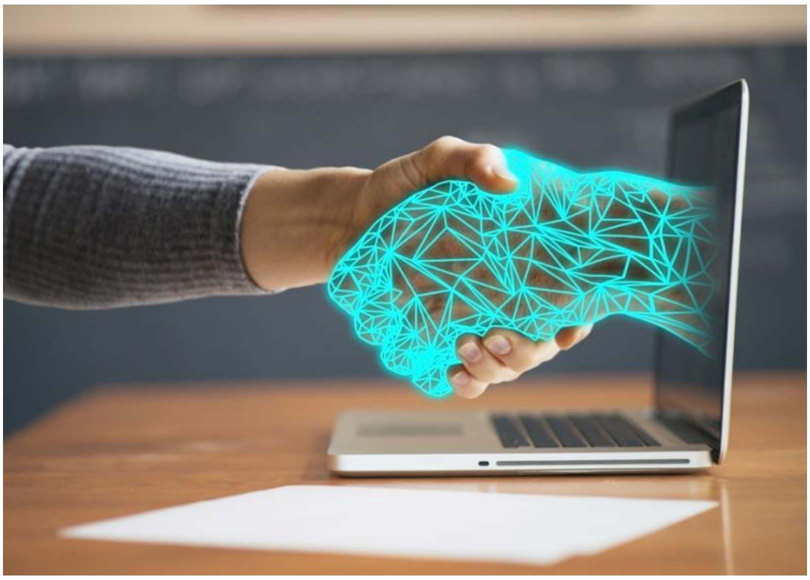
Heart of Midlothian Football Club Building Back Better

Building Back Better, Data-Driven Innovation and the Scottish Football Industry[1]



Scottish Football Building Back Better
Heart of Midlothian Football Club
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[1] We are grateful for the support and co-operation given to this study from the four football clubs that participated in the study (Aberdeen, Heart of Midlothian, Hibernian, and Motherwell) and the Scottish Football Association.
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Introduction[3]

1. Football is Scotland's most popular sport. It delivers in communities and connects with those on the margins of society on a scale that other sports fail to match. Football clubs are anchor institutions within Scottish communities. They do not exist in isolation from the broader forces that affect the people, communities, and countries in which they are situated- including the Covid-19 pandemic. Football clubs in Scotland are often some the central sources of authority that communities look to in living out the lives.

2. This series of micro briefings on the Scottish Football Industry have resulted from a Scottish Funding Council funded Data-Driven Innovation Initiative as part of the 'Building Back Better' open funding call, helping to transform the City region into the data capital of Europe. The Scottish Funding Council provided £75m funding to boost Scottish university research contributing to the mitigation of effects of the Covid-19 pandemic. The University of Edinburgh received £23.2m of these funds.

3. The research was also supported by additional funding in the form of a University of Edinburgh Regional Skills Programme Grant.

4. The data-driven approach to Covid-19 recovery and job retention in the Scottish football industry project was led by the University of Edinburgh's Academy of Sport[4] in partnership with the Bayes Centre[5].

5. The project consisted of two phases which were (i) Phase One- Building Back Better, Data Driven Innovation and the Scottish Football Industry that enabled the collection of research data and the production of a proof-of-concept proposition and (ii) Phase Two Scottish Football, Data Citizenship and Covid Recovery that supported and enabled further impact arising from the data collected.

6. Phase One of the project was designed to (i) produce unique data sets that could help the Scottish football industry build back better from Covid-19 and (ii) demonstrate the potential of the University of Edinburgh's capability to inform and support both the football industry and the broader sports industry.

7. This consisted of four sets of data-driven activities: (i) an analysis of Scottish football sentiment and networks, generated through online communications; (ii) a spatial and demographic analysis of supporters and non-supporters; (iii) a cataloguing of a Scottish football data set and (iv) an analysis of the international reach of football resulting from the hosting of the Euro 2020/21 football matches held at Hampden Park.

8. Phase Two of the project was enabled by a University of Edinburgh's Regional Skills Programme Grant to enable (i) The production of bespoke football data material to be written into *Football More than a Game Curriculum*[6] (a dedicated Massive Open Online Course – Football More than a Game) that would help the data collected from phase one reach an additional online audience of people locally and internationally and

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[4] University of Edinburgh Academy of Sport

[5] University of Edinburgh Bayes Centre

[6] See https://www.futurelearn.com/courses/football

(ii) The production of 4 bespoke research reports for Hibernian, Hearts, Motherwell and Aberdeen arising from the phase one data collection.

9. This report specifically focuses upon Heart of Midlothian Football Club and draws upon a specific data-driven sentiment analysis, a specific social-demographic analysis and a secondary body of reports relating to the future of sport. It is structured around three main sections (i) Scottish Football and Covid 19, (ii) Heart of Midlothian Football Club and Covid 19 and (iii) Recommendations and Observations.

10. It is one of a number of reports with others in the series including: *(i) Scottish Women's Football; (ii) International Engagement through Scottish Football Clubs; (iii) International Engagement and the European 2020/21 Football Championships; (iii) A Geo-Spatial Analysis of Scottish Football; (iv) bespoke reports for each of the other partner football clubs Aberdeen, Hibernian, and Motherwell; and (v) Fans, Influencers and Key Brokers: A Sentiment Analysis of Scottish Football.*

Part One: Scottish Football and Covid 19

11. Scottish football's reach and impact extend far beyond what is immediately obvious both in direct and indirect economic and societal terms. As one club director pointed out, football clubs are at the heart of their local communities and fund thousands of supplier businesses across Scotland which in turn secures employment for tens of thousands of people. In the words of the Chair of Scotland's Sustainable Growth Commission, "I can think of no other business, institution or organisation with the communication reach of football. Every week it dominates swathes of broadcast media, social media, and crucially, public discussion"[7].

12. The full extent of the impact will not be fully visible until the clubs post their accounts for the 2020/21 season. Rangers Football Club posted an operating loss of £23.5 million for the financial year ending June 2021[8]. A year in which Rangers won their first Premiership title in a decade. Rangers highlighted £16.8 million of investment in the playing squad and a revenue loss of £47.7 million, down 19% on the previous year. The 2020/21 year was heavily impacted upon by Covid which was reported as the reason for more than £8 million of match-day and non-match day loses.

13. Aberdeen Football Club reported a loss of £5.19 million in the Scottish Premiership Club's annual accounts to 30 June 2021[9]. Accounts which showed a decrease in turnover of £3.26m from 14.33m to 11.07m and a 2.27m rise in losses. Aberdeen says that empty stadiums during the pandemic are to blame for their losses. Aberdeen decreased their wage bill from £9.77m to £9.36m but point out that due to the decrease in turnover, the wages to turnover ratio increased from 68% to 85%.

14. No redundancies or permanent cuts in expenditure were avoided as a result of a number of measures being taken including, player sales, business interruption insurance, fans

[7] Wilson, A. (2020). Football must be the foundation of stone as we rebuild. Nutmeg No 18, p17.
[8] Palmer, B. (2021). Park takes aim after huge loss. The Times Sport, 6 November, p1.
[9] See BBC Sport (2021). Aberdeen post £5.19m loss to June in one of the toughest financial periods they have faced. BBC Sport 20 November 2021- https://www.bbc.co.uk/sport/football/59354957 [retrieved 21 November 2021].

buying more season tickets than anticipated, staff taking temporary cuts in pay, an injection of new cash from investors and an interest free loan from the Scottish Government[10].

15. One of the Big Five European Leagues, the English Premiership, was reported as being set to lose out on the revenue for Television money as foreign deals were hit by Covid and in particular the collapse of the TV rights market in China[11]. New four-year deals were agreed with the Pitch International for the Middle East and IMG for the US, but well below the $166 million a year ($125 million) deal set of 2018-2024. The lack of crowds at many matches reduced the international interest in the FA Cup. China and sub-Saharan Africa were offering considerably less than in the past and in some cases as low as £5million per year.

16. The Deloitte's Sports Business Group (DSBG) review of the impact of Covid-19 on the sports industry raised a few concerns[12]. Seven pillars of operation are initially highlighted all of which are reflected in the challenges that Hearts Football Club has faced.

17. **Competitions and calendars:** Postponement, cancellation, and the re-organising of events and competitions altered the football calendar, and it remains to be seen, as to whether this continues over the years beyond this initial phase of the pandemic. The potential for innovative changes to existing formats is a possibility and should be encouraged. It would be a missed opportunity if Scottish football was eventually to return to the old norm.

18. **Operating models:** Disruption pushed some clubs and organisations to think about transition to new operating models that they may have already been considering. Others may be forced to adapt - whether they've been planning to or not, whilst many will see this as an opportunity to transform.

19. The pandemic has shown that Scottish Football has had to adjust its professional football structure based on maximising the sport's potential within a new context. Wage cuts, delayed payments, less activity during the football transfer windows, continuing to reach out to communities but with reduced budgets and income for the community foundation arms of clubs, having to plan for training bubbles, social distancing, crowd restrictions, and a cut in the pipeline of content to capture fan engagement has all meant that football clubs have had to revisit operating models to survive.

20. **Commercial relationships:** How can the football or the ecosystem in which it works support and strengthen relationships with broadcasters, sponsors, and partners amid the difficult legal and financial implications of an abrupt shutdown such as that which faced by some Scottish leagues during the 2020/21 season? Such questions were asked of all Scottish clubs as the financial impact of the pandemic became more apparent.

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[10] See BBC Sport (2021). Aberdeen post £5.19m loss to June in one of the toughest financial periods they have faced. BBC Sport 20 November 2021- https://www.bbc.co.uk/sport/football/59354957 [retrieved 21 November 2021].
[11] Ziegeler, M. (2021). FA lose out on TV cash as foreign deals hit by Covid. The Times, 13 November, p13.
[12] Deloitte (2020). Understanding the impact of Covid-19 on the sports industry.[retrieved 7 March 2021].

The scale of the financial impact of Covid-19 on Scottish football for the current season at November 2020 was estimated to be in excess of £100m.

21. **Fan engagement:** How will teams, owners, and sponsors re-think the fan experience? What does "fan experience" mean if there are no fans in the stands? Will the shutdown increase focus on more virtual one-to-one relationships? Will the fluid football fan be more discerning about whether they buy season tickets or prefer pay-per-view options?

22. Football matches without supporters according to one Scottish Football Director are soulless experiences, which left this way would have serious implications for the willingness of broadcasters to keep money flowing into the game. The attendances during the pandemic have generally been limited to directors, players, scouts, and the press[13]. Clubs have attempted to fill the void of material for fans by providing streaming services, often through their own website TV channel of through YouTube.

23. The break with fans in the stadiums has had at least two consequences; (i) it served to reinforce the importance of football clubs in and for communities whether this is taken to mean community as locality, as social network, or as a form of communion, football in and around stadiums firmly captures all of these and (ii) it gave rise to a worry that the break with attending football matches has broken a habit that will need considerable efforts around fan engagement and virus safety checks for stadium attendance to reach firstly pre-virus levels and secondly prepare for the future fan.

24. **Investment:** Given the exposure and liquidity issues of the rapid shutdown, should football organisations and individual investors be diversifying their portfolios across regions or leagues? Is it the time to prepare for future acquisitions or broader portfolios of partnerships between clubs? Would consideration be given to alternative sources of finance which might help to safeguard football in the short term, without compromising the medium and or long-term future of the industry.

25. A club's ability to sustain and boost investment and revenue streams were severely tested over the period of the pandemic. The Deloitte Football Money League Reports annually track the ability of clubs, including Scottish clubs to sustain and diversify revenue streams. The ability to diversify revenue streams has the result of reducing the risk or dependency on any one significant income stream such as gate receipts.

26. While philanthropy might not be a regularly recorded and recognised income stream in football club accounts[14], nonetheless, it has made a much-needed contribution to the ability of clubs to cover some of the costs brought about by the pandemic. It raises the question about the future potential of philanthropic funding as a potential income stream that helps to reduce risk for football clubs.

27. **Digital Workplace:** Giving a remote workforce access to scalable, secure, virtual systems may require new investments in digital, technological, and cyber services. Prior to Covid-19, the Deloitte Media Trends Survey suggested that 25% of consumers watched live-streamed and recorded video of others playing video games each week[15].

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[13] Westcott, R. (2021). The silence of the fans. Nutmeg No 19: March 2021, pp136-139.

[14] This would be when compared to other sectors including alternative sport models in other countries such as the USA.

[15] Deloitte (2021) Digital Media Trends Survey 14th Edition [retrieved 29 March 2021].

For Millennials and Gen Z, it was about 50%. Since the Covid-19 pandemic began, these numbers have held firm, with audiences predominantly watching how-to-videos, game walkthroughs, professional gamers, athletes live streaming their play and eSports competition. Many professional athletes and clubs have stayed connected with their fans by streaming and commenting on their own video game play with the cancellation of live sports. All of this opens the question about who and where future fans will come from and what do they want.

28. The Premier League launched the inaugural ePremier League Invitational competition during the lockdown. According to Nielsen Sports, the final between Trent Alexander-Arnold (Liverpool) and Diogo Jota (Wolves) attracted three million viewers on Facebook and 394,000 viewers on YouTube, demonstrating a 275% rise in viewership from the opening round to the final. The phenomenon of playing, streaming, watching, and socialising within video games may continue to grow and expand when lockdowns and restrictions are eased[16].

29. Some football clubs are seeing their facilities benefit through a new funding scheme such as that between the Scottish Football Partnership Trust (SFPT) and *Shared Access*, the wireless infrastructure operator that works alongside major Mobile Networks Operators (MNOs). Alongside the rollout of a 5G mobile network, *Shared Access* and the Scottish Football Partnership Trust suggest that the total level of investment could reach £5m over the next five years. *Shared Access* has proven how this model can work in England, Ireland, and Wales. Scotland might benefit from a grassroots investment to future proof both sporting talent and geographic connectivity[17].

30. Although the advent of the proposed European Super League was resisted by British Clubs the basic idea that clubs have just as big an accessible fan base outside of the stadium as they do inside, remains the reality for some Scottish clubs. The question remains as to how to help clubs facilitate this fan base as part of the family and whether clubs fully maximise and understand the needs of this segment of fans and potential fans.

31. The advent of increasing investment, opportunities and challenges arising out of the use of digital technology, both in the workplace and in the football industry, provide both challenges and opportunities for Scottish football.

32. **Stadia and Venues:** How did and does the current Covid context affect the needs of arenas and stadiums in the short- to medium-term? Have venues been used to support the response of governments and society to COVID-19? Have such outlets been compensated? How can venues be better utilised, including for new and different content, in the future? What happens if we must continue without crowds or a reduced capacity of crowd? What is or should be the digital capability of the Scottish football stadia and venues?

Summary Statement:

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[16] Deloitte (2021). COVID-19, Football & Digital: 2020/21 Season & Beyond. [retrieved 23 March 2021].
[17] Hislop, J. (2020). Joint scheme set to bring investment to football clubs across Scotland. The Edinburgh Reporter [retrieved 22 March 2021].

33. Understanding the impact of Covid-19 on Scottish football is in the interest of not just the football industry. Many questions have arisen because of this pandemic. How do you simultaneously manage fan expectations, minimise operational disruption, and plan for a future that, in both the short- and long-term, may not look anything like the past? Can new technologies and online channels help engage fans during suspended or modified league operations? Can these changes be used to attract new fan bases to the game? What is the consumption or engagement patterns of new fandom types?

34. With the effects of the pandemic looking likely to be with us for some time, the entire sports ecosystem needs to be vigilant with potential threats to financial and business continuity arising from disrupted cash flows, legal and insurance challenges, and the possible impacts on longer-term attendance and engagement.

35. The pandemic has only accelerated the realisation that football clubs in the future will have to work hard at maintaining, refreshing, and engaging with fans both in old and new ways as the game in Scotland strives to move forward.

36. A crisis often provides the potential for a level of creativity and innovation that if capitalised upon could help to shape the future in a way that is more resilient, more equitable and more lucrative. It is important that Scottish football clubs continually reflect upon innovation and build in organisational capacity and capability for innovation not just on the part but also of the park. Football clubs invest in resources to advance and get an edge with on-field performances often at the expense of resources and innovation around off-field capabilities in relation to i.e. clubs, stadiums, fans and potential fans. Both are needed.

Part Two: Heart of Midlothian Football Club and Covid 19

37. Building back better requires lessons to be learned: (i) by national response teams led by the Scottish Government about the total contribution that football can make, and (ii) by football itself about how it reacts through the crises, how it recovers from the impact of the crises, how it develops and uses its own data driven innovation to be more resilient and proactive in relationship to different stakeholders, perceived or otherwise in Scottish football and how football has used the period to reflect further about the future of football in Scotland and how it could be.

38. Society and government need to fully acknowledge and support the unique role that football clubs play in the community to help ensure that Scotland transforms the effects of Covid-19 into a better future[18]. Clubs are at the heart of their own local communities; they fund thousands of supplier businesses across the country which in turn secures employment for tens of thousands of people.

39. Before Covid-19struck, Hearts were on course for a strong financial performance, showing year on year growth. Financial year 2019/2020 saw Hearts have to cope with not just the impact of the pandemic, but also consequential financial implications

[18] Wilson, A. (2020). 'Football must be the foundation stone as we rebuild'. Nutmeg Issue 18: December 2020, pp14-17.

arising from the removal from the Scottish Premier League. This action came at a cost and is reflected in the accounts for year-end 30th June 2020[19].

40. So, to were the many of actions taken by the club to support the community in which it is located respond to Covid-19. Big Hearts Charity, Community Football and the Heritage Department and Innovation Centre all helped the club to progress. The later receiving continued sponsorship from Baillie Gifford and Dell Technologies[20].

41. Heart of Midlothian plc is a public company limited by shares incorporated in Scotland. Heart of Midlothian plc is a subsidiary of Bidco (1874) and the results of Heart of Midlothian plc are included in the consolidated financial statements of Bidco (1874) Limited[21].

42. The turnover of the club was down by approximately £2.5m, coming in at just over £12m compared to £14.8m the year before[22]. The profit for 2020 totalled £473,000 compared to almost £3m the previous year. For the first time in six years, the financials for 2020/2021 predicted a loss[23]. This impacted the plans to become the largest fan-owned club in the UK. Despite the challenges, the season ticket renewals for 2019/2020 reached 11,500, the numbers pledging to the Foundation of Hearts increased to 8,500 and the company's balance sheet at 30th June 2020 reported net assets of approximately £18m.

43. Hearts Football Club does not exist in isolation from the broader forces that affect the people, communities, and country in which they are situated. Hearts's football reach and impact extend far beyond what is immediately obvious both in direct and indirect economic and societal terms but also in terms of its local and international engagement.

44. Covid related health problems are unequally distributed across society with the poorer more likely to be chronically ill. According to one of Scotland's former Chief Medical Officers, there is a synergy between the virus and the socioeconomic environment in which many people live[24]. Health, sport, and football in Scotland have all been impacted by what the Marmot Review of Covid-19 referred to as the social gradient[25]. What impact has the pandemic had for example on the Hearts para football community, walking football groups, or women's football in Scotland in a year that saw the game for women go professional?

45. The club's approach to the pandemic was to seek to live within its means and use its cash balances to fund a working capital cycle throughout the year. This was designed to serve as a buffer against financial fluctuations that may arise from the pandemic and

[19] Heart of Midlothian PLC Annual Report and Financial Statements for Year end 30 June 2020.
[20] Heart of Midlothian PLC Annual Report and Financial Statements for Year-end 30 June 2020.
[21] Heart of Midlothian PLC Annual Report and Financial Statements for Year-end 30 June 2020.
[22] Heart of Midlothian PLC Annual Report and Financial Statements for Year-end 30 June 2020.
[23] Heart of Midlothian PLC Annual Report and Financial Statements for Year-end 30 June 2020.
[24] Burns, H. (2021). Let's start preparing for the next pandemic once this is over. *The Scotsman* 25 February 2021, p21.
[25] The Marmot Review (2020). Build back fairer: The Covid-19 Marmot Review. London: The Health Foundation. [retrieved 4 March 2021].

or fluctuations in sporting success[26]. The club looked to continue to invest in football talent while maintaining a control over costs and secure in the knowledge that it could receive a return on football assets should it have to sell some players. In other words, careful player trading could be used to offset any operating losses. The club acknowledges that pandemic restrictions curtail the club's ability to maximise the supporter experiences but anticipates a staged return of supporters during the 2021/2022 season with full access expected in early 2022. The club has planned to make any necessary adjustments to allow it to operate effectively throughout current and future restrictions.

46. The cost of an adult season ticket ranged from £78 to £625. Hearts have offered a discounted renewal option for this campaign with the costs for different categories being; Adults - **£200** to **£280,** Over-65s & Students - **£129** to **£179,** Under-18s - **£109** to **£149, and** Under-16s - **£78** to **£129.** Alternatively, fans can choose to take up a full-price renewal option if they wish to inject further cash into the club. This option is costed at Adult - **£295** to **£625,** Over-65s & Students - **£180** to **£380,** Under-18s - **£155** to **£335 and** Under-16s - **£100** to **£290.** The Tynecastle club have also introduced a scheme that allows season-ticket holders to reserve their seat for **£25** and pay for a pro-rata pass at any point in the campaign.

47. The season ticket provided access to all home Scottish Premiership matches. Benefits included Hearts season-ticket holders having priority in ticket ballots for league and cup games and having their names added to a tribute wall at Tynecastle. Season ticket holders will also be granted free streaming of games played behind closed doors or at limited capacity and access to a first-team training session.

48. Finance is a key issue for not just Hearts Football Club. Scottish clubs operate in a very resource constrained environment. In attempting to build back better Hearts should reflect upon the fact that while some of Covid-19's implications are specific to Scottish football, the fallout raises bespoke questions as to whether sport leagues and clubs must rethink aspects of their organization, structure, and governance.

49. The fact that Hearts Football Club has a track record of success in both the men and women's game should not be underestimated. With a budget, just a fraction of that enjoyed by top European clubs Hearts has the potential for an increased financial return from UEFA for both the men and women's teams[27]. For the latter the abrupt end to the 2019/2020 season, the inconsistent resumption of women's football along with other factors resulted in potential sponsorship deals been put on hold during the first year that Scottish Women's football went semi-professional. Women's soccer has boomed across Europe over the last decade, driven in part by improved performances by national teams, a growing interest in Women's World Cups, and to some extent the belated interest of major men's clubs in the women's game[28].

[27] Setting the Pace, the FIFA Benchmarking Report on Women's football draws upon data from 282 clubs involved with women's football at elite professional level. The comparative benchmarking data on participation, governance structures, finance, fan engagement, players and the impact of Covid at early 2020.
[28] Smith, R (2020). Women's football was having a moment; then the clock stopped. NY Times. 11 April 2020. [retrieved 14 April 2021].

50. A crucial lesson from the pandemic has been to recognise the importance of social relationships and networks, particularly within underserved communities. Hearts Football Clubs is well placed to be at the heart of a unique or bespoke conduits of influence that can help to build the club, promote stories about the club and potentially introduce the club to philanthropy. Like other clubs Hearts Football Club will be better served if continues to build and recognise the extent of its own networks, locally and internationally and the way in which these networks work, are fluid and require constant work.

51. At the national level this also holds true and in passing it is worth noting that one of the lost messages amongst the impact of the Scotland vs. England match at Wembley and the Euro 2020 Scotland contribution, was that families kept apart during the pandemic and, most importantly, generations of families, started talking about great Scottish football moments. The wins here are less important than the fact that football was helping to facilitate conversations, contact, and the social networks that have been affected profoundly by Covid-19. Scottish television (STV) estimated that almost one in five Scots, at least 19% of the population, followed the championships on TV alone. More than 20 million people in the UK tuned into watch the Scotland vs. England game.

52. Football, like Scottish society, has burgeoning inequalities by, *for example*, gender, geography, generation, capability that existed before Covid-19 struck and has been exposed further by the pandemic. A social and demographic analysis of the season ticket postcode data only served to enforce the reality that the finances to support the purchase of season tickets in Scotland are uneven. Football, Hearts, other clubs and Scottish society have a role to play in making Scotland a more equitable and happier place. Something that Scottish football recognises but needs further support to maximise the capability of football as a community asset.

53. It is important for football clubs to constantly work at and understand the fluid nature of fan engagement. The next section of Part Two specifically considers at a more granular level questions about Who, What, When and Where in relation to Hearts Football Club.

Where do Heart of Midlothian Season Ticket Holders Come From?

54. Much is made of fan experience and exploring CRM systems to identify how fans behave when in, or around the stadium. Yet, when they leave the football world, which we can control and gather data, little is known, which is ironic given the importance of supporters in the Scottish game and that modern communication with clubs is a 24hr operation. One way we can start to piece together who our consumers are is to explore communities in which they live out their daily lives. By understanding neighbourhoods and attaching census information and other measures we can determine for example how affluent the area is, what its demographic make-up is, its geographical proximity to Tynecastle, the life changes within these neighbourhoods and average disposable income. Furthermore, by understanding customers we can further understand the consumer experience. For example, the consumer experience does not start and end once they are in and out of the stadium, it is a complex process of direct and indirect mechanisms relating to the club.

55. What we know of season ticket holders of Hearts is that in relative terms they reside in a very close proximity to the stadium with a distance decay effect as you move to Edinburgh's fringe and surrounding hinterland. This suggests that fans of Hearts are somewhat place sensitive. Where we see geographical clustering in sport consumers, we tend to visualise areas high in place significance, that is the football clubs role in place identity and individuals sense of place, what geographers call place pride. This has significance for marketing and commercial operations. One challenge is how and if to extend place pride to, for example, family pride.

56. Hearts of Midlothian in 2019/2020 had approximately 11,000 season ticket sales. The majority of these sales stem from Edinburgh area postcodes, with the top sales areas being clustered in West Edinburgh: EH14, EH12, EH11 (including Tynecastle) and EH4. In general, matchday sales are more likely to come from areas outside Edinburgh, consistent with the travel commitments of a season ticket. The most popular total sales areas (EH14 and EH12) are also the most popular per-capita sales areas, with over 2% of people buying season tickets.

57. Overall, 83.86% of Hearts season ticket sales came from the city of Edinburgh itself, with the most popular districts being EH14 (SW Edinburgh, Balerno, 8.72% of sales), EH12 (West Edinburgh, Murrayfield / Corstorphine / East Craigs / South Gyle, 8.53% of sales), EH11 (SW Edinburgh, Dalry / Gorgie / Stenhouse / Broomhouse / Tynecastle, 6.07% of sales) and EH4 (NW Edinburgh, Cramond / Blackhall / Craigleith, 5.79% of sales; also, the most popular district for Hibs sales). The top 10 most popular postcodes account for 47.06% of season ticket sales, with 9 of these coming from Edinburgh and 1 from Kirkcaldy. This is the lowest figure across the four clubs, indicating a wide geographical spread of season ticket holders. Outside Edinburgh, the most popular areas for season ticket sales are KY (Kirkcaldy, 634 sales), FK (Falkirk, 312 sales), G (Glasgow, 235 sales) and ML (Motherwell, 141 sales). Matchday ticket purchasers are more likely to reside outside Edinburgh than season ticket purchasers, but both categories of purchasers are more likely to reside outside Edinburgh than their Hibernian counterparts, indicating that Hearts' following is slightly less concentrated.

Who are Heart of Midlothian's Online Audiences, Information Brokers and Influencers?

58. Fandom is rapidly changing where fans were once just consumers of a football clubs' product, they now form different complex relationships with their clubs. Whilst there is still the traditional fan who engages with the club through traditional means, there is an increasing number, enabled through changes in technology, that are actually consumers and prosumers. That is, they readily consume the core product of the club but also produce content and consumer experience for other fans, without being recompensated for their efforts. Undoubtably, this has arisen as we have moved through shifts from Web 1.0 to Web 2.0 and a focus on interactions through social media. Therefore, it is imperative that football clubs are embedded in the interaction networks of their support groups, understand who key influences are, and how communication dynamics play out during any given period of time. This becomes essential during marketing activities such as season ticket launches.

59. Through exploring Twitter communication networks, we were able to track over time (during the season ticket launch and roll out), who were key to promoting, facilitating and constraining the advertising message. In addition, we were able to identify who are the key prosumers of Hearts related content. a range of fans and affiliated/non-affiliated organisations who contributed to the daily engagement.

60. Over the period of the study, Hearts saw almost 2000 Tweets per week across its Twitter communities. Interestingly, @spfl was the 2nd most popular user, showing the importance of @spfl in disseminating information for the club. @spfl only appeared in the top 5 most popular users for Hearts & Motherwell. It was also clear that certain Hearts-centric accounts like @Amoruso1998, @ThisIsMyStoryPod, and @heartsshirts should be ongoing partners for @JamTarts. Interestingly, @Shay2920 appeared as a popular user despite his limited time at the club, indicating the power players can have in driving fans' conversations

61. The gap between neutral and positive sentiment for Hearts is consistently the largest of the four clubs, indicating a potentially less-engaged follower base. This is largely because most of the analysis has taken place after the season's wrap-up (i.e., particularly low weekly volumes from Week 6 onwards). With low volumes, popular external Tweets can dominate analysis, such as the positive @AgentScotland Tweet in Week 11 that mentioned Hearts (see previous slide). Similar to Hibernian, community-led content was lacking for Hearts over this period, with an associated low level of positive sentiment – this could be a key area for online growth, along with similarly engaging with some of the key influencers/players who remain week over week pre/post season.

62. Two of the official #WeAreHearts launch week posts (28/05 = launch day and 01/06) were among the top five engagement days since the season ended (including the entire baseline), indicating a highly positive reception. However, the club missed an opportunity to follow this up (see the large gap between the 09/06 and 23/06 posts). This significantly reduced momentum, with average hashtag usage of 0/day by Week 3 of the campaign (week to 17/06). A giveaway launched on 21/06 by Josh Ginnelly generated very high engagement, indicating a link between players and fans that could be useful in future campaign launches.

63. The campaign launch increased YouTube engagement, both in terms of views (404/day, +108% vs baseline) and international distribution, picking up some daily views in Australasia and the US. This spike was largest in launch week, with 2,198 views on launch day itself (the largest single figure over the entire measurement period). The Twitter pattern of strong launch followed by rapid decay was reflected on YouTube, with a 71% fall in weekly views from launch week to the following week.

64. During this period of study (season ticket launch), the second most popular user was player Lewis Moore who subsequently retired from Hearts on 26/05. This once again indicates how clubs can leverage players' followings.

65. In the post-campaign period, the #WeAreHearts tag has had a minimal effect on Twitter conversations, with content instead driven by off-campaign conversations (e.g., club communications around the anniversary of the Battle of the Somme on

02/07). Total usage of the hashtag across the post-campaign period stands at 21 Tweets/retweets, or 1.4/day.

66. YouTube views fell following the launch period, although they remain higher than the baseline (300, +55% vs baseline). However, given the Twitter numbers, we can assume that this is due to factors other than the campaign video. As expected with the drop, the most active users have somewhat shifted as the regular contributors to conversation have engaged less (with a few exceptions: @heartsshirts, @William04150909).

What do Heart of Midlothian Fans Talk About and When do they talk about it?

67. The most used terms for Hearts fans are generally a mixture of emojis: “clapping hands”, “tears of joy” and “black heart”/”heavy black heart”. The latter of these are used as a Hearts badge identifier to mark Tweets. “Rightwards arrow” also appears, which is often used by the club to mark official statements. Other than emojis a range of topics gained traction over the period including discussions of players + managers, matches (“St Johnstone”) and discussions over accepting the Championship trophy.

68. Interestingly, in Week 5 of the study, Hearts secured promotion to the 2021/22 SPL with a 6-0 victory over Alloa and dropped points from Dundee and Raith Rovers. How did this affect sentiment? Firstly, there was a significant boost in engagement in Week 5, with168% more tweets/retweets than the previous week, leading to the highest single week engagement across the measurement period; Secondly, engagement was substantially more positive compared to other weeks 33% positive sentiment was unmatched across the measurement period. This shows the importance of once-in-a-season results in driving conversation. With a larger audience and demonstrably higher positive sentiment, this could feed into future campaign launch strategies

69. It is clear that fans like to engage with clubs around emotive content, this is a key driver in building social media traction. Indeed, more emotive, community-driven content could help Hearts foster a more positive online community, along with engaging with some of the key influencers/players who remain week over week to solidify the campaigns. Hearts had the largest gap between positive and neutral sentiment.

What is the potential international reach of Heart of Midlothian Football Club?

70. Players are hidden assets for football clubs in terms of engaging in the consumption and prosumption of fan groups. At present throughout Scottish football, players are not *systematically* used to strategically drive engagement online or drive sales of club materials from season tickets to merchandise. We created a measure that accounts for popularity and reach of players through social media. A term we coined ‘Player Folk Index’. This measure is an online index of a players social media footprint compared to their transfer fee (or current valuation on several prominent football data science sites). At present Hearts had the 2nd most followers, just ahead of Hibs. Hearts maintains a strong following online, especially from Hearts centric accounts, with an opportunity to partner with well-followed players.

71. Hearts’s YouTube viewer base comes predominantly from the UK, with other anglophone countries also registering a significant number of views, namely Ireland

and Australia. Of the four clubs analysed, Hearts has the lowest number of YouTube viewers both in raw numbers and in terms of international distribution. The vast majority of Hearts viewers stem from the UK, with India second (and quite far ahead of third). It is unclear why Indian viewership is so high, perhaps due to historic links: this could provide a potential area for future growth.

72. Hearts launched their season ticket campaign in the off season, meaning that daily conversation volumes are stable and low in the baseline period (283 Tweets/retweets per day). We can also see that hashtag usage before launch is at 0 as the hashtag is bespoke for the Hearts campaign, unlike Hibs' hashtag. YouTube views are correspondingly low, at 161/day, with all views stemming from the UK or India.

What else does the Heart of Midlothian data tell us?

73. The matchday boost for both Tweets and retweets is the largest across the four clubs analysed, at 7.5x and 4x non-matchday volumes respectively. This indicates that the optimal time to launch content in terms of audience size is on a matchday itself. There is also a noticeable boost in the day after matches, particularly for original content: this corresponds with post match discussions around particular results, for example the Brora cup exit. The post-season drop in conversation volumes was particularly high for Hearts.

74. The launch of #WeAreHearts on 28/05/21 generated the third-largest daily volume since the season’s end and the tenth-largest non-matchday volume over the whole measurement period (since March 4th) to that date. However, usage decayed to single-figure daily levels in the second week of the campaign, indicating that the successful launch was not sufficiently followed up by the club. This strong start and quick decay pattern were matched by YouTube views. A spike in engagement driven by Josh Ginnelly on 21/06 indicates a player/fan connection that could significantly amplify future campaigns

Summary Statement:

75. This study has identified the importance of identifying who are customers (supporters) are, what defines them in the physical sense. In addition, by understanding where individuals reside, we can determine their life chances by using neighbourhood level statistics. This has importance for two reasons, firstly, identifying who our match going supporters are and their potential in a commercial sense, and secondly, who are not? And do they reside in hard-to-reach groups and ultimately support strategies to engage and outreach in these communities. Furthermore, increasingly consumers are engaging with matters relating to the club via online methods, which has increased during the pandemic. It is essential to understand that consumers online are often prosumers in that they generate content for the club at no cost. We should also note that online platforms are increasingly differentiated by different user groups, and the GenZ generation have different consumer behaviours than older age cohorts. Understanding the differences in consumption habits of Baby Boomers, Millennials, GenX, GenY and GenZ should be a central concern for Hearts.

Part Three: Recommendations and Observations

76. *Football is an undervalued pillar of connection in and beyond Scotland*. There is no doubt that Hearts Football Club fit this mould of being a pillar of connection in its communities. Football's understanding of the communities it works in has been challenged and enhanced by the pandemic. Community football organisations have played a key part during the pandemic and have where possible been part of the support package serving the needs of local people. The Scottish Government needs to recognise much more and enable much more the capability of football to deliver on a broad range of outcomes.

77. The Scottish football industry has a higher dependency upon gate receipts than any other European country. Therefore, Hearts Football Club has a high dependency upon supporters paying at the turnstiles. Hearts Football Club has shown its willingness to innovate and change, indeed, it currently holds the record attendance figure for a women's game at Easter Road. Few football clubs in Scotland were prepared for stadia closures presented by the pandemic. A football financial model, characterised by short-termism and fragile cash flows, has been severely tested by the health crisis by forcing football to draw on limited reserves. Hearts Football Club should be encouraged to minimise the risk of being significantly dependent upon any one income stream while at the same time grasping opportunities to maximise gate receipt income from both the men and women's game.

78. A traditional monetisation model for the football industry is often based on audiences, events, reach, and impressions, while a community-based monetisation model is driven by maximising the club as a community asset by, for example, storytelling, conversations, access, and direct-to-consumer commerce. A more nuanced understanding of Hearts 's football communities has the potential of unlocking an even more communities focused model that could unlock powerful new ways to produce, distribute, and measure football engagement and relationships based upon what fans and communities, including online communities want.

79. The age of the fluid football fan suggests the need for the continual push for innovation, to harness technological capability and communicate with fans around the world on much more of 24/7 basis. The timing of engagement with football communities needs to be much more of a seven day a week operation rather than having spikes of activity in and around match days. Indeed, there is a 24hr contact opportunities with individuals and communities demanding alternative forms of content.

80. The digitally native Fluid Fan is the path to growth for the entire sports industry, and Fans of Women's Sports are the most fluid fans of all, representing the future fan and revenue growth. The pipeline of talent for women's professional sports has grown at 6x the rate of the men's pipeline since the 1980s.

81. Harnessing the power of prosuming and co-creating online supporters opens up several opportunities to reinvent the marketing communications process. Harnessing the power of prosuming fans increases the reach of the club into parts of the web they can't or have difficulty in penetrating, they have some degree of added social capital and increased levels of trust as communication is not from the club but other fans. In a business sense it may reduce the marketing spend as essentially brand and communications and other parts of the marketing delivery are being supported by fans.

82. Clarity is needed around the issue of co-creation. Who is and should be co-creating the Hearts product? Social media as a two-way conversation and at present clubs tend to be reliant on Web1.0 rather than 2.0. Clubs need to use social media to support fan experience, and this is a 24hr business – it doesn't stop when there is no match. Every single social media platform has analytics attached and these must be used to understand fans.

83. In the age of the fluid fan football clubs, including Heart of Midlothian FC, need to have a much more nuanced understanding of geography in terms where fans come from and could come from. This is essential as we have identified that football fans often have place sensitivity. Furthermore, they don't live out their lives devoid of contact with others in the locality, they consume and act the way they do because they are embedded in social relationships and the context of their environment also impacts back upon this action.

84. The capacity and capability of clubs to cater for the fluid needs of the football fan requires stronger relationships to be built between fans and clubs. Evidence from observed fan behaviours shows fans forging new relationship with footballers facilitated by technology. These fans also clearly unify and move as a community when provoked by social issues that align with their values. The taking a knee campaign is a good example of this. Fans are keen to engage with social issues of the day and issues that impact upon their own communities. Often a key concern of GenZ consumers is how institutions and organisations deal with social issues. For example, Hearts are a club absolutely concerned with environmental issues, but this wasn't reflected in any of the communication during the study.

85. A crucial lesson from the pandemic has been to recognise the importance of social relationships and networks, particularly within underserved communities. Hearts Football club is well placed to be at the heart of bespoke conduits of influence but the way in which football clubs both recognise the extent of their own networks and the way in which these networks work, are fluid and require constant work, remains a work in progress. This requires Hearts and other football clubs to continue to explore football fan engagement as both consumption and presumption.

86. Football clubs and their fans have a significant amount of knowledge to exchange. including positive stories to tell. A key finding from the social sentiment and network analyses was the positive way in which football fans engage with clubs about social issues that matter to the football communities. Football clubs need to get much better at exchanging knowledge with fans and communities in at least three different ways: online, offline, and with key partners that can facilitate this such as universities and/or technology companies.

87. There is a relationship between poverty, deprivation income and season ticket consumption. There is inequality based on season ticket data with the most deprived postcode areas the least likely to attend or bounce back quicker. This has broader implications for season ticket pricing, fan engagement and fan demographics.

88. Scottish football has a significant number of season ticket holders located in wealthy or affluent postcodes. This could also be precarious, if the habit of football is broken,

does not recover and Scottish football continues to disproportionately depend upon gate receipts.

89. Hearts data is included in the cross-data analysis involving the four partner clubs. Overall, 36% of season tickets come from the lowest & second lowest deprived postcodes based upon the Scottish index of deprivation. 53% of season ticket holders for these four clubs reside in postcodes with the highest level of income deprivation.

90. *Any disconnect between Hearts Football Club and its community has social implications for social capital, wellbeing, and happiness.*

91. Elite women's football is global in nature. The leading territories from a revenue-generating perspective are globally spread and the 30 clubs generating the highest revenue (more than USD 1m) come from 13 different countries. Hearts Women's Football Ltd has a strong track record of delivering women's football. As with other Scottish clubs more could be made of the mutual opportunities for clubs to benefit from a more integrated one club approach to elite men and women's football in Scotland.

92. The SFA Accelerate Our Game Strategy 2021-2025 recognises that women's football is the biggest growth area in our national game[29]. The SFA social return on investment study reported that women make up 11% of the Scottish population playing football. The same report noted the increased participation and demand for football by women and girls in Scotland.

93. A revamped Women's Champions League launched in 2021/2022 with UEFA promising to revolutionise the game with more teams, more matches, enhanced revenue from TV and commercial partners, increased UEFA investment and prize money, and a first ever cross-subsidy with the men's competition.

94. Hearts Women provide Hearts Football Club with the opportunity to increase European revenue; increased attendances in Tynecastle Park over a longer period of time; to further support Scotland's national effort; to open up further commercial revenue streams through women's football once a full-time professional football environment threshold is reached. A recent sports innovation report talks of a fluid landscape and the age of the fluid fan. New fans joining the football family are an important avenue of growth for the women's and men's football industry[30].

Scottish Football Matters

95. Planning for subsequent waves of Covid-19 or the next viral pandemic needs to build upon the learnings from previous waves and include strengthened support for not just football, but sport and physical recreation as crucial components of population health and a key part of public health preparedness. The connection between football enabled interventions and physical and mental health outcomes in terms of protection from illness, the development of resilience, and rehabilitation from Covid 19 consequentials has not been fully grasped.

[29] Accelerate our game 2021-2025: Scottish Football Association strategy for girls' and women's football- https://www.scottishfa.co.uk/media/8054/accelerate-our-game-pdf.pdf
[30] Sports Innovation Lab Report (2021). The top 25 most innovative teams in the world. January 2021.

96. Football alone is not the solution to public health or other national and or international crises. However, football organisations have proven to be valuable allies in conveying relevant public health messaging. They have proven to be effective at reaching vulnerable groups and those who are harder to reach through traditional channels.

97. It would have been useful to record, audit and ensure recognition of the role of football organisations in pandemic responses, including data collection on impact of football interventions. Football was active in identifying costs and the loss of income associated with the pandemic, but it was less proactive in public relations terms about the collective work of football in communities throughout the pandemic.

98. Scotland is a relatively data rich country. The various Government responses and narratives to Covid-19 were data driven. The sources of national and local data that inform decision-making processes in Scotland are relatively well developed. Scottish sport has access to private, public, and third-party sources of data.

99. Different parts of the Scottish sporting ecosystem collect their own data. Data sharing is an unequal landscape in terms of capability, capacity, and the ever-changing skills. No specific open data lab or sports lab has been established to serve the needs of the Scottish Football Industry. Scottish Football and Scottish football clubs spend a significant amount of resource upon on-field data to help inform performance. The optimal balance between clubs appointing sport scientists and data analysts has yet to be achieved.

100. A gap exists between on-field and off-field data gathering. The Scottish Football Industry would benefit from a data lab that could support off-field data production and analysis and inform the production of the many good-news stories that emanate from football but don't find sufficient traction in Scotland's public affairs narrative. *There is a need to collectively share data across football clubs and authorities.*

101. Advances in data innovation, sports technology and the development of football stadiums that are all equipped technologically to connect with fluid and changing patterns of fan engagement are all part of this future. Football stadiums in communities are not just gathering places for sporting spectacles but potential windows, for example, showcasing new modes of fan engagement, innovation, education, knowledge exchange and advancing well-being but more needs to be done.

102. Football fans are happy to provide clubs with information about themselves. Clubs that act on the preferences of fans will increase customer loyalty. Clubs need to maximise a more personalised approach not just to hold on to current fan bases, but also to attract more people to be associated with the club.

103. A necessity to recognise and embrace change in the future may require clubs to cater much more for fans that may want to consume football but not necessarily attend matches in the stadium to the same extent. One of the effects of the pandemic has been to raise concerns about how safe and quickly fans will return to stadiums or prefer pay-per-view to consume football. A football habit has been broken, it will take time to repair fully and clubs that can sustain and grow fan engagement both inside and outside

of the stadium and, or those who can, both inside and outside of the country will bounce back better equipped to be resilient in the future.

104. The use of football to make a difference, carry a message, deliver statements on a scale that few other areas of public life can should not be underestimated locally or internationally. As Scotland's most popular sport the opportunity for football to enable a positive Scottish narrative beyond Scotland is a potential story of solidarity innovative support, resilience, and connectivity between people regardless of geographic distance.

105. It is important to understand international fan engagement data. Rather than creating one piece of content and posting it to every platform, content might be tailored for each specific platform in the way users consume their content. These decisions are based on fan engagement data that should be analysed by the football clubs' social team.

106. The individual and collective international player profile of players at clubs has not been optimised as a means of international reach, dialogue, and co-operation between clubs and international communities. International player folk appeal has not yet been fully leveraged. International players could appear much more as key content drivers out with the UK for each club.

107. Football has the power to unite and excite people in nearly every corner of the globe, to raise the profile of a country almost overnight and help reach new audiences. Scotland is in a unique position as a small nation with a large sporting footprint, one of only a few small nations competing in high profile global tournaments, offering an opportunity for public diplomacy through football and other sports. Scotland and football could learn from the innovative work coming out of Australia.

108. The Scottish Government and the Scottish Football Authorities should recognise and value much more how football, and sport, might boost dialogue, co-operation and international activities and relations. There is a great deal for Scotland to learn from. For example, what: Wales has done around sports diplomacy, Norway has done with the Norway Cup, France is doing with Sport En Commun, the USA is doing with sport through USAID, what Germany has done through football being part of the toolkit used by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and what the UK through the British Council has established through Premier Skills.

Conclusions

109. The European Commission's report on the impact of the pandemic on the sport sector referred to a wide range of impacts, including broader economic changes, reduced governmental income, cancellation of events, reduced sponsorship money, reduced member financing, reduced sports broadcasting income, reduced sports tourism income, and reduced production and retail of sporting goods and equipment brought about by the closure of production facilities and retail trade. It pointed to the likelihood that the demand for goods and services would be reduced due to unemployment, reduced working hours and/or fear of infection.

110. The sports industry in general across the UK was unprepared and significantly impacted by the Covid-19 pandemic. This is not the first study to point out that a

preventive and anticipative attitude is effective in building resilience to infectious diseases within a sporting context. The Scottish football industry followed Scottish Government guidelines. Internationally, nationally and locally the Covid-19 and the responses to it were data driven and informed.

111. The partner clubs all recognised that the state of the economy affected the ability of supporters to maximise access to what the club has to offer. It is vital that the clubs continue to listen to what the fan base and potential fan base are saying and whether the attitude of fans towards the club's activities are seen positively, negatively, or simply in a neutral way. Clubs know who the key people in their communication network are and reach out to them to develop formal and informal strategic alliances. All of the clubs recognised the importance of being sensitive to the current context and all the clubs were sensitive to how the fans would react to 2020/2021 season ticket campaigns. Football and football fans have not been immune from the unprecedented political, economic and health environment created by this pandemic.

112. There is a big difference between preparedness, readiness, and response. The idea that preparedness has a beginning, and an end date is false. Whether it be Sars in 2002, H5N1 in 2004, H1N1 in 2009, Mers in 2012, ebola in 2013, Zika in 2019 and Covid -19 in 2019 and its subsequent variants there is a relentless temporal regularity. Preparedness and readiness are a constant, they do not end, needs to be part of the fabric of Scottish society including football and sport as it looks to the future.

113. The pandemic has not gone but has created a set of circumstances which has forced Scottish football and society to reflect about what is important. This needs to continue in an informed way. By doing so it safeguards its future and offers financial, economic and political benefits to the people of Scotland.

114. The need to remain flexible, innovative, agile, connected and responsive are key observations and lesson from the pandemic for football organisations, sport and society.

115. No specific football data lab or sports lab has been established to serve the needs of the football/industry. This should be addressed. Edinburgh University with investment can provide a data analytics service for the 21st century that could enable Scottish football and indeed other sports to better understand, for example, business analytics and the online, offline, local, and international communities that, in this case, Scottish football depends upon.

Building Back Better, Data Driven Innovation and the Scottish Football Industry.

The Academy of Sport in partnership with the Bayes Centre have developed a series of micro briefings written in collaboration with partners from the Scottish Football Industry. They are intended to inform and contribute to enhancing the capability of Scottish football to learn from the Covid-19 pandemic and embrace the possibilities of how data-driven decision-making, innovation and sharing can support, for example, business data analysis and off-field data analysis.

It is envisaged that other micro briefings and reports on Scottish football would include international engagement through football; social and demographic analysis of football season ticket holders; bespoke briefings for individual football clubs supporting the project; Scottish football building back better from Covid-19 and more.

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