Introduction

Bowers and Wilkins (B&W) are a British speaker manufacturer that have been designing and manufacturing high quality audio products since 1966. The company was started with a sum of £10,000. Since then the company has aimed to provide superb and affordable loudspeakers for every potential customer. The product in the current range this report is focusing upon is the B&W MM1. The speaker was first launched in 2010, and marketed solely as a high quality dedicated computer speaker set (Bowers and Wilkins, 2015a).

This report will focus on B&W, taking a current product range and reworking its main functions to be more suited to current market trends and the future requirements of customers.

MM1 Computer Speakers

Our MM1 speakers are made from brushed aluminium surrounded by the highest quality black cloth. Currently the MM1 has a high quality built-in DAC, enabling customers to use USB to stream and bring their music to life. DSP has been added to this product to ensure that our compact speakers have the ability to produce a large sound compared to their size. B&W speakers constantly adjust sound balance to maintain powerful bass with rich and detailed treble at any volume level. The MM-1 has two drivers, one dedicated to low and midrange frequencies and the other for high frequencies, enabling it to sound like a Hi-Fi speaker system (Bowers and Wilkins, 2015b).



<u>Figure 1.</u> A pair of MM1 computer speakers either side of an Apple iMac computer (Bowers and Wilkins, 2015b)

Bowers and Wilkins

A company based upon the belief of its founder John Bowers "If you can make a better product, then you will sell it". The company is based in Britain, with the production, warehousing and head office based in Worthing. A second plant is based in Bradford. B&W took over its own production factory for speaker cabinets at Agerbæk, Denmark in 2003. Steyning Research Establishment is also based in the UK. Between 2006 and 2010 the company was able to increase its annual turnover by 23% (Fame, 2015a). Overall profit for the same period increased by a staggering 52% (KeyNote, 2015).

Adding Value

Manufacturing in house allows us to be able to take in raw materials such as premium woods, plastics and metals then converting these into exceptional products. Thanks to the major research carried out by B&W technicians at the Steyning Research Establishment, they are able to create excellent quality audio systems with a strong aesthetic. Research enables the creation of smaller more powerful drivers, from iron boron magnets that enable a higher fidelity quality sound to be created.

Customer Benefits

Well-designed products that are discrete and can effortlessly fit into any decor. B&W take pride in providing our customer with the highest levels of product excellence and satisfaction from selecting B&W's magnificent products. Priding ourselves on providing the best possible sound by performing research and being able to develop products that utilise the most recent and advanced technologies. All products come with a guarantee of 2 years, an EU requirement that is not followed by all manufacturers.

UK based help and support having many retailers able to care for the products and customers of B&W. UK headquarters also allows customers to benefit from help and service of Britain's finest team. Convenience aspects provided by their products allow a great quality sound, that is easy to put into any room and means that loudness is no longer the only option to enjoy music. As high quality sound becomes more of a priority their brand raises its profile as an aspirational purchase for those searching for quintessentially British made products. All British from design to manufacture without any exceptions.

External environment

Political

Corporation tax decreasing for profits over £300,000 since 2012 to 20% in 2015 and a marginal relief can be granted on taxes owed if the company profits are under £1.5 million (HM Revenue and Customs, 2015a).

Proposed revisions to income tax will see the current personal allowance increase from 10,600 in 2016-17 to £10,800 and for 2017-18 to £11,000. The basic rate limit will be increased to £31,900 for 2016-17 and £32,300 for 2017-18. The higher rate will also be increased to £42,700 in 2016-17 and £43,300 in 2017-18 (HM Revenue and Customs, 2015b). B&W would hope this would encourage those consumers with more disposable income to engage in some luxury purchasing. Carbon emission reporting is now required in all business reports by law, fine and sanctions over the next five years could affect B&W (The Guardian, 2013).

Economic

The revenue attained by the global personal luxury goods market was €224 billion in revenue (at retail equivalent value) in 2014, a 3 percent increase on revenue from 2013 (Bain and Company, 2015).

Cheaper production costs can be found when looking to manufacture in China or Malaysia. Unlike China, Malaysia has no value added tax for non-national companies (ZDNet, 2012).

As the UK is not within the Euro zone, exchange rates could alter revenue depending on whether the conversion is strong or weak (European Commission, 2014).

Social

Consumers in the luxury product industry considered B&W products as status symbols. Other technology brands have tried to enter the market by focusing on product design as well as function. The issue here being recent competitors offer cheaper prices.

Current in home B&W wireless products offer only AirPlay technology, being solely orientated towards iOS and Mac users (B&W, 2015d). However, Android has 56% of the UK market share of smartphones alone, iOS has only 29% (Mintel, 2015a). A backlash towards Apple products among ethically and socially aware customers in the United States and Europe over manufacturing in China could limit its products' appeal (Pestle Analysis, 2015). Android offers more freedom of personalisation and choice; even price may influence consumer preference for android products. With an ageing society in the UK the population of over 65s will increase by 1.1 million to 12.2 million people by 2018, +9.9% compared to 2013. This means it will be imperative to make technology easily accessible for an ageing population (Mintel, 2014a).

<u>Technology</u>

One Trillion songs streamed in first half 2015, 50% up on the previous year (Digital Trends, 2015). A clear need to integrate streaming into products in the next half decade, "over the next five years the music streaming market could almost treble in size, with subscription revenue expected to reach £461 million by 2019" (Mintel, 2015b).

Consumers are finding new avenues of connecting with products over the Internet, with 29% using four or more methods of social media in the last three months, up 8% since the start of 2013 (Mintel, 2015).

Decline in the sales of desktop computers, accounting for only 24% of the PCs (Desktop and Laptops) sold in the UK in 2014 (Mintel, 2015); 39% of adults own a tablet, up from 31% at the end of 2013 (Mintel, 2014a). 74% of adults own a smartphone, for over 65s this number increased from 35% to 44% in one year (Mintel, 2014b). It is clear large and unexpected changes in technology will continue to influence the business in the next 5 years.

Legal

The Waste Electrical and Electronic Equipment Directive, (WEEE), states that old appliances must be recycled rather than sent to landfill. It was brought in to reduce some 2 million tonnes of waste each year. This could cost B&W in recycling expenses (Health and Safety Executive, 2015).

The need to license, requires approval from company owning Intellectual Property, the length of agreement and extendibility will need to be assessed with great caution. Apple in particular has strict legal guidelines for its licenses of property and software (Apple, 2015).

Patented technologies of the company can also leave the company open to piracy and litigation, these must be considered to protect the integrity and distinction of the brand.

All products must obtain a CE certification to apply with European Health and Safety laws (Department for Business Innovation and Skills, 2010).

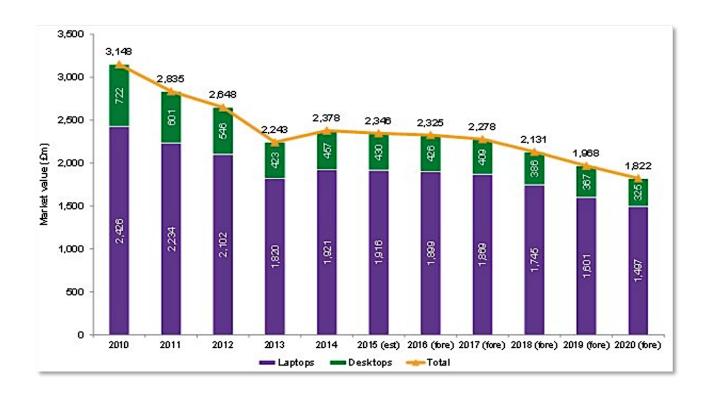
Environmental

In a study from 2009 by Green Seal and EnviroMedia Social Marketing, one out of five persons would have still bought green products despite the economic situation at that time (Environmental Leader, 2009).

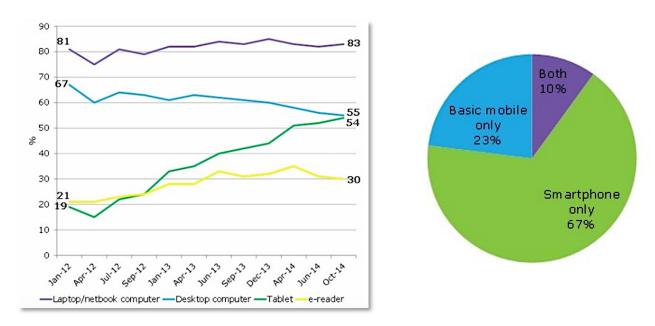
Environmental conscious customers and indeed governing bodies require that each product be labeled with recycling information (Recyclenow, 2015). Not only following the WEEE directive, but sourcing sustainable materials for manufacture and using low emission transport methods will be imperative for B&W to move forward.

The UK market

Since the introduction of the MM1 computer speakers in 2010, the market has very much changed. Figure 2 shows the figures for the desktop PC and laptop market. Figure 3 also aids by showing the increasing popularity of tablets in the UK. In light of this and looking at the current profit in recent years, which has reduced by 63% between 2011 and 2014, it could be inferred that these huge technological changes have contributed greatly.



<u>Figure 2.</u>Forecast for the value of the UK computer market, by segment, 2010-20 (Mintel, 2015).



<u>Figure 3.</u> Line graph-showing decline in Desktop computer and increase in Tablet sales 2015. Pie chart showing personal ownership of Mobile Phones 2014 (Mintel, 2014b)

Wireless Speaker Market

The global market for wireless audio is expected to reach \$24.52 Billion by 2020 (Markets and Markets, 2015). The introduction of the A7 Airplay speaker in 2012 and subsequently the A5 Airplay speaker in 2013 should have given B&W a sharp rise in sales and profit as they are high quality British made audio products that

have wireless functionality (Bowers and Wilkins, 2015d). However, limited functionality of these speakers has lead to population of the market by other companies.

The incredible popularity of media streaming market and wireless technologies have gone hand in hand in the industry both gaining extensive augmentations in popularity over recent years. Speaker companies including Sonos, Bose and Samsung have all capitalised and agreed partnerships with the UKs leading streaming service Spotify (Mintel, 2015c).

Bose

A company founded in 1964, Bose is known globally as the most respected name in sound. It represents a 22% share of sales in the wireless speaker market (Musically, 2015). SoundTouch® is the division of Bose dedicated to wireless multi room music systems released in 2013. A line up of 4 different SoundTouch® enabled speakers and 7 home cinema systems enables this to Bose to dominant the market. An app to control from Apple and Android devices



plus some incredibly useful buttons allow customers to control systems easily. The newly released SoundTouch® 10 offers direct competition to the B&W MM1 in terms of size and performance. It is sold at £169.95 and a discount of 10% can be gained when purchasing two. Currently the speaker offers Bluetooth® connectivity, WiFi® and previous models had Airplay connectivity. The product does not offer stereo pairing and current models have no Apple Airplay or Android NFC connectivity. It does not have an option to calibrate the sound to the room.

Sonos

A company started in 2002 to reinvent home audio for the digital age by bringing music to every room in the home making listening a valued experience (What HiFi, 2015). It represents a 16% share of sales in the wireless speaker market (Musically, 2015). A simple line up of 3 stand alone speaker sizes, a sound bar and subwoofer has enabled Sonos with the help of its ingenious software and control app (for Apple and Android customers) to push forward the wireless speaker market for many years. Their Play 1



speaker would be a direct competitor for the new MM1 wireless speakers. It is priced as £169 and often sold as a pair for a discounted £299. Currently the speaker offers WiFi® and can be configured for stereo pairing. The Play 1 is unable to pair using Bluetooth®, Apple Airplay and Android NFC. It does not have an option to calibrate the sound to the room.

B&W Opportunity

With a British heritage and quality sound engineering through research it should be possible to create products that seriously compete with the main market opposition. The current product retails for £399. The MM1 computer speaker B&W currently have could very easily be converted to a pair of wireless audio giants. Physically separating the two to enable each to have a plug, incorporating some of the functions of other wireless B&W speakers, being Airplay and the B&W connect app. It would be recommended that Bluetooth® with NFC (Near Field Communication) for



Android customers to be incorporated as Android devices dominate the UK market. Sound calibration for B&W customers would be imperative to provide the best small wireless multi room speaker on the market. A range of wired ports would still enable wired connections if customers so wished and three colour options, Black and carbon, White and steel and Cream with gold would nicely follow the colour schemes taken by most smartphone and tablet manufacturers.

Technological and service enablers

As the plans for the new MM1 speakers are to incorporate a whole host of wireless and streaming functionalities it will be imperative to adopt not only new technologies but also support services for customers.

Non B&W Technology Integration

Technologies such as the incorporation of Apple AirPlay is already in use as with the A5 and A7 wireless speakers, and therefore only a license extension to cover this product will be needed from Apple. Bluetooth® has been around for many years however recent advances require the need for aptX® codec, which will give CD like quality of sound when streaming, a necessity for the most discerning Audiophiles (Cnet, 2014). For connection purposes with Bluetooth®, it would be beneficial to incorporate Android Near Field Communication (NFC). This would allow Android users, the most plentiful on the market, to connect instantaneously and show that the product is not only marketed towards the Apple customer base (Android Developer, 2015).

Required B&W App Enhancement

Other successful manufacturers of wireless multi room audio systems have created eco systems, with sophisticated applications for all manner of smart WiFi® enabled devices. Taking the app currently in use with B&W, the B&W AirPlay setup app, see Figure 4. The app should adopt a more up to date and modern aesthetic. It would also be beneficial to allow the consumer more choice when it comes to naming devices around their home, again adding a more personal touch to the application.

Further in app help and support plus feedback rating technologies should be adopted to allow in house review of the service being provided. Incorporation of a radio service to the app to gain Internet radio has proven successful for Bose in particular (PC Mag UK, 2014). It could also prove beneficial to allow in app integration of music streaming services such as Spotify, these would allow instant customer familiarisation with B&W products when advertising. Spotify connect would prove an added benefit for those wanting to use only one app to stream, as music streamed over the WiFi using only the Spotify app can be completed (Cnet, 2015). It would be beneficial to include a sound calibration feature to the application to enable customers to tailor the sound to their room, enabling the best sound quality and performance possible. Options of using the speakers as mono or stereo pairing alternative would be advised and could again be incorporated into this calibration technology section of the new application. The technology should be designed in line with speaker testing and research techniques at the Steyning Research Establishment.



<u>Figure 4.</u> Various windows of the B&W AirPlay Setup app (Bowers and Wilkins, 2015b)

Services

Further services that must be adopted to improve customer response and improve brand awareness involve a thorough support service. Telephone, online, in app and even tutorial videos would be recommended to ensure each and every customer is educated on the capabilities of their products. Staff training on new products and capabilities is imperative and it is recommended that at least two members of the 600 strong employees should take up this dedicated role (Fame, 2015b). Beneficial loan programs to all employees would allow them to get the product and use it themselves for a few months Should product popularity increase dramatically post launch, it would be advisable to increase customer service support staff by 5 members initially and further increases made as and when required.

Marketing and Advertising

Marketing and Advertising are important factors in the success of the new product and increasing product/brand awareness. Social media would be a very lucrative place to advertise as it can reach many more people than traditional methods. Social media advertisers, as well as TV and Radio advertising should be conducted and driven by a dedicated marketing team. Sonos spent \$19.3 million on measured media in 2013, up from \$1 million in 2011. The company is expected to reach \$1 billion turnover in 2015, double its turnover in 2013. This highlights the importance of marketing and advertisement in the market (Musically, 2015).

It would be suggested that these technological revisions supported by a firm customer service support network could take the brand from strength to strength. Looking to the future the new MM1 speakers could enable technologies to be transferred and updating the existing A5 and A7 models.

Improvement Recommendations

The product ownership seen with the MM1 computer speakers was highly valued. B&W are renowned for their innovation and thus far have not innovated significantly in the market of Wireless Audio Systems. The MM1 wireless speakers will fill a void, which prevents comparison against the market leaders in wireless sound.

Justification

Price should be maintained at £399 (Bowers and Wilkins, 2015b). The products were they not manufactured in Britain would cost less however the ethos of the company would not allow this. The quality of audio performance married with sleek and elegant styling will attract customers from all generations and groups within society. Customers will once again relish in owning quality high performing and current audio equipment that will increase pleasure in their lives.

Valuing the Customer

Feedback and the opinions of customers will be extremely important in taking this product forward. Piloting regular surveys and in app ratings that can be completed either in depth or in just a few clicks will help B&W gain a place at the top of this huge market. By ganging customer feedback, it is hoped customers will feel valued and remain loyal to the brand and allowing B&W to provide future products assessing a genuine desire or need. It will also help minimise dissatisfaction and new customer service teams will facilitate this.

Table 1. Suggested improvements to the MM1 speakers

Improvement	Expected Benefit to B&W	Expected Benefit to Customer
Renaming and rebranding the MM1 speakers	Fewer research and design costs as the existing products can be used. Minimal outlay to bring product to market.	The customer can be assured of build quality and performance of the speakers, existing owners may be more persuaded to buy having enjoyed MM1.
Giving each speaker its own power source	B&W start to get customers into multi room experience; by only selling as a pair as is already the case with the MM1. Hopefully the customer will want to add more and make further additions increasing sales and brand recognition.	Customers can either have stereo pairing or put sound in two rooms and are not restricted to how far apart they can be placed.
Different colour options for the speakers	Simple colour options are easy to manufacture, and promote adding into different rooms in the house. A larger product variation and chance to offer customers personalisation. Increasing sales.	Customers can choose personal favourites. Black, white and gold will match the main colours of smart products sold and can promote buying with some fashion conscious customers alone. Individual choice and design aesthetic are augmented.
Including Bluetooth and NFC	Simple technology additions are easy to implement and allow products to appeal to a wider variety of customers than ever before. Increasing units sold over competitors.	Android customers are fully catered for with NFC and allowing them convince of connection to Bluetooth. Bluetooth allows any customer to play music and sound from any source, allowing ultimate freedom not being limited to only app supported media sources.

Providing sound calibration and stereo pairing	Point of difference to competitors, increase revenue.	Allows individualisation and best quality sound. Not offered by other companies.
Improved app	Simple to design and update existing platform, initial costs should not be too high. Could incorporate the companies' own music service.	Customers have an easier user experience than before. Product feels more premium, worth paying extra over the competition.
Integration of music service and internet radio	Advertising collaborations and trust in services allow B&W to utilise their success and popularity, increasing sales.	Customers have more choice, they are able to do more than ever and still attain B&W quality sound whilst using their preferred sources.
Selling the product as a pair of speakers, and making packaging more enticing	Selling as a pair means not having to design new packaging and product isn't that much more expensive over competition. Easy to rebrand existing packaging making it more attractive and increasing sales made, with minimal costs.	Consumer has already a functioning multi room or quality stereo pair to drive need for more speakers. Attractive packaging makes buying the product a better experience, is more eye catching against the competition.
Maintaining physical connections on the speakers	Reducing the amount of changes to the original design, still allowing the MM1s intended purpose.	Customers can utilise more sources, physical connections for computers or non Wi-Fi enabled products.
Include low power standby mode	B&W meet environmental commitments and increase green product buyers.	Customers utilise less power, and can save money.

Conclusion

Should the advice in this report be undertaken it is hoped that the future success of the company would go from strength to strength and that the standing of the B&W particularly in the wireless speaker market will make a dramatic change for the better.

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