“Symphonies to sex on fire”

An investigation into the changing nature of Mobile Music technology and its effect’s on the Irish consumer market between the ages of 20-25 year olds

A dissertation Submitted in part fulfilment of the requirements of the award of BA ordinary degree in Business & Marketing in Dublin Business School.

By

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Approved By Dissertation Supervisor

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Authors Declaration & Confidentiality Agreement

This agreement is hereby executed and effective on the 12th of March, 2010. Between Mark Cahill and Dublin Business School and their representatives, employees, agents and consultants.

I Mark Cahill, declare that I am the sole author of this dissertation, that during this period of registered study I have not been registered for any other academic award or qualification, nor has any of the material been submitted wholly or partly for any other award. I have personally carried out all the work of which this is a record. The programme of study of which this is a part has been delivered by the Dublin Business School.

Signed:___________________________

Date: 10/03/2010
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And finally I would like to thank my Grandfather Joseph Cahill to whom I dedicate my Dissertation to.
Abstract

It is the purpose of this thesis to establish whether music technologies constant evolution affects the consumer’s decision to purchase, as well as alter the consumer’s opinion.

The Irish 20-25 yr old market is a generation of tech savvy intelligent beings. They have grown up with modern conveniences such as the internet and mobile phones, portable media players.

The research being undertaken is to establish just how dependent 20-25 yr olds are on technology by analysing just how much they know about it, and what they perceive as worthy of their attention. As well as the consumers attitudes towards the constant evolution of technology.

Through the use of Focus groups, the information acquired proves the thesis correct. The Irish 20-25 yr old consumer has a positive attitude towards the evolution of mobile music technology, however the evolution of new and more modern variants does not alter the perception of the consumers as to building a must have attitude, it has been established that the 20-25 yr old market will only purchase a new piece of technology is there truly is a necessity for that piece. Their knowledge of the technology that is available is also impressive with the majority of user able to fully understand how applications work and the benefits associated with each new application and upgrade available on new pieces of mobile music technology. There are no impulse purchases due to the relevantly high cost of new technology the 20-25 yr old target will go through the full consumer decision making process before making a purchase.

However they do favour brands in particular the Apple brand I pod for their MP 4 and their laptops seeing them as reliable, quality driven and simplistic.
Introduction

Ireland is one of the most open countries to technology. In particular to music technology, seen as a nation of saints scholars, poets and artists it is only natural that we adopt and adapt the newest methods of accessing music.

The Irish market in particular the 20-25 yr old market are tech savvy creative and bright in terms of developing and using the most advanced technology available on the market. They have gone through the majority of their lives to date upon the back of the Celtic Tiger having access to all modern technology conveniences such as Broadband, Digital TV, mobile phones and portable media device such as CD walkman and the I pod.

This Thesis will attempt to answer the objectives as outlined and to give an insight into the mobile music technology industry, in particular the major players such as Apple, Sony and Microsoft.

It will be necessary to undertake and carry out primary research within the target market. This being the 20-25 yr old Irish market to better understand how mobile music technology affects them.
Chapter One

Literature Review
2.1 Introduction

The purpose of this Literature Review is to explain and give an insight into the advancement and technological impacts that the mobile music industry has across all technology fields. Starting with a brief explanation of how the technology has evolved and how its adaptation has affected the biggest sources of entertainment in the world.

The Discussions will take you through the impact of Piracy on the music industry and how the internet and music industries struggle to compete with the growing demand for cheap music. It will also discuss the competitive nature of the market and how the top mobile music technologies are perceived by the industry leaders.

2.2 Evolution of mobile music technology.

The very first format of mobile music appeared in the 1980’s as the Sony walkman (Sony archives.2009) this tape version was the half the size of an old VHS video tape and required an external battery back. This was the world’s first convergence of technology taking an old format such as the standard cassette player and tape and moulding it with new technologies. Although popular its success was short lived with
the adaptation and creation of the CD and its counterpart the CD walkman. Its sleek design and lightweight when compared to the older walkman made it a huge success and helped create massive revenues in CD sales for companies such as Sony BMG (Sony archives.2009).

However there is one evolution of technology that stands out amongst them all and continues to adapt and grow in both ability and popularity. This is of course the MP3 most predominantly the iPod. Created by Tony Fadell former creative CEO of Apple Inc. It first appeared with the tagline “A thousand songs in your pocket” (Hesseldahl.2009).

Since its appearance it has sold over 218 million units and generated over thirty eight billion dollars making Apple the head of the mobile music technology. (Hesseldahl.2009) The original model has evolved eight times since its arrival and spawned the creation of four other variants, the nano, Shuffle, Touch and iPhone. Each having unique applications and functions that have helped the Apple branch out into other forms of media such as wifi systems, phones and television. (Hesseldahl.2009)

The latest innovation the iPhone 3GS has a camera and traditional IPod functions and applications as well as fully integrated GPS using Google maps, satellite wifi and internet as well as the option to purchase more applications from the online store truly Apple is targeting a new player revolution (Menn.2009)

2.3 Competition between technology giants in the market.

Competition between the giants of music technology is fierce and cut-throat, the battle to constantly be at the forefront of the next big thing. Throughout the late eighties and indeed the nineties decade, Sony electronics ruled over the mobile media market. Its products the Sony walkman in there multiple forms and variations.

However at the turn of the new century Sony slipped from what was seen as an unmoving pedestal and saw a new champion of mobile media arise in its place. In 2001 the very first Apple iPod was produced and sold to the public.
Almost nine years on from that date and iPod is still the market leader with one of the most recognisable brands in the world.

Sony now a only a minor player in the market still remains quietly confident that they can regain there lost market share through there knew tablet technology. Sir Howard stringer Sony chairman and chief executive has high hopes for the new product which is being released after the new I pad (Harding & Gellas.2010)

Other Major competitors in the market are also targeting the new crazy for mobile media in tablet form most notable are HP which use’s a portable version of the windows seven program allowing user to multi task on the tablet something that current leaders Apple don’t have. But perhaps the biggest and most potential of all the new competitors to arise are Dell, they have innovatively come up with a media player in tablet form that is both cost affective and has all the applications, space and abilities that consumer craved the I pad to have using Google’s Android system it presents the smartest system available to date, allowing users to run a host of applications at the same time. (Boran.2010)

2.4 Technologies advancement and its impact on music industry.

Advancement is seen and generally understood as a positive impact for an industry. Music may be the only exception to this generalisation. When the iPod became the super Juggernaut of the music world it did something no other technological advancement could, it brought the music industry to its knees. In the first four years of business, CD prices had to drop 15% to compete with the growth of the iPod (Burt,T.2004)

The MP3/IPod generation became so popular that stores such as HMV Britain’s largest specialist music maker, saw its sales fall from sixty five percent to just forty five according to evidence complied by Sony BMG.(Burt,T.2004) The initial shock to the industry saw earnings plummet. Universal music saw its earnings in 2004 collapse from five hundred and sixty six million to just seventy that year (Burt,2004)
Currently Apple and the four largest music companies in the industry are working together to include interactive packages, photographs, videos, lyric sheets and other items (Hesseldahl, 2009) this is in the hope that it may re-create the heydays of the albums, when friends would buy CD’s and look at the artwork while listening to the music with friends. (Garrahan & Li & Menn, 2009)

Where as sales of digital format have risen nineteen percent to thirty nine million from thirty three million a year earlier. Consumers have purchased six hundred and thirty six point two million individual songs so far this year this is an increase of seventy three point two million so far (Hesseldahl, 2009)

2.5 Mobile Music technology’s effect on the internet and Piracy.

Peer to peer sharing or as the music industry refers to it as ‘stealing’ of copyrighted material. (Larsen, 2004) means that piracy is on an unprecedented scale, so much so that Brazil has exploded to fifty percent of piracy in retail sales, Russia is Europe’s leading piracy culprit feeding twenty six countries with illegal counter fits. Both these accumulate to a five billion dollar piracy market and online sharing /peer to peer sharing accounts for another two point four billion dollars. (Burt, 2004)

The reason for such an increase in online theft is simple, availability of products at a reasonable price ie. At no cost. I tunes and Napster (the official version) only offer a combined one to two million songs were as other illegal downloading sites offer the consumer seven hundred million to eight hundred million, (Burt, 2004) However the internet is not all negative, it is producing advancements and possible new productions the ability to download directly to mobile phones is the reason why music is becoming so portable, accessible and a necessity to every day life. (Larsen, 2004)
The largest music companies are staring to work together with online companies ensuring that they are not caught off guard again. “We continue to make Music but have graduated from piano rolls via six other carries to electronic distribution and still standing” (Larsen.2004) (chairman and CEO of universal music Group)

Some of the biggest names in the industry have been hit harder then others the Irish arm of the Sony global record label has seen loses of one million in twelve months in comparison to last year due to piracy alone.

While operating cost have caused loses as well, due to Irelands high labour and business costs. However Directors remain positive saying that although physical sales are still decreasing digital downloads are on the increase despite piracy problem and the lack of legal assistants in the matter, they expect year on increases. (Noonan.2010)

It is estimated that digital sales accounted for more then one quarter of the music industries global income in 2009. This represents a a nine hundred and forty percent increase in growth generated over the last five years. However the market still saw a thirty percent decline in revenue due to piracy (Barnett.2010)

2.6 Convergence of Music Technology.

Convergence of technologies started in the 1990’s, when new technologies flourished and the technology buzz was abundant. The internet revolution had begun to take a hold of the world population and become more mainstream(Cruikshank& Modi.2004)

“Convergence is a broad term that defines the coming together of technologies and industries” (Cruikshank&Modi.2004) Up until recently convergence of technology has always meant a trade off of applications and abilities, you couldn’t have a small device with a large screen.
This obvious trade off enabled companies to produce ‘extras’ such as the snap on cameras and the flip keyboards, bringing additional revenue to multiple companies. The benefits of what modern technology has to offer is now we can have an item that is light weight, sleek has a camera and all other functions that the consumer wants without a trade off and still fit in your pocket. This means that mobile technology has constant accessibility and constant integration into different platforms of media. (Cruikshank, & Modi. 2004)

Music downloads hit record levels in week fifty one of 2007 and continued to grow during that period. Christmas sales were one million nine hundred and thirty thousand in the UK alone this represented a growth of forty five percent. Week fifty two of the year (Christmas week) saw a one hundred percent increase and a record two million nine hundred and forty thousand downloads (Fenton. 2008) This was due to the consumers ability to download from multiple platforms at any stage of the day from anywhere. Convergence is driven by five key factors (Cruikshank & Modi. 2004)

2.6.1 Five key factors of convergence

Growth of the global internet and mobile populations
The adoption of the internet conditioned people into getting vast amounts of information and entertainment. This lead to an addiction to accessing information quickly (Cruikshank & Modi. 2004). This addiction has continued to grow and now we see the internet as a necessity to general life whether it is on a pc format, phone or console.

Increasing desire for untethered Data experience
The ability to move and still control and access your data whenever/wherever you are, a need for complete mobility and accessibility through mobile, wifi, laptop, IPods/MP3 (Cruikshank & Modi. 2004)

Proliferation of personalized mobile devices that increasingly have multi functions
The demand for wireless data expansions, with multiple applications and functions that are practical to the users needs Eg. Email, video calls

**Increasing desire for a faster experience and the advent of wireless speed**

Historically there have been limitations as to what type of speed our internet can process information at, human nature means that we constantly seek to push if not completely remove the boundaries, (Cruikshank & Modi.2004)

**Cost of infrastructure capital and user application**

Adoption of technologies only proves worthwhile if done in greater numbers once technology has provided operational effectiveness, capital costs become acceptable (Cruikshank & Modi.2004)

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2.7 The cost of evolution on Consumers.

Technologies ever changing form and application comes at a cost to the consumer both existing and new. Downloading music has never been so easy or so expensive, this is due to a deal that Apple made with universal music groups stating that they would charge more then the corner stone ninety nine cents agreed on and charge one euro twenty nine for the top chart songs. (Edgecliffe & Bradshaw.2009)

The reasons behind the increase brought on my competitors such as Qtrax which offers free music for watching advertisements. Since the increase in cost I tunes has purchased competitors LaLa.com which had a unique trial and pay method for selling music. This system would allow the consumer to stream and entire album and listen to it once before the consumer had to make a purchase a decision, similar to test driving a car. I tunes chief executive Steve jobs sees this as an incredible method of enticement and has commented saying that adding a positive or negative feedback report as to which songs are liked the most would enable variable pricing (Edgecliffe & Menn.2009)
2.8 Conclusion
The purpose of this literature review was to get an understanding of what exactly mobile music technology is and how it evolves through the needs of consumers, examining just how the cost’s to the evolution are placed on the consumer in the end and how the industries are trying to reinvent there methods of production and deal with piracy.

Chapter Two
Methodology
Methodology

Problem Definition

“Problem Definition is identification, clarification and definition of the specific marketing difficulty that necessitates decision related information”  
(Domegan & Fleming.2007)

Research Question

Does music technologies constant evolution alter the perception the consumer may have on purchasing?

Research hypothesis
To establish that music technologies evolution does not alter the perception of the consumer towards purchasing.

**Research Objectives**

- To examine consumer attitudes towards music technologies constant evolution
- To examine the consumers understanding of music technologies

**Research Design strategy**

Closely linked to problem definition, problem design strategy is the second step in the marketing research process. “A research design strategy is a blueprint or overall action plan for the remaining marketing research study” (Domegan & Fleming, 2007). It is the framework to build and guide the rest of the marketing research process.

There are three types of research design strategy, exploratory, descriptive and causal.

Descriptive research quantifies known consumers, markets and known marketing issues. It measures the number and amount of a variable present. Descriptive research can be further broken down into either cross sectional or longitudinal, a
cross sectional analysis is like a snap shot of the variables present, were as longitudinal is a description of the elements and variables over a period of time.

Causal proves the cause and effects of relationships between variables, causal data is seen as the most demanding and the conductor must be able to control all factors including outside factors.

The research design strategy chosen for this particular research project is exploratory.

Exploratory research is about establishing trends patterns and ranges of behaviour that are not known. This work is non mathematical and non statistical in form, this gives the researcher freedom to explore different avenues of internet and change the direction of enquiry. The data collection methods associated with exploratory research are as follows, Focus groups, In-depth interviews and projective techniques (Kotler. 2005)

**Data Collection methods**

Data collection methods are broken down into two sections Secondary research and primary research.

**Secondary research**

“Secondary research is data collected by another person for reasons other then the problem at hand “(Domegan & Fleming. 2007). Secondary research can be gathered quicker and cheaper than primary data, Secondary data can be obtained from eight available sources:

- Journals
- Database
- Internet
For this research project the sources that have been used are Journals, database, internet and grey Material, Government.

**Advantages of secondary Research**

- It's process in gathering the data is quick and effective
- It is relatively cheap
- It is quick to use
- There are nine available sources of valid Secondary research
- Collection of secondary data can help alleviate some of the pressure from primary data
- Large Geographic coverag

**Disadvantages of Secondary Research**

- It is not completely relevant to the project at hand
- It is information gathered for other reasons then that at hand
- Its Objectivity is unknown
- Out dated information means inaccurate results
- Incomplete information
Primary Research

“Primary research is undertaken or commissioned by an organisation for a specific purpose. The required information does not already exist in any available form and so has to be undertaken from scratch.” (Brassington & Pettit, 2006)

The advantage of primary research is that it is exactly tailored to the problem in hand. But it can be expensive and time consuming to undertake. Primary data should not be undertaken until all forms of secondary data have been exhausted, as secondary data is more cost effective.

Primary research should not be undertaken until all sources of secondary research have been exhausted.

Advantages of Primary Research

- Directly relates to the project at hand
- Tailored to the problem at hand
- Research is specific and completely relevant
- Objectivity is known
- Ability to observe actions and response
- Multiple forms of gathering the information

Disadvantages of Primary Research

- Time consuming
- Expensive
- Difficult to gather
- Interviewer bias
- Interviewer may lack necessary skills
Key differential factors between Primary and secondary research
(Domegan & Fleming. 2007)  Fig. 1 Table 1

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Secondary Research</th>
<th>Primary research</th>
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<tbody>
<tr>
<td>Collected for other reasons by others.</td>
<td>Collected for specific Problem in hand by researcher.</td>
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</tr>
<tr>
<td>Some to little</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process</th>
<th>Easy to gather</th>
<th>Difficult to gather</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relatively Cheap</td>
<td>Relatively expensive</td>
<td></td>
</tr>
<tr>
<td>Relatively little</td>
<td>Relatively a lot</td>
<td></td>
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| Time required            | Relatively little           | Relatively a lot             |

Primary research is broken down into two types Quantitative and Qualitative.

The chosen type for this research project is Qualitative, “Qualitative research can be defined as the collection of data which is open to interpretation, for instance on attitudes & opinions and which might not be validated statistically” (Domegan & Fleming. 2007)

Qualitative data is known as soft data as it is non statistical, its purpose is to assess the minds of the consumers to discover impressions, expectations and prejudices.
The methods for data collection after choosing qualitative research are Focus groups, In-depth interviews and projective techniques

- Focus group – group of participants 8-12 lead by a moderator in a controlled discussion on a topic
- In-depth interview - A one to one formal meeting with a person, with in-depth knowledge of the field being studied
- Projective techniques- unstructured indirect form of questioning that encourages respondents to project their underlying beliefs, motivations and attitudes

Applications of Qualitative research include:
- Generating ideas on new product development, packaging, design, strategy and branding
- Examination of advertisement strategy
- Exploring the purchasing decision making process
- Exploratory study before Quantitative research
- After Quantitative research to add depth

Quantitative research assumes prior knowledge exists, and background information is available, Quantitative research is used to describe existing market segments competitors and current marketing offerings.

Quantitative research has three techniques for data collection, these are surveys, Observation and panels.
Surveys - involve the collection of data directly from individuals or groups. This may be face to face personal interview.

Panels- A panel of experts consisting of specify chosen eminent industrialists, economists and management consultants. They will be given all information and forecasts and give there views on the future. Quality of the results will depend on the quality and commitment of the experts used.

Observation-This is the second way to conduct descriptive research. It refers to methods of generating data which involve the researcher immersing himself in a research setting and systematically observing dimension of that setting interactions, relationships, actions and events.

Profile of respondents

The population of interest is the aged 20-25 male & females in the Irish market. The age bracket chosen is due to the fact that they are currently the most technologically adapt generation, communally know as ‘generation next’. The study will be based upon there understanding and adaptation of new technologies as they appear on the market.
Consumer personification: Nathan 22 yrs old, DBS college student

Fig.2 Table 2

- Lives in the City areas of Dublin, were it is seen as the technology capital of Ireland.
- Male student, In the middle of the target respondent’s age bracket
- New mobile phones, and I pods are a must.
- DJ applications and software available for free
- MP 3 is constantly used and updated
- Concerts are frequent, receives updates and alerts on Phone
- Enjoys Pc and console Gaming
- Enjoy Ps and console Gaming

Attributes
Psychographic
Demographics
Geographic

Sampling types, there are to sampling type methods Probability and Non Probability. Probability is a type of sampling where each unit has a known chance of being selected; this means that every member of the population of interest has a chance of selection. Probability sampling allows generalisation to be made about the whole population and allows for calculating sampling error
There are four types of Probability sampling: (Domegan & Fleming .2007)

1. Simple random sampling, members/ units are selected randomly from the population of interest list, there is an equal chance of selection, however members must have two components, an accurate complete sample frame and a random selection procedure.

2. Systematic random sampling, members are selected every n th E.g. every 2$^{nd}$ person, starting at a random point in the list.

3. Stratified random sampling, the population is taken and divided into equal, mutual, exclusive and collectively exclusive strata.

4. Cluster sampling, this is a two step technique, the population is sub divided into manageable clusters or groups, random selection is used to select the group members, clusters are generally formed were people have common interests or geographic location.

Non- Probability sampling is not based upon any probability laws. The probability of selection is unknown and is subjective. Sample members are chosen consciously by the researcher.

There are four types of Non probability sampling; (Domegan & Fleming .2007)

1. Convenience sampling, members are chosen because they themselves willingly step volunteer, the selection of the sampling is left to the interviewer.

2. Purposive Sampling, members are chosen because they are not representative of the population; they are selected according to some pre determined criteria.
3. Judgement sampling, expertise of the researcher is used to hand pick the sample unit in an attempt to bring representatives to the sample.

4. Quota sampling, attempts are made to replicate the population without using random selection. It has pre determined contracts, such as Age, Sex, social class.

The sampling method chosen to best suite this projects requirements is non Probability and will be a mixture of convenience and Judgement sampling. The reason for this the selection of convenience over the other styles is that the target market is easily accessible by the researcher and there is an abundant supply of the population of interest at hand and the selection of Judgement sampling is due to the moderators ability to be specific in who is selected.
Fieldwork

Research tool selection

The methods for data collection after choosing qualitative research are Focus groups, In-depth interviews and projective techniques.

The method of data collection chosen for this research project is focus groups. A focus group consists of a group of participants 8-12 who are led in an in-depth discussion on a particular topic or concept.

The purpose behind a focus group is to gain insight by listening to what the sample of the population of interest has to say on a topic, participants can help identify key issues, generate ideas, and uncover customer needs, attitudes, perceptions & motives.

Fig .3 table 3

<table>
<thead>
<tr>
<th>Advantages of Focus group</th>
<th>Disadvantages of Focus group</th>
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<tbody>
<tr>
<td>• Synergism : more people, wider range of information</td>
<td>• Participants may not be representative of the population of interest</td>
</tr>
<tr>
<td>• Snowballing: Domino effect</td>
<td>• Small sample size</td>
</tr>
<tr>
<td>• Stimulation: Listening to others</td>
<td>• Quality of results depends on the skill of the moderator</td>
</tr>
<tr>
<td>• Security : share same feelings with group</td>
<td>• Subjectivity of results</td>
</tr>
<tr>
<td>• Spontaneity: Response are spontaneous</td>
<td>• Coding, analysis &amp; interpretation</td>
</tr>
<tr>
<td>• Serendipity</td>
<td>• Results are exploratory not conclusive</td>
</tr>
<tr>
<td>• Structure : Flexibility in topic &amp; depth</td>
<td></td>
</tr>
<tr>
<td>• Speed: Data collected quicker with large number of participants</td>
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</table>

(Domegan & Fleming, 2007)
The rationale behind the selection of focus groups,

The decision to choose focus groups over the other methods of qualitative research was due to the fact that the study will be taken in a college; therefore, the moderator has a wide selection of participants that all share a common interest in mobile music technology, this means that the moderator will have ready available access to participants with a completely accurate sample frame. This ensures that response rate is at its highest.

The focus groups will be undertaken in DBS in South William Street on the 25th of February 2010; there will be one mini focus group and one regular conducted and taped for evidence.
Chapter three
Data Analysis
Data Analysis

Data Analysis is a set of methods and techniques that can be used to obtain information & insights from data. (Domegan & Fleming. 2007)

Data Analysis requires the research to perform four important parts.

- Editing
- Coding
- Tabulation
- Summarisation

Editing involves checking for problems such as Ambiguity, which are unclear answers. Incomplete answers and inconsistent information. This helps eliminate response error and interviewer error.

Coding involves assigning the data into pertinent categories, to speed up tabulation. (Domegan & Fleming. 2007) Coding means that you assign a code usually a number to represent each specific response to each specific question.

Coding is the process of transforming raw data into symbols. (Churchill & Brown. 2007)

Coding can be Pre-coded or post coded depending on what type of research undertaken. Pre-coding deals with structured questionnaires with close ended questions. It is appropriate were the questions are dichotomous and multiple choice.

Post coding is usually required for open ended questions as respondents write in her answers long hand. It allows qualitative answers to be further processed on a quantitative basis. (Churchill & Brown. 2007)
Tabulation is the summarisation of statistics gathered through your research collection
E.g. 10% of people who smoke attended hospital more than 5 times a year.

Tabulation can be done through two methods:

Simple tabulation, which is done question by question or Cross tabulation which is done by relationships between questions.

Cross tabulations is an important tool for studying the relationships between two or more categorical variables. It is the most multivariate data analysis technique in applied market research. (Churchill & Brown.2007) (Domegan & Fleming.2007)

Simple tabulation is a count of the number of cases that fall into each category when the categories are based on one variable.

Summarisation is the presenting of the raw data into interesting findings relating to objectives.
Chapter Four

Findings
Findings

- **Objective one**: To examine consumer attitudes towards music technologies constant evolution

Through the conduction of a full focus group and one mini focus group, the data gathered and summarisation process provided information that provides the following facts. (See appendix 2 & 3)

**Attitude towards technologies evolution**

The 20-25 yr old Irish market being studied to best understand the attitudes towards music technologies evolution has had contact with these types of technology from an early age, through the two focus groups conducted every member had a form of Sony walkman, this device is seen as the father or first portable music device, which ran on tape or CD.

There has been an upgrade from every type of portable music device up to the current levels of technology available today. Every member of the focus groups has gone through a chain of upgrading from model to model. Starting at the tape and working its way up to current MP4 standards this includes smart phone technology such as the I-phone and Nokia variants. When purchasing new technology, it is through necessity not through impulse or the need to have the latest model, the 20-25 Irish market, make these purchase’s according to what they need not according to what they want.

The 20-25 yr old Irish market is capable of evolving with technology; they have the ability to adapt to the latest innovative products, quite quickly and efficiently. The attitude towards technologies evolution is positive as long as it is of benefit to them. The group conversation within the mini focus group was mainly centred on the I pod MP4 player, the latest version the nano-i and the I pod touch the findings suggest that the 20-25 yr old market are not so concerned with additional extras as long as the key protocols that they require are met this means that although some applications are
view as a waste of space on the product that they want and are removed as soon as they are purchased.

In relation to the method of payment and purchasing music for the portable devices, the 20-25 yr old Irish market still refuses to pay, with the main focus group completely agreeing that if music can be obtained through a quick free method of technology it will be used. This shows that the market is still charging too much per song or per album something that chief executive of Apple Steve jobs has already stated. They agreed that the method that i-tunes has for purchasing is quick and easy to use and that the converting of normal MP3 songs into apples format is easy and convenient, but have found free sources that have similar download capabilities,

Brand is also a major factor, 20-25 yr olds that have undertaken the focus group have provided information, proving that when purchasing a mobile music technology they favour brands that have the highest quality and have good public relations, Apple is the most commonly talked about brand and is seen as the best available. Price wise it is seen as a good investment as the product is assured to deliver.
**Objective two:** To examine the consumers understanding of music technologies

**Understanding and evolving with technology**

The Irish 20-25 yr old market has an in depth knowledge of all forms music technology having had access from an early age it has become second nature to them in terms of understanding new technology. (Appendix 2&3)

The average 20-25 yr old has access to Desktop, laptop, smart phones MP4 and tablet technology. New technology that appears on the market has to be able to both multi task and have multiple purposes. Due to the sheer amount of applications that consumers see as necessary. The latest I pods are no longer your standard music player they have built in cameras that can record edit and play video, they have games calendars clocks and more, what used to be seen as creative extras have now become the basic requirements that all new technology must have in order to be seen as a worthwhile investment by this tech savvy market.

The 20-25 yr old Irish market is also a price sensitive and conscious shopper. They do not impulse purchase, when considering what piece of mobile music technology is needed. They analysis the situation and go through the full CDMP (consumer decision making process)
**Consumer Decision making process**

Problem recognition: The consumer needs to upgrade / replace existing model for newer version.

Search for Information: The consumer seeks out all available information on the product to educate him/herself.

Alternative evaluation: Seek out possible competitors in the market comparing quality, reviews and other forms of feedback.

Choice: The selection of the model best suited to the consumer needs.

Outcomes: positive or negative feedback based on levels of satisfaction obtained through use of item.

The reason for the this is due to the fact that this is seen as a high involvement purchase that, is bad even more important in the current economic climate were money is not to be wasted and therefore consumer can afford to be critical of their analysis on new product.
Primary Vs Secondary Data

Information obtained through Primary data, has stated that the Irish 20-25 year old target market is Price sensitive, intelligent towards purchases involving modern technology and adaptive to the fast nature of mobile music technologies evolution.

They have a vast knowledge of technology from a consumer point of view, They know what interests them and are able to choose what the need over what the what, in other words they are smart consumers, they are able to rationale decided on what model of technology is best suited to their needs rather than submitting to their wants.

There is no secondary data that mentions or takes into regard the level of thought or the detail as to which the consumer will investigate into new technologies appearing on the market. This is again due to the price sensitive nature of the Irish 20-25 year old Irish market and is emphasised even more in the current economic climate.

Secondary data focuses on a purely results based report, the secondary research collected for this dissertation has been extremely detailed as to what has been successful, how many units it has sold and how much money the industry has made from its sales per year.

Conclusion

The data obtained through Primary & Secondary though similar in some nature target different aspects of the consumer. Primary research has given a detailed account into the psychological thought process of the consumer in regards to the evolution of new mobile technology. There as Secondary data is formatted from an industrial point of view taking into account sales for and what has been success full and why this has been the case.
Chapter Five

Conclusion & Recommendations
Conclusion

Music technology has become a key part of life for the 20-25 year old Irish market. It has influential factors across many different fields including accessibility to multiple media, this includes the internet, email, movies, and music.

However, technology's evolution has also impacted the music industry itself with more and more people using illegal downloading. The 20-25 year old Irish market are of the opinion that if it can be obtained for free, then it will be. This has caused substantial problems for companies like Apple and other fee-paying websites.

Mobile music technology has evolved as we have seen fit and as to what we have seen as necessary. It has become a central part of the 20-25 year old lifestyle, it has adopted and changed to match every need that the consumer can think of, starting as a simple MP3 to a mobile theatre of entertainment.

My hypothesis set out to prove that music technology's evolution does not alter the perception of the consumer towards purchasing. Through the conduction of two focus groups, the hypothesis has been proven correct.

The Irish 20-25 year old market are fascinated by technology and enjoy exploring it evolution through hands-on experience, however, there are smart consumers and therefore price sensitive. This is due to the expense nature of new technology when first launched into the market. This is emphasised even more in the current economic climate.

As stated in Data Analysis the CDMP (consumer decision making process) is used in decision making, all options and alternatives are weighed up before purchasing new technology.
Recommendations

If companies wanted to attract the 20-25 year old Irish market more effectively, they will have to lower their prices when introducing new technology to the market.

In relation to Piracy and illegal downloading as mention in my literature review, chief exec Steve jobs of Apple has even stated that in order to combat the rising numbers of illegal downloading of songs, the industry leaders need to allow companies such as Apple and their I-tunes system to charge competitive prices.

A Possible creative idea to capture the interest of the 20-25 year old Irish market, could be to offer a free trial for those interested in the technology on release date. Since this age bracket has been seen to research possible purchase and weigh up the best options on the market giving hands on experience, give a brand a valuable head start against competitors as well as important feedback on what could be better and what the consumer think is positive about the technology being sampled. Companies could email existing loyal consumers and offer the free trial, upon completion of the trial they can offer the technology to the consumer on a permanent basis at a discounted price, By doing so the company gets valuable information/ feedback from the customer, retains his/her loyalty adding to the CLV ( consumer lifetime value) and the consumer him/herself gets to test the latest product and get it at a reduced price which are the two key areas pointed out in the findings chapter that matter most to the Irish 20-25 yr old consumer.

In relation to combating the increasing levels of illegal downloading, fee paying sites such as iTunes to have flash sales, this is similar to the flash mob dance idea that companies use for advertising, the idea of the flash dance is to create massive
exposure when the consumer least expects it, video’s are later put up on popular sites such as Youtube and information travels through word of mouth by witnesses.

The same basic idea could be applied to the iTunes system, except instead of giving the consumer a show, iTunes offers them a deal for a small time period, it could be a list of 50-100 songs all at a highly reduced cost, this could potential increase usage of the system through positive word of mouth association, by not telling consumers when the deals are happening, the consumer will have to browse the system on a regular basis in order to take part in a flash sale. The increase in browsing could also lead to more purchases in general as the advertisement would obtain higher levels of exposure.
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Appendix One

Focus Group discussion guide:

A discussion guide is an outline of the topics to be covered during the session. The discussion agenda is based on the research objectives and client information needs.

Rules of the focus group:
1. Everyone takes part
2. Everyone is free to speak
3. Everyone’s views are important, so respect each other
4. The recording of this group is for transcription only

- What made you buy your first portable music player?
  Probe: Change in lifestyle
  Encouragement from friends
  Friends had them

- Since you bought your first music player, how have they changed?
  Probe: Size,
  Abilities,
  quality

- How many times have you upgraded and why?
  Probe: needed more space,
  old model was obsolete,
  influences of friends

- What do you currently use? And why did you choose that brand/ make?
  Probe: socio-cultural trends,
  price, quality

- What are your opinions on the current technologies available?
  Probe: too much/ too little?,
  still missing things?

- Do you think that technologies evolution has impacted the big industries such as music?
  Probe: piracy,
  Illegal downloads

- What are your opinions on music and its role in your lives? Has it become a necessity or does it still remain a casual interest?
  Probe: emotional connection,
Boost to emotions when needed E.g. motivation

- Can you see or would you ever purchase a device that was compact and yet had all mobile applications?
  Probe: convenience
  Sophisticated feel
  Luxury

- Do you find additional add on’s and applications helpful or a waste of time?
  Probe: irritating
  Waste of space
  Sometimes useful

- When considering upgrading your model what do you look for and at what price?
  Probe: Applications
  Advancement
  Effectiveness
Appendix Two

TRANSCRIPTION OF A FOCUS GROUP ON THE
25TH FEBRUARY 2010

IN RELATION TO THE EVOLUTION OF MOBILE MUSIC TECHNOLOGY

Q. What made you buy your first portable music device?

A. Peter had a Sony Cassette Walkman the reason for him purchasing this was because it was the latest form of music technology at the time.

Steve had a mini disk player the reason for this was that it was more modern than the CD Walkman and was seen to be the next big thing in the market.

Grace/Katrina both had CD Walkman. These were gifts.

Q. How many times have you upgraded and why?

A. Katrina/Grace and Peter: Were all given an iPod as birthday a present. Ken upgraded to an I Pod Touch and did not have another form of portable music device before this.

Raj upgraded from the Sony CD Walkman to the iPod for reasons such as the fact that CD’s were becoming irrelevant and downloading was becoming more popular.

Steve bought himself an I Pod as his first form of portable music device and upgraded due to necessity as he broke his old one.

Q. What do you currently use? And why did you choose that brand/make?

A. Grace/Katrina/Steve/ Ken and Shane and Raj all use I Pod variants from the nano to the touch, this is due to Apples brand image and history of quality products as well as the social status having an I Pod carries.

Q. What are your opinions on the current technologies available?

A. Respondents entire a group conversation based around the technology launch the I Pad, Raj points out that the I Pad is over rated that it is half way between a tablet pc and a laptop but doesn’t do either of there jobs well, it lacks the ability to use multiple applications at the same time, it cannot play flash video’s online making the internet application less effective, Its small keyboard makes doing anything other then email very
difficult. And its delicate nature means that in the consumers mind it is fragile and therefore a risky purchase.

Q. Do you think that technologies evolution has impacted the big industries such as music?
A. All respondents apart from peter have used illegal download to get music that they wanted for there portable media players. The reason for peters decision to not steal music is due to ethics, he feels it is morally wrong to do so. However the group consensus is that technology has made it far to easy to obtain and use software, such as music and movies for free with very little risk of punishment.

Q. What are your opinions on music and its role in your lives? Has it become a necessity or does it still remain a casual interest?
A. Steve and Katrina view music as a must have, it is an everyday need there is a strong connection between the music you listen to everyday and what you are doing at that particular time, Steve uses music to help him get ready for a match, Katrina uses it to entertain herself when cleaning and socializing.
B. Shane Dj’s as a hobby so music for him is apart of his everyday lifestyle he constantly downloads and updates his technology to the best of his ability in order to keep on top of his hobbies demanding technology craving.
C. Raj and grace are not particularly passionate about music so it remains a casual interest rather then a major influential factor.

Q. Can you see or would you ever purchase a device that was compact and yet had all mobile applications?
A. Being that the target market are price sensitive and tech savvy the general view towards the perfect piece of technology is based around its launching price. If the technology was launched at a high end price then the respondents agreed between themselves that they would wait till the price reduced or a competitor came into the market with a similar good at a reduced price.

Q. Do you find additional add ons and applications helpful or a waste of time?
A. Both Steven and Peter find applications a waste of space on their hard drives and as such remove them whenever possible, this is completely different to what Raj and Shane had to say as they favour the use of applications as forms of entertainment and even free GPS systems when working.

Q. When considering upgrading your model what do you look for and at what price?

A. Group consensus is that any upgrade must first meet the original needs, whether this is purely for playing music or for a mixture of different applications. The 20-25 year old market is also extremely price sensitive and will go through the CDMP process (consumer decision making process) brand is also extremely important as quality is also associated with what brand you favour.
Appendix Three

TRANSCRIPTION OF A MINI FOCUS GROUP ON THE
25TH FEBRUARY 2010

IN RELATION TO THE EVOLUTION OF MOBILE MUSIC TECHNOLOGY

R. What made you buy your first portable music device?

A. Respondent 1: Bought a Sony Cassette Walkman when he was younger because he enjoyed new technology

Since Gary bought his first portable music player the cosmetics of music technology has changed. When you look at the original iPod it was a brick now it fits comfortably into your jeans pocket.

Respondents 1/2 & 3: Bought a Sony Disk Walkman as their first portable music device.

Q. How many times have you upgraded and why?

A. All respondents engaged in a conversation about the evolution of the technology to date starting by saying that since their first purchase the technology has become smaller, quicker and more user friendly.

Respondents 1/2: Have upgraded once through necessity

Respondent 3: Has upgraded twice, once through theft and once through necessity because she needed more space for her music.

Respondent 4: Has upgraded twice, once due to theft and once and once through necessity as his old model no longer functioned up to its optimal standard.

Q. What do you currently use? And why did you choose that brand/make?

A. Respondents 3/4: Currently use the Apple iPod due to its good brand image, high quality, good public relations and positive aspects that are associated with the brand such as social

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symbol. Both have the iPod Nano version. It was selected because of its small size yet good memory space and quality.

Respondents 1/2: Have smart phones, these are Nokia brand. The reason for David’s purchase of a smart phone was due to the fact that he wanted a device that could provide multiple uses.

**R.** What are your opinions on the current technologies available?

**A.** Respondents are talking about all current new technology is multi purpose in that it has multiple applications such as the internet, cameras, video playback, music and games. All of these would have been seen as extras a few years ago but are now seen as necessities. In order for new technologies to be seen as a worthwhile investment.

**R.** Do you think that technologies evolution has impacted the big industries such as music?

**A.** All Respondents have agreed that with the evolution of technology piracy and illegal downloading has become too easy and too accessible. It has damaged the music industry with more and more of the 20/25 year age bracket illegally downloading rather than paying for their music. They are of the opinion that if it can be obtained for free then it will be. They do not see it as ethically or morally wrong.

**Q.** What are your opinions on music and its role in your lives? Has it become a necessity or does it still remain a casual interest?

**A.** Respondents 2/3: Both see music as a necessity when travelling and studying as it helps them relax when it comes to study and passes the time when travelling. They enjoy listening to their favourite music whenever possible.

Respondents 1/4: Both see music as a must have item during the day every day. They use it for motivation in all physical activities and see it as a necessity when studying and as part of their social scene.

**R.** Can you see or would you ever purchase a device that was compact and yet had all mobile applications?

**A.** Respondent 2/3/4: Would buy a piece of mobile technology that was both compact and had all mobile applications but he is a price sensitive consumer and therefore would wait for
the initial price to come down or wait for a competitor to release a cheaper version.

Respondent 1: Would not buy this piece of technology as he prefers have two devices therefore he is not over reliant if one device goes missing.

R. Do you find additional add ons and applications helpful or a waste of time?

A. Respondent 1: Finds some of the applications useful, such as Facebook and GPS. He also enjoys the create an application design system as he studies computer science and networking. Other than the necessities he finds other applications a waste of space.

Respondents 2/3/4: Find the applications not necessary and a potential waste of space on their flash drives of the smart phones and iPods.

Q. When considering upgrading your model what do you look for and at what price?

All Respondents being of part time working nature are price conscious and therefore go through the CDMP process (Consumer Decision Making Process). They are price sensitive and well educated in the form of mobile music technology and therefore know what type of price they should be paying when considering upgrades. Key aspects or requirements of upgrading are that the new technology has to have increased space, speed and overall efficiency, quality is also very important as it the brand that they chose. The 20/25 year old age bracket are very loyal to the brands that they are familiar with when it comes to high involvement purchases.
Appendix four

Coding : Mini focus group

- What made you buy your first portable music player?
  Gift: 1
  Necessity: 2/2/2
  Friend:

- Since you bought your first music player, how have they changed?
  Quality: 1/1/1/1
  Size: 2/2/2/2
  Price: 3/3/3/3

- How many times have you upgraded and why?
  Once: 1/1
  Twice: 2/2

- What do you currently use? And why did you choose that brand/ make?
  Ipod: 1/1
  Smart phone: 2/2

- What are your opinions on the current technologies available?
  Good: 1/1/1/1
  Bad: Too much choice:

- Do you think that technologies evolution has impacted the big industries such
  Yes: 1/1/1/1
  No:

- What are your opinions on music and its role in your lives? Has it become a
  necessity or does it still remain a casual interest?
  Yes: 1/1
  No: 2/2

- Can you see or would you ever purchase a device that was compact and yet
  had all mobile applications.
  Yes: 1/1/1
  No: 2

- Do you find additional add ons and applications helpful or a waste of time?
  No: 1/1/1
  Yes: 2

- When considering upgrading your model what do you look for and at what
  price?
  Quality: 2/2
  Speed: 1
  Ability: 1
Coding: Regular focus group

• What made you buy your first portable music player?
  Latest technology: 1
  Gifts: 2/2/2
  Necessity: 3/3
• Since you bought your first music player, how have they changed?
  Size: 1/1
  Quality: 2/2/2/2
  Memory: 3
• How many times have you upgraded and why?
  Once: 1/1/1/1
  Twice: 2
  Never: 3/3/3

• What do you currently use? And why did you choose that brand/ make?
  Ipod: 1/1/1/1/1/1/1/1
  Quality: 2/2/2
  Size: 3/3
  Reputation: 4/4/4

• What are your opinions on the current technologies available?
  Some irrelevant technologies available: 1/1/1/1/1/1/1/1

• Do you think that technologies evolution has impacted the big industries such
  Yes: 1/1/1/1/1/1/1/1
  No:

• What are your opinions on music and its role in your lives? Has it become a
  Necessity or does it still remains a casual interest?
  Yes: 1/1/1/1/1
  No: 2/2

• Can you see or would you ever purchase a device that was compact and yet
  had all mobile applications.
  Yes but would wait for price to go down: 1/1/1/1/1/1/1/1

• Do you find additional add ons and applications helpful or a waste of time?
  Yes: 1/1
No: 2/2
No opinion: 3/3/3/3

- When considering upgrading your model what do you look for and at what Price?
  Quality: 1/1/1/1
  Price: 2/2/2/2