRI) and technology adoption propensity (TAP)

	Technology Readiness Index (TRI) (Parasuraman, 2000)	Technology Adoption Propensity (TAP) Index (Ratchford and Barnhart, 2012)	
Optimism	OPT1: Technology gives people more control over their daily lives.	OPT1: Technology gives me more control over my daily life.	**Optimism**
	OPT2: Products and services that use the newest technologies are much more convenient to use.	OPT2: Technology helps me make necessary changes in my life.	
	OPT3: You like the idea of doing business via computers because you are not limited to regular business hours.	OPT3: Technology allows me to more easily do the things I want to do at times when I want to do them.	

	Technology Readiness Index (TRI) (Parasuraman, 2000)	Technology Adoption Propensity (TAP) Index (Ratchford and Barnhart, 2012)	
	OPT4: You prefer to use the most advanced technology available.	OPT4: New technologies make my life easier.	
	OPT5: You like computer programs that allow you to tailor things to fit your own needs.		
	OPT6: Technology makes you more efficient in your occupation.		
	OPT7: You find new technologies to be mentally stimulating.		
	OPT8: Technology gives you more freedom of mobility.		
	OPT9: Learning about technology can be as rewarding as the technology itself.		
	OPT10: You feel confident that machines will follow through with what you instructed them to do.		
Innovativeness	INN1: Other people come to your for advice on new technologies.	PROF1: Other people come to me for advice on new technologies.	**Proficiency**
	INN2: It seems as if your friends are learning more about new technologies than you are.		
	INN3: In general, you are among the first in your circle of friends to acquire new technology when it appears.		
	INN4: You can usually figure out new high-tech products and services without the help from others.	PROF2: I can figure out new high-tech products and services without help from others.	
	INN5: You keep up with the latest technological developments in your areas of interest.		
	INN6: You enjoy the challenge of figuring out high-tech gadgets.	PROF3: I enjoy figuring out how to use new technologies.	
	INN7: You find you have fewer problems than other people in making technology work for you.	PROF4: I seem to have fewer problems than other people in making technology work.	
Discomfort	DIS1: Technical support lines are not helpful because they don’t explain things in terms you understand.	VUL1: I must be careful when using technologies because criminals may use the technology to target me.	**Vulnerability**
	DIS2: Sometimes, you think that technology systems are not designed for use by ordinary people.		
	DIS3: There is no such thing as a manual for a high-tech product or service that’s written in plain language.		

	Technology Readiness Index (TRI) (Parasuraman, 2000)	Technology Adoption Propensity (TAP) Index (Ratchford and Barnhart, 2012)
	DIS4: When you get technical support from a provider of a high-tech product or service, you sometimes feel as if you are being taken advantage of by someone who knows more than you do.	
	DIS5:If you buy a high-tech product or service, you prefer to have the basic model over one with a lot of extra features.	
	DIS6: It is embarrassing when you have trouble with a high-tech gadget while people are watching.	
	DIS7: There should be caution in replacing important people-tasks with technology because new technology can breakdown or get disconnected.	
	DIS8: Many new technologies have health or safety risks that are not discovered until after people have used them.	
	DIS9: New technology makes it too easy for governments and companies to spy on people.	VUL3: New technology makes it too easy for companies and other people to invade my privacy.
	DIS10: Technology always seems to fail at the worst possible time.	VUL4: I think high-tech companies convince us that we need things that we don't really need.
Insecurity	INS1: You do not consider it safe giving out a credit card number over a computer.	
	INS2: You do not consider it safe to do any kind of financial business online.	
	INS3: You worry that information you send over the Internet will be seen by other people.	
	INS4: You do not feel confident doing business with a place that can only be reached online.	
	INS5: business transaction you do electronically should be confirmed later with something in writing.	
	INS6: Whenever something gets automated, you need to check carefully that the machine or computer is not making mistakes.	
	INS7: The human touch is very important when doing business with a company.	
	INS8: When you call a business, you prefer to talk to a person rather than a machine.	

	Technology Readiness Index (TRI) (Parasuraman, 2000)	Technology Adoption Propensity (TAP) Index (Ratchford and Barnhart, 2012)	
	INS9: If you provide information to a machine or over the Internet, you can never be sure it really gets to the right place.		
		DEP1: Technology controls my life more than I control technology.	**Dependance**
		DEP2: I feel like I am overly dependent on technology.	
		DEP3: The more I use a new technology, the more I become a slave to it.	

Appendix B: Coding scheme

Perceived usefulness (PU)	PU1: Using Google's self-driving car would increase my productivity. PU2: Using Google's self-driving car would increase my driving performance. PU3:Using Google's self-driving car would enhance my effectiveness while driving. PU4: Overall, I would find Google's self-driving car useful.
Perceived ease of use (PEOU)	PPEOU1: Learning to operate Google's self-driving car would be easy for me. PPEOU2: I would find it easy to get Google's self-driving car to do what I want to do. PPEOU3: Google's self-driving car is rigid and inflexible to interact with. PPEOU4: Overall, I would find Google's self-driving car easy to use.
Relative advantage (RA)	In comparison with conventional vehicles, Google's self-driving has several advantages: RA1: Less insurance and maintenance costs RA2: More driving pleasure RA3: Better fuel efficiency RA4: Less traffic congestion RA5: More safety RA6: More driving comfort RA7: Good acceleration RA8: Adequate maximum speed RA9: Agreeable driving noise RA10: Positive reactions of others RA11: Adequate purchase price RA12: Lower operating costs RA13: Mobility to areas that lack adequate public transportation RA14: More time to be spend on other tasks RA15: Ability to drive when intoxicated RA16: Less dependance on public transport RA17: Open up parking space RA18: Mobility to elderly and disabled people
Sensation seeking (SS)	SS1: I would like to drive without a preplanned route and without a schedule. SS2: I often feel like being a racing-driver. SS3: like a 'wild' drive. SS4: I like to drive on roads with many sharp turns. SS5: would like to learn to drive cars that can exceed the speed of 300 km/h. SS6: I do not have patience for people who drive cars. SS7: think I would enjoy the experience of driving very fast on a steep road.
External locus of control (ELOC)	ELOC1: Driving without accidents is mainly a matter of luck. ELOC2: Accidents usually happen because of unexpected events that occur during driving. ELOC3: It is difficult to prevent accidents when the driving conditions are difficult, such as darkness, rain, a narrow road with many turns. ELOC4: Most accidents happen because of bad roads, lack of adequate signs, etc. ELOC5: There will always be accidents, no matter how much drivers try to prevent them.
Internal locus of control (ILOC)	ILOC1: Accidents happen because drivers have not learned how to drive carefully. ILOC2: Accidents happen when drivers do not put enough effort into discovering potential dangers during driving. ILOC3: Most accidents happen as a result of the driver's lack of knowledge or nervousness. ILOC4: A careful driver can prevent any accident. ILOC5: When a driver is involved in an accident, it is because he or she did not drive properly.

Technology readiness	**Optimism** OPT1: Technology gives me more control over my daily life. OPT2: Technology helps me make necessary changes in my life. OPT3: Technology allows me more easily do the things I want to do at times when I want to do them. OPT4: New technologies make my life easier. OPT5: Technologies allow me to be more efficient and productive in my daily life. **Innovativeness** INNO1: Other people come to me for advice on new technologies. INNO2: I can usually figure out new high-tech products and services without help from others. INNO3: I enjoy figuring out how to use new technologies. INNO4: I seem to have fewer problems than other people in making technology work. **Dependence** DEP1: Technology controls my life more than I control technology. DEP2: I feel like I am overly dependent on technology. DEP3: The more I use a new technology, the more I become a slave to it. **Insecurity** INS1: There should be caution in replacing important people-tasks with technology because new technology can breakdown or gets disconnected. INS2: Many new technologies have health or safety risks that are not discovered until after people have used them. INS3: Technology always seems to fail at the worst possible time. INS4: Whenever something gets automated, you need to check carefully that the machine or computer is not making mistakes. **Vulnerability** VUL1: I must be careful when using technologies because criminals may use the technology to target me. VUL2: New technology makes it too easy for companies and other people to invade my privacy. VUL3: I think high-tech companies convince us that we need things that we don't really need.
Customer-based corporate reputation	**Customer Orientation** CO1: Google has employees who treat customers courtPEOUsly. CO2: Google has employees who are concerned about customer needs. CO3: Google is concerned about its customers. **Good Employer** GE1: Google looks like a good company to work for. GE2: Google seems to treat its people well. GE3: Google seems to have excellent leadership. **Reliable and Financially Strong Company** RFSC1: Google tends to outperform competitors. RFSC2: Google seems to recognize and take advantage of market opportunities. RFSC3: It looks like Google has strong prospects for future growth. **Product and Service Quality** PSQ1: Google is a strong, reliable company. PSQ2: Google develops innovative services. PSQ3: Google offers high-quality products and services. **Social and Environmental Responsibility** SER1: Google seems to make an effort to create new jobs. SER2: Google seems to be environmentally responsible. SER3: Google would reduce its profits to ensure a clean environment.
Behavioral intention (BI)	BI: I would be ready to use Google's self-driving car instead of a regular car.

Appendix C: Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ACCIDENTFREE	421	1,0	9,0	5,040	2,4632
ADVANTAG_NONE	421	1,00	2,00	1,9454	,22753
ADVANTAGE_DRIVINGCOMFORT	421	1	2	1,71	,454

ADVANTAGE_DRIVINGNOISE	421	1,00	2,00	1,9192	,27279
ADVANTAGE_DRIVINGPLEASURE	410	1,00	13,00	1,8951	,64941
ADVANTAGE_FUELEFFICIENCY	421	1	2	1,61	,488
ADVANTAGE_INTOXICATION	421	1,00	2,00	1,6081	,48876
ADVANTAGE_LESSINSURANCE	421	1,00	2,00	1,7530	,43180
ADVANTAGE_LESSTRAFFICCONGESTION	409	1,0	7,0	1,709	1,2528
ADVANTAGE_MOBILITYAREASLACKPT	421	1,00	2,00	1,7268	,44611
ADVANTAGE_MOBILITYTOELDERLY	421	1,00	2,00	1,4489	,49798
ADVANTAGE_MOREDRIVERTIME	421	1,00	2,00	1,4703	,49971
ADVANTAGE_OPERATINGCOSTS	421	1,00	2,00	1,8195	,38508
ADVANTAGE_OTHER	421	1,00	2,00	1,9501	,21796
ADVANTAGE_PARKINGSPACE	421	1,00	2,00	1,8195	,38508
ADVANTAGE_POSITIVEREACTIONSOFOTHERS	421	1,00	2,00	1,9406	,23662
ADVANTAGE_PURCHASEPRICE	421	1,00	2,00	1,9074	,29027
ADVANTAGE_SAFETY	421	1,0	2,0	1,444	,4975
ADVANTAGE_SPEED	421	1,00	2,00	1,8409	,36625
AGE	421	1	4	1,88	,842
ATTITUDEDRIVING_ADVANCEDTECHNOLOGY	421	1,00	2,00	1,6176	,48656
ATTITUDEDRIVING_BRAND	421	1,00	2,00	1,8242	,38108
ATTITUDEDRIVING_CONNECTEDVEHICLETECHNOLOGY	421	1,00	2,00	1,8527	,35479
ATTITUDEDRIVING_CONVENIENCE	421	1,00	2,00	1,8029	,39832
ATTITUDEDRIVING_DRIVINGEXPERIENCE	421	1,00	2,00	1,5368	,49924
ATTITUDEDRIVING_FUELEFFICIENCY	421	1,00	2,00	1,4204	,49421

ATTITUDEDRIVING_FUNCTIONALITY	421	1,00	2,00	1,7031	,45744
ATTITUDEDRIVING_OTHER	421	1,00	2,00	1,8907	,31234
ATTITUDEDRIVING_PURCHASEPRICE	421	1,00	2,00	1,4371	,49661
ATTITUDEDRIVING_RELIABILITYDURABILITY	421	1,00	2,00	1,3230	,46819
ATTITUDEDRIVING_SAFETY	421	1,00	2,00	1,5202	,50019
ATTITUDEDRIVING_STYLING	421	1,00	2,00	1,6247	,48478
ATTITUDEDRIVING_USERFRIENDLINESS	421	1,00	2,00	1,8266	,37904
AVANTAGEDEPENDANCEONPUBLICTRANSPORT	421	1,00	2,00	1,7316	,44366
CarSharingService	421	1,0	9,0	5,553	2,1767
CBR_ConcernedAboutCustomers	358	1,0	7,0	4,601	1,5894
CBR_EnvironmentallyResponsible	357	1,0	7,0	4,793	1,5817
CBR_GoogleCreatsNewJobs	357	1,0	7,0	4,381	1,5289
CBR_GoogleExcellentLeadership	368	1,0	7,0	5,049	1,4249
CBR_GoogleHasEmployeesTreatCustomersCourteosly	352	1,0	99,0	5,065	5,1996
CBR_HighQualityProductsAndServices	371	1,0	7,0	5,334	1,4580
CBR_InnovativeServices	364	1,0	7,0	4,931	1,2998
CBR_MarketOpportunities	373	1,0	7,0	5,820	1,1488
CBR_OutperformCompetitors	372	1,0	7,0	5,191	1,5657
CBR_TreatPeopleWell	357	1,0	7,0	5,104	1,4737
COMPETENCEWouldNotBuyFromGoogle	359	1,0	7,0	2,933	1,8985
Compulsory	356	1,0	7,0	3,169	2,0293
Control_DrivingMeansToBeInControl	365	1,0	7,0	3,216	2,0886
DEP_OverlyDependant	379	1,0	7,0	3,607	1,6430

DEP_TechnologyControlsMeMore	380	1,0	7,0	3,089	1,5690
DESIGNATEDLANES	358	1,0	7,0	4,201	2,0631
DV_AdoptionDecision	357	1,0	7,0	4,535	2,2252
EDUCATION	421	1	11	5,07	1,862
ELOC_DrivingWithoutAccidentsMatterOfLuck	380	1,0	7,0	2,979	1,7097
ELOC_ThereWillAlwaysBeAccidents	384	1,0	7,0	5,146	1,7551
ENVIORNMENT_HEAVYTRAFFIC	421	1,00	2,00	1,4157	,49342
ENVIORNMENT_IMPAIRED	421	1,00	2,00	1,3800	,48598
ENVIORNMENT_PICKUPKIDS	421	1,00	2,00	1,7767	,41694
ENVIRONMENT_BORING	421	1,00	2,00	1,4181	,49383
ENVIRONMENT_COMMUTE	421	1,00	2,00	1,5558	,49747
ENVIRONMENT_CONSTRUCTION	421	1,00	2,00	1,7268	,44611
ENVIRONMENT_DIFFICULTPARKINGSITUATIONS	421	1,00	2,00	1,6603	,47416
ENVIRONMENT_ERRANDS	421	1,00	2,00	1,7055	,45638
ENVIRONMENT_EVERYDAYJOURNEYS	421	1,00	2,00	1,6508	,47727
ENVIRONMENT_HIGHWAYS	421	1,00	2,00	1,6318	,48288
ENVIRONMENT_LIGHTTRAFFIC	421	1,00	2,00	1,7387	,43986
ENVIRONMENT_NONE	421	1,00	2,00	1,8575	,35000
ENVIRONMENT_OTHER	421	1,00	2,00	1,9287	,25756
ENVIRONMENT_STRESSFUL	421	1,00	2,00	1,4751	,49997
ENVIRONMENT_TIRED	421	1,00	2,00	1,3207	,46729
ENVIRONMMENT_ONLONGJOURNEYS	421	1,00	2,00	1,4751	,49997
PEOU_CarEasyToUse	386	1,0	7,0	5,728	1,3830
PEOU_LearngToOperateWouldBeEasyForMe	384	1,0	7,0	5,951	1,2765

FAMILIARITY_GOOGLECAR	399	1	7	4,60	1,985
FollowDevelopmentsGoogleCar	409	1	2	1,42	,494
FREQUENCYINFORMATIONSOURCES	421	1,0	5,0	2,036	,8287
FutureTeslaGoogle	376	1,0	7,0	3,697	1,9862
Gender	371	1	2	1,15	,358
GOODACCELERATION	421	1,00	2,00	1,9382	,24100
Google_BenignIntentions	370	1,0	7,0	2,873	1,9444
Google_ScaresMe	368	1,0	7,0	2,582	1,7928
Google_Threat	363	1,0	7,0	4,262	1,9793
Google_TrustGoogleWithDataLife	357	1,0	7,0	3,275	1,9235
GoogleCarAutomationandLaziness	356	1,0	7,0	3,008	2,0189
GooglesselfdrivingcarisagoodideabutIwouldonlyadopt	373	1,0	7,0	3,861	2,0509
IimagineafuturewhereGooglemanufacturersitsownselfdrivi	421	1,0	9,0	5,140	2,3374
ILOC_AccidentsHappenBecauseDriversHaveNotLearnedDriveCarefully	380	1,0	7,0	4,466	1,7210
ILOC_CarefulDriver	390	1,0	7,0	2,897	1,8697
IloveitandIwishwecouldhavetheserightnowIstherean y	364	1,0	7,0	4,780	2,1010
INCLUSIONINPUBLICTRANSPORT	358	1,0	7,0	5,296	1,6858
INCOME	354	1	4	2,34	1,124
INNO_FewerProblemsInMaking	385	1,0	7,0	5,800	1,3401
INNO_ICanFigurPEOUt	393	1,0	7,0	6,066	1,3076
Thereshouldbecautioninreplacingimportantpeopletaskswith	391	1,0	7,0	4,404	1,8592
Manynewtechnologieshavehealthorsafetyrisksthatarenotd	380	1,0	7,0	4,471	1,6587

Insteadofadvancingthetechnologyoffullyautonomousvehicles	358	1,0	7,0	3,950	1,9309
ItsallaboutbusinessWithitsselfdrivingcarprojectGoog	367	1,0	7,0	4,899	1,6573
KMPERYEAR	362	1	5	2,40	1,025
LegalFramework	358	1,0	7,0	4,818	1,6562
LENGTH	421	1	9	3,51	2,538
LEVAUTO_AutomatedDrivingOnlySenseWhenDriverIsAlert	378	1,0	7,0	4,101	1,9354
LEVAUTO_AutomatedDrivingShouldHelpTheDriver	377	1,0	7,0	4,093	2,1199
LEVAUTO_IWouldLikeToChoseManualOr	379	,0	7,0	5,536	1,8689
LEVAUTO_KeepManualControlAnytime	376	1,0	7,0	3,646	2,1945
LEVAUTO_TakeOverVehicleAnyTime	379	1,0	7,0	5,211	1,9593
LICENSETECHNOLOGYTOAUTOMAKERS	352	1,0	7,0	5,307	1,7137
MEMBERSHIPCARSHARING	421	1,00	2,00	1,8979	,30319
MOBILITYBEHAVIOR_BICYCLE	421	1,00	2,00	1,7743	,41851
MOBILITYBEHAVIOR_BUS	421	1,00	2,00	1,9026	,29684
MOBILITYBEHAVIOR_CARPASSENGERCARPOOL	421	1,00	2,00	1,8052	,39650
MOBILITYBEHAVIOR_DRIVEALONEBYCAR	421	1,00	2,00	1,4299	,49565
MOBILITYBEHAVIOR_MOTORCYCLE	421	1,00	2,00	1,9050	,29358
MOBILITYBEHAVIOR_OTHER	421	1,00	2,00	1,9762	,15246
MOBILITYBEHAVIOR_TAXI	421	1,00	2,00	1,9620	,19144
MOBILITYBEHAVIOR_TRAIN	421	1,00	2,00	1,8432	,36402
MOBILITYBEHAVIOR_TRAM	421	1,00	2,00	1,9644	,18559

MOBILITYBEHAVIOR_UNDERGROUND	421	1,00	2,00	1,9359	,24528
MOBILITYBEHAVIOR_WALKING	421	1	2	1,84	,368
MotionSickness	359	1,0	7,0	2,407	1,6550
OPT_NecessaryChangesInLife	387	1,0	7,0	5,013	1,5663
OPT_TechnologyGivesMeMoreControl	387	1,0	7,0	5,199	1,8208
Privacy_Google	367	1,0	7,0	4,621	2,0193
PU_DrivingPerformance	386	1,0	7,0	3,772	2,0739
PU_USEFULNESS	387	1,0	7,0	5,351	1,9141
PURCHASECARFROMGOOGLE	346	1	2	1,65	,478
RELATIONSHIPBETWEENUSER	358	1,0	7,0	4,737	1,5038
RISKY_Children	387	1,0	7,0	2,703	1,8159
SafeEfficientTechnologiesMoreImportantThanSaveJobs	362	1,0	7,0	4,898	1,6885
SS_Cars300kmh	388	1,0	7,0	4,768	2,1357
SS_WithoutPreplannedRouteAndSchedule	378	1,0	7,0	5,093	1,9269
TaxiService	359	1,0	7,0	5,234	1,6086
TYPEOFCAR	421	1,0	6,0	2,798	1,5915
UBER	342	1,0	7,0	5,064	1,6051
VIEWDRIVING_CARSTOOLS	421	1,0	7,0	3,703	2,2677
VIEWDRIVING_DRIVEFORFUNWEEKENDS	404	1,0	7,0	3,604	1,9855
VIEWDRIVING_DRIVINGTIMETOBEALONERELAX	421	1,0	7,0	4,855	2,0852
VIEWONDRIVING_HATEDRIVING	421	1,0	7,0	2,660	1,8838
VUL_CyberSecurityIssues	377	1,0	7,0	3,162	1,8588
Imustbecarefulwhenusingtechnologiesbecausecriminalsmay	383	1,0	7,0	3,569	1,8045
WholePointOfOwningCarIndependence	370	1,0	7,0	3,105	2,1520
Valid N (listwise)	208				

Appendix D: Results of factor analysis

	Component							
	1	2	3	4	5	6	7	8
CBR_TreatPeopleWell	,863	-,168	,016	-,440	-,007	,236	-,205	-,162
CBR_ConcernedAboutCustomers	,838	-,227	,039	-,312	,033	,157	-,179	-,123
CBR_GoogleExcellentLeadership	,830	-,090	-,049	-,282	-,026	,213	-,240	-,160
CBR_HighQualityProductsAndServices	,810	-,164	,015	-,412	,009	,225	-,269	-,056
CBR_EnvironmentallyResponsible	,799	-,225	,042	-,382	,097	,279	-,150	-,175
CBR_GoogleHasEmployeesTreatCustomersCourteosly	,692	-,088	-,071	-,274	-,081	,198	-,126	-,079
CBR_OutperformCompetitors	,679	-,236	,211	-,443	-,119	,158	-,055	,023
CBR_GoogleCreatsNewJobs	,618	-,094	,011	-,105	,232	,324	-,291	,065
LEVAUTO_TakeOverVehicleAnyTime	-,132	,843	,074	,029	,110	-,337	,094	,108
LEVAUTO_IWouldLikeToChoseManualOr	-,153	,787	,111	,014	,174	-,272	-,070	,053
LEVAUTO_KeepManualControlAnytime	-,263	,746	-,062	,242	,158	-,503	,294	,237
LEVAUTO_AutomatedDrivingShouldHelpTheDriver	-,225	,668	,066	,259	,156	-,453	,243	,187
SS_WithoutPreplannedRouteAndSchedule	-,091	,654	,018	-,010	-,035	-,197	,025	,315
PU_DrivingPerformance	,388	-,601	,342	-,275	-,212	,299	-,091	-,135
SS_Cars300kmh	,158	,474	-,112	-,415	,302	,038	,177	,051
DEP_TechnologyControlsMeMore	-,263	,103	,756	,222	,083	-,243	-,010	,087
DEP_OverlyDependant	-,009	,240	,740	-,004	-,053	-,265	,074	,132
INNO_FewerProblemsInMaking	,419	,017	-,080	-,783	-,077	,116	,063	-,039
INNO_ICanFigurPEOUt	,248	-,013	-,049	-,756	-,028	,071	-,080	-,111
PEOU_LearngToOperateWouldBeEasyForMe	,367	-,132	,060	-,727	,068	,115	-,454	,002
PEOU_CarEasyToUse	,410	-,183	,032	-,700	-,049	,173	-,513	-,053

OPT_TechnologyGivesMeMoreControl	,551	-,444	,162	-,606	-,061	,408	-,181	-,132
OPT_NecessaryChangesInLife	,492	-,389	,284	-,553	,064	,291	-,276	-,088
PU_USEFULNESS	,498	-,491	,253	-,506	-,102	,366	-,458	-,080
ILOC_CarefulDriver	-,034	,125	,039	,113	,764	-,192	,194	-,093
ILOC_AccidentsHappenBecauseDriversHaveNotLearnedDriveCarefully	,086	,172	-,048	-,142	,661	-,001	-,069	-,013
Thereshouldbecautioninreplacingimportantpeopletaskswith	-,226	,362	-,003	,137	-,021	-,817	,289	,166
Manynewtechnologieshavehealthorsafetyrisksthatarenotd	-,194	,258	,135	,033	,004	-,762	-,035	,204
Imustbecarefulwhenusingtechnologiesbecausecriminalsmay	-,133	,172	,316	,066	,220	-,699	-,044	,140
VUL_CyberSecurityIssues	-,469	,384	,131	,379	,085	-,671	,188	,138
ELOC_ThereWillAlwaysBeAccidents	,127	,189	-,039	-,361	-,381	-,389	,265	,268
CBR_MarketOpportunities	,490	-,004	,027	-,374	-,195	,037	-,689	-,051
CBR_InnovativeServices	,615	-,091	,001	-,298	-,023	,253	-,617	-,101
ELOC_DrivingWithoutAccidentsMatterOfLuck	-,060	,052	,072	,095	-,125	-,094	,086	,835
LEVAUTO_AutomatedDrivingOnlySenseWhenDriverIsAlert	-,216	,239	,021	,052	,019	-,259	,016	,696

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.

Appendix E: Gender of survey respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	315	74,8	84,9	84,9
	Female	56	13,3	15,1	100,0
	Total	371	88,1	100,0	

Missing	Missing values	50	11,9		
Total		421	100,0		

Appendix F: Age of survey respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<25 years	149	35,4	35,4	35,4
	25-45 years	204	48,5	48,5	83,8
	46-65	39	9,3	9,3	93,1
	>66 years	29	6,9	6,9	100,0
	Total	421	100,0	100,0	

Appendix G: Annual gross household income of survey respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<20.000	104	24,7	29,4	29,4
	20.000-50.000	103	24,5	29,1	58,5
	50.000-80.000	68	16,2	19,2	77,7
	>80.000	79	18,8	22,3	100,0
	Total	354	84,1	100,0	
Missing	Missing values	67	15,9		
Total		421	100,0		

Appendix H: Type of car of survey respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Compact car	107	25,4	25,4	25,4
	Medium Class	117	27,8	27,8	53,2
	Luxury Class	64	15,2	15,2	68,4
	Sports Car	52	12,4	12,4	80,8
	SUV	49	11,6	11,6	92,4
	None	32	7,6	7,6	100,0
	Total	421	100,0	100,0	

Appendix I: Total number of km driven per year by survey respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<5000	84	20,0	23,2	23,2
	5.000-10.000	103	24,5	28,5	51,7
	10.000-25.000	127	30,2	35,1	86,7
	25.000-50.000	41	9,7	11,3	98,1
	>50.000	7	1,7	1,9	100,0
	Total	362	86,0	100,0	
Missing	Missing values	59	14,0		
Total		421	100,0		

Appendix J: Mobility behaviour of survey respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	95	22,6	22,6	22,6
	No	326	77,4	77,4	100,0
	Total	421	100,0	100,0	

MOBILITYBEHAVIOR_TAXI

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	16	3,8	3,8	3,8
	No	405	96,2	96,2	100,0
	Total	421	100,0	100,0	

MOBILITYBEHAVIOR_CARPASSENGERCARPOOL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	82	19,5	19,5	19,5
	No	339	80,5	80,5	100,0
	Total	421	100,0	100,0	

MOBILITYBEHAVIOR_TRAIN

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	66	15,7	15,7	15,7
	No	355	84,3	84,3	100,0
	Total	421	100,0	100,0	

MOBILITYBEHAVIOR_DRIVEALONEBYCAR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	240	57,0	57,0	57,0
	No	181	43,0	43,0	100,0
	Total	421	100,0	100,0	

MOBILITYBEHAVIOR_MOTORCYCLE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	40	9,5	9,5	9,5
	No	381	90,5	90,5	100,0
	Total	421	100,0	100,0	

MOBILITYBEHAVIOR_BUS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	9,7	9,7	9,7
	No	380	90,3	90,3	100,0
	Total	421	100,0	100,0	

MOBILITYBEHAVIOR_UNDERGROUND

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	27	6,4	6,4	6,4
	No	394	93,6	93,6	100,0
	Total	421	100,0	100,0	

MOBILITYBEHAVIOR_WALKING

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	68	16,2	16,2	16,2
	No	353	83,8	83,8	100,0
	Total	421	100,0	100,0	

MOBILITYBEHAVIOR_OTHER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	10	2,4	2,4	2,4
	No	411	97,6	97,6	100,0
	Total	421	100,0	100,0	

Appendix K: Cronbach's alpha of level of automation

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,791	,789	5

Appendix L: Pearson product-moment correlation coefficient of innovation characteristics variables and BI

		DV_AdoptionDecision	PU_DrivingPerformance	PU_USEFULNESS
DV_AdoptionDecision	Pearson Correlation	1	,550	,743
	Sig. (2-tailed)		,000	,000
	N	357	351	353
PU_DrivingPerformance	Pearson Correlation	,550	1	,522
	Sig. (2-tailed)	,000		,000
	N	351	386	380
PU_USEFULNESS	Pearson Correlation	,743	,522	1
	Sig. (2-tailed)	,000	,000	
	N	353	380	387

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		DV_AdoptionDecision	PEOU_CarEasyToUse	PEOU_LearngToOperateWouldBeEasyForMe
DV_AdoptionDecision	Pearson Correlation	1	,420	,302
	Sig. (2-tailed)		,000	,000
	N	357	353	352
PEOU_CarEasyToUse	Pearson Correlation	,420	1	,685
	Sig. (2-tailed)	,000		,000
	N	353	386	380
PEOU_LearngToOperateWouldBeEasyForMe	Pearson Correlation	,302	,685	1
	Sig. (2-tailed)	,000	,000	
	N	352	380	384

Appendix M: Pearson product-moment correlation coefficient of personality characteristics and BI

		DV_AdoptionDecision	INNO_FewerProblemsInMaking	INNO_ICanFigurPEOUt
DV_AdoptionDecision	Pearson Correlation	1	,278	,208
	Sig. (2-tailed)		,000	,000
	N	357	350	357
INNO_FewerProblemsInMaking	Pearson Correlation	,278	1	,586
	Sig. (2-tailed)	,000		,000
	N	350	385	385
INNO_ICanFigurPEOUt	Pearson Correlation	,208	,586	1
	Sig. (2-tailed)	,000	,000	
	N	357	385	393

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		DV_AdoptionDecision	OPT_NecessaryChangesInLife	OPT_TechnologyGivesMeMoreControl
DV_AdoptionDecision	Pearson Correlation	1	,487	,601
	Sig. (2-tailed)		,000	,000
	N	357	353	354
OPT_NecessaryChangesInLife	Pearson Correlation	,487	1	,660
	Sig. (2-tailed)	,000		,000
	N	353	387	384
OPT_TechnologyGivesMeMoreControl	Pearson Correlation	,601	,660	1
	Sig. (2-tailed)	,000	,000	
	N	354	384	387

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		DV_AdoptionDecision	DEP_OverlyDependant	DEP_TechnologyControlsMeMore
DV_AdoptionDecision	Pearson Correlation	1	-,074	-,157
	Sig. (2-tailed)		,167	,003
	N	357	354	353
DEP_OverlyDependant	Pearson Correlation	-,074	1	,501
	Sig. (2-tailed)	,167		,000
	N	354	379	377
DEP_TechnologyControlsMeMore	Pearson Correlation	-,157	,501	1
	Sig. (2-tailed)	,003	,000	
	N	353	377	380

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		DV_AdoptionDecision	Thereshouldbecautioninreplacingimportantpeopletaskswith	Manynewtechnologieshavehealthorsafetyrisksthatarenotd
DV_AdoptionDecision	Pearson Correlation	1	-,368	-,263
	Sig. (2-tailed)		,000	,000

	N	357	356	354
Thereshouldbecautioninreplacingimportantpeopletaskswith	Pearson Correlation	-,368	1	,522
	Sig. (2-tailed)	,000		,000
	N	356	391	380
Manynewtechnologieshavehealthorsafetyrisksthatarenotd	Pearson Correlation	-,263	,522	1
	Sig. (2-tailed)	,000	,000	
	N	354	380	380

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		DV_AdoptionDecision	ELOC_DrivingWithoutAccidentsMatterOfLuck	ELOC_ThereWillAlwaysBeAccidents
DV_AdoptionDecision	Pearson Correlation	1	-,101	-,080
	Sig. (2-tailed)		,057	,137
	N	357	354	351
ELOC_DrivingWithoutAccidentsMatterOfLuck	Pearson Correlation	-,101	1	,074
	Sig. (2-tailed)	,057		,155
	N	354	380	375
ELOC_ThereWillAlwaysBeAccidents	Pearson Correlation	-,080	,074	1
	Sig. (2-tailed)	,137	,155	
	N	351	375	384

Correlations

		DV_AdoptionDecision	ILOC_AccidentsHappenBecauseDriversHaveNotLearnedDriveCarefully	ILOC_CarefulDriver
DV_AdoptionDecision	Pearson Correlation	1	,006	-,193
	Sig. (2-tailed)		,910	,000
	N	357	353	355
ILOC_AccidentsHappenBecauseDriversHaveNotLearnedDriveCarefully	Pearson Correlation	,006	1	,296
	Sig. (2-tailed)	,910		,000
	N	353	380	380

ILOC_CarefulDriver	Pearson Correlation	-,193	,296	1
	Sig. (2-tailed)	,000	,000	
	N	355	380	390

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix N: Pearson product-moment correlation coefficient of customer-based corporate reputation and BI

		CBR_ConcernedAboutCustomers	DV_AdoptionDecision	CBR_EnvironmentallyResponsible	CBR_GoogleCreatsNewJobs	CBR_GoogleExcellentLeadership	CBR_GoogleHasEmployeesTreatCustomersCourteosly	CBR_HighQualityProductsAndServices	CBR_InnovativeServices	CBR_MarketOpportunities	CBR_OutperformCompetitors	CBR_TreatPeopleWell
CBR_ConcernedAboutCustomers	Pearson Correlation	1	,442	,645	,507	,637	,566	,619	,453	,354	,514	,662
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,000	,000	,000	,000
	N	358	347	350	353	357	341	354	354	357	354	351
DV_AdoptionDecision	Pearson Correlation	,442	1	,470	,334	,381	,259	,440	,343	,237	,391	,462
	Sig. (2-tailed)	,000		,000	,000	,000	,000	,000	,000	,000	,000	,000
	N	347	357	346	348	353	335	352	353	355	352	346
CBR_EnvironmentallyResponsible	Pearson Correlation	,645	,470	1	,554	,587	,531	,577	,409	,303	,430	,676
	Sig. (2-tailed)	,000	,000		,000	,000	,000	,000	,000	,000	,000	,000
	N	350	346	357	351	355	339	353	353	356	354	351
CBR_GoogleCreats	Pearson Correlation	,507	,334	,554	1	,477	,372	,386	,401	,283	,275	,465

NewJobs	Sig. (2-tailed)	,000	,000	,000		,000	,000	,000	,000	,000	,000	,000
	N	353	348	351	357	356	342	354	354	356	355	352
CBR_GoogleExcellentLeadership	Pearson Correlation	,637	,381	,587	,477	1	,479	,651	,516	,377	,494	,689
	Sig. (2-tailed)	,000	,000	,000	,000		,000	,000	,000	,000	,000	,000
	N	357	353	355	356	368	346	364	360	366	364	356
CBR_GoogleHasEmployeesTreatCustomersCourteosly	Pearson Correlation	,566	,259	,531	,372	,479	1	,483	,370	,367	,428	,595
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000	,000	,000	,000	,000
	N	341	335	339	342	346	352	348	340	350	350	341
CBR_HighQualityProductsAndServices	Pearson Correlation	,619	,440	,577	,386	,651	,483	1	,510	,386	,556	,640
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000	,000	,000
	N	354	352	353	354	364	348	371	359	369	368	354
CBR_InnovativeServices	Pearson Correlation	,453	,343	,409	,401	,516	,370	,510	1	,464	,348	,506
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000		,000	,000	,000
	N	354	353	353	354	360	340	359	364	362	359	354
CBR_MarketOpportunities	Pearson Correlation	,354	,237	,303	,283	,377	,367	,386	,464	1	,311	,370
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000	,000		,000	,000
	N	357	355	356	356	366	350	369	362	373	369	356
CBR_OutperformCompetitors	Pearson Correlation	,514	,391	,430	,275	,494	,428	,556	,348	,311	1	,528
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000	,000	,000		,000

	N	354	352	354	355	364	350	368	359	369	372	354
CBR_TreatPeopleWell	Pearson Correlation	,662	,462	,676	,465	,689	,595	,640	,506	,370	,528	1
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000	,000	,000	,000	
	N	351	346	351	352	356	341	354	354	356	354	357

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix O: Pearson product-moment correlation coefficient of level of automation and BI

		DV_AdoptionDecision	LEVAUTO_AutomatedDrivingOnlySenseWhenDriverIsAlert	LEVAUTO_AutomatedDrivingShouldHelpTheDriver	LEVAUTO_IWouldLikeToChoseManualOr	LEVAUTO_KeepManualControlAnytime	LEVAUTO_TakeOverVehicleAnyTime
DV_AdoptionDecision	Pearson Correlation	1	-,209	-,571	-,443	-,714	-,509
	Sig. (2-tailed)		,000	,000	,000	,000	,000
	N	357	354	353	353	352	354
LEVAUTO_AutomatedDrivingOnlySenseWhenDriverIsAlert	Pearson Correlation	-,209	1	,201	,186	,250	,196
	Sig. (2-tailed)	,000		,000	,000	,000	,000
	N	354	378	376	376	374	377
LEVAUTO_AutomatedDrivingShouldHelpTheDriver	Pearson Correlation	-,571	,201	1	,498	,635	,580
	Sig. (2-tailed)	,000	,000		,000	,000	,000
	N	353	376	377	375	373	376
LEVAUTO_IWouldLikeToChoseManualOr	Pearson Correlation	-,443	,186	,498	1	,472	,710
	Sig. (2-tailed)	,000	,000	,000		,000	,000
	N	353	376	375	379	374	377
LEVAUTO_KeepManualControlAnytime	Pearson Correlation	-,714	,250	,635	,472	1	,560
	Sig. (2-tailed)	,000	,000	,000	,000		,000
	N	352	374	373	374	376	375

LEVAUTO_TakeOverVehicleAnyTime	Pearson Correlation	-,509	,196	,580	,710	,560	1
	Sig. (2-tailed)	,000	,000	,000	,000	,000	
	N	354	377	376	377	375	379

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix P: Pearson product-moment correlation coefficient of age and BI

		DV_AdoptionDecision	AGE
DV_AdoptionDecision	Pearson Correlation	1	-,301
	Sig. (2-tailed)		,000
	N	357	357
AGE	Pearson Correlation	-,301	1
	Sig. (2-tailed)	,000	
	N	357	421

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		DV_AdoptionDecision	age25	age45	age65	age66
DV_AdoptionDecision	Pearson Correlation	1	,369	-,225	-,134	-,084
	Sig. (2-tailed)		,000	,000	,011	,112
	N	357	357	357	357	357
age25	Pearson Correlation	,369	1	-,718	-,236	-,201
	Sig. (2-tailed)	,000		,000	,000	,000
	N	357	421	421	421	421
age45	Pearson Correlation	-,225	-,718	1	-,310	-,264
	Sig. (2-tailed)	,000	,000		,000	,000
	N	357	421	421	421	421
age65	Pearson Correlation	-,134	-,236	-,310	1	-,087
	Sig. (2-tailed)	,011	,000	,000		,075
	N	357	421	421	421	421
age66	Pearson Correlation	-,084	-,201	-,264	-,087	1
	Sig. (2-tailed)	,112	,000	,000	,075	
	N	357	421	421	421	421

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix Q: Pearson product-moment correlation coefficient of type of car and BI

		DV_AdoptionDecision	typeofcarluxury	typeofcarmediumn	typeofcarnone	typeofcarsports	typeofcarsuv	tyypecargroupscompact
DV_AdoptionDecision	Pearson Correlation	1	-,070	,229	-,110	-,209	-,228	,249
	Sig. (2-tailed)		,184	,000	,038	,000	,000	,000
	N	357	357	357	357	357	357	357
typeofcarluxury	Pearson Correlation	-,070	1	-,263	-,121	-,159	-,154	-,247
	Sig. (2-tailed)	,184		,000	,013	,001	,002	,000
	N	357	421	421	421	421	421	421
typeofcarmediumn	Pearson Correlation	,229	-,263	1	-,178	-,233	-,225	-,362
	Sig. (2-tailed)	,000	,000		,000	,000	,000	,000
	N	357	421	421	421	421	421	421
typeofcarnone	Pearson Correlation	-,110	-,121	-,178	1	-,108	-,104	-,167
	Sig. (2-tailed)	,038	,013	,000		,027	,033	,001
	N	357	421	421	421	421	421	421
typeofcarsports	Pearson Correlation	-,209	-,159	-,233	-,108	1	-,136	-,219
	Sig. (2-tailed)	,000	,001	,000	,027		,005	,000
	N	357	421	421	421	421	421	421
typeofcarsuv	Pearson Correlation	-,228	-,154	-,225	-,104	-,136	1	-,212
	Sig. (2-tailed)	,000	,002	,000	,033	,005		,000
	N	357	421	421	421	421	421	421
	Pearson Correlation	,249	-,247	-,362	-,167	-,219	-,212	1

tyypecargroup scompact	Sig. (2-tailed)	,000	,000	,000	,001	,000	,000	
	N	357	421	421	421	421	421	421

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix R: Pearson product-moment correlation coefficient of gender and BI

		DV_Adoption Decision	genderfemale	gendermale
DV_AdoptionDecision	Pearson Correlation	1	-,168	,181
	Sig. (2-tailed)		,001	,001
	N	357	357	357
genderfemale	Pearson Correlation	-,168	1	-,675
	Sig. (2-tailed)	,001		,000
	N	357	421	421
gendermale	Pearson Correlation	,181	-,675	1
	Sig. (2-tailed)	,001	,000	
	N	357	421	421

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix S: Results of stepwise multiple linear regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,780	,608	,607	1,4225	
2	,842	,710	,708	1,2266	
3	,858	,736	,733	1,1727	
4	,868	,754	,750	1,1337	
5	,876	,768	,764	1,1024	
6	,883	,779	,774	1,0783	
7	,886	,784	,779	1,0673	
8	,888	,788	,781	1,0605	1,745

a. Predictors: (Constant), PU_USEFULNESS

b. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence

c. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence, LEVAUTO_TakeOverVehicleAnyTime

d. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence, LEVAUTO_TakeOverVehicleAnyTime, CBR_GoogleExcellentLeadership

e. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence, LEVAUTO_TakeOverVehicleAnyTime, CBR_GoogleExcellentLeadership, VIEWDRIVING_CARSTOOLS

f. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence, LEVAUTO_TakeOverVehicleAnyTime, CBR_GoogleExcellentLeadership, VIEWDRIVING_CARSTOOLS, RISKY_Children

g. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence, LEVAUTO_TakeOverVehicleAnyTime, CBR_GoogleExcellentLeadership, VIEWDRIVING_CARSTOOLS, RISKY_Children, OPT_TechnologyGivesMeMoreControl

h. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence, LEVAUTO_TakeOverVehicleAnyTime, CBR_GoogleExcellentLeadership, VIEWDRIVING_CARSTOOLS, RISKY_Children, OPT_TechnologyGivesMeMoreControl, Imustbecarefulwhenusingtechnologiesbecausecriminalsmay

i. Dependent Variable: DV_AdoptionDecision

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	828,949	1	828,949	409,668	,000
	Residual	534,194	264	2,023		
	Total	1363,143	265			
2	Regression	967,462	2	483,731	321,525	,000
	Residual	395,680	263	1,504		
	Total	1363,143	265			
3	Regression	1002,863	3	334,288	243,098	,000
	Residual	360,280	262	1,375		
	Total	1363,143	265			
4	Regression	1027,688	4	256,922	199,897	,000
	Residual	335,455	261	1,285		
	Total	1363,143	265			
5	Regression	1047,184	5	209,437	172,344	,000
	Residual	315,959	260	1,215		
	Total	1363,143	265			

6	Regression	1061,989	6	176,998	152,223	,000
	Residual	301,153	259	1,163		
	Total	1363,143	265			
7	Regression	1069,258	7	152,751	134,099	,000
	Residual	293,885	258	1,139		
	Total	1363,143	265			
8	Regression	1074,116	8	134,264	119,386	,000
	Residual	289,027	257	1,125		
	Total	1363,143	265			

a. Dependent Variable: DV_AdoptionDecision

b. Predictors: (Constant), PU_USEFULNESS

c. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence

d. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence, LEVAUTO_TakeOverVehicleAnyTime

e. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence, LEVAUTO_TakeOverVehicleAnyTime, CBR_GoogleExcellentLeadership

f. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence, LEVAUTO_TakeOverVehicleAnyTime, CBR_GoogleExcellentLeadership, VIEWDRIVING_CARSTOOLS

g. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence, LEVAUTO_TakeOverVehicleAnyTime, CBR_GoogleExcellentLeadership, VIEWDRIVING_CARSTOOLS, RISKY_Children

h. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence, LEVAUTO_TakeOverVehicleAnyTime, CBR_GoogleExcellentLeadership, VIEWDRIVING_CARSTOOLS, RISKY_Children, OPT_TechnologyGivesMeMoreControl

i. Predictors: (Constant), PU_USEFULNESS, WholePointOfOwningCarIndependence, LEVAUTO_TakeOverVehicleAnyTime, CBR_GoogleExcellentLeadership, VIEWDRIVING_CARSTOOLS, RISKY_Children, OPT_TechnologyGivesMeMoreControl, Imustbecarefulwhenusingtechnologiesbecausecriminalsmay

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF

1	(Constant)	-,166	,243		-,681	,496	-,644	,313					
	PU_USEFULNESS	,877	,043	,780	20,240	,000	,791	,962	,780	,780	,780	1,000	1,000
2	(Constant)	3,231	,411		7,853	,000	2,421	4,041					
	PU_USEFULNESS	,515	,053	,458	9,693	,000	,410	,619	,780	,513	,322	,495	2,021
	WholePointOfOwningCarIndependence	-,467	,049	-,453	-9,595	,000	-,563	-,371	-,778	-,509	-,319	,495	2,021
3	(Constant)	4,038	,424		9,517	,000	3,202	4,873					
	PU_USEFULNESS	,518	,051	,461	10,211	,000	,418	,618	,780	,534	,324	,495	2,021
	WholePointOfOwningCarIndependence	-,374	,050	-,363	-7,478	,000	-,472	-,275	-,778	-,419	-,238	,428	2,334
	LEVAUTO_TakeOverVehicleAnyTime	-,215	,042	-,184	-5,074	,000	-,298	-,131	-,510	-,299	-,161	,771	1,298
4	(Constant)	3,345	,439		7,612	,000	2,479	4,210					
	PU_USEFULNESS	,439	,052	,391	8,410	,000	,337	,542	,780	,462	,258	,436	2,292
	WholePointOfOwningCarIndependence	-,390	,048	-,378	-8,040	,000	-,485	-,294	-,778	-,446	-,247	,426	2,347
	LEVAUTO_TakeOverVehicleAnyTime	-,220	,041	-,188	-5,380	,000	-,301	-,140	-,510	-,316	-,165	,770	1,299
	CBR_GoogleExcellentLeadership	,235	,053	,147	4,395	,000	,129	,340	,398	,262	,135	,839	1,192
	(Constant)	2,507	,476		5,269	,000	1,570	3,443					
	PU_USEFULNESS	,439	,051	,391	8,648	,000	,339	,539	,780	,473	,258	,436	2,292

	WholePointOfOwningCarIndependence	-,338	,049	-,328	-6,921	,000	-,434	-,242	-,778	-,394	-,207	,396	2,522
5	LEVAUTO_TakeOverVehicleAnyTime	-,181	,041	-,155	-4,423	,000	-,262	-,101	-,510	-,265	-,132	,726	1,377
	CBR_GoogleExcellentLeadership	,230	,052	,145	4,435	,000	,128	,332	,398	,265	,132	,838	1,193
	VIEWDRIVING_CARSTOOLS	,140	,035	,140	4,005	,000	,071	,209	,510	,241	,120	,730	1,371
	(Constant)	2,953	,482		6,128	,000	2,004	3,902					
	PU_USEFULNESS	,407	,051	,362	8,054	,000	,307	,506	,780	,448	,235	,422	2,368
	WholePointOfOwningCarIndependence	-,285	,050	-,277	-5,691	,000	-,383	-,186	-,778	-,333	-,166	,361	2,768
6	LEVAUTO_TakeOverVehicleAnyTime	-,153	,041	-,131	-3,757	,000	-,234	-,073	-,510	-,227	-,110	,700	1,429
	CBR_GoogleExcellentLeadership	,198	,052	,124	3,840	,000	,096	,300	,398	,232	,112	,813	1,230
	VIEWDRIVING_CARSTOOLS	,152	,034	,152	4,418	,000	,084	,219	,510	,265	,129	,723	1,383
	RISKY_Children	-,172	,048	-,138	-3,568	,000	-,268	-,077	-,635	-,216	-,104	,568	1,760
	(Constant)	2,524	,506		4,984	,000	1,527	3,521					
	PU_USEFULNESS	,361	,053	,322	6,799	,000	,257	,466	,780	,390	,197	,374	2,676
	WholePointOfOwningCarIndependence	-,256	,051	-,248	-5,031	,000	-,356	-,156	-,778	-,299	-,145	,343	2,917
	LEVAUTO_TakeOverVehicleAnyTime	-,145	,041	-,124	-3,567	,000	-,225	-,065	-,510	-,217	-,103	,695	1,439

7	CBR_GoogleExcellentLeadership	,164	,053	,103	3,115	,002	,060	,268	,398	,190	,090	,761	1,314
	VIEWDRIVING_CARSTOOLS	,165	,034	,165	4,796	,000	,097	,233	,510	,286	,139	,706	1,416
	RISKY_Children	-,175	,048	-,140	-3,657	,000	-,269	-,081	-,635	-,222	-,106	,568	1,761
	OPT_TechnologyGivesMeMoreControl	,126	,050	,102	2,526	,012	,028	,224	,619	,155	,073	,514	1,946
8	(Constant)	2,366	,509		4,650	,000	1,364	3,368					
	PU_USEFULNESS	,349	,053	,311	6,571	,000	,245	,454	,780	,379	,189	,369	2,709
	WholePointOfOwningCarIndependence	-,267	,051	-,259	-5,255	,000	-,367	-,167	-,778	-,312	-,151	,339	2,950
	LEVAUTO_TakeOverVehicleAnyTime	-,148	,040	-,126	-3,662	,000	-,227	-,068	-,510	-,223	-,105	,694	1,441
	CBR_GoogleExcellentLeadership	,164	,052	,103	3,131	,002	,061	,267	,398	,192	,090	,761	1,314
	VIEWDRIVING_CARSTOOLS	,165	,034	,165	4,838	,000	,098	,233	,510	,289	,139	,706	1,416
	RISKY_Children	-,197	,049	-,158	-4,047	,000	-,293	-,101	-,635	-,245	-,116	,541	1,850
	OPT_TechnologyGivesMeMoreControl	,135	,050	,109	2,720	,007	,037	,234	,619	,167	,078	,510	1,962
	Imustbecarefulwhenusingtechnologiesbecausecriminalsmay	,082	,039	,065	2,078	,039	,004	,159	-,215	,129	,060	,850	1,177

a. Dependent Variable: DV_AdoptionDecision