

Lot Adoption by Enterprises: A Tam Model Development

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The growing interest in enterprises to implement in the internet of things (IoT) in their business processes has made it easier to take control over virtual object rather than the direct surveillance of the physical objects and the virtual object is more robust, rich and precise than the human observation. As a result enterprises will have more control over its process network. As far as the IoT concern, every physical objects have a digital and a virtual existence, which means everything themselves are become aware of their context, so they sense, collect, process, relay, response and exchange or share data as an action or reaction based on the current meaningful information. This takes away the traditional fundamental restraints regarding place, time and human observation. That means business no longer needs to be in the physical proximity all the time and that means they can control and supervise without manually handle and observing the physical object rather remotely. In the perspective of enterprise and IoT, an object or thing moves between many different areas of the business echo system and throughout this journey virtual objects evolve with rich data which has identifiable precise information that can be utilized to control and manage every aspect of business and social life (Verdouw et al. 2015) . There is a prediction that by 2020 there will be around 50 billion smart device connect to each other with vast source of rich data (Qiu et al. 2015).

The purpose of this paper is to identify those reasons that influence enterprises to invest and implement in IoT throughout their business processes and operation echo system. Focuses will be on how to develop a Technology Acceptance Model that outline those contract that are directly linked to the intention of the enterprises to utilize IoT to gain better competitive advantages through critically review current industry case studies and peer reviewed literatures.

The research was conducted on case studies from 63 organizations who have recently implemented sensor based technology that support and create connected network of things or IoT. These organizations are from different industry and geographical position. Through the qualitative research the result shows that there is a significant influence based on perceived usefulness, connectedness and quality, ease of use, behavioural intention, security, satisfaction and trust to adoption of IoT in all those organization. While highest influencers are the perceived usefulness, ease of use, connectedness and service quality; there is still a big gap in the security and data protection. Hence it can be concluded that the differences of each participating organizations craft beliefs that evident as the behavioural intention of the organization to adopt IoT.

Field of Research: Information Technology

Key Words: IoT or Internet of Things, KoT or Knowledge of Things, M2M or Machine to machine Communication, TAM or Technology Acceptance Model, CSP or Communication Service Provider.

1.0 Introduction

Invention of communication technology takes us beyond the way we anticipated it would. Sometimes it almost dictates or influences us how we should behave, react and do our business. The world today is much different than it was in 1832, when the electromagnetic telegraph was invented (Postscapes, 2015). Communication is evolving more to machine to machine than the traditional human to machine interaction. There have been ambitious visions of advance communications for a long time. In order to truly enter in to the future we need to digitize our things surrounding us and create a network of our things to make decisions as precise as possible.

As our everyday businesses grow and get complex and the internet technology progressed, visionaries and thought leaders always wanted to tie them together for a smart global system to improve the efficiency and reliability as well as a system that is economical and sustainable. Internet technology has increasingly becoming an important part in our social and economic advancement and without slowing down, it is becoming more significant in our everyday events (Dutton., 2014) We are attracting industries to design and develop smart machines and tools that are easily adaptable in the chain of machines and software that can reduce the traditional human interaction to zero in any way shape or form to increase communication, gain real meaningful data and speed up the social and business processes to gain the competitive advantages in the industry. As the machine to machine communications also known as m2m communication are on the rise, the Information Communication Technology world and anything that revolve around it has hit by the third waves of transformation, and that is IoT (Patrick., 2014)

The term IoT, was first came to surface in 1990 by Kevin Ashton while explaining the new idea of RFID in P&G Supply Chain (Postscapes, 2015). The IoT or Internet of Things is the network of connected smart devices that are embedded with sensors, software and electronics in order to exchange real time reach data through its computing network. (Atzori et al, 2010).

This drive will create a worldwide network of physically connected objects, where they share collected data seamlessly in order to generate highly advance intelligent information and services (Yan et. Al, 2014) and turned Internet of Things (IoT) in to Knowledge of Things (KoT) for better and efficient decision making and make life easier for human-beings. In our everyday life we generate lots and lots of data which can be collected through interconnected sensors, tags and mobile Sims by the help of information and communication technology (ICT) and later can be accumulated, merged, processed, analysed in order to create beneficial and valuable data to empower intelligent and ubiquitous services (Yan et. Al, 2014). Sensors and IDs are crucial part in every machine that collects, process and transport data. These harvested of digital data through m2m communication is the source of insights and because of this communication, IoT is becoming a focal point of next generation of technology shift for businesses and social life and it promises greatness. (Agrawal and Das, 2011) Perceived understanding dictates that the opportunities which will come from the implementation of technology are endless, however despite of the beneficial opportunities, there are still some aspects such as security and trust; that could make consumers, businesses and enterprises reluctant in implementing and adopting (Mehrtens at. el, 2001). In the recent years there has been exponential increase in the smart devices that are capable of collecting and transporting data from both the consumer and the enterprise. In order to service effectively, it requires safe, secure, fast and reliable connectivity and management process to handle this digital growth. This growth already has and will trigger even more economical growth.

2.0 The research problem

Every technological phenomenon had its share of glory and criticism. IoT (Internet of Things) is fairly new concept in any industry. Research on IoT has mostly examined the technological characteristic point of view and not from its applicability, especially not from the adoption of IoT in multi industry point of view. Enterprises are facing many difficulties and one of the biggest is how to response to the volatile demand.(Ping Lou et al. 2011). To face those challenges Information and Communication Technology departments are suggesting new technological approaches but in many cases not enough information is available on why enterprises, those who have, are adopting IoT. There is a need for research to investigate and identify those constructs that influence

enterprises to adopt and implement IoT as their technology investment strategy to gain competitive advantages so that others can make informed educated decision.

2.1 The purpose and objective of the study

The purpose of this paper is to explore IoT taking a multi-industry prospective, to identify the reasons that enterprises are considering in adopting IoT itself from both the technology and the management stand point. The research has developed along a TAM model of the adoption of IoT by enterprises in the recent years. The question that the research would seek answer for is 'what factors contribute to the adopting of IoT?'

3.0 Literature Review and Theoretical Framework

The Internet of Things (IoT) is an emerging technology and it is attaining its ground very quickly where ever there is wireless communication medium exists (Atzori, Iera & Morabito 2010). IoT refers to a big picture in our everyday things such as objects; our geographical position and surrounding environment are interconnected with each other through wireless internet. (Koreshoff, Robertson & Leong 2013). Our house hold objects such as smart meter, thermostat, in room sensors and devices with real time weather feed can communicate with each other without any human interaction to serve the occupier with a common goal and that is provide heating when needed, switch off the lighting when there is no need for it and also with the prediction data of live weather feed can help the solar water heating and electricity system to produce and store as much as it can for the cloudy day and also send the excess to the smart grid (Koreshoff, Robertson & Leong 2013; Ou et al. 2012). Atzori et al, 2010 also mentioned IoT can be realized in three models and they are:

1. Internet focused, where internet would work as a middleware, then
2. Object focused, where sensors are the main motivators, and
3. Semantic focused or knowledge based (Atzori, Iera & Morabito 2010; Gubbi et al. 2013).

This paper presents a Technology Acceptation Model (TAM) through analyzing 61 publicly published case studies from the early adopter of IoT that has impacted 63 locations.

The IoT of things is an enormous and complex network of smart devices that generate real time data using the inbuilt sensors to measure the surrounding; an actuator that enable networked devices to act upon; the high speed processor to collect, store and process those rich data; nodes that help to relay those data to the program devices to take the next level of action and to manage those sets of devices, there is a coordinator (Koreshoff, Robertson & Leong 2013).

Recent research identified that IoT works as an enabler of real-time control over the quality in enterprise business processes. It is no surprise that quality is the most important factor for a sustainable enterprise and to have a proactive quality management; enterprise needs to appropriately collect, process and act upon those data or information generated from the machine to machine communication. The set of activities that the businesses need to accomplish has to flow in parallel with the flow on information that has accumulated during the process life cycle. In the modern cloud base enterprise information system allowing cross organizational activities and the information synchronized with the suppliers, producers, distribution centres and the customer to achieve a common goal and that is efficiently delivering the right product on time to the right

person with the minimum cost and to able to replicate the process time and time again with optimum precision. This can only be possible when the enterprise will have the capability to utilize those M2M rich data within the business echo system, not only the data within the enterprise but also the supplier and customer centric data to be used in the decision making process (Xu 2011). IoT harvest the data but data is only 1s and 0s until you turn it into insights and then you have the opportunity to intervene how that is going to impact on your life and business and that is knowledge, so it is vital not just to collect data through IoT but turn them in to Knowledge of Things or KoT, as we call it.

The adoption of new technology is not just acquiring a new system and start using it. It is much more than that. Organization do not just adopt technology for the sake of it, they adopt new technologies and tool to improve productivity and success in their business processes (Godoe and Johansen, 2012 Burton-Jones & Hubona, 2006) In many cases these adoption do not go according to the plan due to many reasons. These adoptions are investments by the organization and any unsuccessful investment has a huge negative impact on organizations future. They don't just cause economic losses but also creates dissatisfied workers (Lee et. al 2014). So it is very important to contract a model of adaptation by the organization in order to identify what influences them to adopt particular technology (Godoe and Johansen, 2012)

There have been quite a few models to explain information and communication technology 's effectiveness in a workplace but the most praised one is the Technology Acceptation Model also known as TAM, proposed by Davis (1989)(Svendensen et al., 2013). TAM is very useful in constructing the foundation from which it is easy to understand the how the external matters influences acceptance, approach and meaning to use a technology. The two main perceptive beliefs that are focus by TAM are the perceived usefulness and perceived ease of use (Park, 2009). By extension, TAM can also be used to identify the adoption IoT by enterprises and likely to reveal contributory association among the constructs that are comparable to the result s of earlier researches. Thus the current study employs the TAM method to order to observe the role of the following constructs to determine the IoT adoption by enterprises.

3.1 Perceived Usefulness

It has been indicated by TAM that perceived usefulness is vital meter in pointing attitude and intention to use Information Systems and the related services (Davis, 1989). Many other researchers have used TAM model and showed that perceived usefulness has a positive impact on organizations decision making intention (Al-Suqri, 2014 and Hess et al. 2014). In a related mood this study outlines that the perceived usefulness indicates that using IoT can improve overall performance and will have similar effect on employees utilizing the services related to IoT. Perceived usefulness will have positive influence on the satisfaction and the satisfaction will have positive influence on the behavioural intention towards IoT adoption by an enterprise.

3.2 Perceived Connectedness

Perceived connectedness is a vital issue when it is to communicate in between two or more devices. These interactivity is the characteristic of those machines that mutually influence connected objects whether physically or wirelessly (Lee et al 2014). Even the largest machine manufacturers must include the connectivity ability inbuilt in their design and finish goods (Lederer and Burleton, 2015). Perceived connectedness has a positive influence on perceived usefulness of IoT enable services. It has also strong connection with perceived connectedness and they both

resulted in satisfaction and grew trust on IoT service and that impact positively on behavioural intention in adopting IoT.

3.3 Perceived Service Quality

It is quite a difficult task to measure the actual quality of service, however academics and professional have decided that the quality of service should be measured by the perspective of the users (Tam, 2004). When there is a high perceived service quality the satisfaction is also high and that lead to trust and trust influence in behavioural intention towards adopting IoT.

3.4 Perceived Ease of Use

Perceived ease of use is defined by the consideration of individuals on the use of specific technology which would be accomplish with minimum or no effort. (Al Suqri, 2013) It is directly related to user's behaviour. (Lee et al 2014). Many researchers indicated that perceived ease of use and perceived usefulness are reflective of each other (Hess et al. 2014). Perceived ease of use has a positive influence on the perceived usefulness and that lead to satisfaction, the trust and ultimately influence in behavioural intention.

3.5 Behavioural Intention

Researchers have indicated that attitude concerning use of technology has a very robust connection in behavioural intention and the behaviour itself. Behavioural intention is utilized in this research as a dependent variable as it is more accurate in identifying the intention to IoT adaptation. (Wong et al., 2013). Behavioural intention is influenced by trust and satisfaction.

3.6 Satisfaction

As the new technologies are inventing and coming to change our business environment, they are also competing each other to attract users but the critical matter is how they are making users experience in using that technology satisfying. It is also been noticed in many research that the sense of satisfaction influence user in using that technology and build trust (Shipps and Phillips, 2013) Satisfaction is also closely tied with perceived ease of use (George and Kumar, 2013). Satisfaction comes from the perceived usefulness, perceived ease of use and perceived strong security. Satisfaction influence trust and trust lead to behavioural intention.

3.7 Perceived Strong Security

Security is very important in any technology that collect, process, transfer and share data. Early research shows that the customer's satisfaction are highly dependent on their sense of security and lower level of risk. The weaker the security, the higher the risk and the higher the risk is the lower the satisfaction. (George and Kumar, 2013). Perceived strong security has a positive influence on satisfaction and trust.

3.8 Trust

It is difficult not to consider risk in any technology that track, collect and shares not only just business data but also personal information. (Dutton 2014) Trust becomes very crucial when

customer needs to share their financial and personal data. Trust could be seen as individual's behaviour (Mangin 2014). Trust has a strong positive influence on behaviour intention.

4.0 Research Methodology:

The very modern nature of IoT influence the research to be a case study content analysis approach. In case study research, it is visible lot of factors and not limited to precise action, event and problem. (Dooley, 2002). This method of research is highly effective and appropriate when there is not enough theory is available or developed (Mehrtrens, 2001). The business case studies can collect and represent real truth in a very specific and accurate manner and it is a very effective way to test a theory and construct the foundation of a model (Mehrtrens, 2001)

4.1 Data Collection:

The aim and objective of this study is to gain an insight through a qualitative research that takes samples of data from the existing data source that has been already made available from recent credible industry case study. This study has analysed 63 case studies from different countries, in different industries and serviced by different communication service providers (CSP) in recent years ranging from 2008 to 2015, where each enterprises has already invested and implemented IoT in their businesses.

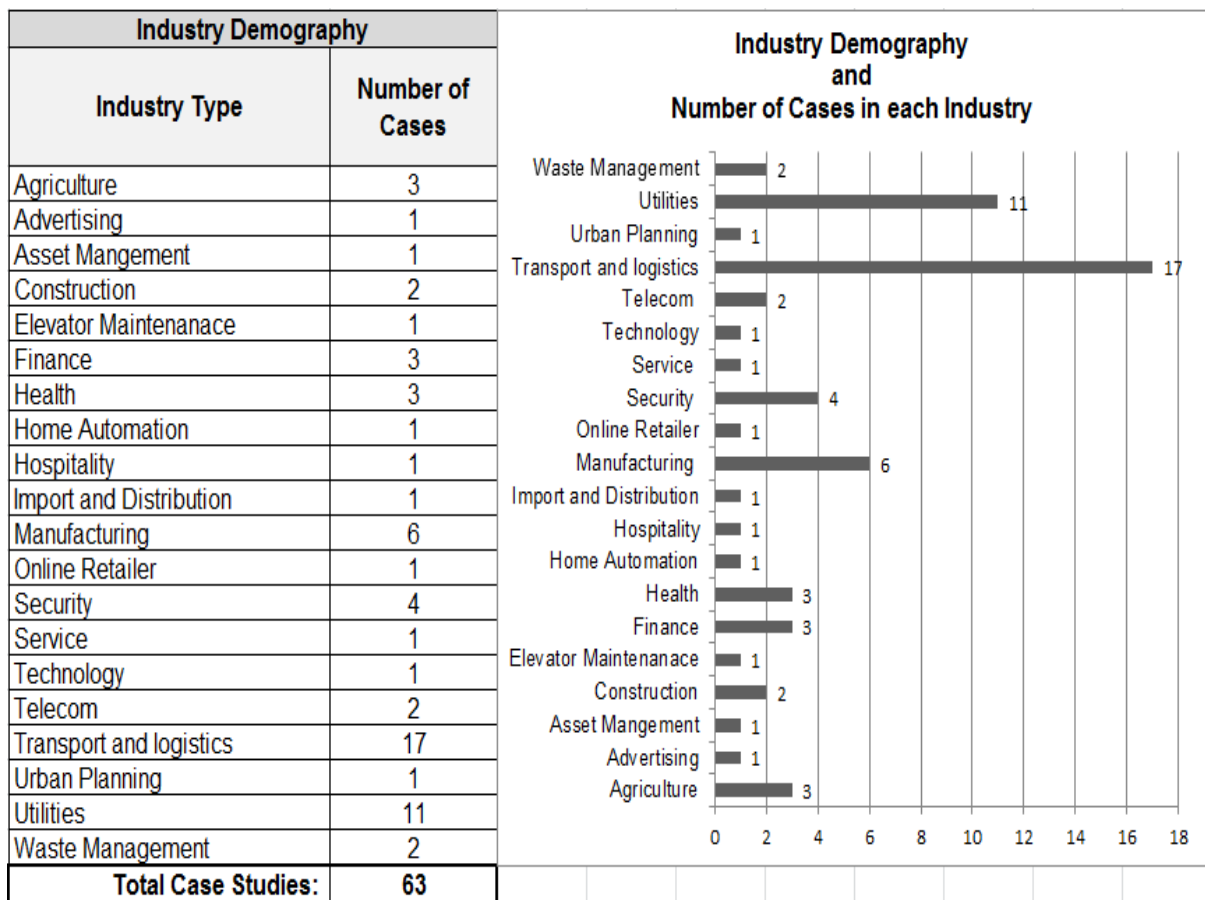


Figure 1: Industry Demography of those Case Study Sample

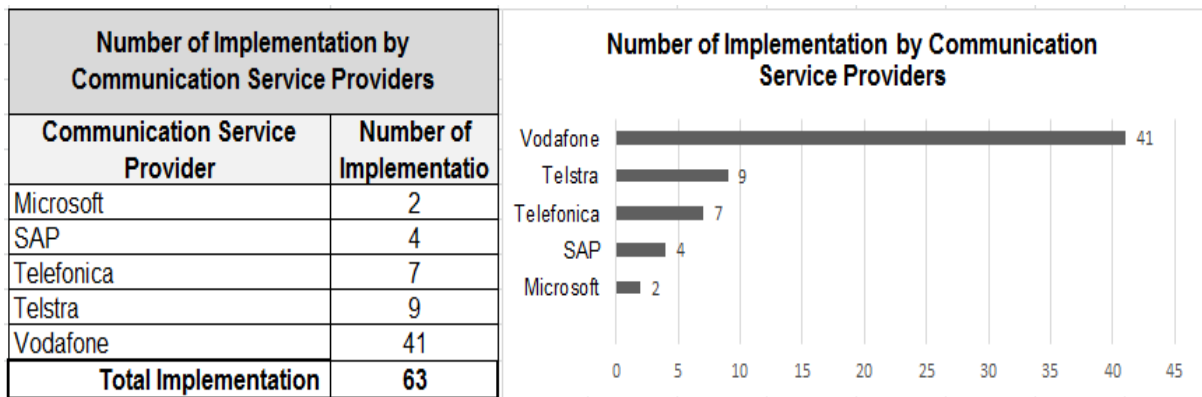


Figure 2: IoT Service Implementations in CSP Market Leader Prospective

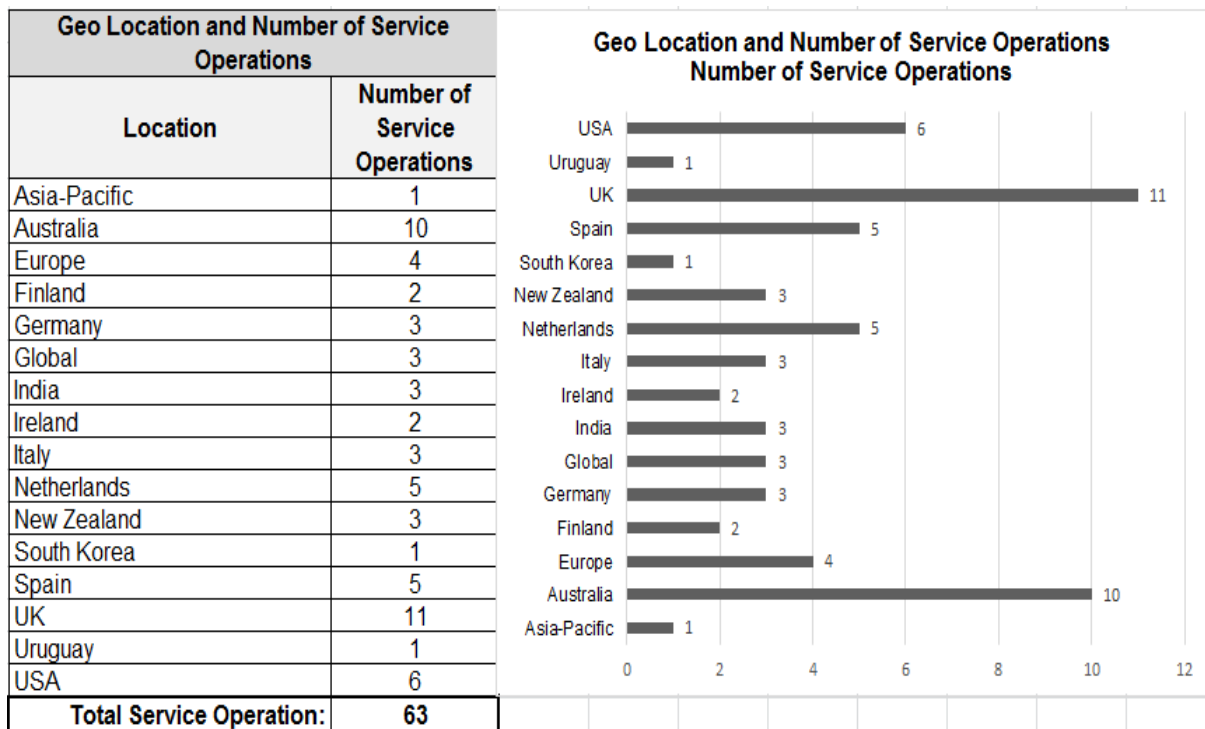


Figure 3: Sample Case Studies in Location Prospective

5.0 Model Development:

The research model has been developed based on the TAM model and has been developed to investigate the research question – ‘Why do enterprises adopt IoT?’ Although the new model is quite similar to the original TAM model (Devis, 1989), it has introduced some of the observations that were made while analyzing the case studies. Each of the constructs was measured by the information that was presented through the case study and has a direct connection to the constructs.

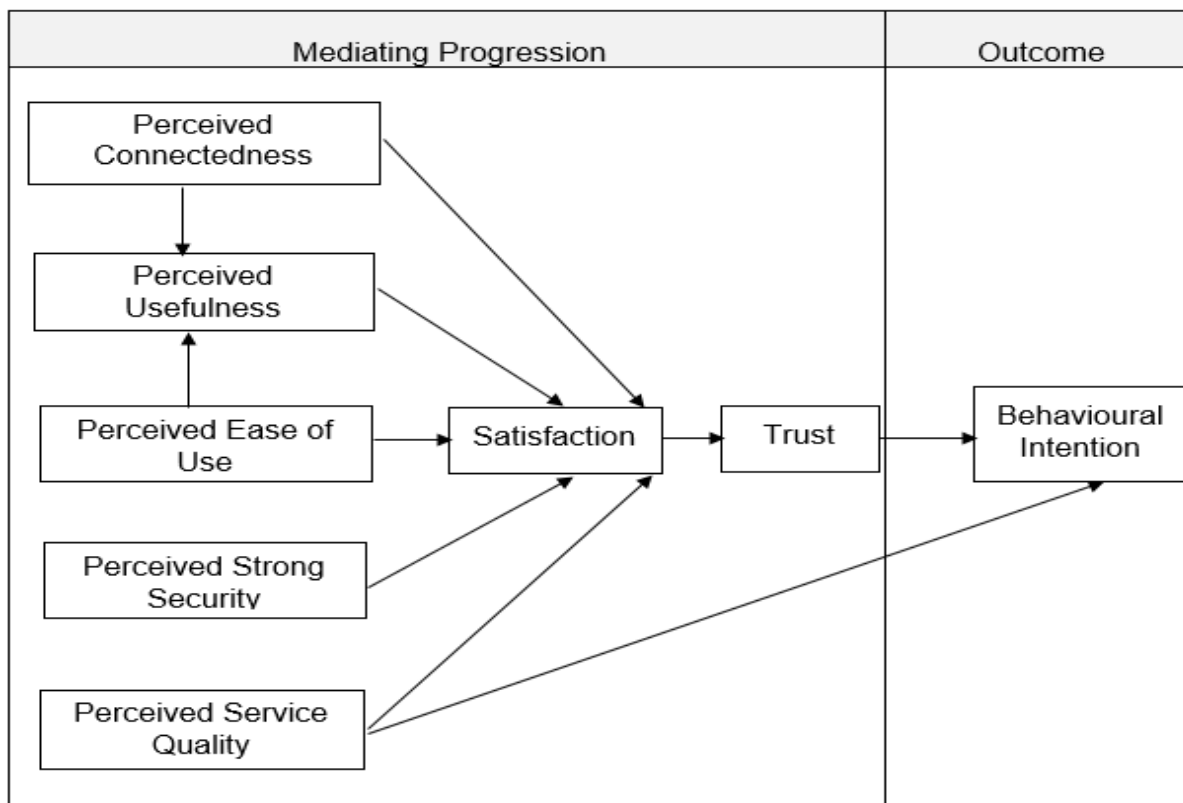


Figure 4: Research Model (TAM)

6.0 Analysis and Results

This study has been investigated and put forward a clear understanding of the reasons that influences enterprises to adopt IoT. There were many factor influenced enterprises to adopt IoT but those that are more important reason that came out from the case study was perceived usefulness, satisfaction, perceived service quality, perceived connectedness and perceived ease of use. The case study organization demography and the construct measurement has been identified in appendix 1 and 2 respectfully. Most of these enterprises has given huge emphasis on improved productivity, revenue generation, cost reduction, sensing and tracking, behavioural data and remote access and control.

The analysis also reveals that there is still huge gap in the security and how privacy of data protection in IoT based enterprise environment. The clear and simplicity of the model that has been developed through this research can be beneficial for other future research.

The limitation of the research is equally important to recognize. Most of these case studies were developed under direct supervision of the communication service providers (CSP) so it is possible that the data that has been published are source of bias and put forward more beneficial information than the critical negative data such as privacy and security. All of these data were collected by external entity and had their own format and questionnaire to collect those data. Our results from the all the case study in assessing the relationship between the perceived usefulness ease of use, connectedness, service quality, trust in the technology, satisfaction, intention to use and IoT adoption were measures consistent and in line with our anticipation. The result also indicated that the relationship between the beliefs and the usage are consistent across organization but the TAM's belief constructs are specific to Information and communication technology. These

constructs are all internal and more systematic study need to be employed in order to identify external construct.

7.0 Research Limitation:

This research has been conducted using externally developed case studies from CSP companies and not from the actual enterprises who implemented IoT in their organization. It has been noted that, the result might have been different and the study could have revealed different angle if those case studies have been developed by those enterprises independently. It is evident that there is enormous benefit to be gain through adaptation of IoT in effective processes enhancement, cost reduction by reducing human handling, lean production management and overall risk reduction. These benefits are only possible due the characteristics of IoT; transparency, traceability, adaptability, scalability and suppleness. However as an open-system, IoT challenges the existing information architecture that is predominantly static in many organization. In many cases lot of these data collected through the smart devices does not reflect in its overall decision making strategy due to the lack of the data driven enterprise models and decision making techniques to provision the emerging new model of IoT (Qiu et al. 2015).

8.0 Conclusion:

The main objective of our research was to construct a revised TAM model in relation to the adaptation of IoT in enterprises, based on the original TAM model and contribute to the ongoing improvement of TAM. We investigate some new construct that are closely related to IoT adaptation as well as the more common constructs in technology acceptance. As a qualitative research, the focus had been to establish a knowledge base that is credible, dependable and easily transferable to further research and development. As the numbers to smart devices are in rise, proper utilization of M2M communication will change the way we work and live our life. In order to take the IoT as an acceptable tool in cross industry strategy to support the business and enterprises, the industry itself needs to work together towards a common goal with academics, business leaders, technology developers and governments. As we can now envision that IoT can change the world that we know, we need to have the appropriate technological and social capabilities to capture the IoT to gain raw data and change in to valuable knowledge and information. There are enormous challenges to that have to be addressed and appropriately solve in order to fully utilize the value of IoT, but the vale is even bigger. How rapidly we will go to that stage is up to us.

Appendix 1: Case Study Organizational Demography

Case Study Organizational Demography
Table Summary:

Industry Type	Number of Cases	Location	Number of Service Operations	CSP	Number of Implementation
Agriculture	3	Asia-Pacific	1		
Advertising	1	Australia	10	Microsoft	2
Asset Mangement	1	Europe	4	SAP	4
Construction	2	Finland	2	Telefonica	7
Elevator Maintenanace	1	Germany	3	Telstra	9
Finance	3	Global	3	Vodafone	41
Health	3	India	3		
Home Automation	1	Ireland	2		
Hospitality	1	Italy	3		
Import and Distribution	1	Netherlands	5		
Manufacturing	6	New Zealand	3		
Online Retailer	1	South Korea	1		
Security	4	Spain	5		
Service	1	UK	11		
Technology	1	Uruguay	1		
Telecom	2	USA	6		
Transport and logistics	17				
Urban Planning	1				
Utilities	11				
Waste Management	2				

No	Industry Type	Organization	Communication Service Provider (CSP)	Highlight	Geographic Location	Published
1	Agriculture	Reid Stockfeeds	Telstra	The company turns over \$44 million p.a. and still growing.	Australia	7/10/2011
2	Agriculture	Keenan	Vodafone	World leading livestock feed producer.	Europe, USA, Australia	28/02/2013
3	Agriculture	Gilgai Farms	Telstra	Cattle and Sheep Farm with 6000 head of stock on 2700 hectares of land with 44km pipeline linking 100 water points	Australia	31/10/2012

4	Asset Management	Movimatic a	Vodafone	Provide asset tracking through geo-location service and satellite.	Italy	11/07/2013
5	Construction	Azzona Drainage	Telstra	Independent contracting firm known for its high service and integrity.	Australia	8/10/2011
6	Construction	CableTracks	Vodafone	Reduce damages to underground cables.	Netherlands	12/06/2013
7	Elevator maintenance	Kone	Vodafone	Global leader in the elevator and escalator business. Revenue was 6.3 billion in 2012	Finland	9/04/2014
8	Finance	ASB Bank	Vodafone	One of the first Banks in New Zealand to introducing internet and mobile banking	New Zealand	31/10/2012
9	Finance	Mswipe	Vodafone	Mswipe is the first mobile payment solution in India.	India	13/05/2014
10	Finance	Inversis	Telefonica	450 employees	Spain	15/04/2015
11	Health	Once	Telefonica	Dedicated to the social and labour-market inclusion of disabled people. Main source of income is from lottery game productions.	Spain	15/04/2015
12	Advertising	Admirror	Vodafone	Automated health report for chronic disease management	Netherlands	6/08/2014
13	Health	TRxCARE	Vodafone	TRxCARE assist in providing disease specific customize treatment delivery service for chronic condition	UK	28/02/2013
14	Health	Sensormind	Vodafone	Sensormind is sensor based in home movement monitor for independently living seniors.	UK, Ireland	21/03/2014
15	Home Automation	SecureNet	Vodafone	The home automation market is expected to grow 25% every year for the next four years and SecureNet is well placed in the market as a service provider.	Australia	20/10/2014
16	Hospitality	Brasserie Bread	Telstra	Supplies to 500 restaurant from two different cities	Australia	15/04/2015

17	Import and distribution	Ansomar	Telefonica	Ansomar is a leader in seafood import and distribution industries in the world, providing end to end logistic services from the source to the consumer.	Spain	15/04/2015
18	Manufacturing	Coco-Cola Amatil	Telstra	World famous beverage manufacturer. Over 265 Million people consume coca cola worldwide	Asia-Pacific	26/08/2012
19	Manufacturing	Atlas Copco	Vodafone	More than 140 years in industrial manufacturing with over 39,800 employees and annual revenue over 10.5 bn.	Global	3/09/2013
20	Manufacturing	Carel	Vodafone	An Italian manufacturing company deals with industrial climate and refrigeration	Itali	23/05/2013
21	Manufacturing	Rockwell	Microsoft	Provide industrial automation and information solutions to customers in 80 countries	USA	18/03/2015
22	Manufacturing	GM OnStar	SAP	Over 6 Million active subscriber	USA	2012
23	Manufacturing	Ideal Life	SAP	5.3 million patients in USA are using their CHF scale device	USA	Jun-08
24	Online Retailer	Amazon	Vodafone	Amazon has revolutionised the way buy and read book through the Kindle ebook reader. Headquater in USA, Amazon has its presence in all 5 continent and employes 117300 staffs.	USA	6/06/2014
25	Security	iDefigo	Vodafone	Innovative Kiwi start up in niche security industry	New Zealand	25/11/2013
26	Security	CSL DualCom	Vodafone	Leader in the UK dual signalling market	UK	6/09/2012

27	Security	Methmind er	Vodafone	A unique m2m system that detects methamphetamine manufacturing activities in a rental properties for land lords and realestate agents.	New Zealand	11/10/2012
28	Security	Custodia	Vodafone	An UK based security company has a proven record of reclaiming 80% of its stolen equipment with in 8 hours.	UK	1/01/2011
29	Service	ISS	Telefonica	Cleaning and Caterin service provider with customer well over 500,000 Worldwide and 43,000 in UK	UK	15/04/2015
30	Technology	Bosch Software Innovations GmbH	Vodafone	This global technology company with over 500 employees support its customers in developing IoT technology.	Germany	28/08/2013
31	Telecom	Procon Telematics	Telstra	The world's leading provider of reliable mobile resource management	Australia	3/03/2012
32	Telecom	GridTEQ	Vodafone	High speed on board wifi connection in busses for European travelers.	Europe	22/07/2014
33	Transport and Logistics	Wagga Shuttle	Telstra	It covers more than 80,000km each year, with atleast 30 trip each day.	Australia	15/04/2015
34	Transport and Logistics	Global Traker	Vodafone	It became global leader in trade data share in a very short time	Global	29/04/2014
35	Transport and Logistics	Comotrans	Telefonica	Specialized on frigorific transports on both national and international freights	spain	15/04/2015
36	Transport and Logistics	Cutcsa	Telefonica	Largest passenger transportation company in Uruguay with fleet of 1100 busses	Uruguay	15/04/2015

37	Transport and Logistics	DriveNow	Vodafone	A joint venture between BMW and Sixt AG, DriveNow is a carsharing business with about 50 employees in Germany. By early 2013, DriveNow had 90,000 customers registered with DriveNow.	Germany	3/11/2014
38	Transport and Logistics	Informobil ity.it	Vodafone	Provides realtime in-vehicle monitoring for its transport and insurance customers	Europe	30/10/2012
39	Transport and Logistics	Mahindra REVA	Vodafone	Since MahindraREVA was founded on 1994, it has become one of the pioneer in electric car technologies and manufacturing.	India	25/01/2014
40	Transport and Logistics	TomTom	Vodafone	As a digital mapping system, TomTom focuses on automotive industry to provide best routing possible	Global	10/09/2010
41	Transport and Logistics	Isotrak	Vodafone	Specialized in tracking and asset management and transport solution	UK	2/07/2012
42	Transport and Logistics	eGate	Vodafone	Solution provider to air and rail transportation. Providing most accurate onboard data to the suppliers makes it easier for them to improve better customer experience.	USA	9/03/2015
43	Transport and Logistics	Zenith Hygiene	Vodafone	Implemented m2m technology to cut down their fuel and insurance cost.	UK	11/03/2013
44	Transport and Logistics	Transpoc o	Vodafone	An Irish successful fleet management company in UK and France.	Ireland	18/01/2013
45	Transport and Logistics	Track4Se rvices	Vodafone	Specilized in Near Field Communication (NFC), Track4Services had completed two major projects for 2012	Finland	14/11/2013

				London Olympic Games.		
46	Transport and Logistics	Sycada	Vodafone	Vehical tracking system that helps to improve driver's behaviour and reduce fuel cost	Netherlands	7/02/2014
47	Transport and Logistics	Scanvogn Australia	Telstra	Product price over 100,000 a unit.	Australia	15/04/2015
48	Transport and Logistics	Move Yourself	Telstra	Operate from over 1000 Location	Australia	16/04/2015
49	Transport and logistics	Autolib	Microsoft	An innovative car sharing service in the city of Paris, France. It started its operation in December 2011.	France	15/03/2014
50	Urban Planning	Venis S.p.A	Vodafone	Smart city		20/03/2013
51	Utilities	CESC	Vodafone	CESC is one of the oldest and most profitavle electric utilities in india	India	19/07/2013
52	Utilities	Bglobal	Vodafone	Cost savings of 5% on electricity bills because of smart metering	UK	1/01/2011
53	Utilities	Spillsure	Vodafone	Mordanize and digitize domestic oil usage measurement mothod for user and in the process reduce fuel bills and improve efficiency.	Uk	4/03/2014
54	Utilities	Enexis	Vodafone	One of the largest energy network operator in Netherlands with 4.5 million customer.	Netherlands	13/08/2012
55	Utilities	npower	Vodafone	Smart metterring system that not just a tool for accurate usage reading but also to gather consumer's behavioural data to develop better product.	UK	20/05/2014
56	Utilities	WIKON	Vodafone	Remote monitoring service since 1991.	Germany	27/08/2013
57	Utilities	The New Motion	Vodafone	Make electric vehical charge for low cost , simple and the whole process transparent.	Europe	11/06/2014

58	Utilities	British Gas	SAP	53 million meters as an opportunity to build close relationship with consumer	Uk	2012
59	Utilities	Duke Energy	SAP	Automated meter readings and better load balancing	USA	2012
60	Utilities	C&A	Telefonica	Multinational retail company, head office in Netherlands. Operated in 15 countries	Spain	15/04/2015
61	Utilities	AMS	Vodafone	Consumer's embraced the smart metering for their electricity supply to lower costs, reduce CO2 emissions.	New Zealand	1/01/2011
62	Waste Management	Mic-O-Data	Vodafone	Technology to help local council to reduce cost in waste management and sustainability.	Netherlands	1/09/2012
63	Waste Management	Ecube Labs	Vodafone	An environment friendly digital bin system for the city of Seoul, South Korea. It will not only stop the overflowing of city bins, but also will reduce operational cost, CO2 Emission and fuel cost of waste transportation.	South Korea	16/01/2014

Appendix 2: Content Analysis of the Researched Case Studies

Content Analysis of Case Studies			
Table Summary: This table has recorded all the text and expression that was mentioned in all those case study as a measurement instrument of the Construct of our study. Ex. Reduced Workload has been mentioned in 31 of the 63 case studies and this indicate the Construct Perceived Usefulness.			
Construct	Measurement Instrument	Number Of Times	Case Study Organization
Perceived Usefulness (PU)	Reduced Workload	31	ISS, Procon Telematics, Gilgai Farm, Scavogn Australia, Move Yourself, Azzona Drainage, CESC, Admirrorr, Kone, Global Traker, iDefigo, Keenan, CableTracks, British Gas, Duke Energy, Isotrak, Transpoco, infomobility.it, Bglobal, AMS, SecureNet, Mic-O- Data, Ecube Labs, Spillsure, Sensormind, TRxCARE, npower, Enexis, The New Motion, WIKON, Movimatica.
	Reduced Human Error	29	Admirrorr, ISS, Inversis, autolib, Coco-Cola Amatil, Brasserie Bread, Ansomar, Gilgai Farm, Move Yourself, Procon Telematics, Wagga Shuttle, CESC, Global Traker, Keenan, CableTracks, CSL DualCom, British Gas, Duke Energy, DriveNow, infomobility.it, SecureNet, TomTom, Isotrak, Zenith Hygiene, Transpoco, Spillsure, Sensormind, Movimatica.
	Interoperability and Scalability	10	Admirrorr, Movimatica, Transpoco, TRxCARE, Global Traker, Keenan, Isotrak, GM OnStar, infomobility.it, Amazon
	Green Sustainability, Reduce	8	Inversis, Ecube Labs, autolib, Gilgai Farm, Azzona Drainage, C&A, ASB Bank, DriveNow
	Efficient Energy Consumption	18	Inversis, Ecube Labs, The New Motion, WIKON, SecureNet, Brasserie Bread, C&A, npower, Enexis, Spillsure, AMS, CESC, Bglobal, ASB Bank, Carel, British Gas, Bosch Software Innovations GmbH, Duke Energy.
	Tracking	39	ISS, autolib, Scavogn Australia, Move Yourself, Azzona Drainage, Wagga Shuttle, Comotrans, Cutcsa, Rockwell, Once, CESC, ASB Bank, Global Traker, GridTEQ, CableTracks, Ideal life, British Gas, Duke Energy, DriveNow, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, SecureNet, Mic-O-Data, MahindraREVA, Custodia, Methminder, Ecube Labs, TomTom, Isotrak, Zenith Hygiene, Transpoco, Track4Services, Sycada, npower, Enexis, Movimatica.
	Reduced Overtime	3	ISS, Azzona Drainage, Wagga Shuttle

	Total Visibility of Assets	32	ISS, Brasserie Bread, Gilgai Farm, Comotrans, Move Yourself, Azzona Drainage, Rockwell, CESC, ASB Bank, Admirrorr, Custodia, Global Traker, AMS, SecureNet Bglobal, Carel, Bosch Software Innovations GmbH, infomobility.it, iDefigo, Keenan, CableTracks, GM OnStar, British Gas, Duke Energy, Mic-O-Data, MahindraREVA, Methminder, TomTom, Isotrak, Zenith Hygiene, Transpoco, Movimatica.
	Improved Productivity	57	ISS, Coco-Cola Amatil, Brasserie Bread, Gilgai Farm, Scanvogn Australia, Procon Telematics, Move Yourself, Azzona Drainage, Reid Stockfeeds, Wagga Shuttle, Comotrans, Cutcsa, Rockwell, Once, CESC, Atlas Copco, ASB Bank, Admirrorr, Kone, Global Traker, GridTEQ, iDefigo, Keenan, CableTracks, Carel, GM OnStart, Ideal life, British Gas, Duke Energy, DriveNow, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, Amazon, SecureNet, Zenith Hygiene, Mic-O-Data, MahindraREVA, Ecube Labs, TomTom, Isotrak, eGate, Transpoco, Spillsure, Mswipe, Sensormind, TRxCARE, Sycada, npower, Enexis, The New Motion, WIKON, Venis S.p.A, Movimatica, Custodia.
	Cost Reduction	43	ISS, Inversis, autolib, Coco-Cola Amatil, Azzona Drainage, Brasserie Bread, Gilgai Farm, Scanvogn Australia, Move Yourself, Reid Stockfeeds, Procon Telematics, Wagga Shuttle, C&A, Comotrans, CESC, ASB Bank, Admirrorr, Kone, Global Traker, Keenan, CableTracks, Carel, CSL DualCom, DriveNow, infomobility.it, Bglobal, AMS, SecureNet, Mic-O-Data, Methminder, Ecube Labs, Isotrak, Zenith Hygiene, Transpoco, Spillsure, Sensormind, TRxCARE, npower, Enexis, Venis S.p.A, Movimatica.
	Predictical Reporting	29	ISS, Inversis, Brasserie Bread, Cutcsa, Rockwell, Spillsure, Gilgai Farm, Reid Stockfeeds, Comotrans, Rockwell, CESC, Admirrorr, Global Traker, GridTEQ, British Gas, Duke Energy, infomobility.it, Bglobal, AMS, SecureNet, Mic-O-Data, Isotrak, eGate, Zenith Hygiene, Transpoco, Sensormind, TRxCARE, npower, Enexis, Movimatica,
	Enhanced Customer Service	44	ISS, Move Yourself, Scanvogn Australia, Reid Stockfeeds, Procon Telematics, Cutcsa, Rockwell, Once, CESC, Atlas Copco, Admirrorr, AMS, Kone, Global Traker, GridTEQ, iDefigo, Ideal life, British Gas, Duke Energy, infomobility.it, Bosch Software Innovations GmbH, Bglobal, Amazon, SecureNet, Mic-O-Data, MahindraREVA, Spillsure, Methminder, TomTom, Isotrak, eGate, Transpoco, Track4Services, Mswipe, Sensormind, TRxCARE, Sycada, npower, Enexis, The New Motion, WIKON, Venis S.p.A, Movimatica.

	Asset Management	26	Scanvogn Australia, Custodia, Gilgai Farm, ISS, Comotrans, Inversis, autolib, Coco- Cola Amatil, Brasserie Bread, Ansomar, Move Yourself, Wagga Shuttle, Rockwell, ASB Bank, Kone, Global Traker, iDefigo, Keenan, DriveNow, infomobility.it, Bosch Software Innovations GmbH, SecureNet, Isotrak, Zenith Hygiene, Transpoco, Movimatica.
	Operational Visibility	48	Scanvogn Australia, Gilgai Farm, ISS, Inversis, autolib, Wagga Shuttle, Coco-Cola Amatil, Brasserie Bread, Ansomar, Azzona Drainage, Reid Stockfeeds, Comotrans, Rockwell, Once, CESC, Admirrorr, Kone, Global Traker, GridTEQ, iDefigo, Keenan, CableTracks, GM OnStar, Ideal life, British Gas, Duke Energy, DriveNow, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, SecureNet, Mic-O-Data, Ecube Labs, TomTom, Isotrak, eGate, Zenith Hygiene, Transpoco, Spillsure, Mswipe, Venis S.p.A, Sensormind, TRxCARE, npower, Enexis, The New Motion, WIKON,
	OHS	7	Scanvogn Australia, Move Yourself, Admirrorr, Kone, Methminder, Sensormind, TRxCARE,
	Maintain Competitive Advantage	38	The New Motion, WIKON, Track4Services, Transpoco, Isotrak, SecureNet, Sycada, Amazon, Ansomar, Cutcsa, Once, Brasserie Bread, Move Yourself, Rockwell, Spillsure, Reid Stockfeeds, CESC, Atlas Copco, Kone, Global Traker, GridTEQ, iDefigo, Keenan, GM OnStar, Ideal life, TomTom, British Gas, Duke Energy, infomobility.it, Zenith Hygiene, Bosch Software Innovations GmbH, Bglobal, AMS, Mic-O-Data, MahindraREVA, eGate, Venis S.p.A, Movimatica.
	Improved Accuracy& Event History	49	Wagga Shuttle, ISS, Inversis, Coco-Cola Amatil, Brasserie Bread, Gilgai Farm, Scanvogn Australia, Scanvogn Australia, Move Yourself, Azzona Drainage, C&A, Comotrans, Cutcsa, Rockwell, CESC, ASB Bank, Admirrorr, Kone, Global Traker, GridTEQ, iDefigo, Keenan, CableTracks, Carel, GM OnStar, British Gas, Duke Energy, SecureNet, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, Mic-O- Data, MahindraREVA, Methminder, Movimatica, Sensormind, TRxCARE, TomTom,Isotrak, eGate, Zenith Hygiene, Transpoco, Spillsure, npower, Enexis, The New Motion, WIKON, Custodia.

	RealTime Remote Monitoring & Control	55	Wagga Shuttle, ISS, Inversis, Coco-Cola Amatil, Brasserie Bread, Gilgai Farm, Scanvogn Australia, Scanvogn Australia, Move Yourself, CSL DualCom, Azzona Drainage, C&A, Comotrans, Cutcsa, Rockwell, CESC, ASB Bank, Admirrorr, Kone, Global Traker, GridTEQ, iDefigo, Keenan, Carel, GM OnStar, British Gas, Duke Energy, DriveNow, SecureNet, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, Mic-O- Data, MahindraREVA, Methminder, Track4Services, Ecube Labs, TomTom, Isotrak, eGate, Zenith Hygiene, Transpoco, Spillsure, Sensormind, TRxCARE, Sycada, npower, Enexis, The New Motion, WIKON, Movimatica, Custodia.
Perceived Connectedness (PC)	Sensors Deployment	39	ISS, C&A, Wagga Shuttle, Inversis, autolib, Coco-Cola Amatil, Brasserie Bread, Ansomar, Gilgai Farm, Scanvogn Australia, Comotrans, Rockwell, CESC, ASB Bank, Admirrorr, Kone, Global Traker, Keenan, CableTracks, CSL DualCom, GM OnStar, British Gas, Duke Energy, DriveNow, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS
	Web Portal for Users	24	ISS, Brasserie Bread, Wagga Shuttle, Gilgai Farm, Scanvogn Australia, Move Yourself, Comotrans, ASB Bank, Admirrorr, Global Traker, MahindraREVA, GridTEQ, iDefigo, CSL DualCom, Spillsure, infomobility.it, Mic-O-Data, Isotrak, Transpoco, Track4Services, Sensormind, TRxCARE, Venis S.p.A, Movimatica.
	Always Connected	51	ISS, Inversis, autolib, Coco-Cola Amatil, Azzona Drainage, Transpoco, Brasserie Bread, Gilgai Farm, Scanvogn Australia, Move Yourself, Reid Stockfeeds, Procon Telematics, Wagga Shuttle, Cutcsa, C&A, Comotrans, Rockwell, Once, CESC, Atlas Copco, ASB Bank, Admirrorr, Kone, Global Traker, GridTEQ, Keenan, CableTracks, CSL DualCom, Ideal life, DriveNow, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, SecureNet, Mic-O-Data, MahindraREVA, Methminder, Ecube Labs, TomTom, Isotrak, eGate, Zenith Hygiene, Track4Services, Spillsure, Sensormind, TRxCARE, Sycada, The New Motion, WIKON, Venis S.p.A, Movimatica.

	Access & Control	41	ISS, Inversis, autolib, Coco-Cola Amatil, Azzona Drainage, Brasserie Bread, Ansomar, Gilgai Farm, Scanvogn Australia, Move Yourself, C&A, Rockwell, CESC, ASB Bank, Kone, Global Traker, iDefigo, Keenan, Carel, GM OnStar, DriveNow, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, SecureNet, Mic-O-Data, MahindraREVA, TomTom, Isotrak, Zenith Hygiene, Transpoco, Spillsure, Mswipe, npower, Enexis, The New Motion, WIKON, Venis S.p.A, Movimatica, Custodia.
	Network of Devices	15	Coco-Cola Amatil, Scanvogn Australia, Rockwell, GridTEQ, Admirrorr, Global Traker, Keenan, Carel, infomobility.it, SecureNet, Mic-O-Data, Isotrak, Zenith Hygiene, Transpoco, Track4Services,
Service Quality (SQ)	High Service Quality	49	Ansomar, Brasserie Bread, Reid Stockfeeds, Scanvogn Australia, Move Yourself, Azzona Drainage, Comotrans, Procon Telematics, Wagga Shuttle, Cutcsa, Rockwell, CESC, Admirrorr, Kone, Global Traker, GridTEQ, iDefigo, Keenan, CableTracks, Carel, CSL DualCom, British Gas, Duke Energy, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, Amazon, SecureNet, Mic-O-Data, MahindraREVA, Zenith Hygiene, Methminder, Ecube Labs, Sensormind, TRxCARE, TomTom, Isotrak, eGate, Transpoco, Track4Services, Spillsure, Sycada, npower, Enexis, The New Motion, WIKON, Venis S.p.A, Movimatica, Custodia.
	Regulation Compliance	16	Ansomar, Brasserie Bread, Wagga Shuttle, ASB Bank, Kone, iDefigo, Global Traker, CableTracks, infomobility.it, Isotrak, Zenith Hygiene, Transpoco, npower, Enexis, Venis S.p.A, Movimatica.
	Up to Date Service	26	Bglobal, Coco-Cola Amatil, Move Yourself, CESC, Admirrorr, GridTEQ, iDefigo, Keenan, British Gas, Duke Energy, Bosch Software Innovations GmbH, AMS, Amazon, SecureNet, Mic-O-Data, MahindraREVA, Ecube Labs, TomTom, eGate, Zenith Hygiene, Mswipe, Sensormind, TRxCARE, npower, Enexis, Venis S.p.A,
	Productivity and Future Servicing Alart	16	Coco-Cola Amatil, Move Yourself, Wagga Shuttle, Comotrans, CESC, Rockwell, Atlas Copco, Kone, Keenan, Bosch Software Innovations GmbH, Bglobal, MahindraREVA, Zenith Hygiene, Spillsure, The New Motion, WIKON,

	High Level of Critical Observation	35	Gilgai Farm, Coco-Cola Amatil, Wagga Shuttle, C&A, Comotrans, Rockwell, ASB Bank, Admirrorr, Kone, Global Traker, iDefigo, Keenan, CableTracks, Carel, CSL DualCom, GM OnStar, Mic-O-Data, infomobility.it, Bosch Software Innovations GmbH, SecureNet, Zenith Hygiene, MahindraREVA, Methminder, Ecube Labs, TomTom, Isotrak, eGate, The New Motion, WIKON, Transpoco, Spillsure, Sensormind, TRxCARE, Movimatica, Custodia.
	Better Business Plan	13	Gilgai Farm, Coco-Cola Amatil, Reid Stockfeeds, Procon Telematics, Atlas Copco, GridTEQ, Keenan, Amazon, eGate, Track4Services, Spillsure, Mswipe, Venis S.p.A,
	Warranty Policy	4	Scanvogn Australia, Global Traker, Isotrak, Transpoco,
	OHSE Compliance	8	Scanvogn Australia, Isotrak, Wagga Shuttle, Admirrorr, Transpoco, Kone, Global Traker, Methminder,
	Value Added Service	39	Scanvogn Australia, Move Yourself, GridTEQ, Once, CESC, Admirrorr, Kone, Global Traker, iDefigo, Keenan, CableTracks, Carel, GM OnStar, Ideal life, British Gas, Duke Energy, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, Amazon, SecureNet, Mic-O-Data, MahindraREVA, Methminder, Ecube Labs, TomTom, Isotrak, eGate,
	Claim Management	4	Reid Stockfeeds, Global Traker, infomobility.it, Isotrak,
Perceived Ease of Use (PEU)	Fast and Easily Installable,	9	ISS, Cutcsa, Admirrorr, Kone, iDefigo, CableTracks, Mswipe, Track4Services,
	Moduler Approach	2	ISS, Comotrans
	Detailed Decommendation	22	Inversis, Azzona Drainage, Comotrans, Atlas Copco, ASB Bank, Transpoco, Kone, Admirrorr, Global Traker, GridTEQ, Keenan, infomobility.it, Mic-O-Data, Ecube Labs, TomTom, Isotrak, eGate, Zenith Hygiene, Sensormind, TRxCARE
	Automatic Powerful Report	14	Ansomar, Brasserie Bread, Gilgai Farm, Wagga Shuttle, Comotrans, CESC, Global Traker, GridTEQ, infomobility.it, Bglobal, AMS, Isotrak,
	No Additional IT infrastructure investments	4	Ansomar, Admirrorr, Amazon, Mswipe,

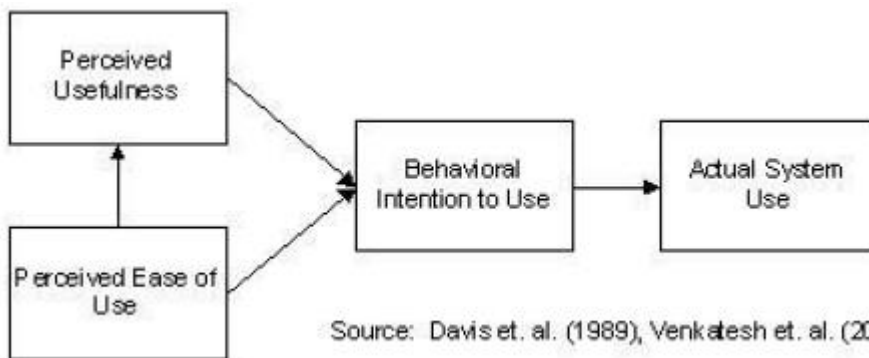
	Easy Access to Behavioral Data	23	AMS, SecureNet, Coca-Cola Amatil, Bglobal, CESC, Admirrorr, Kone, GridTEQ, iDefigo, Bosch Software Innovations GmbH, Mic-O-Data, MahindraREVA, Methminder, Ecube Labs, eGate, Zenith Hygiene, Spillsure, Mswipe, Sensormind, TRxCARE, npower, Enexis, The New Motion, WIKON
	Convenient and Accurate	46	ISS, Inversis, autolib, Coco-Cola Amatil, Brasserie Bread, Azzona Drainage, Ansomar, Move Yourself, Procon Telematics, Wagga Shuttle, C&A, Comotrans, Cutcsa, Rockwell, CESC, ASB Bank, Admirrorr, Kone, Global Traker, GridTEQ, iDefigo, CableTracks, Transpoco, Carel, CSL DualCom, DriveNow, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, Amazon, Mic-O-Data, Methminder, Ecube Labs, TomTom, Isotrak, eGate, Zenith Hygiene, Track4Services, Mswipe, Sensormind, TRxCARE, Sycada, npower, Enexis, Movimatica, Custodia.
	High Mobility	15	Amazon, Mswipe, Track4Services, Transpoco, Isotrak, Sensormind, TRxCARE, Once, TomTom, Admirrorr, Global Traker, GridTEQ,
Behavioral Intention in Use (BIU)	Identify and Isolate problem	26	ISS, Inversis, autolib, Coco-Cola Amatil, Brasserie Bread, Ansomar, Rockwell, CESC, Admirrorr, Kone, Global Traker, iDefigo, Keenan, CableTracks, GM OnStar, DriveNow, infomobility.it, Bosch Software Innovations GmbH, Bglobal, Mic-O-Data, MahindraREVA, Methminder, Isotrak, Zenith Hygiene, Transpoco,
	Efficient Consumption (Fuel/Energy)	7	Inversis, Zenith Hygiene, Ecube Labs, Azzona Drainage, Wagga Shuttle, Comotrans, ASB Bank
	Relying on Data Not Intuition	28	ISS, Inversis, autolib, Coco-Cola Amatil, Brasserie Bread, Ansomar, Cutcsa, Rockwell, ASB Bank, Global Traker, Keenan, CableTracks, Carel, DriveNow, infomobility.it, Bosch Software Innovations GmbH, Mic-O-Data, MahindraREVA, Methminder,
	Change in Behavior	20	ISS, SecureNet, Reid Stockfeeds, Mic-O-Data, MahindraREVA, Wagga Shuttle, C&A, Comotrans, ASB Bank, GridTEQ, Bosch Software Innovations GmbH, Methminder, Ecube Labs, TomTom, eGate, Zenith Hygiene, Track4Services, Spillsure, Mswipe, Sycada,
	Credible Evidence for Insurance	10	Ansomar, Transpoco, Global Traker, iDefigo, Zenith Hygiene, infomobility.it, Methminder, Isotrak,
	Better Work Life	1	Gilgai Farm

	Reduce Manual Effort	29	Gilgai Farm, Wagga Shuttle, Scanvogn Australia, Move Yourself, Procon Telematics, Comotrans, Cutcsa, Rockwell, Once, Kone, Global Traker, Keenan, CableTracks, Carel, Ideal life, Mic-O-Data, infomobility.it, Bosch Software Innovations GmbH, SecureNet, Ecube Labs, The New Motion, WIKON, TomTom, Isotrak, Zenith Hygiene, Transpoco, Spillsure, Venis S.p.A, Movimatica.
	Strengthen Relationship (Ex. Doctor - Patient/Vendor - Customer)	8	Admirrorr, Keenan, Venis S.p.A, Methminder, eGate, Zenith Hygiene, Sensormind, TRxCARE
Satisfaction (S)	Guaranteed Quality of Service	35	Ansomar, Procon Telematics, Cutcsa, CESC, Atlas Copco, Admirrorr, Global Traker, Kone, GridTEQ, iDefigo, Keenan, CableTracks, GM OnStar, infomobility.it, Bglobal, AMS, Amazon, Mic-O-Data, Zenith Hygiene, MahindraREVA, Methminder, Ecube Labs, TomTom, Isotrak, eGate, Transpoco, Track4Services, Spillsure, Mswipe, Sensormind, TRxCARE, npower, Enexis, Movimatica, Custodia.
	Maintaining Optimum	5	Ansomar, Comotrans, Global Traker, infomobility.it, Isotrak
	Meeting Deadlines	7	Ansomar, Reid Stockfeeds, Isotrak, Comotrans, Global Traker, Keenan, infomobility.it,
	Remote Monitoring	37	Scanvogn Australia, eGate, Comotrans, Rockwell, CESC, Admirrorr, Kone, Global Traker, GridTEQ, iDefigo, Keenan, Carel, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, SecureNet, Mic-O-Data, MahindraREVA, Methminder, Ecube Labs, TomTom, Isotrak, Zenith Hygiene, Transpoco, Spillsure, Sensormind, TRxCARE, npower, Enexis, npower, Enexis, The New Motion, WIKON, Venis S.p.A, Movimatica, Custodia.
	Value for Customers	37	Scanvogn Australia, Reid Stockfeeds, Comotrans, Cutcsa, CESC, Rockwell, Atlas Copco, Admirrorr, Kone, Global Traker, GridTEQ, iDefigo, Keenan, Carel, GM OnStar, British Gas, Duke Energy, Methminder, infomobility.it, Bglobal, AMS, Amazon, SecureNet, MahindraREVA, TomTom, Isotrak, eGate, Transpoco, npower, Enexis, Track4Services, Spillsure, Mswipe, Sensormind, TRxCARE, Sycada, Venis S.p.A, Movimatica.
	Assistance for Employees	27	Move Yourself, Procon Telematics, Comotrans, Cutcsaaw, CESC, ASB Bank, Admirrorr, Kone, Global Traker, iDefigo, Keenan, CableTracks, infomobility.it, Bglobal, SecureNet, Mic-O-Data, MahindraREVA, Ecube Labs, Isotrak, Zenith Hygiene, Transpoco, Mswipe, Sensormind, TRxCARE, npower, Enexis, Movimatica.

	High Quality Reports	30	Move Yourself, ISS, Inversis, Brasserie Bread, Cutcsa, Rockwell, Spillsure, Gilgai Farm, Reid Stockfeeds, Comotrans, Rockwell, CESC, Admirrorr, Global Traker, GridTEQ, British Gas, Duke Energy, infomobility.it, Bglobal, AMS, SecureNet, Mic-O
	Easy Daily Operation	22	Move Yourself, Reid Stockfeeds, Comotrans, Cutcsa, Rockwell, CESC, ASB Bank, Kone, Global Traker, iDefigo, Keenan, CableTracks, infomobility.it, Bosch Software
	High Visibility & Control	38	Azzona Drainage, Reid Stockfeeds, Comotrans, Cutcsa, Rockwell, CESC, Admirrorr, Kone, Global Traker, GridTEQ, iDefigo, Keenan, CableTracks, GM OnStar, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, SecureNet, Mic-O- Data, Zenith Hygiene, MahindraREVA, Methminder, Ecube Labs, TomTom, Isotrak, eGate, Transpoco, Spillsure,
	Financial Gain / Improved Revenue	42	ISS, Inversis, autolib, Coco-Cola Amatil, Azzona Drainage, Brasserie Bread, Gilgai Farm, Scavogn Australia, Move Yourself, Reid Stockfeeds, Procon Telematics, Wagga Shuttle, C&A, Comotrans, Cutcsa, CESC, Global Traker, Keenan, Carel, DriveNow, infomobility.it, Bglobal, AMS, Amazon, SecureNet, Mic-O-Data, Methminder, Ecube Labs, Isotrak, eGate, Zenith Hygiene, Transpoco, Track4Services, Spillsure, Mswipe, Sycada, npower, Enexis, The New Motion, WIKON, Movimatica, Custodia.
	Future Business Opportunity	14	Once, CESC, Atlas Copco, Admirrorr, Kone, Ideal life, British Gas, Duke Energy, Bglobal, AMS, eGate, Zenith Hygiene, Mswipe,
Perceived Strong Security (PSS)	Alert on Security Breach	11	Scavogn Australia, SecureNet, MahindraREVA, Comotrans, iDefigo, CableTracks, GM OnStar, Bosch Software Innovations GmbH, Methminder, Zenith
	Uniqe Identifier to Protect	2	Wagga Shuttle, GM OnStar
	Alarm on System Fails	2	Cutcsa, SecureNet
	Secured Data Exchange	5	Global Traker, infomobility.it, Isotrak, Track4Services, Movimatica.

Trust	Value in Emerging Technologies	58	ISS, Coco-Cola Amatil, Brasserie Bread, Gilgai Farm, Scavogn Australia, Procon Telematics, Move Yourself, Azzona Drainage, Reid Stockfeeds, Wagga Shuttle, Comotrans, Cutcsa, Rockwell, Once, CESC, Atlas Copco, ASB Bank, Admirrora, Kone, Global Traker, GridTEQ, iDefigo, Keenan, CableTracks, Carel, GM OnStart, Ideal life, British Gas, Duke Energy, DriveNow, infomobility.it, Bosch Software Innovations GmbH, Bglobal, AMS, Amazon, SecureNet, Mic-O-Data, MahindraREVA, Methminder, Ecube Labs, TomTom, Isotrak, eGate, Zenith Hygiene, Transpoco, Track4Services, The New Motion, WIKON, Spillsure, Mswipe, Sensormind, TRxCARE, Sycada, npower, Enexis, Venis S.p.A, Movimatica, Custodia.
	Dependable Data Source	39	ISS, Reid Stockfeeds, Inversis, autolib, Coco-Cola Amatil, Brasserie Bread, Azzona Drainage, Ansomar, Scavogn Australia, Procon Telematics, Wagga Shuttle, C&A, Comotrans, Rockwell, CESC, Admirrora, iDefigo, Keenan, CableTracks, Carel, DriveNow, Bglobal, AMS, Mic-O-Data, MahindraREVA, Ecube Labs, TomTom, eGate, The New Motion, WIKON, Zenith Hygiene, Spillsure, Sensormind, TRxCARE, npower, Enexis, Venis S.p.A, Movimatica.

Appendix 3: Original Technology Acceptance Model



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