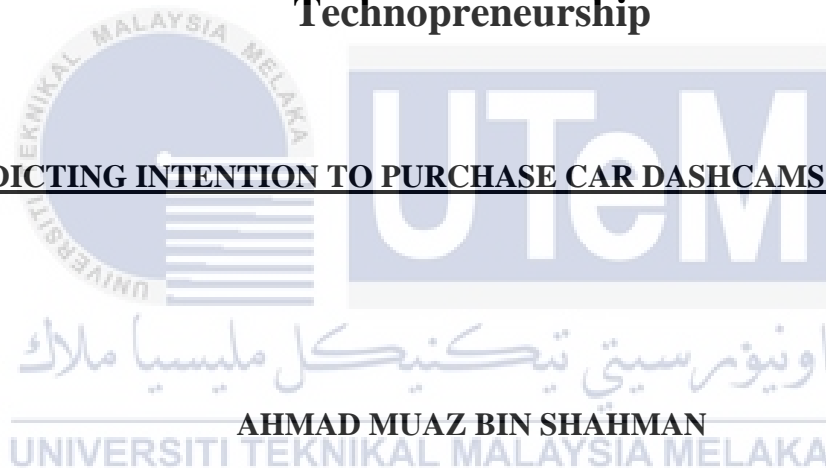




**Faculty of Technology Management and
Technopreneurship**

PREDICTING INTENTION TO PURCHASE CAR DASHCAMS IN MELAKA



**Bachelor of Technology Management (High Tech Marketing) with Honours
(BTMM)**

2023

PREDICTING INTENTION TO PURCHASE CAR DASHCAMS IN MELAKA

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Faculty of Technology Management and Technopreneurship

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2023



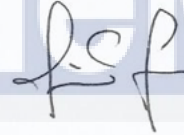
DECLARATION

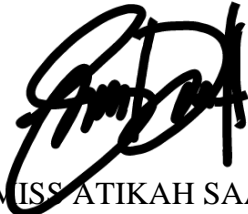
I hereby declare that this thesis project of title “predicting intention to purchase car dashcams in Melaka”. The work on this project is my own work except for quotations and summaries which have been duly acknowledged. This research paper has not been accepted for any degree and is not concurrently submitted for award of other degree.


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APPROVAL

I hereby declare that I have read this thesis research and in my opinion this thesis is sufficient in terms of scope and quality for the award of Bachelor of Technology Management (high tech marketing) with Honours

 
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DEDICATION

I would like to dedication my gratitude to my dear parents, who have supported me both spiritually and monetarily.

Shahman bin Shahman

Nuraishah binti Mokhtar

A big thanks to my supervisor and panel for guiding me through my research study.



Thank you so much for always being understanding, as well as to my friends who supported and assisted me, without their support and blessing, this study would be difficult to accomplish in the time allotted. Thank you very much!

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ABSTRACT

The advancement of technology in our nation has resulted in the inclusion of Dashcams in our vehicles, which may assist the driver in the event of an accident by demonstrating the facts. This study looks at the elements that influence a user's decision to buy a dashcam in Malaysia. The previous study established a conceptual research framework that may have increased the security assurance capabilities of dashcam use. Purposive sampling will be used in this study to collect 150 respondents, who will be analysed using the Statistical Package for Social Sciences (SPSS) version 27. This outcome will help with descriptive analysis, reliability, correlations, and significance. Trust has the greatest value of significance toward the independent variables other than perceived ease of use, attitude, social impact, and pricing value, according to the researcher's findings. When conducting a technology product, trust is essential because the product's security may be breached or hacked by unknown individuals. Aside from that, this study will help to enhance understanding of the user's behavioural intention to utilise dashcams.

Keywords: Vehicle safety; technology adoption; dashcam; theory of technology acceptance; Melaka.

ABSTRAK

Kemajuan teknologi di negara kita telah menyebabkan pemasangan Dashcam dalam kenderaan kita, yang boleh membantu pemandu sekiranya berlaku kemalangan dengan menunjukkan fakta. Kajian ini melihat elemen yang mempengaruhi keputusan pengguna untuk membeli dashcam di Malaysia. Kajian terdahulu mewujudkan rangka kerja penyelidikan konseptual yang mungkin telah meningkatkan keupayaan jaminan keselamatan penggunaan dashcam. Persampelan bertujuan akan digunakan dalam kajian ini untuk mengumpul 150 responden, yang akan dianalisis menggunakan Pakej Statistik untuk Sains Sosial (SPSS) versi 27. Hasil ini akan membantu analisis deskriptif, kebolehppercayaan, korelasi, dan kepentingan. Kepercayaan mempunyai nilai kepentingan yang paling besar terhadap pembolehubah bebas selain daripada kemudahan penggunaan, sikap, kesan sosial dan nilai harga yang dirasakan, menurut penemuan penyelidik. Apabila menjalankan produk teknologi, kepercayaan adalah penting kerana keselamatan produk mungkin dilanggar atau digodam oleh individu yang tidak dikenali. Selain itu, kajian ini akan membantu meningkatkan pemahaman tentang niat tingkah laku pengguna untuk menggunakan kamera pemuka.

Kata kunci: Keselamatan kenderaan; penggunaan teknologi; Camera papan pemuka; teori penerimaan teknologi; Melaka.

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LIST OF ABBREVIATION

ABBREVIATION	MEANING
EDR	Event Data Recorders
CAGR	Compound Annual Growth Rate
TAM	Technology Acceptance Model
UTAUT	Unified Theory of Acceptance
GPS	Global Positioning System
DVR	Digital Video Recorders
Dash Cam	Dashboard Camera
PEU	Perceived Ease of Use
AT	Attitude
SI	Social Influence
PV	Price Value
TR	Trust
SPSS	Statistical Package for Social Sciences



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CHAPTER 1

INTRODUCTION

1.0 INTRODUCTION

This chapter discusses the study's history, research problem, research question, research aims, scope, limitations, and significance. The researcher decides to explore predicting intention to use automobile dashcams in Melaka to finish a Bachelor Degree Dissertation (Projek Sarjana Muda PSM) at the Faculty of Technology Management and Technopreneurship.



1.1 BACKGROUND OF THE STUDY

The expansion of technical innovation and the exchange of data online or offline enhanced information processing speed, resulting in a speedy reaction to events Titilis and Laurinaitis (2016). Over the previous decade, a lot of innovation has been introduced into cars and roads, and the imagination of automotive innovation is growing as more effort is made into development Osswald et al. (2012). Certain technology has been added to cars by manufacturers, aftermarket companies, and drivers Edmunds et al. (2014). Automation or telematics technology is always used Osswald et al. (2012).

Telematics is a wireless data-collection and-dissemination system Hutchinson (2004). It refers to systems that retrieve and store data, but it also involves data entry. These features provide a vast field for development and application. Technological innovation generates new opportunities but may clash with its foundations Moehrle and Caferoglu (2019). The fast expansion of telematics technology has led to a multitude of creative approaches for automating users without a structured system built, deployed, and assessed from a driver-focused perspective. The deployment of advanced telematic technologies without a driver-driven approach to incorporating complex data may result in data overburdening, a lack of driver preparation and support, over-reliance on innovation by drivers, deskilling of drivers, negative social adjustment to the innovation, and low recognition or even abuse of the technologies. Human components are important in the design and presentation of new technologies, but they are often neglected as inadequate details Edmunds et al. (2014). Vehicle dashcams (also known as dashboard cameras, car digital video recorders, or blackboxes) enable high-quality video recording of external views and automatic collision/motion sensing that provide evidence in case of unexpected traffic related accidents and incidents (e.g., crashes on the road or damages to a parked vehicle). Dashcams complement existing Event Data Recorders (EDRs), which can record only low-level vehicle states such as the speed, steering, and braking at the time of a crash Bill Canis and David Randall Peterman (2014). Dashcams are gaining popularity in many parts of Asia and Europe. For example, according to the report for global dashboard camera market size was valued at USD 3.2 billion in 2020 and is expected to expand at a compound annual

growth rate (CAGR) of 12.9%, in terms of revenue, from 2021 to 2028 GVR (2019). Other countries with high adoption rates include Russia and China. In these nations, use of dashcams has now become an integral part of the driving experience of individuals.

Most people presently live in a modern globalized where technological facilities are improving, and because of the development in the number of technologies on vehicles, researchers used to undertake study predicting intent to acquire car dashcams in Melaka. To assess the usage or rejection of an automobile dashcam, researchers employ the Technology Acceptance Model (TAM) hypothesis Davis (1989). The TAM is widely used to explain a person's intentions and actual use of information technology (IT). Because dashcams are a type of technology, the TAM may help explain why people want to use them Chiu, Chang, Cheng, & Fang (2009).

1.2 PROBLEM STATEMENT

People have become aware of the increasing number of car accidents occurring in Malaysia. From March 2020 to October 2021, there will be approximately 5000 fatal traffic accidents, according to The Star (2021). According to police figures, road accident deaths in Malaysia are expected to rise slightly in 2020, according to The Star (2020). By the time this happened, we can see that there are emerged of technology by manufacturer which help the drivers to drove safely in the road which is called as a dashcam. However, there is a problem with it which there are many people who do not have the knowledge to access it or do not even bother to have it in their car. For example, the older generation's vehicles are the ones that do not install the dashcam inside their cars since they do not have studied or gained some knowledge about it.

Other than that, Malaysians should expect to pay between RM260 and RM830 for a branded or high-quality dashcam Adam Rowe (2022). Some people have decided not to put this in their car since it is so expensive and not within their budget. This creates a dilemma for the marketer when it comes to meeting the demands and desires of their customers [Mike Hess, Pete Doe (2013)]. As a result, they must find a way to

sell it and make it available to the public so that everyone may benefit from it and drive more safely.

Therefore, it is important to comprehend the usage of dashcams, which will also have an impact on the amount of dashcams available in Melaka. This research will assess how far the goal of dashcam usage extends, as well as the technological implementation of automobiles in terms of safety, according to the participants. The focus of this study will be on the attitude, social influence, pricing value, and social influence that may be assessed toward the dashcam participants. The following one is dependent on the context of the dashcam itself, and it is referred to as perceived ease of use. Other than that, this study aims to merge and modify two technology adoption models: the Combined Technology Acceptance Model and Theory Planned Behavior, as well as an extension of the Unified Theory of Acceptance and Use of Technology.

1.3 RESEARCH QUESTIONS

- 1) What are the factors affecting dashcam purchase intention?
- 2) What is the most significant factor of dashcam purchase intention?

1.4 RESEARCH OBJECTIVES

- 1) To identify factors affecting dashcam purchase intention.
- 2) To investigate the most significant factor for dashcam purchase intention.

1.5 SCOPE OF THE STUDY

This study will look at the elements that influence users' intentions to purchase dashcams in Melaka. The respondents in this study are largely from persons who own a car. Since dashcams may be required in the future for cars. As a result, there is a significant likelihood that auto owners will put it on their vehicle in the future. This study will be carried out at Melaka Tengah, Melaka.

1.6 LIMITATION OF THE STUDY

The researcher experienced various constraints while doing this research, including time constraints, a lack of competence and knowledge, and the participation of respondents. Due to the tight time frame for completing his work, the researcher has limited research time. The researcher has certain challenges in gathering as much information and facts about his study as possible within a particular timeframe.

Other than that, to do research, research needs to have extensive knowledge of the topic that has been studied. But the researcher's lack of knowledge and skills in doing this research makes it limited to his research. After that, the researcher has a hard time accessing the respondents. This is due to their lack of participation during the study process. Most of them are not answering the questionnaire thoroughly, and another constraint from respondents is connected to honesty.

1.7 SIGNIFICANCE OF THE STUDY

This research will increase the intention to purchase the dashcam. At the present being, these cameras are extensively utilised all throughout the world by common drivers, driving instructors, taxi and bus drivers, police officers and so on. This camera's ability to integrate with other onboard technologies, such as GPS and recorders, makes it one of the most useful cameras on the market. Chris (2014).

The results of this research will then be used to produce information on customers' intentions to acquire dashcams. Because there are some individuals who are

unfamiliar with dashcams, this research will raise awareness about the safety of dashcam use in this period.

SUMMARY

Throughout this chapter, researcher had explained on some elements in this research which are background of the study, problem statements, research questions, and research objectives, scope of study, limitation, and significance of study.



CHAPTER 2

LITERATURE REVIEW

2.0 INTRODUCTION

Dashcam technology has attracted the interest of numerous academics over the years. According to recent studies, some study focused solely on improving dashcam features for more precise recording and data transfer Tummala et al. (2019); Kadu et al. (2018). A review of the literature found that prior research had concentrated on the technological features of dashcams. Understanding the technological and future user's intention towards technology, according to Wu et al (2016), is critical since the technology device interacts with the user rather than only technical considerations. As a result, this study modified and expanded the previous studies' existing theoretical framework to investigate the variables that influence an individual's desire to utilize a dashcam in the context of new technology acceptance.

Previous research has focused on the advantages of utilizing dashcam to investigate accident causes, as well as the comparison of individual legal and privacy rights while using dashcam in different countries Titilis and Laurinaitis (2016); Gershon et al. (2019); Rea et al. (2018). The exploratory research approach was utilised in previous empirical studies to give I insights into the origin and consequence of an occurrence, and (ii) to find trends in ideas and attitudes. The studies, however, did not include the planned and desirable consequences that may result from the usage of dashcams, which are susceptible to the judgments users make against the product and its qualities. As a result, this study employs a quantitative research approach to

investigate users' views and intents to utilise dashcams from a behavioural standpoint. Early assessments of people's intentions to adopt new technology will assist to monitor their reactions, broaden their knowledge base, and enhance comprehension of the possible advantages Sener et al. (2019).

2.1 Safety Technology Adaption

According to Altadonna (2022), Technology adoption is the successful integration of new technology into your business. Adoption means more than just using technology. When you've adopted new technology, you'll use it to its fullest potential and see the benefits of using the new system. As additional technologies are produced or adapted for safety objectives, it is critical to identify methods to increase technology integration into safety management processes. These phases are technology adoption, technology implementation and technology acceptance (or utilization) (Straub, 2009). We can see that from previous studies indicate that the use of technology in the built environment has led to numerous safety and non-safety benefits (Ozorhon and Oral, 2016; Skibniewski and Chao, 1992; Wang, 2008; Yan and Demian, 2008) although the adoption rates have been relatively slow or at least slower than other industries such as manufacturing (Karakhan and Alsaffar, 2019). Therefore, a continual flow of research has looked at numerous areas of safety technology devices. Cantor et al. (2006) performed a comprehensive investigation of motor carrier safety technology adoption and discovered that, in general, motor carrier enterprises are still in the early phases of implementing safety technologies.

2.2 Implementation of Dashcam

Digital video recorders (DVRs) that are suction-mounted to the dashboard or the windscreen and continuously record the image through the glass of a windscreen are referred to as dashboard-mounted cameras. These cameras are also sometimes referred to as "Dash Cams," which is an abbreviation for "dashboard camera" Johnson (2018). As a result of the decrease in price of related technology, dash cams became more accessible to other motorists, leading to a rapid increase in the number of vehicles