# **Entrepreneurial Analysis of Novel Shoe Product**

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#### **Abstract**

Sports Engineering, Inc. (SEI) has been developing technologies focused on preventing and reducing the severity of lower body sports injuries, specifically related to Anterior Cruciate Ligament (ACL) tears. The primary focus of this report is to analyze the project from an entrepreneurial perspective, analyzing the viability of the product in the marketplace through analysis of current products on the market, costs if development and production, distribution methods, product launch strategies, and marketing strategies, and the product's life cycle (PLC). Each of these elements are analyzed to provide recommendations for a product launch strategy for SEI as the company prepares to bring their technologies to the marketplace.

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#### 1 Introduction

SEI has developed an innovative system to be used in athletic footwear that has the potential to revolutionize injury prevention in sports. The patented design allows for the effective management of horizontal and vertical forces and rotation, which are key factors in many sports-related injuries. As SEI prepares to bring this technology to market, it is crucial to analyze the project from an entrepreneurial perspective to ensure the successful launch of the product and long-term viability. This report aims to provide SEI with valuable insights and recommendations for introducing their technology into the marketplace on an industrial scale by analyzing different conventional methods to deploy the product to the market along with marketing strategies.

### 2 Background

#### 2.1 ACL Injuries

Soccer is a popular sport enjoyed by millions of people worldwide, but it also carries a significant risk of injury to the ACL. Injuries to this are among the most common and severe injuries sustained by soccer players, with incidence rates ranging from 0.06 to 3.7 per 1000 hours of exposure, depending on factors such as level of play and gender (Walden et al., 2010; Montalvo et al., 2019). These injuries can lead to substantial time lost from sports participation and significant healthcare costs, with the annual cost of ACL injuries in the United States alone estimated to be around \$2 billion (Mather et al., 2013).

Research has shown that female soccer players are at a much higher risk of ACL injuries compared to their male counterparts. Studies suggest that women are 2-8 times more likely to sustain an ACL injury than men playing the same sport (Arendt et al., 1999; Agel et al., 2005; Mancino et al., 2024). This gender disparity has been attributed to various other factors, including differences in neuromuscular control, hormonal influences, and anatomical characteristics (Hewett et al., 2005; Alentorn-Geli et al., 2009).

Most ACL injuries in soccer occur during non-contact situations, such as landing from a jump, sudden deceleration, or changing direction rapidly. Approximately 70-84% of ACL injuries in soccer are non-contact in nature (Boden et al., 2000; Dai et al., 2014). This highlights the importance of developing effective prevention strategies that target neuromuscular control, balance, and proper landing techniques. Implementing such prevention programs has been shown to reduce the incidence of ACL injuries in soccer players by 50-80% (Hewett et al., 2005).

#### **ACL INJURY**

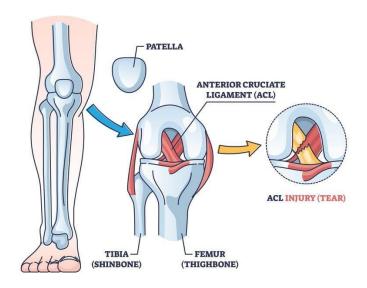


Figure 1: Visualization of an intact and torn ACL in the body (ACL Injury, 2024).

Depending on factors such as the severity and frequency of ACL injury, the prognosis for patients sustaining this type of injury can vary. In the short term, ACL injuries can cause significant pain, swelling, and reduced mobility which often requires a period of rest and rehabilitation. Many cases of ACL injury recovery involve surgical procedures to graft the split ligament back together, especially complete ACL tears. Typically, the timeline to a full recovery is 6-12 months (Ardern et al., 2011). However, even with successful surgical intervention and rehabilitation, many athletes fail to return to their pre-injury performance (Ardern et al., 2014). In the long term, people with a history of ACL injury are at an increased risk of developing

early-onset osteoarthritis, which studies showing a prevalence of osteoarthritis ranging from 10-90% at 10-20 years post-injury (Lohmander et al., 2007; Ajuied et al., 2014). This increased risk of osteoarthritis can lead to chronic pain, reduced function, and decreased quality of life. As such, the long-term medical outlook for individuals with ACL injuries highlights the importance of developing effective prevention strategies and optimizing treatment approaches to minimize the risk of future complications.

Age- and Sex-Specific Annual Incidence of Anterior Cruciate Ligament Injury, 1990-2010

	No. of Cases			Incidence Rate (per 100,000 person-years)		
	Female	Male	Total	Female	Male	Total
Age group						
≤13	3	8	11	1.1	2.9	2.0
14-18	203	190	393	227.6	203.0	215.0
19-25	132	267	399	113.2	241.0	175.4
26-35	172	349	521	81.1	166.1	123.4
36-45	142	205	347	69.4	101.7	85.4
$\geq$ 46	93	77	170	20.7	20.0	20.4
Total (95% CI)	745	1096	1841	55.6 (51.7-59.8)	85.44 (80.5-90.7)	70.2 (67.1-73.5)
Total (95% CI)	745	1096	1841	$55.3 (51.3-59.2)^a$	$81.7 (76.8-86.6)^a$	68.6 (65.4-71.8)

<sup>&</sup>lt;sup>a</sup>Age-adjusted to 2010 US population.

Figure 2: The age group from 14-25 across both sexes accounts for 43% of ACL injuries for this study (Sanders et al., 2016).

#### 2.2 Existing Patents

In 2013 Dr. Jonathan A. Blum filed a patent application for a special shoe insert designed to adequately support an athlete's foot movements during play, especially at the heel, inner, and outer sole of the foot (Blum). More recently, Professor Christopher Brown of Worcester Polytechnic Institute (located in Worcester, Massachusetts) has filed several patents in conjunction with others related to novel dampening technologies to be applied to athletic footwear. The first of these patents, granted in 2017 by the US Patent and Trademark Office (USPTO), describes a shoe sole using an air spring and specialized teeth in the sole interacting with the main shoe body to absorb shear forces that would otherwise be experienced by the athlete in the knee joint (C. Brown et al., 2017). His patent granted in 2021 expands on this initial design, introducing unique leaf springs throughout the shoe sole to further absorb shear forces in addition to the teeth and air spring system (C. A. Brown et al., 2021). His patents granted in 2022 and 2023 build off of these designs, further improving them and using different methods to achieve the improved results (C. A. Brown et al., 2022, 2023).

<sup>&</sup>lt;sup>b</sup>Age- and sex-adjusted to 2010 US population.

Rather than continuing to explore methods to absorb horizontal loads, Brown filed a patent application in Q3 2019 for a design to absorb vertical loads in footwear, using a novel non-linear air spring system in the heel of the shoe (C. A. Brown et al., 2024). Non-linear springs have the property of having a load curve that does not follow a linear pattern, such that the rate of force applied by the spring is not proportional to the rate at which it is compressed. In laymen's terms, a spring compressed by unit x will exhibit a force A, whereas when that same spring is compressed by unit 2x will exhibit a force 5A rather than 2A. On the same day this was filed, another was filed exploring another design to absorb horizontal loads in athletic footwear, this time integrating the dampers in the spikes of cleats rather than embedded into the inner sole of the shoe (C. A. Brown, 2024).

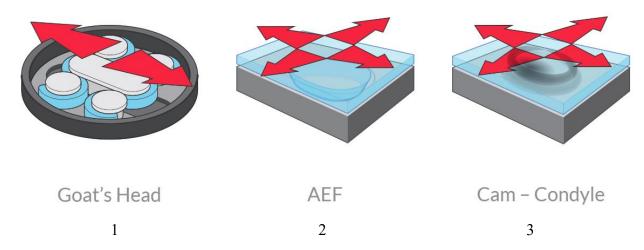


Figure 3: SEI's suite of load management technologies, each with their own patent (Sports Engineering, Inc., n.d.-b).

The Goat's Head (Figure 3-1), first filed for a patent in 2017 (US 10,888,138 B2), uses an array of leaf springs to mitigate horizontal loads in the ACL primarily by absorbing the energy into the springs upon sudden changes in position of the shoe (C. A. Brown et al., 2021). A later iteration of the Goat's Head (US 11,622,596 B2) combined several "spring packs" coupled with larger non-linear springs dedicated to front-to-back loads only (C. A. Brown et al., 2023). The AEF design (Figure 3-2) uses multiple isolated discs with protrusions for the studs on the cleat interacting with the sole of the shoe acting as the spring to dampen the load rather than dedicated leaf springs (C. A. Brown, 2024). The patent (US 11,877,625 B2) details how the multi-layered shoe sole interacts with the studs to provide a non-linear damping force, which

works in all directions evenly rather than being most effective at damping loads in-line with dedicated leaf springs. The Cam-Condyle system (Figure 3-3) works more similarly to the AEF system, but instead the upper geometry of the isolated studs is rounded off rather than being flat, providing more uniform damping characteristics in 3-dimensions rather than strictly along the horizontal plane.

#### 2.3 Device/Product Overview

The suite of technologies SEI has spearheaded have been in development for the past decade, with the first patent being filed on April 11, 2013 (C. Brown et al., 2017). At its core, each device is a modified shoe sole intended for use in athletic footwear to reduce the likelihood of ACL injuries. This is accomplished using non-linear springs incorporated into the shoe sole, acting to absorb and dampen any sudden vertical and lateral loads so that they are not absorbed by the athlete, theoretically preventing, and reducing the likelihood of injury.



Figure 4: SEI marketing graphic for the force distribution throughout the Split Sole<sup>TM</sup> Shoe System (Sports Engineering, Inc., n.d.-a).

The latest patents granted for the design use round inserts, directly connected to the spiked ends of the cleats, suspended in the shoe sole. These elements contact the specialized material which acts as a non-linear spring when the footwear is in use. So, when making sudden stops or turns, the suspended elements will move freely and apply the force of the insert to the sole of the shoe, dampening the force of the movement before it is translated to the wearer. It is important to note that this setup is most effective in the horizontal plane, with other systems better suited for vertical load management.

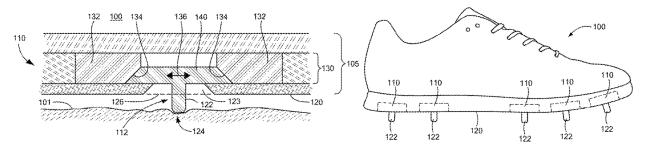


Figure 5: Patent drawing describing how the lateral dampening system looks (C. A. Brown, 2024).

#### 2.4 Potential Markets

Given the nature of the product, it would be most beneficial if it is employed in situations where lower body injuries are likely and/or common due to non-contact, high loading scenarios. The technology must be able to fit into the footwear associated with the sport in question without excessive bulkiness or size differences with current footwear options on the market. The following markets were evaluated for their viability for the Split Sole<sup>TM</sup> technology to be employed in:

- Ballet
- CrossFit
- Helmets
- Hockey
- Soccer
- Skateboarding
- Track & Field
- Wrestling

In an analysis of these markets, it was concluded that soccer was the most viable option to enter the market given the high rate of lower extremity injuries, high global participation rate, and optimal size constraints in existing footwear options (Clemente et al., 2022).

#### 2.5 Product Deployment Strategies

When bringing a new product to the market, especially as a smaller company with limited initial resources, it is critical to be deliberate in each decision in the process while considering several different deployment strategies to maximize the chances of success for the product. One strategy to use is to conduct beta testing with a select group of users before a full-scale launch, gathering feedback, identifying issues, and making necessary improvements to refine the product and ensure a better user experience. This may be a viable option to consider for SEI's Split Sole<sup>TM</sup> technology to an extent, depending on how SEI ultimately approaches the marketing and styling of the product. This would require a small-batch production of Split Sole<sup>TM</sup> and likely either direct supervision of extensive human trials or other experiments to validate the designs' performance. Conducting such tests may expose issues with either the new technology itself or its integration with current sportswear. Another common approach is to launch a minimum viable product (MVP), a basic version of the product with core features to test market demand and gather user feedback while minimizing development costs. This may look like modifying an existing shoe directly and surveying a target audience (for example, male soccer players aged 16-22) for interest in such a product or what the target audience values in sportswear. This would provide valuable insight into how to market the product most effectively, emphasizing the factors a target audience considers most when shopping for sportswear.

Targeting a specific audience or market segment and focusing on launching the product to that group first can allow for more targeted marketing efforts and help build a loyal user base. This may be like how GORE-TEX (expanded polytetrafluoroethylene, or ePTFE for short) first started in the construction and cabling markets, making plumber's tape and miniaturized coaxial cable. It was only later that the material began to be used in the textiles industry, today being used in everything from jackets to spacesuits (Weigl, 2022). Similarly, Split Sole<sup>TM</sup> may be best introduced to the market targeting a specific market segment (like soccer cleats) rather than attempting to launch the product in a much wider market (such as generic cleats across several sports categories), failing to capture the nuanced priorities consumers of different markets may have. Collaborating with influencers to promote the product can also help reach a wider audience and build trust and credibility for the brand, especially when the influencers are especially popular with media outlets and the public. If SEI decides to use celebrity status to break into a particular market, it may garner the publicity SEI needs to get a foothold in the industry. This is true for specific individuals (e.g., Lionel Messi) and brands alike (e.g., Nike).

Team and brand loyalty are powerful tools that can be leveraged effectively to craft an image of a product or a brand, which is more powerful than any one message about a product or brand.

Building anticipation and excitement for the product before the official launch through social media teasers, blog posts, email newsletters, or press releases can create a sense of excitement and encourage early adopters. This may be coupled with celebrity or other brand endorsements to compound the impact of this strategy. Attending trade shows may garner attention from others in the industry, potentially sparking a partnership or generating word-of-mouth advertising in the professional community.

Launching the product in phases, starting with a specific geographic location or user group before expanding to a wider audience, enables better control over the launch process and allows the company to address any issues before a full-scale deployment. For example, approaching a collegiate soccer team (varsity or intermural) may be a good option to observe how consumers feel about the product in use. One of WPI's soccer teams may be an excellent option for this, considering the relationship Professor Brown has with the university. Finally, providing robust customer support and regularly updating the product based on user feedback and market demands helps maintain user satisfaction and encourages long-term adoption. The extent of this may be gathering data from customer experience surveys, however it is critical to have an accurate gauge of how the market responds to the product to make more informed decisions as the product's life cycle progresses.

In terms of using partnerships with other, more well-established companies in the target market, there is potential to launch the Split Sole<sup>TM</sup> system in existing products in conjunction with these companies. As an example, SEI may consider partnering with New Balance or Nike, either licensing or selling the technology so these companies can handle the distribution and manufacturing. This may be a more viable option since the initial manufacturing costs are some of the most expensive when considering the launch of a new product. This would be the most hands-off strategy to use, since the bulk of the work would be handled by the partnering company rather than SEI, which would otherwise require more capital to deliver the first production model of the standalone product.

## 3 Analysis

#### 3.1 Cost Analysis

To remain competitive in the sportswear industry, SEI must either price their products similarly to existing sportswear or convince the market that any price discrepancy is proportional to the value added by their technology. So, either the manufacturer must take on the additional costs to create a product using Split Sole<sup>TM</sup> or pass the cost directly to the consumer, increasing the price of the product (assuming similar profit margins). Observing the current prices of soccer cleats as an introductory market for SEI, there is already an established range of prices that consumers are willing to pay for soccer cleats. The reported average price of soccer cleats designed for firm ground is relatively high, likely in part a biproduct of increased demand for firm ground cleats. With firm ground-style soccer cleats dominating the market at 54% of the market share, it is clear that this may be a viable option to focus SEI's efforts on (Malhotra, 2023). As this is already a well-established industry, the compound annual growth rate (CAGR) cannot be expected to be as high as a blooming startup company, however it still is anticipated to grow at a rate of 5.4% which indicates a solid, steady growth for the soccer shoe industry (Malhotra, 2023).

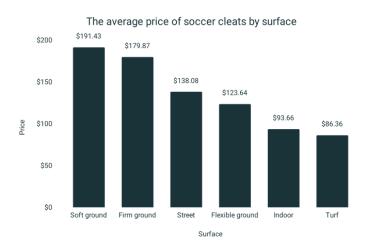


Figure 6: The reported averages of soccer cleat price for playing surfaces ranges from about \$85 to \$200 (McLoughlin, 2021).

#### Global football shoe market share by type

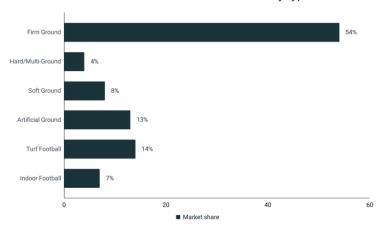


Figure 7: Global soccer shoe market by type (Malhotra, 2023).

Looking at the market share of different brands in the soccer footwear industry, it is clear that Nike and Adidas dominate the segment, accounting for 86.2% of the reported total market (Malhotra, 2023). Interestingly, both of these brands have a similar average price for their soccer cleats, with Nike having an average price of \$157.21 and Adidas with \$146.35 (McLoughlin, 2021). Keeping in mind the range of average prices by both brand and type, a conservative target price for shoes with the Split Sole<sup>TM</sup> technology would be anywhere from approximately \$130 to \$190, with approximately a 10% buffer from the lowest average price (\$146.35) and the highest average price (\$179.87), assuming SEI targets maintaining similar prices for their products as existing products.

Brand	Price (\$)
Under Armour	223.33
New Balance	163.89
Nike	157.21
Umbro	146.67
Adidas	146.35
PUMA	134.21
Diadora	95.00
Joma	80.00
Mizuno	60.00

Table 1: Reported average prices of soccer cleats by brand (McLoughlin, 2021).

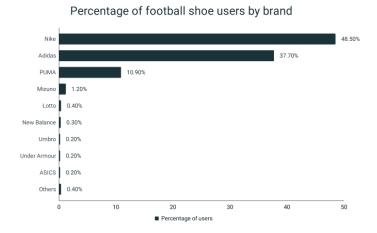


Figure 8: Percentage of soccer shoe users by brand (Malhotra, 2023).

Depending on the targeted final point of sale (retail or wholesale), the pricing for the product may vary drastically as well. The above figures are based on retail prices, which may have markups as high as about 50%, with shoe manufacturers such as Nike only profiting about \$4.50 for a \$100 shoe (Shoelander23, 2014). This does not leave much room for additional costs, such as incorporating Split Sole<sup>TM</sup> into an existing design without raising prices or decreasing retail markups, which would require negotiation with retailers who are the direct customers of manufacturers' products. If SEI opts to handle manufacturing and distribution alone, the increased costs incurred by the company due to the relatively small operating scale compared to giants such as Nike may price them out of the market if arguments to justify increased prices are not effective.

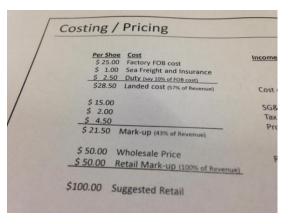


Figure 9: Cost breakdown of a \$100 Nike sneaker, provided by Matthew Kish of the Portland Business Journal (Shoelander23, 2014).

#### 3.2 Marketing & Advertising Strategies

When it comes to choosing a marketing strategy, it is important to have a firm grasp of what the target audience values and target any advertising efforts to appeal to those elements. Given the significantly high participation rates in athletes aged from high school to college and the corresponding ACL injury rates for this demographic, a target audience of soccer athletes aged from 14 to 25 may be an ideal audience to cater SEI's product to. However, of athletes surveyed in a recent study evaluating athletes' priorities when purchasing athletic wear, the number one factor was comfort followed by durability and price (Clemente et al., 2022). Interestingly, this study found that safety was one of the lowest-ranked factors for those surveyed, of which about 64% of those surveyed were between the ages of 18 and 24, a considerable proportion of the proposed target audience (Clemente et al., 2022). At a first glance, one may assume that Split Sole should be marketed heavily as a safety product, whereas this survey suggests that may not be the most effective strategy to use.

Rank these attributes by importance in your decision making process for purchasing your footwear from most to least important.

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Brand	1.00	8.00	4.36	1.86	3.47	180	784.00
Comfort	1.00	5.00	1.62	0.86	0.75	180	291.00
Durability	1.00	6.00	3.22	1.36	1.85	180	580.00
Price	1.00	8.00	3.69	1.47	2.16	180	665.00
Safety	1.00	8.00	4.99	1.73	3.00	180	898.00
Social Consciousness	1.00	8.00	6.32	1.39	1.93	180	1138.00
Style	1.00	8.00	4.17	1.90	3.62	180	750.00
Other	1.00	8.00	7.63	1.06	1.12	180	1374.00

Figure 10: Survey results ranking priorities for athletes when purchasing sportswear (Clemente et al., 2022).

The same survey reported that the survey respondents valued brand over safety, suggesting that any marketing strategy should lean into the respondent's brand loyalty rather than pitch the product as strictly a safety item. Given the dominance Nike has in the market segment and the respondent's preference for brand, it is likely that the survey respondents prefer Nike sportswear over other considerations such as safety features a product may boast. The safety features may be an additional bonus; however, they are not weighed as heavily as the logo across the packaging.

These athletes likely share the same media consumption platforms of others around their age, so using advertising channels such as social media, short-form video platforms (like TikTok, Snapchat Discover, and YouTube Shorts), and podcasts may deliver any advertising messages more effectively than using other advertising platforms such as television and conventional radio ads. Methods such as word-of-mouth may be effective to an extent, however it usually requires that the product is already established in the market rather than being introduced to it. The product must be communicated as being an additional benefit and safety addition with limited to no perceived detriment to style or comfort. Split Sole may have a more difficult launch if this message is not effectively communicated, given that these are some of the highest priorities for a considerable portion of the target audience.

#### 3.3 Product Life Cycle

Introducing a new product to the market requires careful consideration of the current market, existing products, and the current state of each of these products in the market. In this case, the Split Sole<sup>TM</sup> offers bolstered safety characteristics for modern sportswear, mitigating ACL injuries in athletes. To ensure the success of this product, it is essential to conduct a thorough life cycle analysis to understand the potential trajectory of the product and make informed decisions regarding its development, launch, and long-term management.

The product life cycle of the Split Sole™ is expected to follow the typical stages of introduction, growth, maturity, and decline. During the introduction stage, the focus will be on creating awareness and generating initial demand among early adopters and athletes. This stage may last for 6 to 12 months, depending on the effectiveness of marketing efforts and the reception of the product in the market. As the product gains traction, it will enter the growth stage, characterized by rapidly increasing sales and market share. This stage may span 1 to 2 years, during which SEI will need to scale up production, expand distribution channels, and invest in further product development to stay ahead of the competition. Once the Split Sole™ reaches maturity, sales growth will stabilize, and the focus will shift towards maintaining market share and profitability. This stage may last 2 to 3 years or more, depending on the product's ability to fend off competitors and retain customer loyalty. Key strategies in this stage will include product differentiation, cost optimization, and customer retention programs. Eventually,

the Split Sole<sup>TM</sup> will enter the decline stage, marked by decreasing sales and profitability. This stage may be triggered by technological obsolescence, changing customer preferences, or the emergence of superior alternatives. The company will need to decide whether to discontinue the product, reposition it for a different market segment, or invest in a new generation of the product to reignite growth. Throughout the product life cycle, the company must adapt its marketing and sales strategies to maximize success. This may involve targeted advertising, price adjustments, promotions, and partnerships with fitness influencers and brands. By continuously monitoring market trends and customer feedback, SEI can make informed decisions to prolong the growth and maturity stages while minimizing the impact of the decline stage.

Since Split Sole<sup>TM</sup> is meant to act in conjunction with existing products, it is likely not to disrupt the sports shoe industry but rather strictly increase the value of those existing products it is used in. If marketed effectively, Split Sole<sup>TM</sup> may lead to increased sales in the products that adopt it, however it is unlikely to significantly alter the demand of existing products given the primary purpose of the technology and the target audience's priorities. It is also unlikely to take market share from existing products, accelerating their decline, since the priorities of consumers do not align as well with the goals of the device as originally thought. However, the product is much more likely to enhance the sales of sports shoes, complementing existing products and adding to the value proposition they bring to consumers. It is also possible for the product to attract more customers to the market (i.e., more soccer players) if the product can prove and communicate its effectiveness to consumers. The increased safety of sports may encourage new players to try out the sport if safety concerns can be mitigated with Split Sole<sup>TM</sup>. Given that the sports footwear industry is well-established and in the maturity phase, it is unlikely that SEI's technology will cause a significant shift in the life cycles of existing sportswear it would be integrated with.

The introduction of SEI's technology into the sportswear sector may have a significant impact on the competitive landscape, pushing other companies to incorporate systems to further reduce lower body sports injury rates. Competitors may respond to the launch of Split Sole<sup>TM</sup> by emphasizing the strengths of their own products and highlighting their track record in player protection and product performance. They may also explore opportunities for collaboration with SEI to integrate Split Sole<sup>TM</sup> into their own product lines to offer a more comprehensive safety

solution to their customers. These competitors may also consider developing similar complementary products to maintain their market position after Split Sole's<sup>TM</sup> introduction to the market. However, the introduction of the product may also inspire new entrants to the market, attracted by the potential for growth in the field should initial reception of Split Sole<sup>TM</sup> be positive and fruitful. As the market evolves, the life cycle of the technology and existing safety products will be influenced by the interplay of competitive actions and customer preferences. The ability to continuously innovate, adapt to changing market conditions, and forge strategic partnerships will be crucial for sustained success in this dynamic landscape. By staying attuned to the competitive environment and proactively responding to challenges and opportunities, SEI can carve out a strong position in the market and contribute to the overall advancement of sports safety.

Based on this analysis, SEI has the potential to establish a firm position for itself with Split Sole<sup>TM</sup>, but only if effective partnerships are established and the primary marketing strategy is effective. In the long term, the technology has a unique position as a complementary device, enabling it to inject itself into the general market while enjoying the benefits of an established and mature athletic footwear market. As Split Sole<sup>TM</sup> progresses through its lifecycle, it is crucial to adapt strategies to maximize its potential and mitigate any challenges that may arise. To extend the growth stage and delay the onset of maturity, the company should focus on continuous innovation and product enhancements. Engaging with key stakeholders, such as sports organizations, coaches, and athletes, can help drive adoption and build brand loyalty. As Split Sole<sup>TM</sup> reaches maturity, the company should prioritize customer retention and market penetration. In the eventual decline stage, the company should focus on optimizing profitability and exploring new growth opportunities. This may involve streamlining operations, reducing costs, and phasing out less profitable product variations. Simultaneously, the company should invest in research and development to identify new product ideas or market trends that can drive future growth and innovation. Developing a comprehensive go-to-market strategy, establishing efficient supply chain processes, and creating compelling marketing campaigns will be critical for effectively launching and sustaining the product in the market.

#### 4 Conclusion

After extensive review of SEI as a company, its products and promise, existing patents, and market conditions, one can propose a product launch strategy to maximize product success. The technology SEI is looking to launch promises an increase in safety by reducing ACL injuries in athletes, which will be a key point to mention in any marketing efforts made for the product. However, despite this being the primary objective of Split Sole<sup>TM</sup>, consumers in the proposed target audience, male and female soccer athletes aged 14-25 playing on standard soccer fields (firm ground), do not value safety nearly as highly as other factors such as comfort and brand loyalty. An effective strategy may be to partner with a popular sports company such as Nike through either a licensing deal or selling the intellectual property directly with a royalty, depending on how much direct involvement SEI's executives would like to maintain with the product launch. Existing brands price their soccer cleats in the range of \$130-\$190, suggesting that SEI should develop their products to either be ultimately sold within this price range or develop arguments for any increased value added by the technology. SEI has a great potential to establish itself as a source of innovative sportswear safety solutions, however its success in the market will depend largely on the partnerships the company forms and marketing efforts to drive consumers to consider Split Sole<sup>TM</sup> in their athletic footwear purchases.

#### 5 References

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