

Changemakers: Creativity and Value Creation: A2

- 1. Produce a contemporary idea that will change how the sports sector interacts and engages with the world. This could be something new or something applied in a different context. You need to consider the rationale and justification of the idea within 1000 words of referenced material.**

The integration of embedded sensor technology within a football represents a significant advancement in sports innovation, particularly in the context of performance analytics, fan engagement and data-driven decision-making. While the concept of a smart football aligns with ongoing technological trends in elite sport, its broader implications require critical evaluation in terms of effectiveness, accessibility, and long-term impact on the sports sector.

One of the most significant contributions of a GPS-enabled football lies in its ability to enhance performance analysis. Traditional systems, such as wearable GPS devices, have been widely adopted in football to monitor player movement, workload and physiological output (Cummins et al., 2013). However, one flaw with these is that the technologies primarily focus on physical metrics and provide no data regarding technical execution.

The introduction of ball-centred data addresses this limitation by providing objective insights into technical skills such as passing accuracy, shot power and ball trajectory. Within elite level sports the evolution of big data is shifting performance analysis towards more detailed and contextual datasets (Rein and Memmert, (2016)). The idea of a smart football contributes to this shift in focus by capturing previously inaccessible data points, allowing a more comprehensive understanding of specific aspects of in-game performance.

Furthermore, rapid feedback systems have been shown to significantly improve skill acquisition and motor learning in athletes (Baca and Kornfeind, 2006). Real-time data delivered through a mobile application allows athletes to immediately adjust their technique, reinforcing correct behaviours and accelerating development to improve performance. This aligns with contemporary coaching methodologies that emphasise evidence-based training and the need for continuous feedback to aid improvement.

Having access to detailed and accurate data can greatly improve how coaches train players and identify talent. In the past, coaches were mostly reliant on watching players and making their judgements based on what they were seeing. However, that approach can be subjective and therefore biased (Hughes and Bartlett, 2002). The smart football helps solve this problem and eliminate any chances of bias occurring as the data which is provided is all objective which allows the coaches to make more accurate and informed decisions.

In regard to talent identification, measurable data such as passing accuracy, shot power and ball control can give a clearer picture to coaches of a player's ability level. Research shows that performance indicators are important for understanding what makes a successful

football player (Sarmiento et al., 2014). By using the data provided by the smart football coaches and scouts can compare players using consistent measurements over any duration of time.

However, it is important to recognise that data should not completely replace traditional scouting methods but should work alongside coaches own judgement and experience to help gain a better understanding of all aspects of play as performance is also affected by factors such as decision making, positional awareness, teamwork and physiological aspects which can be difficult to measure (Travassos et al., 2013).

Beyond performance analysis, the smart football has the potential to significantly transform fan engagement. The modern sports consumer increasingly demands interactive and data-rich experiences, driven by advancements in digital media and broadcasting technologies (Hutchins, 2016).

Real-time ball data can be integrated into live broadcasts, providing viewers with detailed insights such as shot speed, spin rate and distinguishing passing patterns. This enhances the viewing experience by making the game more transparent and providing the viewer with more of the intricate details.

In addition, the integration of smart football data into mobile applications can support second-screen experiences in the form of fantasy sports and gamification. Paraganas (2017) argues that digital interaction strengthens fan relationships with sport by increasing the engagement which can be quite limited with professional clubs and players. By allowing fans to access and analyse their favourite teams and players real-time data in further depth, the Smart Technology Football fosters a deeper connection between spectators and the real game.

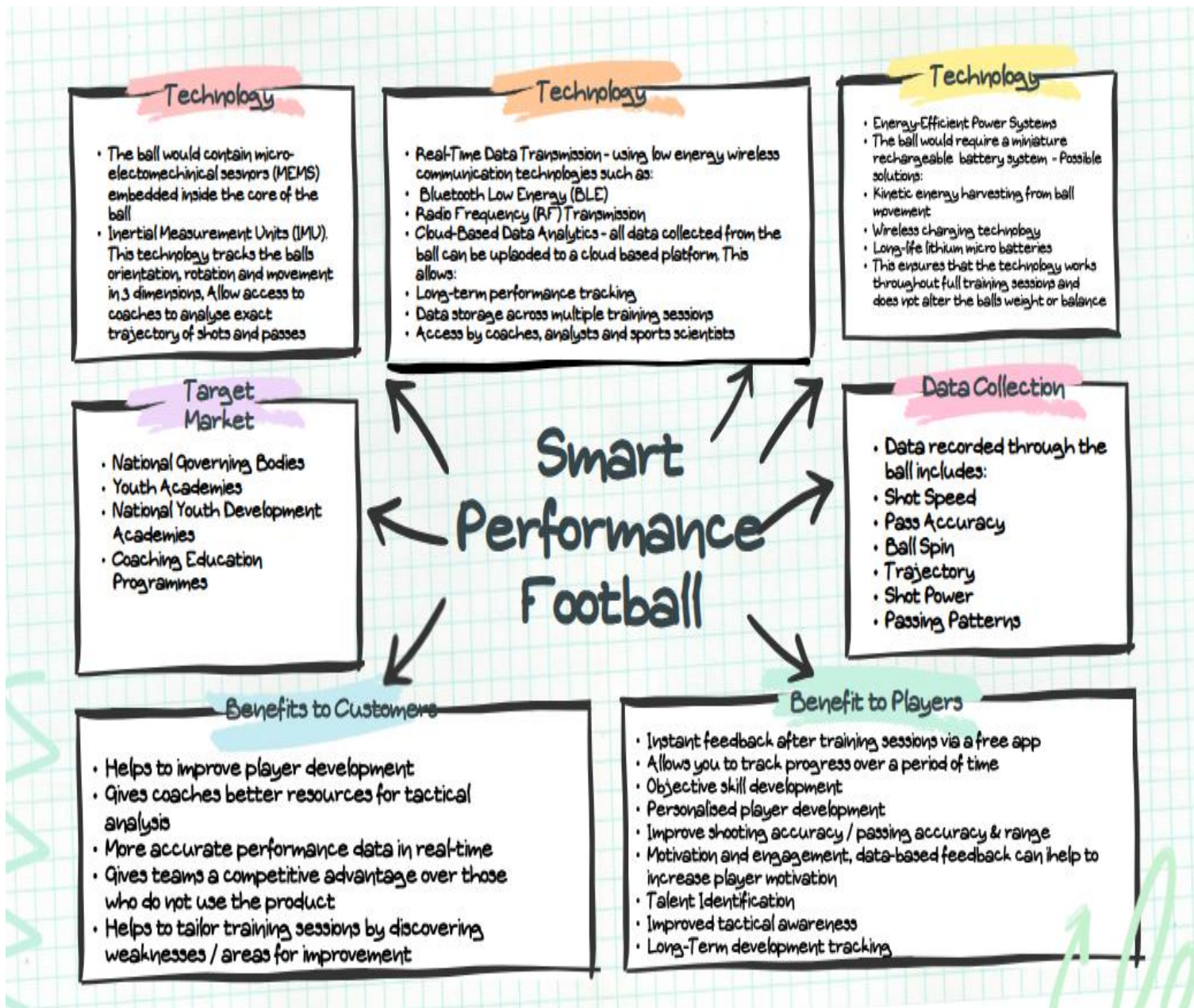
The introduction of the product has significant implications for academy-level development, youth academies play a crucial role in developing future elite level players, yet their access to advanced analytics is often limited due to expenses and infrastructure requirements. The Smart Performance Football provides academies with affordable access to performative data, objective tracing of player development over any desired timeframe and enhanced talent identification through measurable metrics.

Furthermore, early exposure to data-driven training prepares young players for the demands of elite football, where analytics play an increasingly important role every day. Over reliance on data can have its negatives as it could damage the psychological and tactical aspects of performance (Travassos et al., 2013). Not only is the product beneficial to academies around the world but will also help many governing bodies as they are responsible for developing the sport and promoting participation.

Smart football data can be utilised across multiple sectors, including broadcasting, betting, sponsorship and technology development. An example of benefits to betting companies can be them having access to real-time data to refine predictive models.

In conclusion, the Smart Performance Football represents a transformative innovation within the sports sector, offering significant benefits in performance analysis, coaching, fan engagement and commercial development. By shifting the focus towards ball-centred data, this technology provides a more comprehensive understanding of football performance and enhances interaction between the sport and its global audiences.

2. Create a mind map (with your idea in the centre) that demonstrates how the ideas and concepts covered within the Units of the module are interconnected and how they contributed to the development your project idea.



3. Design a 4 page booklet that will market your idea to your target audience and present your idea to your peers. The booklet needs to be professionally presented using appropriate online software during its creation.

“TRACK EVERY TOUCH”



ABOUT US

► OUR PRODUCT

At Smart Performance Football, we are here to revolutionise how players, coaches and fans interact with the game. By embedding advanced GPS sensor technology directly into the ball, it captures real-time data such as shot speed, pass accuracy, passing patterns and ball trajectory. This data is instantly transferred to a user-friendly mobile app, providing immediate feedback and performance insights using Bluetooth technology. Once you purchase our product you will receive an email with a unique code to set up your account. Clubs / Academies will also be able to provide their players with logins to gain access to all data at no cost.

♥ VALUES

Our product is built on the core values of innovation, accessibility and performance improvement. We believe that advanced sports technology should not be limited to elite athletes but available to players at all levels. By providing accurate and reliable data, we promote fairness and objectivity in coaching and talent identification. We also value continuous development, encouraging players to improve through measurable feedback. Integrity and data security are equally important, ensuring user information is protected and used responsibly. Ultimately, our smart football reflects a commitment to enhancing the game while making it more inclusive, engaging and driven by meaningful performance insights.

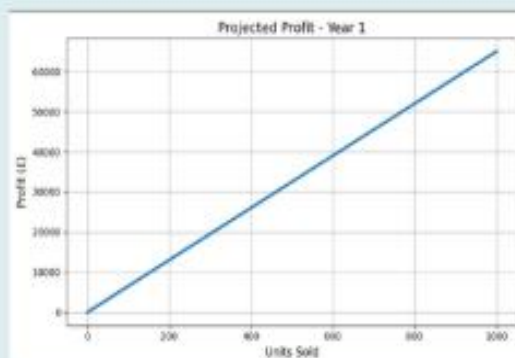
🎯 GOALS

Our goal is to transform football into a more data-driven and interactive sport. We aim to support player development by providing instant, actionable feedback that improves skills and performance over time. Another key goal is to enhance coaching by offering objective insights that complement traditional methods. We aim to make this technology accessible worldwide, from grassroots to professional levels.

PRODUCTION COST BREAKDOWN

- High-quality match ball materials and stitching at £15 per unit
- Embedded Sensor Technology, including gps tracking chip, accelerometer and bluetooth module costing £30 per unit
- Battery and Power System £10 per unit
- Software and App Development including data processing and analytics system £30,000.
- Production cost per unit £55 - RRP Price £120

PROJECTED PROFIT YEAR 1 SALES



Within the first year of sales, we have projected that we will sell upwards of 1000 units, with each sale being made at £120. Within the next 5 years we are hoping to achieve a 20% increase on sales year on year and create partnerships with Football Academies and National Governing Bodies.

PROTOTYPE OF THE PRODUCT



The Smart Performance Football has been designed with a clean and modern aesthetic, combining performance with technology. The simple design ensures the ball maintains a professional, match-quality appearance while seamlessly integrating advanced tracking technology. A minimal colourway has been chosen to reflect a sleek, high-performance product, avoiding any unnecessary distraction and keeping the focus on functionality.

WHY CHOOSE US?

Our product is competitively priced within the premium sports technology market. While basic smart balls are available at lower prices, they lack advanced data capabilities which we have incorporated into our product. We also offer app access included in the product price as we believe that you should not face any monthly expenses to use a product which you have already spent money on.

References:

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