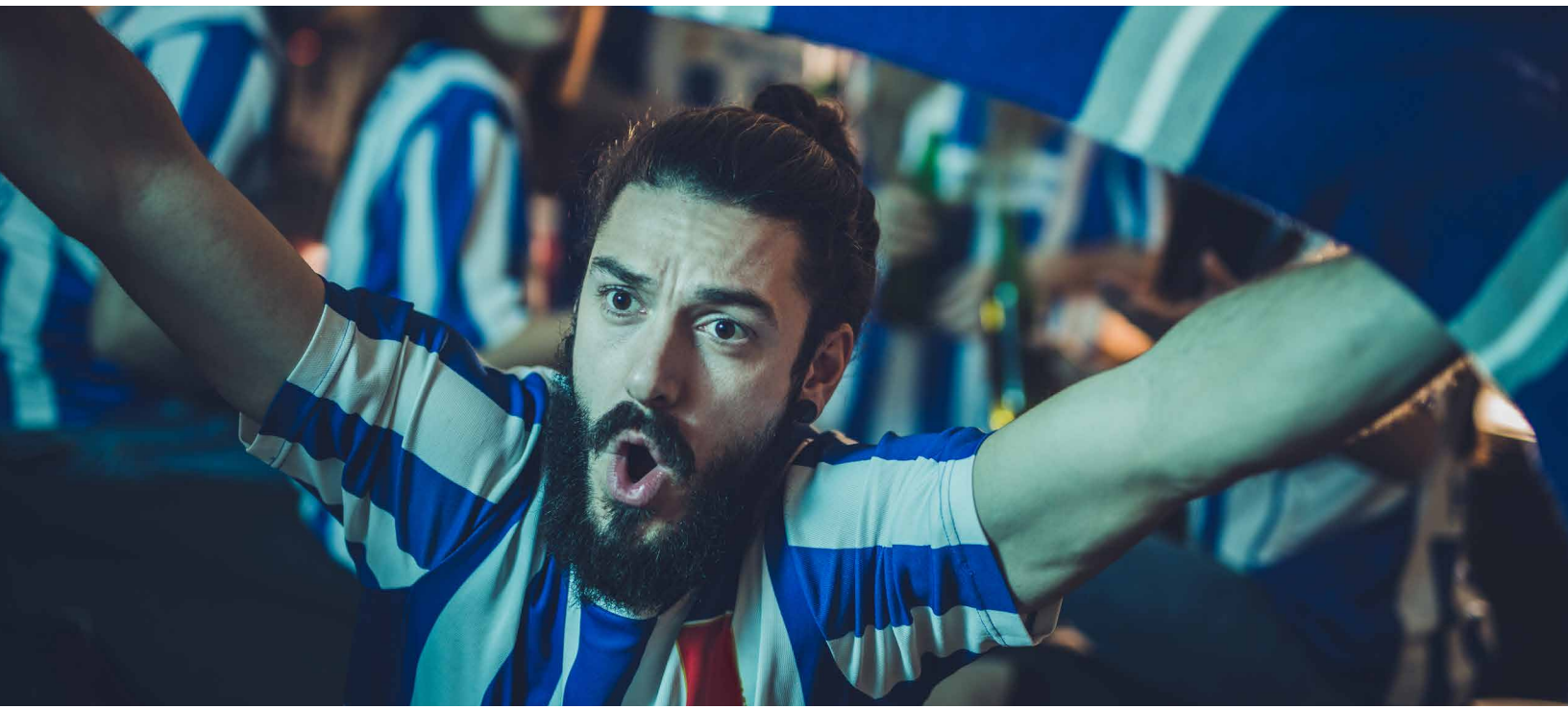


Edgio

Speed matters on and off the pitch:

Why a high-performing
ecommerce site is the key to
sports merchandising success





The difference between winning and losing (and sometimes drawing) in elite football is often the finest of margins.

The 2018/19 Premier League season was decided by a single point and in the game between champions Manchester City and runners-up Liverpool earlier that season, Goal Line Technology (GLT) ruled out a goal by the latter because the ball was 11.7mm from crossing the line –the equivalent of nine grains of sand.¹

The rewards at stake are so great that clubs and federations in the modern era leave nothing to chance and are willing to do anything that will deliver even a fraction of a percentage in performance, no matter what the cost.

Data-driven recruitment departments identify the best players to suit an individual team and avoid mistakes, performance analysis teams seek to optimise tactics and training schedules, and injured players are sent to the best medical facilities in the world to boost their recovery. Pitch maintenance is an entirely specialised field of study, psychologists are common in the game, and there are even specialist throw-in coaches who look to increase the effectiveness of an underutilised set piece.

But all these marginal gains on the pitch are only effective if supported by shrewd commercial nous off it. Behind the scenes, commercial and operations teams are doing everything they can to enhance the fan experience and drive revenues that provide the coaches and playing staff with the resources they need in their pursuit of glory.

The latest development in football's commercial evolution is technology. The digital transformation of sport is making existing processes more efficient and opening up new possibilities that drive financial and on-field success. This includes online retail, which is a huge opportunity for clubs to grow revenues and engage fans in a more digitally enabled society.

However, many clubs are not applying the principles of marginal gains to their commercial ventures and could be missing out on much of this growth. Just as a few millimetres can decide matters on the pitch, just a few milliseconds can make the difference between ecommerce success and failure.





The growing importance of commercial revenues and ecommerce to football clubs

The challenge of static matchday revenues

The commercial opportunity in football was immediately recognisable as the sport transformed from an upper- and middle-class pursuit into a mass spectator event in the late 19th Century. Early entrepreneurs hired professionals to improve fortunes on the field, established leagues that would ensure regular fixtures, and built rudimentary stadiums that would allow them to sell tickets.

For decades, matchday revenues were by far and away the most important source of income for football clubs who expanded, renovated, or rebuilt stadiums to accommodate more fans, modernise the experience, and incorporate hospitality options to drive growth.

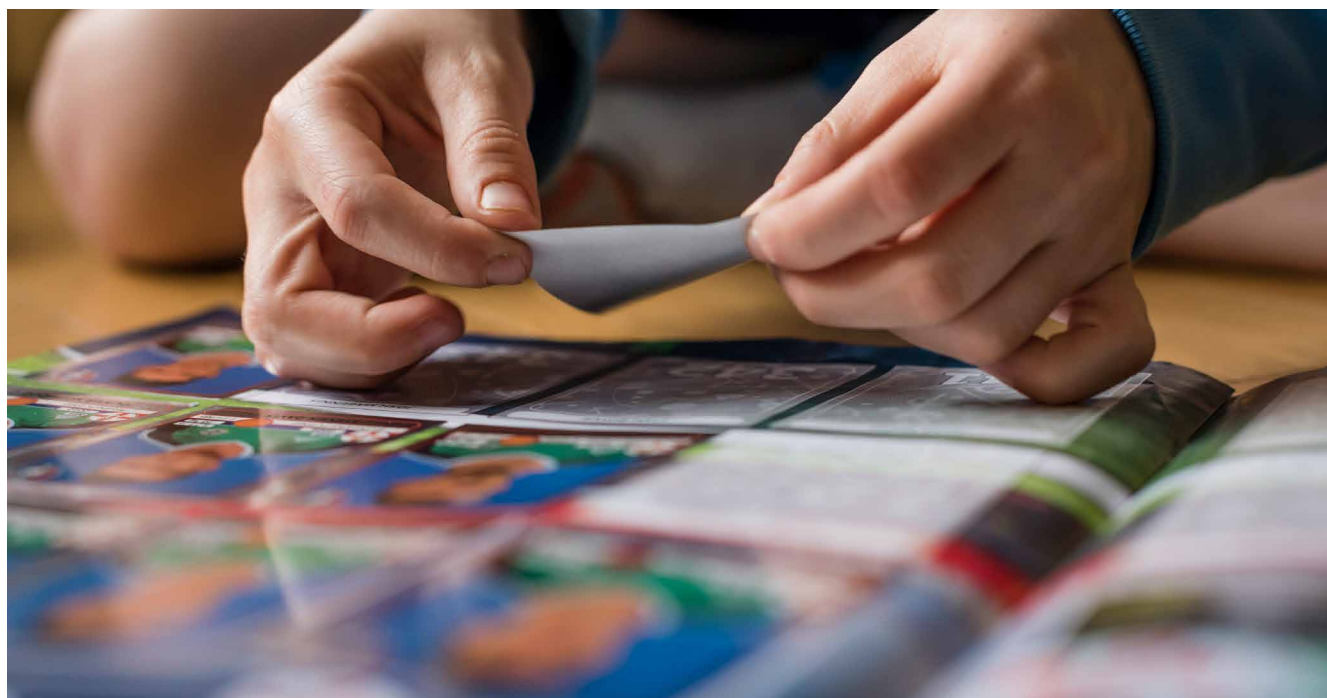
Diversified ticket offerings, coupled with the rising popularity of football around the world, have ensured matchday revenues are still a significant proportion of clubs' balance sheet even with the riches on offer from television rights deals and sponsorships. But for many clubs at an elite level, growth is now static.

The most obvious limit is space. During the 2021/22 Premier League season, the total attendance for all 380 matches was a record 15.2 million. Meanwhile, grounds were fuller than they have ever been in history, with a utilisation rate of 97.7 per cent of capacity.²

The second barrier is demand. The quality of modern football and the loyalty of fans means clubs can increase ticket prices to a degree, but this demand is not totally inelastic – especially at times when the cost of living is high and disposable income is strained.

Finally, acquiring new fans that are physically able to attend games is a challenge in saturated markets like the UK where most adults already to support a team.

Media rights have offered a more promising source of growth in recent times but commercial activities, including merchandising, can more than compensate for the limitations of matchday income by effectively monetising and engaging domestic and international fanbases.



The growth of international fanbases

Satellite television, high-speed broadband, smartphones, and social media have allowed football clubs to build global fanbases, create new channels of engagement and have attracted a whole new generation of digitally native supporters.

Top 10 clubs by social media followings (in millions)

		Facebook	Instagram	Twitter	YouTube	TikTok	Total
1	Manchester United	74.9	54.5	29.5	5.5	12.4	176.8
2	Chelsea	49.5	31.7	19.3	3.5	5.7	109.7
3	Liverpool	38.2	35.3	19.2	6.6	6.5	105.8
4	Manchester City	40.2	29.1	11.4	3.8	6	90.5
5	Arsenal	37.7	21.1	18.6	2.6	1.8	81.8
6	Tottenham Hotspur	23.2	12	6.8	2	13.4	57.4
7	Leicester City	6.9	6.1	2.4	0.4	2.3	18.1
8	Everton	3.7	2.5	2.7	0.6	1.2	10.7
9	West Ham United	2.7	1.9	2.1	0.3	1	8
10	Wolverhampton Wanderers	2.3	2	1	0.6	1.3	7.2

Source: Deloitte (<https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/sports-business-group/deloitte-uk-dfml22.pdf>)

The scale of this global fanbase is demonstrated by followers on major social media platforms as well as the increase in the Premier League's global television deals. For the upcoming rights cycle between 2022 and 2025, the value of the league's international deals will increase by 30 per cent to UK£5.3 billion (US\$6.44 billion) – eclipsing the value of its domestic agreements, which are worth UK£5.1 billion (US\$6.2 billion), for the first time.

The challenge for clubs is to create revenue opportunities beyond ticketing to engage and monetise fans who will never set foot in a stadium.

Commercial revenue opportunities

Domestic fans might be both a ticketing and a merchandising opportunity, but overseas fans might buy more merchandise more regularly because wearing the latest kit is the main way they identify with the team. A more engaged international fanbase means more revenue in other areas, such as memberships or subscriptions, and adds value to sponsorship deals.

This potential helps explain why football clubs are positioning themselves as brands to maximise commercial revenues.

Across the 20 largest football clubs in the world by revenue, the proportion of commercial income rose year-on-year over a three-year period prior to the Covid-19 impacted seasons of 2019/20 and 2020/21. In the 2016/2017 season, commercial revenue accounted for 38 per cent of total revenues of €7.9 billion and by 2018/19, it stood at 40 per cent of €9.3 billion. Meanwhile the proportion of matchday revenue fell from 17 per cent to 16 per cent over the same period.³



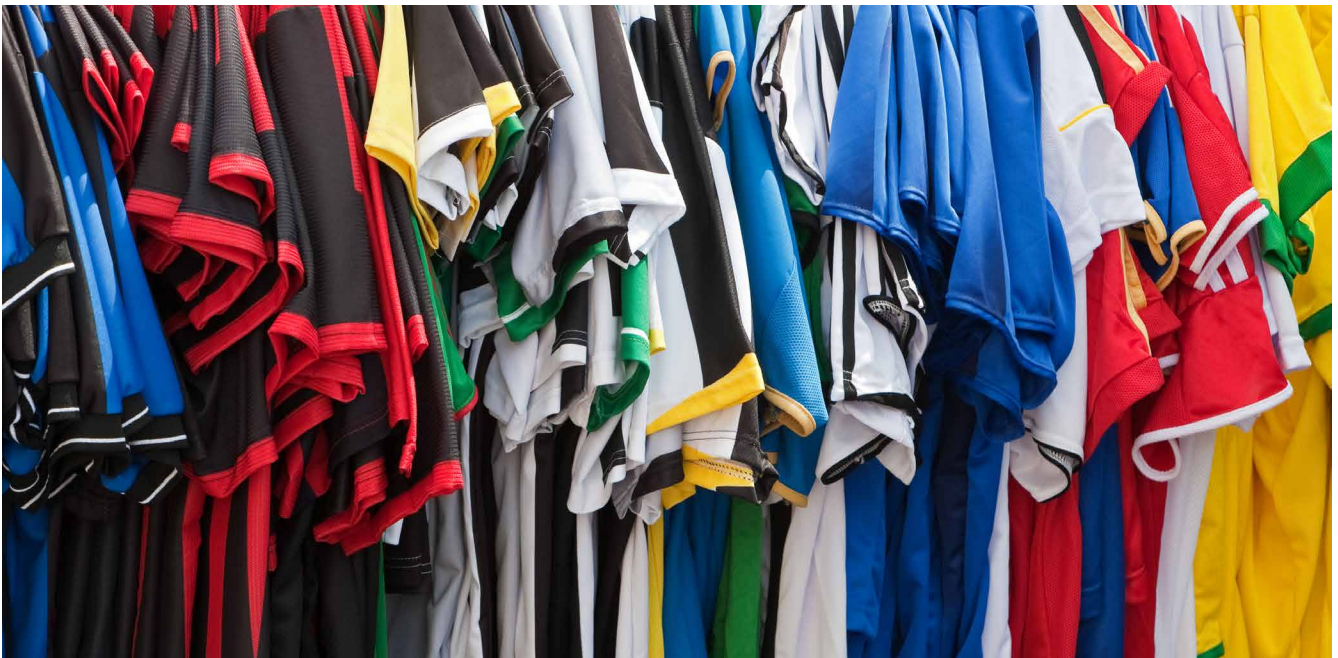
Merchandising as a driver

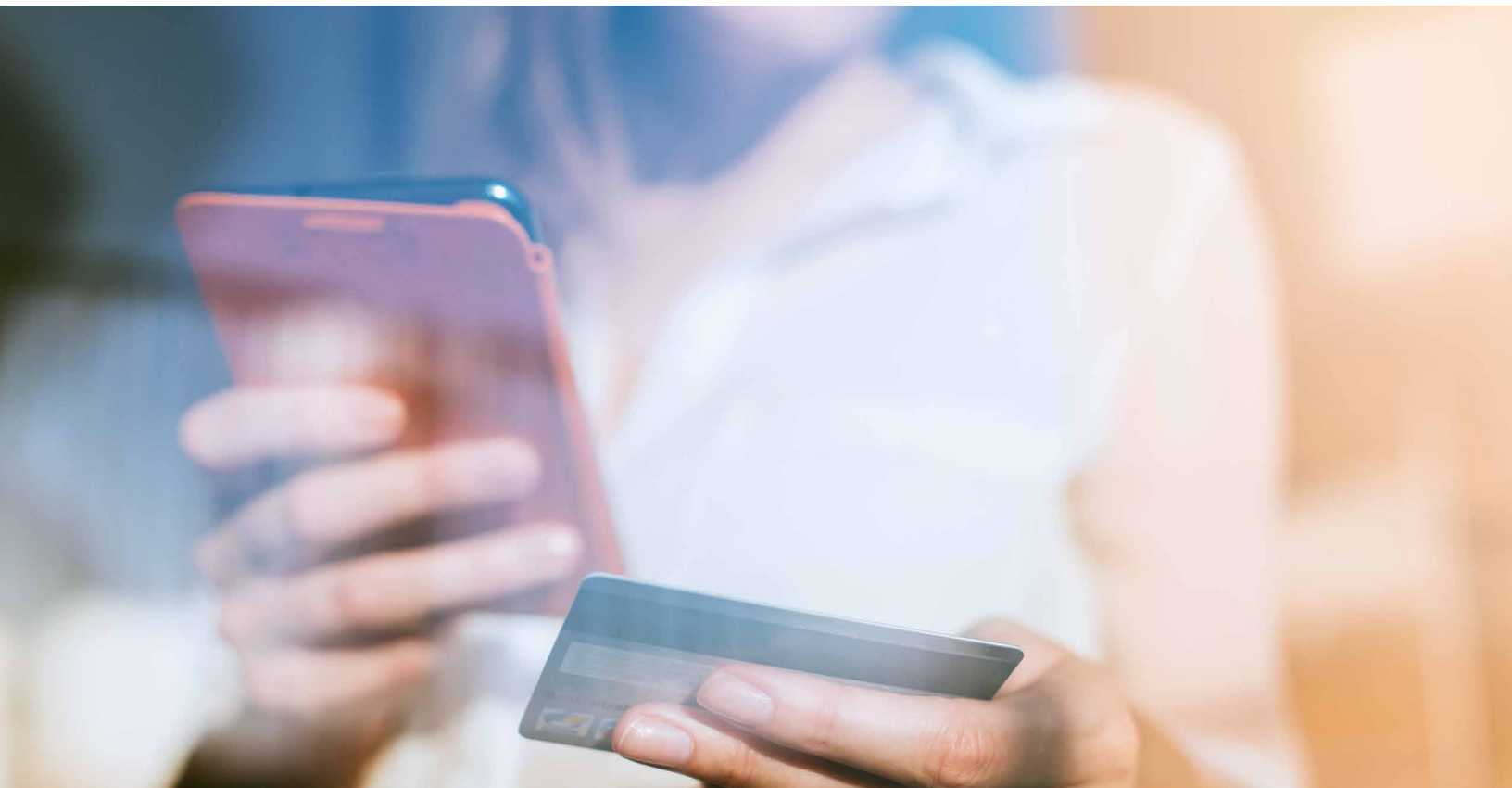
Merchandising is a key driver of this commercial growth. For example, Manchester United's matchday revenue was UK£110.8 million in 2019, while merchandise was UK£102.1 million.⁴ Some of this demand comes from younger, digitally native football fans who interact and consume football in an entirely different way, whether it's on social media, in video games, or through fashion.

Online searches for football-related fashion have increased significantly in the past few years, and clubs are capitalising on this by creating vintage-inspired kits and working with fashion houses to develop new lines.⁵

Kit deals are even being restructured so that clubs maintain more freedom to pursue their own merchandising ideas or to partner with others to create new product ranges that go beyond the traditional inventory of the megastore. For example, Paris St Germain's collaborations with designers and Nike's Jordan Brand have popularised the idea of aspirational leisurewear that attracts Gen Z fans who are buying into the idea of clubs and players as brands.

The global reach of football transcends cultural, linguistic, and national boundaries and for many modern football fans, merchandise isn't just functional, it's an identity statement.





How to create a high-quality online store

The rise of online retail

This innovation in design needs to be matched by innovation and competency in retail strategy. The wider digitisation of society, accelerated by Covid-19, has made consumers more comfortable with online shopping and has contributed to a rise in direct-to-consumer (DTC) retail. This is a huge opportunity for clubs to claim a greater share of sales and exert more control over the experience, driving customer satisfaction, increased, order value and more repeat visits.⁶

Football clubs have a unique advantage in this competitive landscape as the loyalty they command among their customers is unparalleled in any other industry. Fans are more likely to visit the club shop because they know their team benefits, but they still want the best deals and service.

A high-quality experience

A high-quality experience is essential if clubs are to seize the opportunity on offer and this means solving common challenges and investing in online infrastructure.

Consistency is critical in an omnichannel environment. Messaging and propositions should be the same across physical and digital touchpoints as any confusion will delay the purchasing decision until further research has been undertaken. Even worse, customers could be tempted elsewhere.

The official website, online store and mobile app should all speak to each other and use a common login. This will enhance the user experience and also give clubs greater visibility so they can analyse data and personalise the experience for different customers, including intelligent recommendations that increase average revenue per user (ARPU).

Furthermore, the user experience should be the same on every device. Mobile browsing accounts for more than half of all web traffic and the value of mobile shopping orders more than trebled to US\$3.56 billion in 2021, accounting for 72.9 per cent of all ecommerce sales globally.⁷ Accordingly, consumers expect to be able to do everything they can do on a desktop on a mobile device.

If a club's mobile app or website fails to let fans customise their home kit with the name and number of their favourite player, for example, they are going to abandon their basket and go elsewhere. The technology exists to make it happen so it should be used.

Easy delivery and returns, language, and currency options are especially important when dealing with international orders, and clubs can even use data analytics to create entire product lines for specific markets.





Controlling the experience

Investments in infrastructure and user experience provide clubs with the agility to capitalise on demand and rapidly respond to market trends.

Newcastle United shirt sales rose by 300 per cent after the takeover by Saudi Arabia's Public Investment Fund (PIF) last year, Manchester City saw sales increase by 17 per cent following the signing of England cult hero Jack Grealish last summer, while Chelsea sales climbed 16 per cent after their Uefa Champions League victory in 2021.

But the most high-profile example was the surging demand for Manchester United shirts with 'Ronaldo 7' on the back after the Portuguese forward returned to Old Trafford in August 2021. The Red Devils saw overall shirt sales rise by 62 per cent thanks to the 'Ronaldo effect', generating UK£187 million in total, with Manchester United earning UK£13.1 million in commission (to supplement the annual fee paid by kit partner Adidas).

It is the fastest-selling Premier League shirt of all time, demonstrating the power of a global fanbase and the pulling power of a marquee player, and the more shirts that were sold via official channels, the more revenue Manchester United will have received.⁸

Why speed matters on and off the pitch

The Ronaldo example highlights the importance of having a high-performing ecommerce platform, particularly when it comes to page load speed. The time it takes for a website to load affects everything from customer satisfaction to search engine performance, both of which have a direct impact on revenues.

Following the completion of Ronaldo's signing, online searches for his shirt rose by 600 per cent. The longer the page load speed, the further down a retailer appears on Google's search rankings and the more unhappy a customer will be about their experience. Both scenarios risk pushing fans to third party retailers.

The importance of page load time

Page load time indicates the amount of time it takes for website content to fully load on an end user's browser. This includes text, images, video, and any other interactive features. Naturally some factors are beyond the retailer's control, such as connection speed, but there are plenty of elements that can be influenced. These include file size, backend infrastructure, code efficiency, hotlinking and the volume of plugins or widgets.

Available data shows that **the longer it takes for a page to load, the less likely a customer is to complete a purchase** and even if they do stick around, the overall value of their basket is lower, and they are less likely to make a repeat visit. All of this has a negative effect on ARPU.

Every single second counts. **Nearly half (47 per cent) of online users expect a web page to load in two seconds or less and 40 per cent will abandon a website that takes more than three seconds to load.** Meanwhile, 79 per cent of shoppers who have a dissatisfying experience are likely to buy from the same site again, with 52 per cent saying quick page loading is important to their site loyalty.⁹

The longer it takes for a page to load, the less likely a customer is to complete a purchase.



The clear link between speed and revenue

An ecommerce site that loads in one second has a conversion rate two and a half times higher than a site that loads in five seconds.¹⁰ Other research suggests a one second delay in page response can result in a seven per cent reduction in conversions. When that data is put in monetary terms, the business importance of page load time becomes clear – **if a retailer earns US\$100,000 a day, then a one second delay could cost them US\$2.5 million in lost sales every single year.**¹¹

Mobile shoppers are more patient than those on desktop, with only 19 per cent saying they would abandon a store if they had to wait less than six seconds. However, 58 per cent expect performance to be roughly the same regardless of what device they are using. This is clearly not the case in reality, with one analysis showing the average page load speed on mobile is 27.3 seconds – more than two and a half times the figure for desktop load times.

In some scenarios, a 0.1 second natural mobile speed improvement can increase retail conversions by 8.4 per cent and average order volume by 9.2 per cent.¹² That's a lot of gain for such a small improvement.

What all this data demonstrates is that there is a clear link between performance and revenues.

Core Web Vitals and search engine visibility

The negative effects of a poor user experience are compounded by poor web search visibility. Google ranks webpages depending on how unique, helpful, and authoritative the content is and how well the website performs technically. A set of criteria called 'Core Web Vitals' are used to help determine the 'page experience' score, which essentially measures user experience.

- **Largest Contentful Paint (LCP):** This is essentially page load speed, or the time it takes for a user to click on a link and see most of the content on their device.
- **First Input Delay (FID):** This is the time it takes for a user to interact with the page, such as entering text or clicking on a menu.
- **Cumulative Layout Shift (CLS):** This measures the stability of a page as it loads and that everything should be where it is intended.

Google provides each website with a traffic light indicator of how well they are performing in each category - good (green), needs improvement (amber), and poor (red). When it comes to LCP, Google considers 2.5 seconds to be a good score, four seconds to be passable, and anything beyond as poor.

Core Web Vitals are just one of hundreds of metrics Google uses to rank pages but just as marginal gains make such a difference in sport, anything that can improve performance in search results must be pursued. A retailer that isn't in the first handful of search results is going to be at a serious disadvantage when football fans come looking for merchandise. And if they're on the second page of results? Forget it.



The Premier League of page load speed

Premier League Table according to LCP

		LCP (ms)	FID (ms)	CLS
1	Newcastle United	1832	20	0%
2	Leeds United	2404	38	8%
3	Brighton & Hove Albion	2655	23	7%
4	Brentford	2709	26	11%
5	West Ham United	2726	24	21%
6	Everton	2745	22	7%
7	Liverpool	2802	24	30%
8	Crystal Palace	2929	15	13%
9	Leicester City	2975	30	46%
10	Southampton	3138	19	5%
11	Tottenham Hotspur	3192	22	9%
12	Manchester City	3335	27	5%
13	Wolverhampton Wanderers	3349	16	3%
14	Watford	3469	21	0%
15	Aston Villa	3600	22	29%
16	Manchester United	4679	61	16%
17	Chelsea	5273	40	6%
18	Burnley	5854	494	48%
19	Norwich City	7334	46	2%

Source: <https://www.erwinhofman.com/core-web-vitals-data/football-clubs/?category=england&orby=lcp,asc> (10/06/22)

If the Premier League was decided on LCP, then Newcastle United would be champions and Manchester City, the actual title winners, would be occupying mid-table. Indeed, Newcastle are one of only two clubs, alongside Leeds United, that pass their Core Web Vitals assessment.

It seems surprising that Premier League football clubs who devote significant resources to anything that can give them a fractional uptick in performance on the field, and recognise the importance of commercial revenues, are ignoring such an obvious gain.



What can football clubs do to improve ecommerce performance?

Improving page load time doesn't necessarily mean compromising on the functionality of an online marketplace. There are several ways to enhance user experience and improve Core Web Vital scores by making changes behind the scenes.

The most obvious improvement is to ensure backend infrastructure is optimised to guarantee performance and handle large volumes of users during busy periods. A star signing in the summer transfer window is inevitably going to cause a surge in traffic and clubs must be ready for that.

Compression tools for images and videos can lower the amount of bandwidth required to ensure marketplaces are as visually enticing as possible and removing unnecessary plugins can also catalyse delivery. Developers should also make sure code is as efficient as possible and make sure their websites are optimised for the latest version of the target web browser.



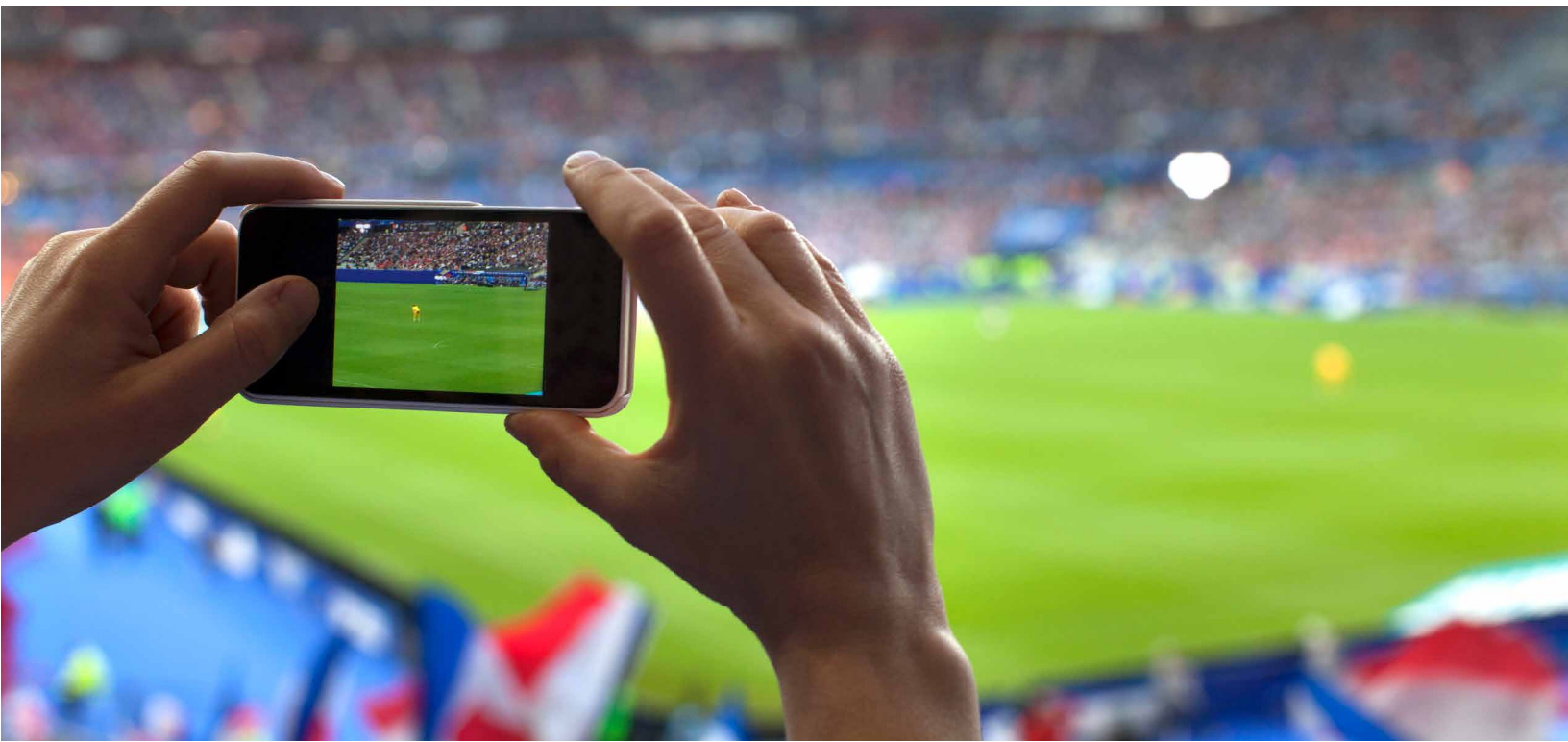
The Edgio App platform simultaneously enables sub-second page load times and simplifies and speeds up the development process.

Sub-second delivery with Edgio AppOps

A modern CDN for the modern-day website, seatbelts included.

A Content Delivery Network (CDN) can assist in many of these endeavours by providing a distributed network of servers that delivers content to end users much more rapidly than using a single server model. However traditional CDNs may not deliver the desired boost in performance as they are disconnected from the development workflow leading to delayed deployments, sluggish sites and a lack of monitoring and observability.

Furthermore, they were built 25 years ago to only cache static content – yet most pages on the web today have dynamic, database-driven content. As a result, many sites are slow to load. To cache dynamic data, the CDN must integrate with development.



This integration – capable on modern CDNs like Edgio, enables sub-second page loads and simplifies and speeds up the development process. Edgio is truly the web developer's CDN. EdgeJS makes CDN-as-code possible – acceleration becomes a native part of the web application. That extends to dynamic content as well as static. There's nothing else like it.

In addition to speeding up the first page load, Edgio accelerates user access to each additional page by adding predictive prefetching. What that means is the browser grabs the data just ahead of the user, effectively extending the "edge" all the way to the browser to deliver the best possible speeds.

Edgio next-gen web CDN provides the ability to develop, deploy, preview, run and monitor the marketplace from a single integrated environment. The net benefit is dramatically reduced complexity, making it easier for developers to manage page elements, test out new features and release instantly. Scheduled monthly releases become a thing of the past!

Observability is another major advantage of the Edgio platform, with easy visibility into page elements causing slowdowns or errors before they affect the user.

All these innovations help drive sub-second speeds that can improve LCP- the time to paint the largest image on the page - by up to 90 per cent, improving the user experience and boosting a club's bottom line.

The need for speed doesn't just apply to website page loads, it plays a vital role when managing security breaches too.

Organisations need to be ready for threats and be able to respond rapidly in the event of an incident. As a business becomes more digitised, it becomes increasingly reliant on digital technologies, and it collects greater volumes of what can be incredibly sensitive data. Football clubs are no exception. As high-profile organisations, they are attractive targets for cybercriminals and malicious actors.

A data breach can violate regulations and the trust of fans, while ransomware or a distributed denial of service (DDoS) attack can take critical systems offline, disrupting operations and damaging revenues. This is before you consider financial penalties under the EU's General Data Protection Regulation (GDPR). IBM places the average cost of a data breach as US\$4.2 million.¹³

Edgio AppOps built in security can be considered the 'seat belts' for a rapid ecommerce platform. A global, distributed platform provides rapid, scalable protection against malware and DDoS attacks, complemented by round-the-clock monitoring and support. There's no reason why functionality has to come at the expense of safety.

Find out how Edgio AppOps can be the star signing for your website.

Footnotes

1. <https://www.theguardian.com/football/2019/jan/04/liverpool-manchester-city-brush-off-disappointment-defeat>
2. Premier League <https://www.premierleague.com/news/2635534>
3. <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/sports-business-group/deloitte-uk-dfml22.pdf>
4. Manchester United (<https://ir.manutd.com/company-information/business-model.aspx>)
5. Copa 90 <https://strivesponsorship.com/wp-content/uploads/2019/04/The-Modern-Football-Fan-2.0-COPA90.pdf>
6. <https://www.mckinsey.com/industries/retail/our-insights/sporting-goods-2021-the-next-normal-for-an-industry-in-flux>
7. <https://www.merchantsavvy.co.uk/mobile-ecommerce-statistics/>
8. Love The Sales (<https://www.lovethesales.com/press/articles/football-shirt-sales>)
9. Neil Patel (<https://neilpatel.com/blog/loading-time/>)
10. Portent (<https://www.portent.com/blog/analytics/research-site-speed-hurting-everyones-revenue.htm>)
11. Neil Patel (<https://neilpatel.com/blog/loading-time/>)
12. Deloitte (https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/Consulting/Milliseconds_Make_Millions_report.pdf)
13. <https://www.ibm.com/uk-en/security/data-breach#:~:text=Data%20breach%20costs%20rose%20from,year%20history%20of%20this%20report.>