



Ecosystem Development in Emerging Sports: Explaining Portugal's Lead over Germany in Padel

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Abstract

The study investigated the factors that explained Portugal's lead over Germany in the development of padel. The study employed a mixed-methods design, grounded in ecosystem theory, dynamic capabilities, path dependence, and combined twelve semi-structured expert interviews with a survey of 108 respondents from both countries who were players, complemented with secondary data.

Both qualitative and quantitative results combined on five factors. With demand spiking during the COVID period, Portugal already had in place earlier institutional consolidation, national tournament structure, licensing system and federation-led coach certification. The biggest country effect was found for infrastructure and access, mirroring climate conditions and regulatory complexity in Germany. The social embedding was stronger in Portugal and correlated with coaching and access. Booking platforms evolved from supporting services into core tools for ecosystem coordination. Portugal's larger domestic coaching base reflected earlier investment in capability. Triangulation also showed that perceived growth was uncorrelated with the four ecosystem scales, supporting the distinction between growth and maturity.

The results suggest that the Portuguese lead was not due to the presence of ecosystem components, but rather to the sequencing of these components before the peak in demand. The size of the market was not the gap in Germany, but the structural depth. There was capital and demand, but regulatory constraints limited the expansion of infrastructure.

Keywords: Padel, Sport ecosystem development, Dynamic capabilities, Path dependence, Cross-national comparison, Mixed-method, Emerging sports

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Resumo

O estudo investigou os fatores que explicam a vantagem de Portugal sobre a Alemanha no desenvolvimento do padel. Utilizou um desenho de métodos mistos, baseado na teoria do ecossistema, nas capacidades dinâmicas e na dependência de trajetória, combinando doze entrevistas semiestruturadas a especialistas com um inquérito a 108 jogadores de ambos os países, complementado com dados secundários.

Os resultados qualitativos e quantitativos convergiram em cinco fatores. Quando a procura atingiu o pico durante a COVID, Portugal já dispunha de uma consolidação institucional antecipada, com estrutura de torneios nacionais, sistema de licenciamento e certificação de treinadores liderada pela federação. O maior efeito do país verificou-se nas infraestruturas e no acesso, refletindo as condições climáticas e a complexidade regulamentar na Alemanha. A integração social foi mais forte em Portugal e correlacionou-se com o treino e o acesso. As plataformas de reservas evoluíram de serviços de apoio para ferramentas centrais de coordenação do ecossistema. A maior base de treinadores nacionais de Portugal refletiu um investimento antecipado em capacidade. A triangulação mostrou ainda que o crescimento percebido não se correlacionou com as quatro escalas do ecossistema, apoiando a distinção entre crescimento e maturidade.

Os resultados sugerem que a vantagem portuguesa não se deveu à presença de componentes do ecossistema, mas à sequência em que estes surgiram antes do pico da procura. À Alemanha não faltava dimensão de mercado, mas profundidade estrutural: havia capital e procura, mas as restrições regulamentares limitaram a expansão das infraestruturas.

Palavras-chave: Padel, Desenvolvimento do ecossistema desportivo, Capacidades dinâmicas, Dependência do percurso, Comparação transnacional, Método misto, Desportos emergentes

Título: Desenvolvimento do ecossistema nos desportos emergentes: explicando a vantagem de Portugal sobre a Alemanha no padel

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List of Abbreviations

CEO – Chief Executive Officer

COVID-19 – Coronavirus Disease 2019

d - Cohen's d (effect size measure)

DOSB - Deutscher Olympischer Sportbund (German Olympic Sports Confederation)

FIP - Federación Internacional de Pádel (International Padel Federation)

M – Mean

Mdn – Median

MW - Mann-Whitney U Test

n – Sample Size

OLS - Ordinary Least Squares

p - p-value (statistical significance)

RBT - Resource-Based Theory

rs - Spearman's rank correlation coefficient

SD - Standard Deviation

SME - Small and Medium-sized Enterprises

T1-T5 - Thematic blocks 1–5 (survey)

1. Introduction

In tandem with growth in sporting activities, padel has become one of the world's fastest-growing racket sports. Originating in Mexico and taken to Spain, the sport has developed rapidly throughout Europe in recent years. This growth is due to a combination of factors, including its social and inclusive nature, low entry barriers, and suitability for outdoor and indoor environments. Compared to traditional sports activities, padel combines ease of learning with first-class player retention, making this sport very attractive not only for athletes, but also for club operators, investors, and cities. Crucially, this expansion is not being driven exclusively by early-adopter markets. Instead, it is being supported by professional club operations, digital booking platforms, and advanced models that have evolved beyond traditional sports clubs and offer flexible pay-to-play options. These factors have enabled padel to grow rapidly and sustainably.

Europe has become the center of padel's expansion. According to the FIP World Padel Report 2025, it is estimated that more than 60% of all padel players worldwide are based in Europe, driven by over 50,000 courts and a strong network of clubs and national associations. This makes Europe interesting for analyzing how ecosystems around this sport emerge, develop, and commercialize. Furthermore, padel encounters factors such as real estate development, digital platforms, sponsorship, and public sports policy, so that it is a clearly economically and strategically relevant topic (International Padel Federation, 2025).

Regardless of its strong growth trend, the development of the sport varies significantly across European countries. A contrast can be seen between Portugal and Germany. These two countries have a comparable level of development and access to sports infrastructure but show a clear difference in the maturity of padel. Portugal has positioned itself as one of the most advanced markets in Europe. According to data from the FIP World Padel Report 2025, the country has more than 1,500 padel courts and accounts for approximately 8% of European padel enthusiasts, ranking third behind Spain and Italy. Portugal benefits not only from its infrastructure but also from a strong network of clubs, a tournament calendar, and advanced integration of competitive structures (International Padel Federation, 2025).

The German padel market, on the other hand, has high growth potential and low ecosystem maturity. The number of courts has experienced a sharp growth in recent years with growth

rates of around 50% and more than 875 courts. However, the German padel ecosystem is still relatively fragmented. The Playtomic Global Padel Report 2025 however, shows a high revenue per court in Germany, which points to a high demand and purchasing power. But this demand has not yet been translated into the dense club networks, competitions, training structures and institutional support. Based on this information Germany looks to be in the early stages of ecosystem development, with fundamental elements appearing but not yet fully integrated (Playtomic, 2025).

These differences suggest that the success of padel cannot be explained by demand growth alone. To understand the reasons for these differences we need to go beyond descriptive indicators and develop a theory-based explanation. Padel is growing and economically relevant, but there are few academic studies about this sport. Existing literature on sports management and economics largely focuses on existing and established sports. Studies comparing how a sports ecosystem has developed differently are rare. Industry reports provide detailed data on participants, infrastructure, revenues and costs, but they limit the view of mechanisms that enable some ecosystems to transfer timely recognized growth into a sustainable value creation.

This research gap appears to have practical importance. As shown in the paper of the European Commission, these structures and systems can play an important role in the expansion and development of regional areas and promote the creation of social values (European Commission. Directorate-General for Education and Culture et al., 2016). For decision-makers, associations, and investors, understanding which resources and capabilities are important for building a strategy for a sustainable sports system is of great importance. Comparison between Portugal and Germany therefore presents a suitable opportunity to conduct research aimed at gaining knowledge that is both academically and practically relevant.

Building on the contrasting development paths of Portugal and Germany, and the identified gaps in existing research, the aim of this thesis is to explain the enablers behind Portugal's lead in padel. Accordingly, the Research Question guiding this study is:

What factors explain Portugal's lead over Germany in the development of padel?

2. Literature Review

2.1. Historic background of padel

The beginnings of padel originate back to 1969, when Enrique Corcuera built a smaller court at his house in Acapulco, Mexico, being unable to fit a full tennis court. He constructed the first-ever padel court by building a court which measured 20 by 10 meter with walls around it and net were in the center. His wife, Viviana, wrote the first rules. The sport was brought to Spain in the early 1970s when Prince Alfonso of Hohenlohe paid a visit to Corcuera's house, enjoyed the game, and subsequently deployed padel courts at the Marbella Club Hotel in Andalusia. Julio Menditeguy arrived on the scene around the same time and padel was brought to Argentina where more courts were built. As the sport gained popularity, padel began to grow in South America during the 1980s when Brazil, Uruguay and Chile all embraced it. (FIP, 2026)

2.2. Sport ecosystem development

The national padel ecosystem is taken as a unit of analysis, considering the ecosystem as a structured system of interdependent actors, such as federations, clubs, operators, sponsors and players, which through their coordinated activities contribute to value creation and sport development. Kumar et al. (2018) show that sports systems function as cross-sectoral, interinstitutional agreements in which political goals, institutional logic, and user goals are linked. Cross-level coordination aligns with ecosystem theory, which emphasizes complementarities and role alignment rather than hierarchical control as the central coordination mechanism (Jacobides et al., 2018).

The structure is also path-dependent since institutional agreements, governance structures, and strategic decisions made early on constrain later growth trajectories. Begović (2025) demonstrates how sports ecosystems increasingly develop through institutional structures and political anchoring. Early consolidation, in this logic can produce self-reinforcing effects. Industry reports confirm uneven development trajectories. The Global Padel Report 2025 distinguishes countries according to stages of development, from early emergence to consolidation to maturity (Playtomic, 2025). Strong growth alone, does not indicate structural depth, maturity reflects infrastructure, professionalization, and organized governance. In this context, ecosystem maturity is defined as the degree of consolidation, role clarity, infrastructural density, and systemic coordination achieved at the national level.

Theoretically, earlier consolidation and stronger cross-sector coordination may generate cumulative advantages, while fragmentation constrains the pace and depth of development. Value creation at the ecosystem level thus resides not in individual firms, but in the collective ability of the national system to organize complementarities, mobilize resources, and sustain coordinated expansion.

2.3. Strategic management perspectives

2.3.1. Ecosystem coordination

Ecosystem maturity depends fundamentally on how effectively interdependent actors are aligned. Coordination means aligning actors that operate autonomously but remain structurally linked, growth is not driven by individual capabilities, but by how roles, interfaces, and incentives are configured across the system (Jacobides et al., 2018).

Jacobides et al. (2018), demonstrate that ecosystems rely on distinct complementary actors and modular structures that support collaboration without central control. Clear, standardized roles create durable coordination structures rather than ad hoc bilateral agreements. Adner (2017) defines ecosystems by their alignment structure, in which partners are clear about positions, roles, and processes. Ecosystem strategy is therefore about coordinating alignment rather than owning resources, establishing participation conditions and managing relationships so that value is created without central control. A theoretical tension arises here, ecosystem theory focuses on decentralized collaboration, yet sports systems typically include formal governing bodies, such as national federations, that exercise coordination authority.

Interorganizational benefits can arise from relationship-specific investments and governance structures that support collaborative value creation (Dyer & Singh, 1998). Earlier coordination among associations, clubs, operators, and tournament organizers may therefore generate structural advantages, providing the first mechanism for explaining why one national ecosystem may consolidate faster than other.

2.3.2. Dynamic capabilities and adaptive scaling

In rapidly growing markets, development is less about owning resources than reconfiguring them. The dynamic capabilities framework captures this logic, capabilities are the ability to integrate, develop, and reorganize competencies in dynamic markets environments (Teece, 2007, Eisenhardt & Martin, 2000), with the analytical focus on organizational processes rather than static assets. Ecosystem-level dynamic capabilities are defined as the collective ability of

interconnected actors to sense emerging opportunities, coordinate strategic responses, and reconfigure institutional and infrastructural arrangements. Marques et al., (2025) shows that resilience in dynamic markets depends on how effectively different forms of assets are built up, adapted, and interconnected, while Alimohammadi et al. (2023) find that dynamic capabilities, mediated by digital platforms, shape performance in uncertain environments. Both studies confirm that adaptability operates across organizational levels and is critical in dynamic contexts.

2.3.3. Path-Dependence and evolutionary development

Path dependence complements coordination and capability perspectives by explaining how earlier choices constrain later options. Once coordination structures, rules, and participation patterns are established, national sports systems develop not only in response to current demand but along historically established trajectories.

Path dependency means that early institutional decisions limit later options for action and set in motion processes that reinforce themselves over time (Martin & Sunley, 2006). Increasing returns, learning effects and institutional lock-ins increase the likelihood of existing trajectories over time, even when other configurations appear more feasible at later stages. Teece (2018) applies this logic to organizational capabilities, what a system can do tomorrow depends on what it built yesterday. Sporting institutions represent political regimes and transnational influences at the ecosystem level, which accumulate over time, limiting the possible configurations of future coordination and influencing the ways in which resources can be mobilized (Begović, 2025). The simultaneous existence of early adaptation, institutional support and tournament infrastructure may set in motion self-reinforcing processes in which the increasing density of venues attracts players and encourages further investment.

2.3.4. Resources and capabilities for comparative analysis

Resources, capabilities and historically shaped structures are connected over time and thus an integrated perspective is essential for a comparison of Portugal and Germany. Ecosystem theory reveals that actors are embedded in complementary networks of activity, built around well-defined roles (Jacobides et al., 2018), that generate interdependencies that structure resource allocations. Dynamic capabilities, on the other hand, refer to the recognition and adaptation of competencies under changing conditions (Teece, 2007, Eisenhardt & Martin, 2000, Barreto,

2010) capabilities that are embedded in organizational processes and bounded by existing structures.

From a Resource-Based Theory perspective (Barney et al., 2021), these interdependencies form ecosystem-level assets. Unlike firm-centric RBT, however, the ecosystem perspective holds that distributed resources generate value only when coordination structures enable their effective combination (Balduck et al., 2015).

Ecosystem theory, the resource-based theory (RBT), and dynamic capabilities are best understood as complementary layers of the same logic, structural complementarities shape how resources are combined. Asset configurations determine where advantage arises and coordination processes reshape those configurations over time. Differences in ecosystem development emerge from the interplay of all three. The following section translates this framework into the concrete mechanisms through which sports ecosystem develops.

2.4. Mechanisms of sports ecosystem development

2.4.1. Institutional structures and governance

The development of ecosystems in sport is shaped not only by market demand but also by governance and institutional structures. Associations, political frameworks and the logic of financing decide which activities are prioritized, legitimized and funded.

Institutional theory suggests that sports organizations are embedded in fields impacted by regulatory and cognitive pressures (Robertson et al., 2022). Associations organize resources and set rules at the system level but must manage competing goals, especially the tension between elite and grassroots sports development (De Bock et al., 2022). If priorities aren't aligned, they can also crowd out the growth in the participation level.

These priorities are supported by funding mechanisms. In Germany, for example, public investments tend to favor old-established competitive and youth activities over new sports (Feiler et al., 2019) and at the European level, sport is increasingly integrated into regional development strategies linking policy objectives and infrastructure investments (European Commission. Directorate-General for Education and Culture et al., 2016). Such policy harmonization can speed up ecosystem consolidation, when aligned with local capacities. Governance operates through a chain of connected effects, regulatory frameworks and funding models set the incentives. These incentives, shape how federations, clubs, and operators harmonize, coordination patterns influence infrastructure investment and complementors involvement and these dynamics together determine the overall pace of development.

Governance is, therefore, a primary mechanism through which ecosystem maturity diverges across countries.

2.4.2. Infrastructure and access conditions

Financing structures, facilities, and geographic accessibility determine who can participate, how often, and under what conditions, in growing sports, infrastructure density and investment logic shape whether initial demand translates into long-term ecosystem growth.

Crompton (2014) argues that returns on investment in sports facilities depend on integration into broader development strategies, though success is conditional on a critical mass of complementary attractions and a holistic planning approach. European Commission Directorate General for Education and Culture. et al. (2016) confirms that investments yield the greatest returns when embedded in regional innovation, tourism or urban renewal strategies, the study further illustrates that sport can advance regional policy when infrastructure aligns with skill development, SME support and governance.

In Germany, public investment in clubs follows regulatory patterns that favor traditional structures, potentially slowing the spread of newer sports such as padel (Feiler et al., 2019). Infrastructure therefore matters not in isolation, but as component of broader ecosystem conditions that enable or constrain participation.

2.4.3. Diffusion and participation dynamics

Even where governance and infrastructure are sufficient, a sport expands only if participation spreads through social networks and gains legitimacy. Visibility, influence and trust shape diffusion dynamics. Individuals making decisions under uncertainty are guided by the networks in which they are embedded (Kumar et al., 2018).

Rogers' diffusion model shows that adoption proceeds over time through communication channels within social system after early adopters embrace the product or service, accelerating once a critical mass is reached as uncertainty falls and observability increases. Rogers (2003) shows that diffusion is non-linear, weak ties between networks act as bridges, and small initial differences can trigger disproportionate chain reactions. In a sports context, participation arises within a system connecting politics, infrastructure, and users (Kumar et al., 2018). Studies on padel show that visibility, social media presence, and local networks can significantly accelerate regional diffusion (Alhammad et al., 2025).

In Portugal, an early critical mass, sustained by tournaments and strong club networks, may have triggered self-reinforcing growth. In Germany, weaker connectivity and lower visibility could have slowed the equivalent process. Diffusion thus links social adoption to the governance and infrastructure mechanism discussed above, amplifying their effects at the national level.

2.4.4. Commercialization and complementor development

Ecosystem maturity also depends on whether complementary actors can be integrated into sustainable value creation. In padel, this means operators, sponsors, platforms, and brands contributing to a distributed model in which no single actor concentrates the value chain.

Ecosystem theory emphasizes that value creation depends on organized complementarities (Jacobides et al., 2018). In padel, this means court manufacturers, training academies, tournament organizers, and booking platforms, integrating these actors reduces transaction costs, standardizes interactions, enable scalable coordination. González-Serrano et al. (2021) links sports ecosystem growth to infrastructure, economic maturity, and innovative capacity, suggesting that successful commercialization emerges from system-level coordination rather than individual investment.

Digital platforms are accelerators, Alimohammadi et al. (2023) show that they improve the relationship between dynamic capabilities and performance through better coordination and integration of users. The Global Padel Report 2025 confirms the increasing professionalization, rising revenues per court and the importance of booking software for the profitability of a club. Commercialization thus translates ecosystem coordination into economically sustainable growth.

2.4.5. Human capital and capability building

Infrastructure, governance, and commercialization generate lasting development only when the necessary skills and capabilities are in place. Skills, volunteer work, and leadership quality determine whether material resources translate into participation growth. Human capital in sport is a development factor, not merely an input.

Human capital encompasses knowledge, skills, motivation, and adaptability embedded in a supportive organizational context (Hossini et al., 2015). Marques et al. (2025) demonstrate that resilience in sport depends on building, adapting, and linking economic, social, and human capital simultaneously, confirming that coaching and management capabilities require

continuous development. At the club level, staff, board members, coaches, and volunteers constitute interconnected dimensions of performance potential, weaknesses in any one area constrain overall development (Balduck et al., 2015).

2.5. Cross-national comparison

2.5.1. Padel and ecosystem-based value creation

Padel provides a particularly suitable context for analyzing ecosystem-based development, its global expansion is recent, measurable, and structurally uneven. Within less than two decades the sport moved from a niche activity to a transnational phenomenon, yet national trajectories differ markedly in speed and consolidation.

Data from the FIP World Padel Report 2025 show that the sport is now played in 150 countries, with 77,000 courts worldwide and more than 35 million players. Europe accounts for 60% of players and 66% of courts, but growth rates vary significantly between countries. (International Padel Federation, 2025). International tournaments are becoming more institutionalized, supporting the growth of organizations beyond simple numerical growth. The Global Padel Report 2025 distinguishes among emerging, growing and consolidated markets in terms of court density, operator professionalism and commercialization models, a pattern in line with the ecosystem logic of Buser et al. (2022), which sees the sport as a system of interdependent actors creating shared value within structured roles.

Portugal and Germany can accordingly be compared across five ecosystem dimensions: institutional coordination, infrastructure density, commercialization, human capital, and diffusion dynamics. Portugal's position interpreted not as a simple size effect, but as reflecting more advanced integration of ecosystem resources and adaptive capabilities.

2.5.2. Explanation of differential ecosystem development

Drawing on coordination theory and path dependence, earlier and more coherent alignment among ecosystem actors creates cumulative advantages in scaling and consolidation, fragmented governance and delayed coordination conversely, slow and limit development. These expectations are tested empirically through comparison of Portugal and Germany.

In Portugal, coordination between the federation, clubs, operators, and tournament organizers appears to have emerged earlier, reducing friction and facilitating joint growth (Jacobides et al., 2018; Adner, 2017). Persistent fragmentation and unresolved tensions between established sport structures, private operators, and associations weaken coordinated expansion. Dynamic

capabilities explain why growth requires early demand recognition, infrastructure development, and structural adaptation (Teece, 2007). Institutional structures and diffusion processes reinforce these dynamics. Governance that prioritizes mass sports participation over elite sports development accelerates the path to critical mass (Robertson et al., 2022; Rogers, 2003), while infrastructure density lowers barriers to entry. Digital platforms, sponsors, and professional operators then stabilize growth through professionalization.

Portugal's lead thus possibly reflects a more coherent alignment of coordination structures, adaptive capabilities, institutional priorities, and diffusion dynamics. Where early coordination advantages are already established, later entry may weaken the self-reinforcing processes that drive consolidation. For empirical research, comparing resources alone is insufficient, the decisive factor is how effectively the ecosystems mechanisms interact and sustain long-term development.

3. Methodology

3.1. Scientific method

This study was designed as data-driven scientific research around a clearly specified Research Question. The methodology section justified the chosen design, demonstrating why it was appropriate for generating defensible claims from the data (Saunders et al., 2009). Before data collection began, key terms were operationalized into predefined indicators and coding categories to ensure conceptual consistency across both national contexts, while still allowing contextual meaning to be retained in interpretation (Mayring, 2004).

The study combined deductive grounding with inductive openness, supporting transparent links between data and conceptual development (Gioia et al., 2013). Transparency and replicability were pursued by specifying procedures (sampling logic, interview structure, coding stages, survey constructs) and using triangulation across sources to strengthen the credibility of findings (Yin, 2009).

3.2. Research design

The study adopted a mixed-methods research design, combining qualitative expert interviews with a quantitative survey, analyzing and comparing the ecosystem-level drivers that explain the difference in padel development between Germany and Portugal (Queirós et al., 2017).

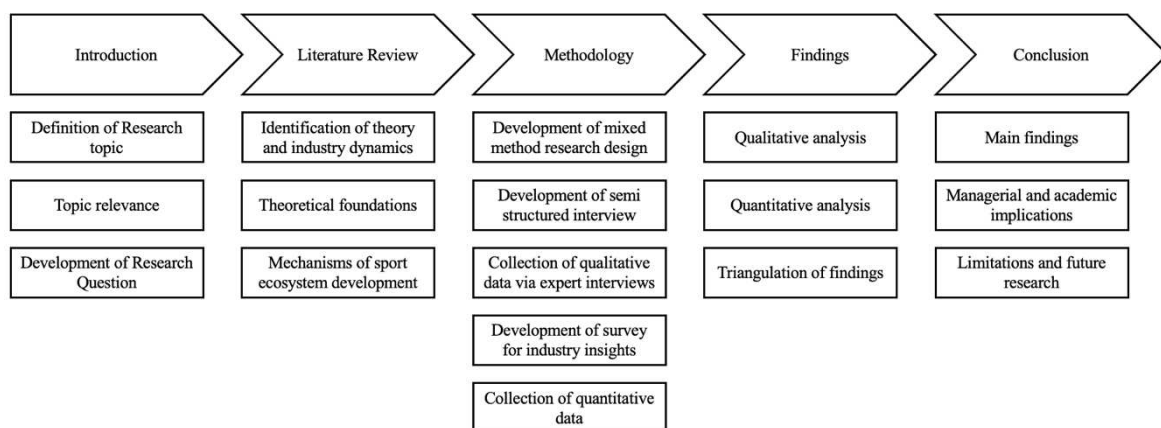


Figure 1 Research Design

The two countries were selected because they represented contrasting stages of padel market development. This outcome-oriented selection, was designed to identify the factors and mechanisms associated with advanced development. To reduce the risk of retrospective bias, the comparison was anchored in the theoretical framework developed in Chapter 2 and

supported by systematic triangulation of primary and secondary data (Yin, 2009). The unit of analysis was the national padel ecosystem. Theoretical constructs from the literature review guided the operationalization across the qualitative and quantitative phases, with coding and measurement procedures detailed in Section 3.6 (Mayring, 2004).

3.3. Primary data collection – Expert interviews

Primary qualitative data were collected through 12 semi-structured expert interviews conducted across Portugal and Germany. Purposive sampling was used to ensure representation across different ecosystem roles, interviewees included federation representatives, club founders, facility operators, coaches, and industry experts, providing a diverse cross-section of perspectives within both national ecosystems (Saunders et al., 2009). Expert was defined as a person with a strategic or operational role directly involved in the padel development in Portugal and Germany. To avoid being too reliant on elite views, sampling was designed to include higher level views such as federations or larger operators, alongside on the ground views such as clubs, coaches and suppliers (Taylor et al., 2015).

The interviews followed a semi-structured format. An interview guide was developed based on themes derived from the literature review. Questions were structured around: padel evolution & coordination, infrastructure & access, commercialization & complementary services, participation & community and human capital & capability building. This format allowed comparability across interviews while preserving flexibility to explore country-specific developments.

Interviews lasted approximately 30 to 40 minutes and were conducted via Microsoft Teams, Google Meets and Phone calls. All interviews were recorded and transcribed. Data collection continued until no substantially new themes emerged, indicating thematic saturation. Sampling was governed by two principles, coverage and saturation. Coverage ensured representation across all main actor types. Saturation confirmed that the main themes had been captured within each country. Together, these principles provided a balanced and thorough view of the ecosystem (Saunders et al., 2009).

Table 1 summarizing the interviewees, including interview ID, role and type of organization, is provided below.

Table 1 Expert profiles

Interview ID	Role	Organization
GER_01	CEO	Padelball Manufacturer
GER_02	Founder	Padel Club
GER_03	Sport Director	German Padel Association
GER_04	CEO/Founder	Padel Passion
GER_05	CEO/Founder	Padel Eagle
GER_06	Expansion Manager and Head of Scouting	Padelon Germany GmbH
PT_01	Padel Coach	Racket Pro EUL
PT_02	Founder & Publisher of padel media platform	PT Padel Portugal
PT_03	Competitive player & Industry expert	Padel for Ladies
PT_04	Vice President	Padel Federation Portugal
PT_05	Country Manager Portugal	Playtomic
PT_06	Owner	Padel Club

3.4. Primary data collection – Survey

A structured survey was conducted among padel players in Portugal and Germany, to complement and explore the qualitative insights. It measured how padel players in Portugal and Germany perceive key factors shaping padel market development, including ecosystem maturity, resource availability, institutional support, community dynamics, visibility, value, and playing behavior, enabling a structured cross-national comparison. Survey items were derived from the analytical framework and the main themes emerging from expert interviews (Saunders et al., 2009).

The target population included active padel players from Portugal and Germany. The survey was distributed through three channels: padel-specific WhatsApp groups in both countries, Instagram, and padel forums and online communities active in both markets. After data cleaning and removal of incomplete responses, 108 usable responses remained (Saunders et al., 2009). Survey items were structured using Likert-scale measures. Constructs were operationalized to

reflect: infrastructure & access, coaching, development, & entry pathway, competitive structure & club integration, community, social identity, & venue experience, market visibility and momentum, & perceived value.

Demographic and background variables were included to control for age, playing frequency, country of play, venue type, physical activity level, motivations, price paid and willingness to pay.

3.5. Secondary data

Academic literature, federation statistics, and industry reports were collected to contextualize ecosystem development levels. They served three purposes: establishing a baseline picture of ecosystem development, providing context against which interview claims could be verified, and assisting triangulation where qualitative and survey findings diverged (Yin, 2009).

3.6. Data analysis

Qualitative data were analyzed through structured content analysis in Atlas.ti. First, deductive categories aligned with the analytical framework (ecosystem resources and capability dimensions) were applied to all transcripts. Second, emergent themes specific to each national context were identified inductively (Mayring, 2004). The analysis compared Portugal and Germany across recurring themes, documenting frequency patterns, intensity of emphasis and structural differences.

Quantitative survey data were analyzed in R using descriptive statistics, reliability analysis, group comparisons, and regression (Bell et al., 2018). The Internal consistency of the four constructed scales was assessed using Cronbach's alpha. Country differences were tested with Welch's t-tests and Cohen's d, complemented by Mann-Whitney U tests as a non-parametric robustness check. Multiple linear regression estimated the country effect on each scale while adjusting for playing frequency, age, and venue type. Spearman correlations were used to examine relationships between scales and outcome items.

3.7. Triangulation of findings

Findings from expert interviews, survey responses, and secondary data were compared systematically. Converging patterns across the three sources strengthened explanatory validity and divergences were examined to identify structural differences between the two ecosystems (Yin, 2009). Where results diverged, discrepancies were examined in terms of actor perspective,

structural country differences, or measurement limitations. When sources conflicted, priority was assigned by data type, such as secondary indicators for factual baselines, interviews for explaining mechanisms, and surveys for perceptual patterns. This approach ensured that conclusions rested on convergent evidence rather than any single data source.

4. Findings

4.1. Qualitative results - Semi structured interviews

The interview findings were organized into seven thematic categories following Mayring, (2004) qualitative content analysis approach: the state of padel development in Portugal and Germany, the evolution of padel across both countries, infrastructure and access conditions, commercialization and complementary services, participation and community diffusion, human capital and capability building, and the broader ecosystem drivers shaping national development trajectories. This structure enabled a systematic comparison of the two markets while preserving the richness of expert perspectives.

4.1.1. State of development of padel in Portugal vs Germany

Portugal and Germany showed different stages of the padel ecosystem. The evidence suggested important differences in maturity, coordination, and structural depth, although both markets showed strong growth in recent years. The literature review highlighted ecosystem maturity as a function of not just demand but also institutional consolidation, infrastructure density and coordination capacity.

What really made Portugal stand out was the extent of its support system. The national tournament circuit was strong, with prize-money competitions taking place almost on every weekend and a structure from the federation that had many levels of performance (PT_02; PT_04). The federation also had direct connections to clubs, managed licensing and competitions, and had dramatically increased coaching education including around 300 certified coaches a year (PT_04). This was consistent with the literature on ecosystem, path dependence and diffusion indicating that early institutional development generates self-reinforcing growth dynamics (Jacobides et al., 2018; Martin & Sunley, 2006; Rogers, 2003). The Portuguese market, at club level, had evolved beyond the simple provision of courts, with many larger facilities merging academies, social spaces, gyms and physiotherapy (PT_05). Some weaknesses remained there were low levels of infrastructure density in the interior. Moreover, the federation had limited resources. Lastly, the youth pipeline was still less developed than the adult recreational one (PT_02; PT_03; PT_04).

It seems that the expansion of the German market had basically occurred through commercial operators and private investment, while governance and institutional structures had progressed

comparatively slowly. With the increase in league registrations and demand for coaches there appeared to be an increase in supply, but it was following the market boom and not driving it (GER_03). The literature review's argument about how delays in coordination and fragmentation of governance can limit consolidation of the ecosystem is consistent with this (Adner, 2017; Jacobides et al., 2018). Meanwhile, interviewees concurred that infrastructure constraints were a big issue. The increase in padel courts in Germany relied largely on the conversion of tennis halls and industrial buildings. While building permits, change of use rules and approval procedures significantly slowed down the expansion (GER_01; GER_03; GER_05; GER_06). The market had commercialized; Cupra and Head had become visible sponsors. Playtomic was used across the board by operators (GER_01; GER_03; GER_04). Yet the depth of national competition, youth structures and broader institutional support was less well-developed than Portugal.

4.1.2. Padel evolution in Portugal vs Germany

In Portugal, the sport dated to the 1990s, although it was a minor activity concentrated among a few private clubs, mainly in the Algarve (PT_03). The significant pivot took place from 2019 through 2021, as the worldwide development of padel launched alongside the COVID-19 pandemic a window of time that accelerated demand for outdoor sports played in smaller groups (PT_03). Various individuals who were asked about this moment declared that was the actual turning point. By the time growth truly took off, Portugal already had a well-defined institutional structure. The federation had created a national circuit of weekly tournaments with prize money at different levels, which was what PT_02 said was the primary driver of the growth of padel in this country and believed to be unique anywhere else in the world. The early, federation-led structure provided a framework within which clubs and players could align, according to PT_01. Portugal had about 400 clubs and about 3,000 courts with 300,000–350,000 active players (PT_02; PT_04). The market was not still seen as emerging but as having entered a phase of maturity and differentiation (PT_06).

Germany did not develop in this way. The first pioneers of the discipline, such as Spanish emigrants in Stuttgart, brought the sport to Germany around 2014 although progress was slow for several years and largely awareness-driving (GER_05). The COVID period made it popular in Europe, and the arrival of bigger commercial chains, celebrity involvement and media coverage thereafter significantly fueled demand around 2024 and 2025 (GER_04; GER_03).

The German Padel Association had made significant progress in extending certifications, tournaments, and leagues (GER_03). Over a span of four years, Hamburg had grown from around 5 or 6 clubs to 12. This was comparable to Portugal in absolute terms. Yet this across a population almost eight times larger.

The key distinction between the two cases lay less in raw numbers than in the sequencing of development. Portugal built institutional infrastructure and organized competition early, which created cumulative advantages as the player base expanded, consistent with the path-dependence logic outlined in the literature review (Martin and Sunley, 2006; Begović, 2025). Germany, by contrast, was experiencing supply and demand growth simultaneously, but without the same depth of structured coordination behind it. This difference in developmental sequencing helped explain why both markets can share similar court counts while sitting at meaningfully different stages of ecosystem maturity, a distinction the Global Padel Report 2025 formalizes through its classification of markets by institutional consolidation and operator professionalism rather than numerical growth alone.

4.1.3. Infrastructure and access Portugal vs Germany

As the literature review established, financing structures, facilities, and spatial accessibility determined who can participate, how often, and under what conditions, and in growing sports, the investment logic behind infrastructure shaped whether initial demand converts into long-term ecosystem depth (Kumar et al., 2018, Crompton 2014).

In Portugal, the most consistently cited enabler of infrastructure growth was climate. Because outdoor courts were viable for most of the year, operators faced substantially lower entry costs than counterparts in northern Europe (PT_03; PT_06). This structural advantage allowed many independent clubs to enter the market without the capital requirements associated with large indoor facilities, and relatively accessible land prices outside major cities reinforced this dynamic (PT_03). The Algarve, with its international tourism base and sports-oriented clientele, served as an early testing ground before the model spread nationally (PT_03). PT_04 noted that infrastructure quality had improved dramatically over time: in the early boom years, clubs were built hastily and without much care for surroundings, whereas the facilities constructed in recent years were considerably more professional. PT_05 confirmed that growing private investment, made credible in part through booking platform data showing

strong occupancy rates, drew more capital into court construction and facility upgrades across the country.

In Germany, the infrastructure picture was shaped by a fundamentally different cost structure. Because outdoor padel was not viable year-round, covered facilities were the norm, making initial investment considerably higher. The most common development pathway had been the conversion of existing tennis halls, which reduced the need for change-of-use permits and leveraged an established racket sport infrastructure base (GER_05; GER_06). Even so, regulatory requirements remained a significant friction point. Multiple interviewees pointed to complex building codes, structural engineering requirements for glazed court walls, and lengthy permit processes as consistent obstacles that drive up both cost and development timelines (GER_01; GER_02; GER_03; GER_05). Outdoor court construction alone cost around 60,000 to 70,000 euros per court, and purpose-built indoor halls were considered financially unviable by most operators (GER_03; GER_05). These dynamics align with the observation in the literature that public investment in Germany has historically favoured established sport structures over newer activities, which has limited institutional support for padel infrastructure development (Feiler et al., 2019).

However, both countries demonstrated a structural pattern of urban and economically stronger regions growing faster than minor ones. This was in line with the wider literature showing that infrastructure investment tended to follow population density and economic capacity and is most effective when embedded in broader development conditions rather than built in isolation.

4.1.4. Commercialization and complementary services Portugal vs Germany

As previously demonstrated in the literature review, the level of ecosystem maturity was dependent on how much these complementary actors can be integrated into sustainable value creation, and that successful commercialization was likely to emerge from system-level coordination rather than isolated investment (González-Serrano et al., 2021; Jacobides et al., 2018).

Several interviewees described the commercial side of padel in Portugal as now being well established through a self-reinforcing cycle. PT_03 said, “As the audience traffic increased, the commercial potential of padel was realized and the presence of sponsors increased on all levels of competition from national tournaments to regional amateur events.” Booking platforms, especially Playtomic and its predecessor Aircourts, played a structurally formative role: they

normalized online court reservation, improved occupancy rates for clubs, and generated player data that further attracted brand investment (PT_03; PT_05). The purchase of Aircourts by Playtomic, which already had major stakes in the Portuguese market, was a key moment for the professionalization of the commercial operation of clubs, highlighted PT_05. National brands from Portugal had also established themselves as key players in the ecosystem. PT_01 mentioned Cork and Quad as two equipment brands with a large community reach, while PT_03 mentioned Cupra and Oysho as international brands that have embedded themselves well in the sport's identity.

In Germany, commercialization had followed a similar structural logic but from a more fundamental starting point. Cupra was identified in several interviews as the most consistently present sponsor in the market, with a brand positioning that was strongly associated with padel's young and active demographic (GER_03; GER_05). Brands such as Head and Adidas had achieved a high visibility, while padel-specific brands such as Bullpadel and Nox were actively competing for market share (GER_06). In Germany, Playtomic had also served as a basic commercial infrastructure layer, allowing for fully automated club operations and giving national visibility to new facilities that would have difficulty reaching players otherwise (GER_01; GER_03). GER_03 however identified a structural constraint: larger corporate sponsors were still hesitant, not least because the German Padel Association was not yet certified by the DOSB and the broader association structures that were usually linked to large sponsorship decisions were still evolving. "As the market matures, we are seeing the larger chains starting to build booking apps to capture customer data and avoid reliance on third parties, which shows a trend towards more concentrated commercial models," added GER_06. Both markets confirmed the framing of the literature that digital platforms were accelerators of ecosystem development by strengthening the coordination between operators, players and commercial partners (Alimohammadi et al., 2023; Global Padel Report 2025).

4.1.5. Participation and community spread Portugal vs Germany

In Portugal, the diffusion process had been fundamentally social in character and was now widely described as self-sustaining. PT_03 captured this well, noting that nobody entered padel alone but was brought to it by someone else, and that once people had tried it, the conversion rate was exceptional. This organic, person-to-person spread was amplified over time by the creation of structured amateur leagues at every level, which gave players clear goals and kept

them engaged beyond the initial trial (PT_03). PT_06 observed that growth became increasingly self-reinforcing once padel entered people's lifestyle and social networks, echoing Rogers' (2003) logic of chain reactions triggered by initial diffusion advantages. Digital communication tools, particularly WhatsApp groups, had served as an everyday coordination mechanism that sustains community cohesion between matches and across clubs (PT_03). PT_01 highlighted that padel's social accessibility, the ease of enjoying it regardless of level, had been a particularly strong retention factor. Participation also had spread across social classes and age groups more readily in Portugal than in markets with deeper tennis traditions, as padel was not competing against a firmly entrenched cultural alternative (PT_03). At the same time, PT_02 flagged a persistent structural concern, the player pyramid skewed heavily toward adults over 30, and youth participation remained underdeveloped, which posed longer-term questions about the sport's depth of roots.

In Germany, diffusion had followed the same foundational logic but from a considerably earlier starting point. The sport moved from a few hundred enthusiasts to a nationally recognized activity primarily through social media exposure, celebrity endorsement, and event-driven visibility (GER_03; GER_04). GER_03 pointed to TV coverage, the arrival of Premier Padel and the World Padel Tour on German soil, and entertainment formats featuring celebrities as events that legitimized padel to audiences who had not previously encountered it. GER_04 described TikTok and Instagram as major recruitment channels, particularly for younger players, with the dynamic of children seeing content online and then introducing the sport to their parents. GER_02 noted the growing role of corporate events and padel as a networking activity, which had introduced the sport to professional demographics. Retention rates were described as very high once players had tried the sport, consistent with the same accessibility and sociability factors that characterized the Portuguese case (GER_06). However, GER_04 raised a forward-looking concern once the pool of people who have not yet heard of padel shrinks, growth would depend on converting casual participants into regular players, which required a stable, structured community base rather than novelty-driven curiosity.

Both countries confirmed the core argument in the literature that visibility, social networks, and local community anchoring were essential diffusion mechanisms for emerging sports (Alhammad et al., 2025; Kumar et al., 2018).

4.1.6. Human capital and capability building Portugal vs Germany

Human capital in sport was a development factor rather than simply an input, skills, adaptability, and organizational capabilities determined whether material resources translate into meaningful participation growth, and weaknesses in any one dimension constrained overall ecosystem performance (Hossini et al., 2015; Balduck et al., 2015).

In Portugal, the early phase of development was heavily reliant on imported expertise. PT_03 noted that the first coaches came almost exclusively from Spain, and that this dependency only diminished gradually as the Portuguese federation built its own certification programs in response to rising domestic demand. PT_04 described the federation's coach training infrastructure as one of its most significant achievements, noting that approximately 300 new coaches were certified annually across twelve or more programs, with a third certification level being introduced. Despite this progress, quality remained uneven across regions: PT_03 observed that finding a well-trained coach in urban areas like Lisbon, Porto and Algarve was relatively straightforward, but the interior of the country was less served. PT_01 pointed to the tension between quantity and quality in coaching, noting that the pace of player growth had often outrun the development of truly qualified coaching capacity, and that building coherent player development pathways from beginner to competitive level had taken years. PT_02 added a forward-looking dimension, arguing that the next evolution in coaching quality will come from applying scientific methodologies to training, a field where countries with stronger sports science traditions may eventually challenge the current dominance of Spanish and Argentine coaches.

In Germany, the coaching landscape reflected the sport's shorter development timeline. Multiple interviewees acknowledged that the majority of practicing coaches currently came from Spain, Portugal, or Latin America, as the domestic player base simply had not yet had the time to produce experienced coaches at scale (GER_04; GER_06). The German Padel Association had responded with a growing certification system offering C, B, and planned A-level licenses, with GER_03 noting that coaching courses were running at four to five events per month, all fully booked. GER_01 confirmed that the German Padel Association was widely recognized among club operators as the primary driver of coaching education nationwide. Nevertheless, GER_05 observed that the most capable German coaches were almost all former tennis players, and that incentivizing them to fully pivot to padel remained difficult as long as their tennis coaching practices remained financially viable. The structural constraint, as

GER_04 framed it, is that most German players had only been playing for around a year, making it genuinely hard to build a domestic coaching pipeline in parallel with growth.

Both countries faced the same underlying tension: coaching capacity tended to lag participation growth and bridging that gap required sustained institutional investment over time (Marques et al., 2025). Portugal's head start, driven by earlier federation-led certification structures and a larger pool of experienced coaches, represented a meaningful capability advantage. Germany was closing the gap through deliberate association-level investment, but the depth of the coaching base remained constrained by the sport's recent arrival, a gap that was unlikely to close quickly and that could act as a limiting factor on the quality of the player development pathway.

4.1.7. Ecosystem structure components

Across Portuguese interviews, the most consistently cited components were accessible infrastructure, community and social belonging, coaching quality, and organized competition. PT_03 placed infrastructure first, stressing that courts must be reachable geographically, financially, and in terms of scheduling, before identifying community culture and coaching quality as the second and third pillars. PT_02 placed organized competition at the very top, arguing that without a structured tournament circuit giving players a reason to keep returning, no other component holds together. PT_04 prioritized accessibility and community over infrastructure. PT_05 identified infrastructure, the federation, booking software and users as the four pillars of the ecosystem. PT_06 included entrepreneurial private investment as a separate driver to capture the role of commercially oriented club operators in the expansion of Portugal.

The German interviewees developed a broadly similar picture, but differences in emphasis showed where the gaps in the ecosystem were felt most strongly. GER_03 focused on structural organization, sponsorship, and coaching education. GER_02 put infrastructure in the top spot, community programming second, and accessible digital booking third. GER_06 pointed to financial capacity and a well-aligned federation, warning that fragmentation of the ecosystem was a risk without alignment across actors.

The level of convergence across both contexts was analytically meaningful. Consistent with the literature's treatment of ecosystem maturity as the level of integration achieved across these

dimensions (Buser et al., 2022; Jacobides et al., 2018), infrastructure, community, governance and human capital were recognized as universally important factors regardless of market stage.

4.2. Quantitative Results – Survey

4.2.1. Data cleaning

Survey responses were filtered to retain cases with at least ninety percent progress, a minimum response duration of seventy-five seconds, and a country of play of either Germany or Portugal. Preview responses and incomplete submissions were removed. The twenty-two Likert items were recoded into a five-point numerical scale. The final working dataset comprised 108 valid responses, with 49 from Germany and 59 from Portugal. Missing values were minimal across Likert items.

4.2.2. Sample description

The sample composition by country is summarized in Table 2. The German subsample was concentrated in the 25–34 age band (61%), while the Portuguese subsample was more evenly distributed across the 18–24, 25–34, and 35–44 bands. Portuguese respondents reported higher playing frequencies, with 41% playing two to three times a week. Both subsamples were dominated by commercial padel club users, although the share was higher in Portugal (73%) than in Germany (59%). Pricing patterns differed clearly, German respondents more frequently reported paying €15–€19 per session, a price band absent in Portugal, while Portuguese respondents more often paid €5–€9. A similar pattern emerged for willingness to pay.

Table 2 Sample Profiles

Variable	Category	Germany (n = 49)	Portugal (n = 59)
Age	Under 18	1 (2%)	1 (2%)
	18–24	13 (27%)	21 (36%)
	25–34	30 (61%)	20 (34%)
	35–44	4 (8%)	14 (24%)
	44+	1 (2%)	3 (5%)
Playing frequency	Less than once a month	5 (10%)	3 (5%)
	1–3 times a month	20 (41%)	8 (14%)
	Once a week	11 (22%)	21 (36%)
	2–3 times a week	10 (20%)	24 (41%)
	4 or more times a week	3 (6%)	3 (5%)
Venue type	Commercial padel club	29 (59%)	43 (73%)
	Tennis or multi-sport club	17 (35%)	16 (27%)
	Public / municipal facility	2 (4%)	0 (0%)
	Other	1 (2%)	0 (0%)
Price paid	Under €5	1 (2%)	2 (3%)
	€5–€9	6 (12%)	19 (32%)
	€10–€14	30 (61%)	38 (64%)
	€15–€19	12 (24%)	0 (0%)

Willingness to pay	Under €5	0 (0%)	1 (2%)
	€5–€9	6 (12%)	6 (10%)
	€10–€14	20 (41%)	46 (78%)
	€15–€19	20 (41%)	6 (10%)
	€20–€24	2 (4%)	0 (0%)
	€25 or more	1 (2%)	0 (0%)

Chi-square tests confirmed significant structural differences between the subsamples for age ($\chi^2=9.59$, $p=.048$), playing frequency ($\chi^2=13.66$, $p=.008$), price paid ($\chi^2=19.28$, $p<.001$), and willingness to pay ($\chi^2=21.04$, $p<.001$). Venue type did not differ significantly ($\chi^2=4.87$, $p=.182$).

4.2.3. Descriptive statistics

Descriptive statistics for all twenty-two Likert items are presented in Table 3. Mean scores ranged from 2.97 (booking ease) to 4.20 (digital tools). Highest agreement levels ($M > 4.00$) were observed on digital tools, ease of starting, group participation, market growth, retention intention, and introductory formats. The lowest agreement levels appeared on booking ease and supply meeting demand. The three competition items recorded the lowest medians of three across the questionnaire. Standard deviations ranged from 0.54 to 1.11.

Table 3 Descriptive statistics

Item	n	M	Mdn	Mode	SD
Court availability	108	3.65	4	4	0.93
Booking ease	108	2.97	3	4	1.11
Supply meets demand	108	2.98	3	4	1.08
Affordability	107	3.47	4	4	0.84
Introductory formats	108	4.03	4	4	0.89
Coaching availability	108	3.40	3	4	0.96
Skill improvement	108	3.72	4	4	0.76
Digital tools	108	4.20	4	4	0.69
Ease of starting	108	4.04	4	4	0.61
Tournament entry	108	3.33	3	3	0.75
Organised competition	108	3.29	3	3	0.66
Development pathway	108	3.25	3	3	0.80
Group participation	108	4.01	4	4	0.54
Social life	108	3.69	4	4	1.04
Venue environment	108	3.80	4	4	0.77
Motivation	108	3.67	4	4	0.84
Food & drink	108	3.51	4	4	0.91
Visibility	108	3.79	4	4	0.84
Media attention	108	3.66	4	4	1.02
Market growth	108	4.11	4	4	0.55
Value for money	108	3.70	4	4	0.65

Retention intention	107	4.13	4	4	0.79
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4.2.4. Reliability

Internal consistency of the four constructed scales was assessed using Cronbach's alpha (Table 4). Visibility and media attention were not aggregated into a scale and were retained as single items in the subsequent analyses. Access ($\alpha=.77$) and competition ($\alpha=.73$) reached good levels of internal consistency. Coaching ($\alpha=.70$) reached the conventional threshold but should be interpreted as a two-item composite, as alpha tends to be inflated for short scales. Community ($\alpha=.63$) showed acceptable but moderate consistency. The alpha-if-deleted analysis indicated that no single item could be removed to substantially improve the scale, reflecting the heterogeneity of items spanning group dynamics, social life, and venue environment. Findings on the community scale should accordingly be interpreted with appropriate caution.

Table 4 Scale Reliability

Scale	Items	Cronbach's α	Status
Access	3	0.770	Good
Coaching	2	0.700	Good
Competition	3	0.731	Good
Community	5	0.634	Acceptable

4.2.5. Scale constructions

The four composite scales were computed as unweighted means of their respective items, access (court availability, booking ease, supply meets demand), coaching (coaching availability, skill improvement), competition (tournament entry, organised competition, development pathway), and community (group participation, social life, venue environment, motivation, food and drink). Affordability was treated as a separate construct, as it captured an economic rather than infrastructural dimension. Visibility, media attention, market growth, value for money, and retention intention were retained as single items. Across all four scales, Portuguese respondents reported higher means than German respondents (Table 5), with the largest difference appearing on the access scale.

Table 5 Scale Means by Country

Scale	M (Germany)	SD (Germany)	M (Portugal)	SD (Portugal)
Access	2.50	0.68	3.78	0.48
Coaching	3.11	0.71	3.93	0.58
Competition	3.10	0.50	3.45	0.62
Community	3.38	0.41	4.02	0.45

4.2.6. Comparison Portugal and Germany

Country differences were tested using Welch's t-tests, with effect sizes quantified as Cohen's *d* (Table 6, Figure 2). All four scales showed significant differences favoring Portugal, with effect sizes ranging from medium on competition ($d=0.60$) to very large on access ($d=2.20$). Among the single items, visibility, media attention, and value for money also differed significantly, with large effects on the first two and a medium effect on value for money. Three items did not differ significantly. Affordability showed a negligible effect ($d=0.18$), despite the substantial differences in price levels actually paid, Portuguese respondents paid less but did not perceive padel as significantly more affordable. Market growth received high agreement in both countries ($M > 4.00$), indicating that perceived momentum transcended country boundaries. Retention intention was similarly high in both groups ($d=0.16$), suggesting that those who play tend to remain committed regardless of country.

Table 6 Country Comparison Results

Variable	M (DE)	SD (DE)	M (PT)	SD (PT)	t (df)	p (t-test)	d	p (MW)
Access (scale)	2.50	0.68	3.78	0.48	11.03 (84)	< .001	2.20	< .001
Coaching (scale)	3.11	0.71	3.93	0.58	6.51 (92)	< .001	1.28	< .001
Competition (scale)	3.10	0.50	3.45	0.62	3.18 (106)	.002	0.60	.002
Community (scale)	3.38	0.41	4.02	0.45	7.80 (105)	< .001	1.50	< .001
Visibility (index)	3.32	0.69	4.06	0.64	5.74 (100)	< .001	1.12	< .001
Affordability	3.39	1.00	3.53	0.68	0.87 (83)	.385	0.18	.452
Market growth	4.18	0.60	4.05	0.51	-1.23 (94)	.223	-0.24	.134
Value for money	3.47	0.77	3.90	0.44	3.47 (74)	< .001	0.70	.001
Retention intention	4.06	0.84	4.19	0.75	0.80 (96)	.427	0.16	.389

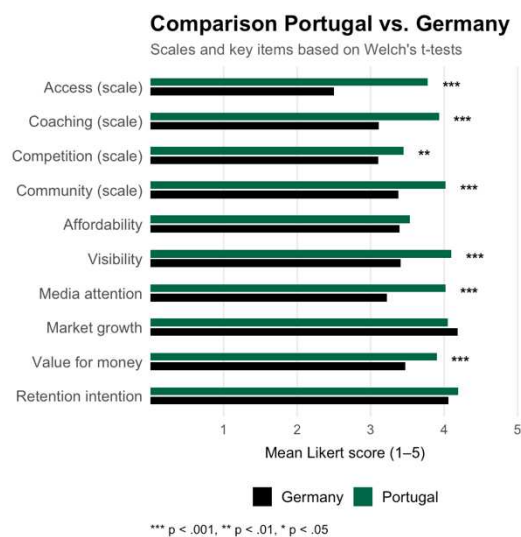


Figure 2 Portugal–Germany Mean Comparison

4.2.7. Topic findings

Item-level comparisons across the five thematic blocks are visualized in Figures 3 to 7. On infrastructure and access (T1), Portuguese respondents reported significantly higher agreement on court availability, booking ease, and supply, while affordability was the only item not differing significantly. On coaching, development, and pathway (T2), all items showed significant differences favoring Portugal, with the largest gaps on coaching availability and introductory formats. The widespread agreement on digital tools across both countries indicated a well-developed booking and organizational layer in both ecosystems.

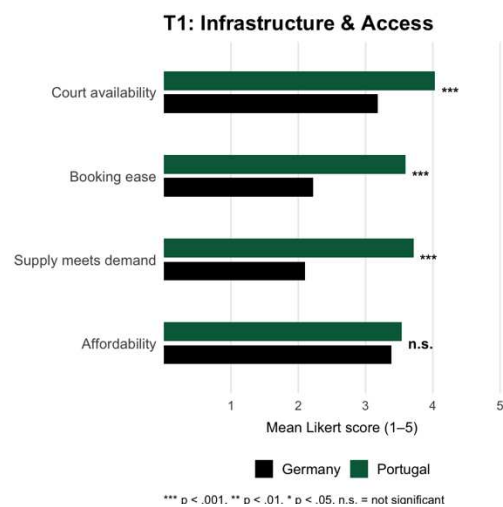


Figure 3 Infrastructure & Access Comparisons by Country

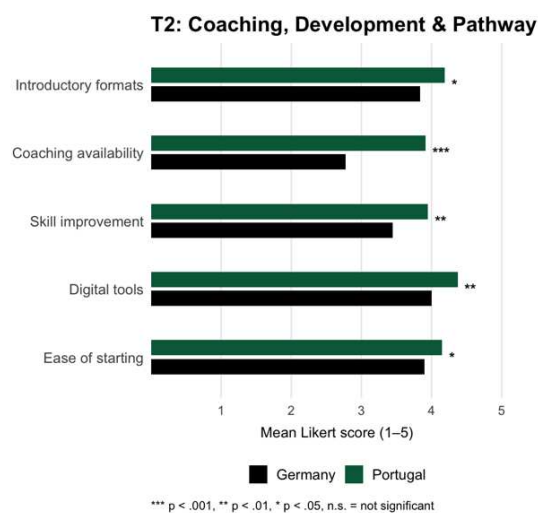


Figure 4 Coaching, Development & Pathway Item Comparisons by Country

On competitive structure (T3), Portuguese respondents reported higher agreement on all three items, although differences were smaller than in other blocks. Both countries recorded the lowest scores of the questionnaire here, with median values of three throughout, indicating that the competitive infrastructure was perceived as the least developed dimension in both ecosystems. On community, social, and venue (T4), all five items showed consistently large country differences, indicating that the social and atmospheric dimensions were perceived more positively in Portugal across the board. On visibility, momentum, and value (T5), Portuguese respondents reported significantly higher agreement on visibility, media attention, and value for money, while market growth and retention intention did not differ significantly between the two countries.

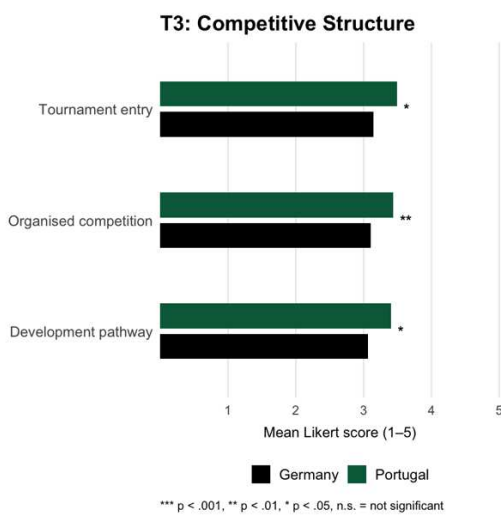


Figure 5 Competitive Structure Item Comparisons by Country

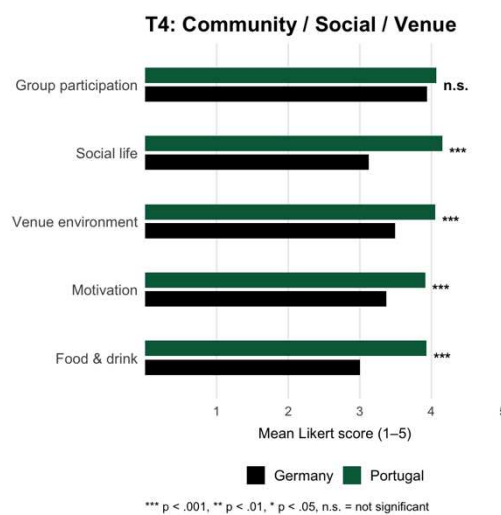


Figure 6 Community, Social & Venue Item Comparisons by Country

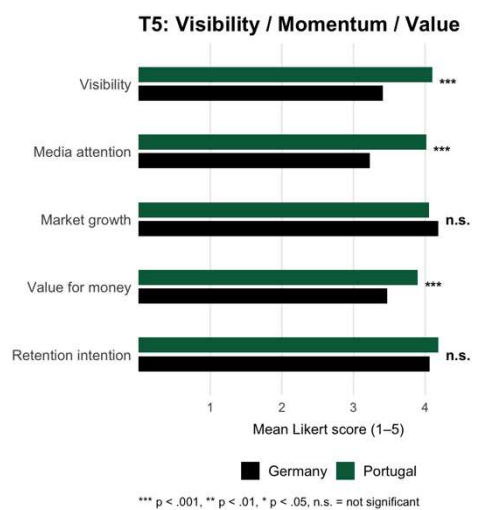


Figure 7 Visibility, Momentum & Value Item Comparisons by Country

4.2.8. Regression analysis

Regression analysis estimated the country effect on each of the four scales while adjusting for behavioral and demographic differences. A base model included a country dummy (1 = Portugal, 0 = Germany) and playing frequency. An extended model added age (band midpoints) and a commercial venue dummy as a robustness check against the structural sample differences identified in Section 4.2.2. The regression coefficient (B) indicates the change in scale points associated with a one-unit increase in the predictor, holding the other predictors constant, the country coefficient therefore reflects how many scale points higher a Portuguese respondent scored compared to an otherwise comparable German respondent.

In the base model (Table 7), the country coefficient was positive and significant for all four scales, ranging from 1.24 on access to 0.24 on competition. Playing frequency was a significant predictor only for the competition and community scales. R^2 values ranged from .19 (competition) to .56 (access).

Table 7 Base Regression Results

Scale	B (Country)	B (Frequency)	R^2	n
Access	1.24***	0.07	0.56	108
Coaching	0.80***	0.04	0.30	108
Competition	0.24*	0.19***	0.19	108
Community	0.58***	0.11**	0.40	108

In the extended model (Table 8), the country coefficient remained positive, significant, and substantively unchanged across all four scales. The change in the country coefficient between specifications did not exceed 0.03 scale points. Neither age nor the commercial venue dummy reached significance in any of the four models. Variance inflation factors remained below 1.10 across all predictors, indicating that multicollinearity was not a concern. Table 9 summarizes the robustness comparison.

Table 8 Extended Regression Results

Scale	B (Country)	B (Frequency)	B (Age)	B (Venue)	R^2	n
Access	1.27***	0.07	-0.01	-0.13	0.57	108
Coaching	0.80***	0.04	-0.00	0.00	0.30	108
Competition	0.24*	0.19***	-0.01	0.09	0.20	108
Community	0.59***	0.11**	-0.01	0.02	0.41	108

Table 9 Robustness Comparison

Scale	B (base)	B (extended)	ΔB	Status
Access	1.24	1.27	+0.03	Robust
Coaching	0.80	0.80	+0.01	Robust
Competition	0.24	0.24	0.00	Robust
Community	0.58	0.59	+0.01	Robust

Both specifications converged on the same conclusion, Portuguese respondents reported significantly more positive perceptions of access, coaching, competition, and community than German respondents, and these differences were not attributable to compositional differences in age, playing frequency, or venue type.

4.2.9. Correlations

Spearman rank correlations were computed across the four scales and three outcome items. Spearman's coefficient was chosen as appropriate for ordinal Likert data. The matrix is reported in Table 10.

Table 10 Correlation Matrix

Variable	1	2	3	4	5	6	7	8
1. Access	—							
2. Coaching	0.53	—						
3. Competition	0.40	0.48	—					
4. Community	0.59	0.65	0.40	—				
5. Visibility	0.49	0.48	0.37	0.55	—			
6. Value for money	0.33	0.37	0.36	0.38	0.25	—		
7. Market growth	-0.16	0.06	0.02	0.05	-0.12	0.00	—	
8. Retention	0.14	0.28	0.30	0.18	0.27	0.05	0.29	—

The four scales correlated moderately to strongly with one another, with the strongest associations between coaching and community ($r=.65$), access and community ($r=.59$), and access and coaching ($r=.53$). Competition correlated more weakly with the other three scales (r s between .40 and .48). Value for money correlated positively and moderately with all four scales (r s between .33 and .38), suggesting that perceived value reflected an aggregate impression of ecosystem quality rather than a price-based judgement. Market growth was largely uncorrelated with the four scales and with value for money, while retention intention correlated weakly to moderately with the scales, reflecting the limited variance in this item given that most respondents in both countries indicated a high intention to continue playing.

4.3. Integrated analysis

The strongest pattern across all three sources concerned timing. The literature described path dependence and early coordination as central mechanisms for ecosystem development (Martin & Sunley, 2006; Begović, 2025; Adner, 2017). The interviews showed what this meant in practice. In Portugal, the federation, the national tournaments, and the coach certification system were already in place when the demand window opened during the COVID-19 period (PT_02; PT_03; PT_04). In Germany, supply and demand grew at the same time and certification systems from the federation were still being built (GER_03; GER_05). The survey confirmed that this difference was visible to players. The country effect was significant on all four scales, with effect sizes ranging from medium on competition ($d=0.60$) to very large on access ($d=2.20$). When age, playing frequency, and venue type were added as controls, the effect remained almost unchanged ($\Delta B \leq 0.03$). The results suggested that Portugal's lead was linked to differences in the padel market, not just differences between respondents.

A second strong pattern concerned how deeply padel was embedded in everyday life in Portugal compared to Germany. The qualitative evidence on this point was unusually consistent across interviewees. PT_03 described the diffusion process as fundamentally social, noting that nobody enters padel alone but was brought into it by someone else. PT_06 added that growth became increasingly self-reinforcing once padel entered people's lifestyle and social networks. PT_01 emphasized that the ease of enjoying the sport regardless of skill level had been a particularly strong retention factor. The survey supported this interpretation. The community scale showed the second-largest country effect of the entire study ($d=1.50$) and was the most strongly correlated with coaching ($rs=.65$) and access ($rs=.59$). Social participation, in other words, did not stand alone but moved together with the infrastructural and educational substance that surrounded it, consistent with the diffusion logic described by Rogers (2003).

The German case showed the same components but in a slower, more institutionally constrained form. Diffusion in Germany had been driven less by organic social adoption and more by visibility events, social media exposure, and celebrity endorsement (GER_03; GER_04). Beyond diffusion, the structural conditions for infrastructure development further constrained the pace of base-building. Multiple interviewees pointed to complex building codes, structural engineering requirements, and lengthy permit processes as consistent obstacles that drove up cost and lengthen development timelines (GER_01; GER_02; GER_03; GER_05). The dominant development pathway had therefore been the conversion of existing tennis halls,

which avoided change-of-use permits and leverages an established racket sport infrastructure base (GER_05; GER_06). This pattern was consistent with the literature's observation that public investment in Germany has historically favored established sport structures over newer activities (Feiler et al., 2019). The survey reflected these conditions in measurable form. The access scale produced the largest effect of the entire study ($d=2.20$), the country coefficient remained at 1.27 in the extended regression, and venue type did not absorb any of the country effect, indicating that the gap was systemic rather than driven by where players happened to play.

Two findings became clear only through triangulation. The first concerned affordability. Portuguese respondents paid less per session than German respondents. The €5–€9 band was reported by 32% of Portuguese players and was absent in Germany, while the €15–€19 band was reported by 24% of German players and was absent in Portugal. But the perception of affordability was almost identical in both countries ($d=0.18$). The interviews did not flag affordability as a problem in either country. Path dependence offered the explanation. In a more developed market, lower prices became the norm and stop being seen as an advantage.

The second triangulation finding concerned market growth. Both subsamples reported high agreement on perceived growth ($M_{DE}=4.18$; $M_{PT}=4.05$), with no significant difference between countries. The correlation matrix showed that this item was not connected to any of the four scales (r s between $-.16$ and $.06$). German players perceived strong growth without recognizing the structural gaps that the interviews and the scales identified. This was consistent with the framing in the literature that growth alone does not indicate structural depth (Playtomic, 2025). The implication for the research question is direct, perceived growth could not be used as a proxy for ecosystem quality.

Taken together, the three sources gave the same answer. Portugal's lead was not mainly a result of court density, demand, or willingness to pay. It was a result of the earlier alignment of coordination structures, the cultural integration of the sport, and the regulatory and cost conditions that allowed infrastructure to expand without the friction encountered in Germany. Germany's gap was not a lack of growth but a lack of structural depth.

5. Conclusion

5.1. Main findings

This study set out to answer one question: *What factors explained Portugal's lead over Germany in the development of padel?* The analysis drew on twelve expert interviews, a player survey of 108 respondents across both countries, and secondary industry data. Five drivers stood out. None of them worked alone, and it was their combined effect that explained the gap between the two ecosystems.

The first factor was the timing of institutional development. When demand for padel surged during the COVID period, Portugal already had the basic structures in place. The federation was running a national tournament circuit, a licensing system, and a coach certification program that produced around 300 new coaches every year (PT_02; PT_04). Germany was building all these layers at the same time as the player base was growing in 2024/2025. The German Padel Association was still expanding its certification system and was working toward DOSB recognition during the same period (GER_03). This head start gave Portugal cumulative advantages, in line with the path-dependence logic described by Martin and Sunley (2006) and Begović (2025).

The second factor was infrastructure and access. The biggest country difference in the entire study appeared on the access scale ($d=2.20$), and two conditions explained this gap. Portugal's climate allowed outdoor courts to be used most of the year, which kept entry costs low and helped many independent operators enter the market (PT_03; PT_06). Germany depended on covered facilities, faced complex building codes, and dealt with long permit processes, all of which raised costs and slowed expansion (GER_01; GER_03; GER_05). The country effect remained almost unchanged after controlling for age, playing frequency, and venue type ($\Delta B \leq 0.03$), which showed that the gap was structural and not driven by who was answering the survey.

The third factor was the social embedding of the sport. The community scale produced the second-largest country effect ($d=1.50$) and correlated strongly with coaching ($r_s=.65$) and access ($r_s=.59$). In Portugal, padel spread through personal networks. People brought their friends and family into the sport, and this dynamic became self-sustaining over time (PT_03; PT_06). This pattern matched Rogers' (2003) description of how adoption gains momentum once a critical mass is reached. In Germany, growth depended more on visibility events, social

media, and celebrity endorsement (GER_03; GER_04). These channels recruited players quickly but did not yet produce the same depth of social roots.

The fourth factor concerned commercialization and digital platforms. Booking platforms, in particular Playtomic, played a central role in Portugal. They made online court reservation the norm, helped clubs improve their occupancy, and produced player data that attracted brand investment (PT_03; PT_05). Sponsors followed, with brands present at every level of competition. In Germany, platforms reached comparable functional coverage, but sponsors remained more cautious. (GER_03; GER_06).

The fifth factor was human capital and coaching. Portugal's earlier investment in federation-led coach certification produced a larger domestic coaching base. Germany still relied heavily on coaches imported from Spain, Portugal, and Latin America (GER_04; GER_06). The German Padel Association was actively closing this gap through its certification program, but the depth of the coaching base was limited by how recently the sport had arrived in the country.

Two findings became visible only through triangulation. Portuguese players paid less per session than German players, but they did not perceive padel as significantly more affordable ($d=0.18$). In a more developed market, low prices become the norm and stop being seen as an advantage, which fits the path-dependence logic. Perceived market growth was high in both countries and was not correlated with any of the four ecosystem scales. German players recognized strong growth without recognizing the structural gaps that the interviews and the scales identified. This confirmed the argument in the literature that growth alone does not indicate ecosystem maturity (Playtomic, 2025).

The answer to the research question was therefore clear. Portugal's lead came from an earlier alignment of institutional structures, infrastructure conditions, social embedding, commercial integration, and human capital. Germany's gap was not a lack of growth but a lack of structural depth, further constrained by regulatory complexity and lengthy planning processes that slowed infrastructure expansion even where demand and capital were present.

5.2. Theoretical implications

The findings contributed to the literature on sport ecosystem development. They showed that the strength of ecosystem theory in this context lies in the sequencing of components, not just their presence. Both countries had the same building blocks, but the order in which these blocks were put in place produced very different outcomes. This adds to the work of Jacobides et al.

(2018) and Adner (2017), suggesting that complementary structures only generate cumulative advantages when they are established before demand surges, not alongside it.

The study also extended the dynamic capabilities framework (Teece, 2007) to the ecosystem level. Portugal's federation-led ability to coordinate actors and respond to demand worked as a collective capability rather than a firm-level one. This supports the broader view advanced by Alimohammadi et al. (2023) and Marques et al. (2025). The affordability finding gave a clear empirical example of path dependence as described by Martin and Sunley (2006) and Begović (2025), once a structural advantage becomes the norm, players stop noticing it, even though it is still there. Finally, the missing correlation between perceived growth and the four ecosystem scales gave empirical substance to the distinction between growth and maturity introduced descriptively in the Global Padel Report 2025.

5.3. Practical implications

The findings carried direct implications for federations, operators, and policymakers in markets that were still consolidating. The clearest message across all three data sources was that institutional layers produce their biggest returns when they are built before demand surges. For the German Padel Association, this means that DOSB recognition, expanded coach education, and a formal national competition system should be treated as foundational rather than incremental investments.

For operators and investors, regulation emerged as the most binding constraint on infrastructure expansion in Germany (GER_01; GER_02; GER_03; GER_05). Direct dialogue with municipal and federal authorities on building codes and change-of-use procedures would address a problem that capital alone cannot solve. The strong correlation between access, coaching, and community also showed that infrastructure investment pays off most when it is paired with coaching capacity and social programming. For platform operators and commercial partners, the central role of booking platforms in Portugal (PT_03; PT_05) suggests that platforms and player data act as coordination tools for the whole ecosystem rather than as side services. A final point applies to how growth is read. Operators and association leaders should base their decisions on indicators of structural depth rather than on growth numbers based on court counts alone.

5.4. Limitations

Several limitations should be acknowledged. The qualitative sample consisted of twelve interviews with ecosystem actors who had active commercial, institutional, or operational interests. Purposive sampling ensured coverage of the main actor categories (Saunders et al., 2009), but interviewees may have presented developments in ways that reflected their organizational positioning. Triangulation across interviews, survey, and secondary sources reduced this risk but did not remove it (Yin, 2009).

The survey produced 108 usable responses. This supported descriptive comparison and exploratory testing but limited the statistical power for more demanding tests. Self-reported Likert-scale responses also carry the well-known risks of social desirability and recall bias (Bell et al., 2018), and recruitment through a limited number of channels introduced selection bias toward more engaged or platform-connected players. The comparative design itself restricted external validity, since the mechanisms identified here may work differently in markets at earlier or later stages of development. Finally, the data was cross-sectional and captured a specific moment in two ecosystems whose structures were changing month by month (Adner, 2017).

5.5. Future research

Several directions would extend the present analysis. A longitudinal follow-up conducted three to five years later could test whether Portugal's structural advantages persist as Germany's institutional layers mature, a broader cross-national comparison including Spain, Sweden, Italy, and emerging non-European markets would address the external-validity constraint and show which enablers identified here generalize across stages of development (Begović, 2025).

Two more focused avenues also warrant attention. The central role of booking platforms and the shift toward proprietary systems among larger German chains call for dedicated study of platform consolidation and data ownership in sport ecosystems (Alimohammadi et al., 2023). Player-level qualitative research, segmented by gender, age cohort, and pathways from other racket sports, would clarify how participation behavior interacts with the supply-side conditions analyzed here, with particular attention to youth participation, which appeared as a structural gap in both markets.

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7. Appendices

Interview Guide

Purpose of the Interview

The goal is to understand, from your perspective, which factors have mattered most in shaping padel's development in [Portugal/Germany] and how these factors have interacted over time.

Consent, Recording & Confidentiality

"With your permission, I'd like to record this conversation so I can focus on our discussion rather than note-taking. The recording will only be used for my own transcription and analysis — it will not be shared. Your responses will be treated confidentially; I will refer to you by your role and country only, not by name, unless you explicitly agree otherwise."

Opening questions:

- Could you briefly describe your current role and how it connects to padel?
- How would you describe the current state of padel in [Portugal / Germany] from where you sit?
- (Opt) Has your own work or organization changed significantly as the sport has grown? Can you give me an example?

Core Questions:

Part 1: Padel Evolution & Coordination

- If you think back over the last years, how would you describe the development of padel in Portugal / Germany —from early days to today?
- What were the 2–3 most important turning points that changed the pace or direction of development?
- (Opt) In your view, what has been the most important factor in keeping the different parts of the padel ecosystem moving in the same direction? And where has that been hardest?

Part 2: Infrastructure & Access

- What enabled or constrained the growth of courts, clubs, and playing opportunities in [Portugal / Germany]?

- Are there parts of the country, or groups of players, where access to padel is easier or harder? What explains that?

- (Opt) What were the main barriers: real estate, permits, financing, zoning, weather/indoor needs, construction know-how?

Part 3: Commercialization & Complementary Services

- How has the commercial side of padel developed in [Portugal / Germany] (sponsors, equipment brands, booking platforms, tournaments?) What has driven that?

- Which commercial partnerships or services have had the biggest impact on how the sport has grown? Why those in particular?

- (Opt) Have digital platforms (booking apps, social media) changed how clubs operate or how players find courts and communities?

Part 4: Participation & Community Spread

- How did padel move from a small group of early players to the wider participation levels you see today? What were the key turning points?

- What do you think makes people stick with padel once they've tried it and what has helped spread it to new groups of players?

- (Opt) Were there specific events, campaigns, or moments that triggered a spike in interest?

Part 5: Human capital & Capability Building

- How has the availability of trained coaches and qualified people in the ecosystem evolved? What has driven that or held it back?

- If you think about the capabilities your organization or sector has built over time, what has been hardest to develop and how did you go about it?

- (Opt) Where do operators or federation staff typically come from, do they transfer from other sports, grow from within padel, or come from other fields?

Closing Question:

- From your perspective, what are the key components of a national padel ecosystem? Could you rank your top 3–5 and briefly explain why you place them in that order?
- Is there anyone else — a person, organization, or type of actor — that you think I should really speak to to understand what's shaped padel's development here? And are there any documents, reports, or data sources you'd recommend I look at?

Interview Summary GER_01

The interviewee operated a padel ball sourcing and distribution business spanning Hong Kong, Germany, and several Asian markets, serving predominantly B2B clients. From this commercial vantage point, the respondent described Germany as still far from peak padel, with urban hubs such as Cologne, Munich, Hamburg, and Frankfurt well supplied but large areas of the country underserved. Court numbers were reported to have risen from approximately 900 in 2025 to around 1,400 at the time of the interview, with substantial further expansion expected.

Two turning points were highlighted: the padel event staged by ProSieben, which raised mainstream visibility, and the involvement of high-profile athletes, particularly German football professionals and Formula 1 drivers, whose social-media presence reached audiences far beyond the existing padel community. On infrastructure, the respondent emphasized two enablers, the conversion of underused tennis-club capacity and the repurposing of vacant industrial spaces, while identifying building-permit processes as the dominant constraint. Playtomic was described as a central commercial enabler, both as a unified booking layer and as the foundation for fully automated facilities. The DPV was credited with running a structured nationwide coach-licensing programme. The respondent ranked infrastructure first, coaching offerings second, and centralized federation activity third.

Interview Summary GER_02

The interviewee was in the process of opening a new padel club in Hamburg, having prepared a master's-thesis business plan and market analysis for the city. From this entrepreneurial vantage point, the respondent characterized Germany as undergoing exponential growth with a clear trajectory toward mainstream sport status. Hamburg had grown from five or six clubs in 2022 to twelve at the time of the interview, with national court numbers around 1,300. The

supply-demand imbalance was described as severe, with players typically required to book at least two weeks in advance.

Two turning points were highlighted: the emergence of chains such as Padel City and the Berlin-based Mitte, the latter pursuing a deliberate central-location urban strategy, and the visibility generated by professional athletes and the DPV's expanding tournament structure. Building permits, particularly change-of-use approvals, were identified as the principal infrastructural constraint, alongside scarce suitable urban properties. Playtomic was described as having had a very significant influence on growth through low-friction booking visibility. Coach availability was described as still developing, with reliance on Spanish imports and former tennis coaches. In ranking ecosystem components, the respondent placed infrastructure first, community and the social component second, and booking platforms third.

Interview Summary GER_03

The interviewee served as Sport Director of the German Padel Association, with responsibility for youth development, the women's national team, league operations, and coach education. From this institutional vantage point, the respondent described Germany as in the midst of a sustained boom, with team registrations in the national league having more than doubled to over 800 and coaching courses consistently fully booked. Youth participation was identified as the principal area of structural weakness.

Three turning points were highlighted: the increased media visibility of padel as a sport, the arrival of professionally capitalized chains such as Padel City and Mitte that accelerated infrastructure development, and the indirect promotional effect of celebrity participation through social media, the Promi-Padel-WM, and television appearances. The presence of a centralized federation structure was described as the single most important factor in keeping the ecosystem coherent, particularly when contrasted with the hypothetical fragmentation of regional bodies. Youth development was identified as the hardest capability to build, addressed through school outreach, performance centers for elite young players, and an expanded league pyramid extending downward through the divisional structure. In ranking ecosystem components, the respondent placed structural development first, financing and sponsorship second, coach education third, and infrastructure expansion fourth.

Interview Summary GER_04

The interviewee co-founded one of the first purpose-built padel facilities in northern Germany, having drawn knowledge from the earlier Danish padel market, and subsequently exited the

business to a larger conglomerate. From this entrepreneurial vantage point, the respondent characterized padel in Germany as fundamentally a commercial rather than a club-based sport, with the traditional German club model unsuited to the capital intensity required. The market was described as having entered its exponential phase around February and March 2025, with further expansion expected for two to four years before consolidation.

Key turning points included the early Scandinavian boom and subsequent collapse of We Are Padel, which validated the market while exposing overcapacity risks, and the visibility generated by the urban, instagrammable concept developed by Mitte. Capital availability was identified as the principal infrastructure driver, with rapid scaling concentrated among three large chains. The respondent forecast extreme market consolidation, with chains pushing proprietary booking systems and smaller, lower-specification facilities likely to disappear. Coach availability was described as a persistent bottleneck, with continued reliance on Spanish imports. Germany's developmental lag relative to Spain and Portugal was attributed to climate, the South American origins of the sport, and slower Scandinavian-style trend diffusion.

Interview Summary GER_05

The interviewee founded a premium padel camp company organizing training trips primarily in Spain for German-speaking customers, having previously operated one of the earliest German padel courts in 2014. From this vantage point, the respondent described padel's German trajectory as having shifted decisively in the four to six months preceding the interview, with rapid expansion into previously underdeveloped segments and a noticeable surge in inbound demand.

Infrastructure was identified as the foundational turning point, since social-media visibility could only translate into participation where courts existed. The respondent highlighted North Rhine-Westphalia as the densest cluster, followed by Hamburg, Munich, Stuttgart, Frankfurt, and Berlin. Commercial development was attributed to the sport's lifestyle appeal, which had attracted equipment, apparel, automotive, and health brands, with Cupra and Head identified as particularly influential sponsors. Coach availability was described as a significant constraint, with strong tennis coaches typically lacking incentive to transition. Germany's lag relative to Spain and Portugal was explained by the multi-decade head start of those markets, while bureaucratic friction in Germany was framed as having paradoxically supported healthier growth by preventing oversupply. In ranking ecosystem components, the respondent placed

community first, followed by the surrounding offering of court bookings, training, events, tournaments, and league integration.

Interview Summary GER_06

The interviewee served as Expansion Manager for a German padel chain, with responsibility for identifying and developing new locations nationally. The respondent's background spanned both tennis and the conversion of an existing tennis hall into a padel venue. From this vantage point, the respondent characterized the German market as growing extraordinarily rapidly, with halls multiplying in the Ruhr area in particular, and projected long-term capacity at 15,000 to 20,000 courts at full development.

The market acceleration was dated to 2022, when large operators including Padel City entered seriously, with the real public breakthrough in 2025. Celebrity participation and the high advertising budgets of major chains were identified as principal visibility drivers. Building-permit processes, particularly change-of-use approvals, were described as the dominant infrastructural constraint, prompting the chain's strategic focus on converting existing tennis facilities. Playtomic was acknowledged as historically important but increasingly bypassed by larger chains developing proprietary apps to access fuller customer data. Coach availability was described as underdeveloped, with most coaches imported from Portugal, Argentina, Spain, and broader South America. Germany's lag was attributed to cultural caution, the slowness of traditional club structures, and the relative agility of private-equity-backed chains.

Interview Summary PT_01

The interviewee worked as a full-time coach at one of Lisbon's leading padel clubs while pursuing a parallel pathway as a competitive player. From this dual perspective, the respondent characterized padel's development in Portugal over the previous seven to eight years as exponential, with prime-time demand consistently saturated and visible growth in tournament participation, coaching enrolments, and group-class bookings. The broadcasting of professional tours and major international events in Cascais were identified as key turning points, amplified further by social media exposure. Player retention was attributed to the sport's social and accessible character, which allowed beginners to enjoy meaningful matches almost immediately.

A substantial part of the conversation focused on human capital. The respondent described a persistent quantity-versus-quality tension in coaching and identified consistency in player development as the hardest capability to build. Portugal's developmental lead was partly

attributed to the early articulation of viable player-development pathways combining sporting structure with commercial sustainability, drawing on lessons from tennis and the Spanish ecosystem. The Portuguese Padel Federation was assessed positively for providing a clear national framework. In ranking ecosystem components, the interviewee placed players and community first, infrastructure second, and commercial support third.

Interview Summary PT_02

The interviewee founded a Portuguese padel media platform in 2023, operating across Instagram, a print and online magazine, and communication services for clubs and the Federation. The respondent described padel's expansion in Portugal as having started slowly around 2012 before accelerating dramatically after the pandemic, identifying COVID-19 as the decisive turning point that translated latent interest into mass participation. By the time of the interview, the Federation counted between 15,000 and 16,000 licensed players, with an estimated 300,000 to 350,000 social players, around 400 clubs, and roughly 3,000 courts spread across the country.

The interviewee gave particular weight to the role of the Portuguese Padel Federation, which established a weekly tournament circuit with prize money already in 2017 and 2018, later evolving into a tiered structure where social players competed alongside professionals. International results, particularly those of Ana Catarina Nogueira and later national team medals, were highlighted as reinforcing signals. Commercialization was identified as the weakest link, with sponsorship attraction remaining a persistent challenge and brand investment heavily concentrated on professional players rather than clubs or media. In ranking ecosystem components, the respondent placed organized competition first, the social environment second, and infrastructure third.

Interview Summary PT_03

The interviewee founded an international padel content and editorial brand focused on women's padel, holding the Portuguese national veterans 55+ title and operating as both player and analyst. The respondent described padel in Portugal as having reached a phase of accelerated maturity, with infrastructure expanding in step with demand and the average level of play progressing rapidly. Women's padel was identified as structurally lagging behind men's in licenses, time slots, and visibility, which had motivated the brand's creation.

Three turning points were highlighted: the COVID-19 period, which suited an outdoor small-group format and converted many tennis players permanently; the emergence of inspirational

figures such as Sofia Araújo, whose international results created a ripple effect among young female players; and the arrival of sponsors, which professionalized the entire ecosystem. Word-of-mouth diffusion across social classes and generations was identified as the most powerful and underestimated growth driver. Coach training was described as a major early bottleneck, initially dependent on Spanish imports before federation certification programming reduced this dependency. In ranking ecosystem components, the respondent placed accessible infrastructure first, community and post-match culture second, training quality third, visibility and role models fourth, and clear governance fifth.

Interview Summary PT_04

The interviewee served as Vice President of the Portuguese Padel Federation, responsible for competitions and club and player relations. From this institutional vantage point, the respondent described Portuguese padel as still growing rapidly, having expanded from seven clubs and around eleven courts in 2012 to more than 300 clubs, over 2,000 courts, and roughly 300,000 players. The Federation's resources were described as never having fully kept pace with this growth, creating persistent operational strain.

The interviewee emphasized that the Federation had played a foundational role from the outset by promoting visible figures and structuring competition. A central turning point was the strategic pivot four years earlier toward youth investment, which had since produced academies serving hundreds of children and a substantially enlarged talent pool. The pandemic was identified as a second decisive accelerator, doubling the number of clubs and extending padel into inland regions. Coach training was identified as one of the toughest early challenges, addressed through a Federation-run program producing roughly 300 new coaches annually. Logistical scale remained the hardest capability to build, given the direct relationship between the Federation and over 300 clubs and 17,000 athletes. In ranking ecosystem components, the respondent placed the sport's accessibility first, community second, and infrastructure third.

Interview Summary PT_05

The interviewee served as Country Manager Portugal for the dominant racket-sports booking platform, having joined through the acquisition of a Portuguese platform that had previously held roughly 92 percent of the local padel market. From this vantage point, the respondent described Portugal as a consolidated market that was still growing on both the supply and demand sides, with off-peak hours consistently filled as a reliable indicator of unmet demand.

Three turning points were highlighted. The first was the introduction of online booking, which replaced phone-based reservation systems and transformed market accessibility. The second was broader digitalization, accelerated by the pandemic as players became more comfortable with self-service technology. The third was the recognition by external investors that padel clubs were commercially viable, which unlocked significant capital inflows. The respondent described the Portuguese foundation as deliberately built on academies, professional coaching standards, and youth pipelines, which had produced strong senior and junior national teams. Clubs were described as increasingly investing in lifestyle services beyond court rental, including gyms, physiotherapy, and food and beverage offerings. Permit processes were identified as the principal infrastructural barrier. Software competition was framed as both an accelerator and a source of fragmentation in user experience.

Interview Summary PT_06

The interviewee owned and operated a padel club in Portugal, with responsibility spanning court usage, pricing, coaching, events, partnerships, and longer-term investment decisions. From this operational vantage point, the respondent described Portuguese padel as already well established and embedded in everyday sporting and social life, with a more complete surrounding ecosystem of clubs, coaches, tournaments, brands, and digital platforms. The market was described as increasingly competitive, requiring greater professionalization than in earlier phases.

Three turning points were highlighted: padel's transition from niche to mainstream leisure activity, the proliferation of private clubs that scaled visibility and availability, and the social spread of padel through lifestyle networks, which made growth self-reinforcing. Climate, rising demand, and private investment were identified as the principal infrastructural enablers, while land availability, permits, and financing remained the main constraints, particularly in major cities. Coaching capacity was described as having improved substantially but lagging behind court construction, with formal pathways and consistency in quality having been the hardest to develop. Portugal's lead over Germany was attributed to favorable climate, cultural fit with Portuguese leisure habits, the role of private clubs in rapid expansion, and high recreational accessibility. In ranking ecosystem components, the respondent placed accessibility first, club and community structure second, entrepreneurial investment third, human capital fourth, and visibility fifth.