# The Athletic and Outdoor Industry Cluster

# A White Paper

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# The Athletic and Outdoor Industry Cluster

## Executive Summary

The athletic and outdoor cluster—firms that design, develop, manufacture, market, distribute and sell apparel, footwear and gear for active outdoor recreation—is a signature cluster for Portland and Oregon.

This cluster consists of more than 300 firms with a payroll, and employs more than 14,000 Oregonians, at an average wage of more than $80,000 annually.  In addition the cluster includes about 3,200 self-employed individuals with sales of $100 million annually.

Oregon has the nation's foremost concentration of athletic and outdoor companies.  The Portland metropolitan area has the highest location quotients for footwear distribution and footwear manufacturing of any large U.S. metropolitan area.  Oregon  receives more patents for footwear than any other state.  The region's key domestic rivals include Los Angeles and New York for apparel and Boston for footwear.

Portland's athletic and outdoor cluster is the quintessential knowledge-based industry. Firms here specialize in the creative and knowledge-intensive aspects of design and management of athletic and outdoor.  Other functions of the industry—mass manufacturing, distribution, and final sales—chiefly occur in other locations:  most products are manufactured in Asia, and a majority of the sales of the largest firms are to customers outside the United States.  But Portland is the epicenter for designing and marketing these products and managing the global enterprise.

The critical ingredient in the growth and success of the industry is the local talent base. Portland and Oregon have an exceptionally strong concentration of individuals with a combination of the creative and design skills and business acumen needed to succeed in the industry.  This human capital agglomeration benefits from, and contributes to a virtuous cycle that attracts and develops still more talented workers.

The essential characteristics of the cluster—active living and outdoor recreation—are a reflection of the values and interests of Oregonians.  A key part of the cluster's competitive advantage stems from the environment that Oregon provides to the people in this industry to live and work in what some in the industry call the "hybrid lifestyle." The region's great environment, abundant recreational opportunities, and widespread sustainability ethic attracts and helps root here the kinds of workers who help the industry to flourish.

Nike, Columbia and Adidas are the pillars and foundation firms of this cluster. The cluster had its antecedents in pioneering firms like Pendleton and Jantzen. The emergence of Nike in the 1970s helped catalyze the formation of the cluster in Oregon. The tension between fierce market competition among corporations and frequent movement of workers among firms has helped propel the cluster's growth over time.

Nike played a decisive role in defining the athletic and outdoor cluster and anchoring it in Portland. Nike s defined a business model, brought thousands of talented workers to Oregon, and connected Portland to the globe. And while Nike is still vitally important, the cluster is now much bigger than one firm.

Increasingly, the growth of the cluster is fueled by entrepreneurship. People who have learned the skills of the trade here are, in increasing numbers starting their own businesses. The technology and networks are such that very small firms can now employ the global sourcing, global marketing business model, with high value creative and managerial functions centered in Oregon.

Athletic and outdoor in Portland functions as what some scholars describe as an alpha cluster. Alpha clusters are found in a few large cities, and include industries like fashion, music, art, and media. An alpha cluster is characterized by continuous innovation, high wages, strong geographic concentrations, and strong connections to the culture and quality of life in particular communities. Athletic and outdoor in Oregon has all these characteristics. In addition, athletic and outdoor is a linchpin of the Portland area's alpha clusters, with important connections to design, media and communication, and culturally to a distinctive local lifestyle and other clusters in music, art and food.

As it stands the athletic and outdoor cluster is an asset and an opportunity. Based on discussions with industry leaders of large and small firms, the following opportunities were identified to further the growth of firms and jobs in the cluster and to strengthen Portland and Oregon's position as the athletic and outdoor center of the world. To capitalize on these opportunities, with the industry's leadership and initiative, the City, State and other partners should address these recommendations:

- Acknowledge and promote the region's leadership position as the world's premiere athletic and outdoor industry cluster.
- Promote networking of firms and professionals in the athletic and outdoor cluster.
- Execute the materials resource library business plan, through the newly established Portland Center of Design & Innovation.
- Nurture entrepreneurship and startup activity by improving access/availability of working capital programs, mentorship and networking.
- Expand industry specific education to prepare more Oregonians to compete for jobs in this globally competitive industry.
- Look for opportunities to "on-shore" manufacturing.
- Address key state and local policies on taxes and education funding.
- Develop cross cluster connections to the region's other "alpha clusters

- Expand the public sector economic development tools to address the challenges of a globalized, knowledge-driven sector of the economy.

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## White Paper

Portland’s athletic and outdoor cluster is a group of innovative, world-class firms that design, market, manufacture and distribute footwear, apparel and related gear for sports, recreation and active lifestyles.  It is anchored by Nike, the global leader in this field, Adidas’ North American headquarters and Columbia Sportswear.  In addition, the industry cluster includes hundreds of smaller firms that develop and market their own products, and provide a wide range of specialized services to other firms in the cluster. The competitiveness of the cluster is tightly bound up in the skills, interests, and values of its workers, and the strong interconnections with the local tendencies for active living, sustainability, and innovation.

Statewide, the athletic and outdoor industry directly employs more than 14,000 workers and includes more than 700 firms with a payroll.  Total statewide payroll in 2008 was more nearly $1.2 billion.  Average wages in this industry are more than $80,000 annually, about 70 percent higher than the statewide average for all workers.  (Average wage levels are skewed by very high wages in a few large firms; not all firms pay average wages of this level).  In addition, we estimate that there are as many as 3,200 self-employed persons with sales revenues of more than $100 million  working directly in the athletic and outdoor cluster or in closely related occupations like specialized design services. These statistics record only employment in “core” athletic and outdoor industries; the cluster also generates impact through its purchases from other industry sectors, especially creative and professional services.

Portland is a major center for the athletic and outdoor industry cluster.  Portland has the highest concentration of athletic and outdoor firms of any of the nation’s 50 largest metropolitan areas; the region has the highest location quotient for footwear wholesaling of any large metropolitan area and the second highest location quotient for footwear manufacturing.    Its athletic and outdoor firms account for the single largest share of footwear-related patents in the United States.  The region has the second highest level of self-employment specialization in athletic and outdoor related industries of any large U.S. metropolitan areas—behind only San Francisco.

Athletic and outdoor encompasses a diverse array of products, including footwear, apparel, and gear.   Most of the products are intended for outdoor, recreational and casual use, and generally embody a combination of performance and styling.  The core of the industry is footwear and apparel businesses that sell athletic shoes, hiking boots, shirts, coats, shorts and all manner of garments.  The gear or active “ware” component of the business encompasses firms that make everything from bikes and bike racks, to knives and tools, to sporting goods like snowboards, baseball bats and exercise equipment. Offshoots of the athletic and outdoor cluster include fashion apparel and companies that serve crossover markets like gear and apparel for pets. Developing new products specialized for emerging sports and activities, or that cross boundaries and create new categories is a regular feature of the athletic and outdoor industry.

Athletic and outdoor is an alpha cluster, meaning that it is characterized by rapid innovation and product cycles, tight geographic concentrations, relatively high wages and is embedded in metropolitan regions with other alpha cluster industries, including fashion, finance, advertising and public, relations, film and video, and cultural industries (Shoales 2006). Because it integrates design, marketing and global branding, athletic and outdoor is a cluster that has a higher level of recognition than most clusters, and contributes additional creative impetus to the regional economy. Portland’s athletic and outdoor cluster fits all the characteristics of an alpha cluster: it contributes to, and feeds off of a series of other creative industries, it pays higher than average wages, and it specializes in the high value-adding functions of its industry’s value chain.

Moreover, the athletic and outdoor cluster is emblematic of a profound shift in the underlying sources of economic wealth, away from physical production towards knowledge creation. In many respects, the local cluster is exclusively about using local knowledge creation to compete at the high end of the global economy. Indeed, with minor exceptions, the region’s two largest employers neither manufacture their products here, nor do their physical products ever even move through Oregon; for the most part they are produced by workers in other nations, and sold mostly to customers who live outside North America. And these firms’ local activities focus almost exclusively on the high value, high wage tasks of design, marketing, finance and management; the low wage jobs in manufacturing, distribution, and retailing occur outside Oregon, and mostly outside the United States. Portland’s athletic and outdoor cluster is the quintessential global, knowledge-based industry; one that pays high wages to Oregonians based on their ability to create economically valuable new ideas that compete in the global economy.

Nike has played, and continues to play, a crucial role in the athletic and outdoor cluster. Nike is the number one firm globally in this industry, and is the number one athletic and outdoor employer in Portland and Oregon.

The establishment, growth and success of Nike was the seminal event in creating an athletic and outdoor industry cluster in Portland. “Phil and Bill” (Phil Knight and Bill Bowerman) created a new set of products (high performance athletic shoes) and a business model (global branding of footwear), that dramatically changed the apparel and footwear industries. Historically, there was little reason to believe that footwear firms would flourish in Portland; while the region had a few makers of outdoor related footwear (like Danner and several smaller firms making “brown boots” for logging, construction and hiking), the nation’s footwear industry was historically concentrated in New England, St. Louis and Akron, Ohio (rubber footwear).

Nike has played a key role in the growth of the athletic and outdoor industry in Portland. It is the leading and prototypical athletic and outdoor firm: it essentially defined the current version of the industry, and many of its workers have gone on to play leadership roles in other firms. Former Nike employees Rob Strasser and Peter Moore were responsible for bringing Adidas North American headquarters to Portland, and played key roles in helping update the company's organization and global strategy in the early 1990s (Smit 2008) . A significant fraction of Columbia Sportswear's principal managers previously worked at Nike. Many start-up apparel and footwear firms around the state were launched by Nike alumni and many small firms around the state y employ Nike alumni as well.

Nike is important for five key reasons. First, its scale and economic importance are key drivers for the local economy. The company and its operations have a direct economic impact on the Portland area estimated at $1.9 billion per year in 2004. Second, the company attracts skilled workers to the region, as well as developing the skills of its own workers, and many of these workers go on to work at jobs in the athletic and outdoor cluster (and elsewhere in the local economy). Third, Nike provides a business model for other firms, and its former employees have started many spin-off businesses, especially in athletic and outdoor. Fourth, Nike anchors the region's brand and credibility as a center for athletic and outdoor businesses. Fifth, Nike supports many professional and creative firms as well as self-employed individuals that serve as critical vendors/suppliers to Nike. Over time, Nike's role has changed; while it was the progenitor of the cluster in the 1970s and 1980s, today, Nike employment is less than half of the cluster total. Most of the job growth today is coming from other firms, including suppliers and vendors, and the cluster is more complex and diverse than in earlier decades.

The industry cluster is not a typical hub-and-spoke or buyer supplier cluster, as in the automobile (Detroit) or aircraft (Seattle) industries. Smaller firms in the industry are independent of larger firms, typically selling into niche markets too small (at least presently) to interest larger firms. Unlike a Boeing or a General Motors, that is a major customer for dozens or hundreds of supplier firms, other firms in the apparel cluster do not sell their wares to Nike. Athletic and outdoor is a cluster characterized by human capital concentrations, entrepreneurship and knowledge development, and is tightly connected to the emphasis on active, outdoor recreation.

In many respects, the current form of the athletic and outdoor industry is emblematic of the wider transformation to a knowledge based economy. Many early pioneering firms manufactured footwear, apparel and gear, either for local markets, or using local inputs. Danner manufactured boots and Jantzen manufactured swimwear locally, Pendleton Woolen mills manufactured a majority of their blankets and clothing in Oregon and Southwest Washington, and Columbia Sportswear made hats, vests and coats. Today, however, only a small minority of firms manufacture any significant portion of their products locally, and those that do specialize in low volume high value products. Most firms have outsourced their low value, high volume manufacturing to lower cost areas in Asia, especially China, Indonesia and Vietnam. Similarly most North American distribution activity has shifted closer to the US population center (Tennessee, Kentucky, and Indiana). The activities that remain in Portland tend to be the high value, creative core activities of design, marketing, finance, logistics and management.

The athletic and outdoor industry is characterized by competing and complementary clusters. Boston, Los Angeles, San Francisco, New York, and Boulder are all frequently mentioned as prominent cluster locations for apparel, footwear and outdoor gear in the United States. Each has different strengths and specializations than Portland's athletic and outdoor cluster as described in the chart below. Boston is a key center for footwear firms including Reebok (Adidas subsidiary) and New Balance. Los Angeles is a design center for US fashion. New York is the center for high fashion in the US. The San Francisco Bay area has many outdoor and outerwear firms. Boulder and Salt Lake-Ogden are strong in outdoor gear and apparel.

Competing Regions

| Region | Strengths | Companies |
|---|---|---|
| Los Angeles, CA | Apparel Manufacturing, Distribution | American Apparel, Patagonia |
| New York, NY | Apparel Manufacturing, Distribution | |
| Boston, MA | Footwear Distribution, Footwear Distribution | Reebok, New Balance |
| San Francisco, CA | Apparel Distribution | The North Face, Levi Strauss |
| Boulder, CO | Skiing, Outdoor Gear | Spyder Active Sports |
| Salt Lake-Ogden, UT | Skiing, Outdoor Gear | Salomon |

There are other specialist clusters. China's Pearl River Delta, just outside Hong Kong, is a major center for global footwear production. Centered on the city of Dongguan, this region has more than 3,000 footwear factories, employing 200,000 workers who produce more than one billion pair of shoes annually, and is responsible for about 50 percent of Chinese footwear exports (Chen 2005). Many are owned and managed by Korean or Taiwanese firms that were once manufacturers in their own countries.

Sustainability is of growing importance to the industry both in a narrow, technical sense (i.e. developing more environmentally friendly products and production processes) but more generally in defining the industry's core values, in stimulating product and market innovation, and cutting costs. Sustainability is important to athletic and outdoor firms both externally (to customers) and internally (to employees). Externally, a significant and growing segment of athletic and outdoor consumers are environmentally conscious (a set of values tied to many kinds of active, outdoor recreation), and are increasingly seeking products that have minimal environmental consequences. In addition, they are looking for athletic and outdoor firms to show a commitment to sustainability throughout the product life-cycle (i.e. sourcing materials from sustainable sources, minimizing the use of toxic chemicals, providing for recycling of used product). Internally, a significant number of persons working in the industry share these same values and are looking to work for firms that embody and apply sustainability as part of their business strategy. Sustainability strategies are also seen as risk-avoiding: getting ahead of the curve in developing alternative materials and processes helps insulate the company from the negative effects of higher oil prices, tougher product safety regulations, and changing consumer tastes. To some extent, embracing sustainability as part of corporate culture and strategy is helpful in attracting and retaining talented young workers. Companies also see sustainability as an issue of corporate trust, rather than a product characteristic: customers evaluate the behavior and processes of the company (whether they can trust it to be “sustainable and environmentally friendly”, to “do the right thing” and “make smarter decisions”) rather than evaluating whether specific products are more (or less sustainable than others). How to describe the corporate commitment to ethics and a philosophy is perplexing to many industry observers; sustainability is part of the equation, but is too narrow; “corporate social responsibility” is also viewed as an incomplete definition.

**Competing at the intersection of fashion and performance.** Competitive advantage in the industry derives primarily from brand, beauty and performance. Brands embody key messages and beliefs about the culture of a company and its products. Innovation in the industry is derived from better performing, more “beautiful” products and from building brand. Brands assure customers that products will be perceived by others as beautiful. Self-image and social or peer group acceptance are often central to fashion trends, and brands look to key in to these trends in developing their products.

Oregon’s physical environment and emphasis on outdoor recreation and active living are strong complementary assets for this industry. The region’s mild climate, and relatively easy access to a wide range of outdoor recreational opportunities (the Pacific Ocean, the Columbia River Gorge, the Cascades, Mt. Hood the High Desert, and the Willamette Valley), make Oregon an attractive place for people with an interest in active living. Oregon residents are far more likely to engage in most forms of outdoor recreation than other Americans. The region has many passionate early-adopters and innovative users who have pioneered different kinds of outdoor activities (from running for health in the 1960s to cyclocross and windsports today). The strength of local recreational participation sometimes plays a key role in the development of new products and new companies. Company’s customers, and perhaps more importantly, their employees, take advantage of these recreational opportunities, which can provide insights into the development of new products.

**Human capital is the key ingredient.** Portland’s role in the athletic and outdoor value chain is in developing and marketing athletic and outdoor products. The creative people who design these products and develop the brands help market them are at the center of this industry cluster. They are supported by those with the business acumen to manage the financial and logistical aspects of the industry. Large and small firms identify talent as the key competitive factor in the industry, and point to the region’s abundant supply of talented workers with experience as the region’s chief economic asset for the athletic and outdoor cluster. As Tim Boyle of Columbia Sportswear explained, the region’s large talent pool is a double edged sword – an advantage because it attracts talent and firms and a disadvantage because it attracts other firms that may hire away talented workers, and tends to bid up the price of skilled workers. But on balance, access to talent is essential to cluster success.

Firms in the athletic and outdoor industry both tap the local talent pool and hire people nationally and globally to work at their locations in Portland. Talent is important because it is essential to innovation and a source for new ways of thinking, creating new products, and further developing the brand and marketing messages that sell goods and services.

Historically, attracting talented workers to Portland has not been a problem, but some in the industry worry that a combination of high personal income taxes and deteriorating public school quality, specifically K-12, may make it harder to attract talent in the future. For senior level or "C Suite" executives there is also the concern about a lack of other executive level opportunities should the job not pan out and in some cases concern about the spouse's ability to be gainfully employed.

**Athletic and outdoor is a high wage industry.** The average wage in the state's athletic and outdoor industry in 2009 was $82,700, according to data compiled by the Oregon Employment Department. This is 79% higher than the average wage for all workers in the Oregon portion for the Portland metropolitan area ($46,233) in that same year. The industries high average is the product of both relatively high wages, and a disproportionate concentration of the workforce in high wage occupations. Some firms and some occupations pay far less than the average, but these low wage jobs are a smaller share of total cluster employment than in the rest of the economy. High wages reflect the key role that talented workers play in this industry cluster.

**Blurred boundaries.** A key aspect of Portland's athletic and outdoor industry cluster is the blurring of the boundaries between an individual's role as worker, consumer, and citizen. A significant fraction of those working in the athletic and outdoor cluster, especially the creative workers, are passionate participants in active recreation: they use their own products, and they embrace a lifestyle that emphasizes these values. Portland's physical and cultural environment provides diverse opportunities and strong support for active living and sustainability. One firm—Keen—has even coined the term "hybrid life" to describe the balance we seek to achieve in our lives between "living, working and playing". The ability to combine career with personal passions in a supportive environment is a decisive advantage for this cluster.

**Work Ethic/Pay Levels:** The pervasiveness of the hybrid lifestyle manifests itself in a pronounced schizophrenia about the region's work ethic. Employer's recognize and value the fact that their workers are committed to balancing work and outside interests, but are dismayed, as one put it, that the parking lot is empty at 5:00 on Fridays. Despite its high pay levels (especially at larger firms), of those we interviewed we learned it is not uncommon for people to take (and stay at) lower paid jobs in Oregon, because of the lifestyle that the region affords them. Many of the firms we interviewed were started and staffed by persons who had previously worked at larger firms with a higher level of compensation , and voluntarily chose to pursue other opportunities such as starting a new business, and earn less

**Frequent mergers, acquisitions, and growth**. The athletic and outdoor industry is continuing to evolve and expand. Expansion is occurring both in the scale and variety of the industry. Major brands (Nike, Adidas, and Columbia) are seeing their global markets expand as incomes rise around the world, and interest in active lifestyles grows. New entrants are identifying, developing and expanding niche markets for specific products and activities. Part of this evolution is a continuing movement of firms into, and out of the industry. New firms are started and grow; a few expand to become established players in the industry, some remain small "lifestyle" companies that support their owners and a small number of workers, some are sold to outsiders or larger firms, and some fail. Acquisition of small growing firms brings new ideas and competencies into larger firms, and recapitalizes investors and entrepreneurs. In addition, there are many serial entrepreneurs in the athletic and outdoor industry. Some brands grow and flourish for a time, but then mature, and are purchased and operated by large, multi-brand apparel or sports equipment companies (such as VF or AmerSport), which use economies of scale in procurement and distribution, rather than sales growth, to drive profitability.

**Cluster dynamics.** The athletic and outdoor cluster is continuously changing, and this is propelled by four factors. First, the large incumbent firms have seen continuing revenue and employment growth, both of their core brands, and through acquisition of related brands. Second, there has been a strong wave of startup activity and most of these startups have continued and grown. Third, some established firms have contracted or failed (often being sold to another larger firm). Even these closures can prompt dislocated workers to start their own firms, ultimately triggering further growth. And finally, the cluster has grown by the relocation or expansion of athletic and outdoor firms from other locations to Oregon i.e. Keen, Icebreaker, Keen, Yakima, Merrell, Li Ning

**Non-durable goods that require continuous innovation**. Athletic and outdoor products are mostly non-durable goods, with a lifetime measured in months or a few years. Many athletic and outdoor products have a substantial fashion component, and consumers regularly replace footwear and apparel, and to a lesser extent gear. Apparel and footwear have strong seasonal sales cycles, and regular style changes. Consequently, firms in the athletic and outdoor industry are regularly developing new products and designs to anticipate market and fashion trends. Predicting, responding to, and shaping market trends is a key driver of success in the industry. One critical element of success is speed: shortening the cycle of designing new products, and reducing the amount of time between production and delivery, can be the difference between profit and loss. Going forward, the industry needs to continually develop new products and new designs in order to be successful, and the challenge has grown greater over time with the proliferation of competitors, market niches, and product diversity

**Research and Development.** Athletic and outdoor companies are continually developing new products. While much innovation is around style, and fashion trends, there is also continual effort to improve the performance characteristics of products. Oregon based firms account for a high fraction of the patents issued for innovations in footwear manufacturing. In addition, several of the larger companies have begun to integrate more sophisticated technology into their products. Nike has developed "Nike+" a product that allows runners to capture data about their running, including distance, pace and calories burned, transmit the to a sport band or Ipod; and upload it to a personal computer; Nike has built a series of personal training and social networking tools that use the information. Adidas has developed a similar product called "miCoach."

**Part of a global value chain:** Athletic and outdoor is a globalized industry. A vast majority of apparel and footwear products are produced in Asia. Large incumbent companies like Nike and Adidas compete on a global sale, and get a majority of their revenue from outside the United States. Most small firms also sell internationally, although in general they get a majority of their revenue from sales in the United States, especially in the first few years of operation. The ability to navigate the global supply chain is an essential skill for most firms; they must learn to source product in Asia and sell product nationally and globally in order to be successful. That said, the widespread availability and reliance upon contract manufacturers in Asia means that sourcing (and manufacturing cost) are seldom a key competitive differentiator—all firms face roughly the same production costs. Differentiation has to come from product design and marketing.

**Manufacturing locally is the exception, not the rule.** A few firms in the athletic and outdoor industry manufacture their own products domestically. Nike manufactures its proprietary air soles in Oregon, in part to protect the intellectual property associated with their production. Danner boots and several custom footwear manufacturers produce higher end products domestically, either for government contracts or premium buyers looking for a "Made in the USA label." Several equipment manufacturers make all or most of their products locally, including Leatherman tool and Kialoa Paddles and local bicycle manufacturers. Some apparel firms source prototypes locally, and contract locally for finishing garments (with embroidery or screen printing). For these firms, lean manufacturing is important to be competitive with low labor cost locations in Asia.

**Competing cluster locations.** The principal competing locations include New York for high fashion apparel, Los Angeles for general apparel, and Boston for footwear and high end cycling. Other competitors in particular facets of the industry include Boulder, Colorado for outdoor gear and equipment; the San Francisco Bay area for apparel. Each of these locations has its own strengths and weaknesses. Los Angeles is a major center for apparel distribution, and has a vastly larger local manufacturing base than Portland. The garment districts in New York still have strong concentrations of designers, and distributors, as well as a wealth of suppliers and cutting and sewing contractors that are simply not found in Portland, and therefore provide a strong infrastructure for firms that want to manufacture/prototype in the US. High living and operating costs have prompted several California firms to move, including to Oregon.

**Global competitors.** All of the firms in the athletic and outdoor industry are affected by global scale competition. Nike and Adidas face U.S. based competitors like New Balance and UnderArmour, and international competitors such as Tiger, Puma, and Li-

Ning.  Small firms also face global competition.  Firms face competition from firms developing new products and new designs that may gain more favor with customers—a fact acknowledged in all of the firm's public investment disclosure statements—and also from firms that copy or counterfeit their designs.  As one industry executive ruefully acknowledged, some of his customers also turn out to be competitors, as they will often commission "store-brand" imitations of best-selling branded designs.  Cheap imitations are an annoying – and in the case of patented designs, illegal – by product of market success.  Some products can be protected legally through patents and trademarks, but in most cases, firms have to outwit copycats by continually improving their product, and maintaining a strong brand identity.

**Multi-faceted:  athletic and outdoor, gear, apparel**.  Athletic and outdoor products are highly differentiated and customized, and different firms produce different products targeted to a wide range of market niches and end-users.  Indeed, the process of growth in this industry is driven by segmentation:  firms develop products and brands that are targeted to increasingly more finely disaggregated groups of consumers.  The categories that define the industry change over time as firms define and develop new markets

**Bi-modal industry structure:**   The athletic and outdoor cluster is composed of two distinct kinds of firms:  very large firms and very small firms.  Three firms (Nike, Columbia and Adidas) have more than 500 employees, seven others (including Leatherman, LaCrosse/Danner and Pendleton) have between 100 and 500 employees, and all of the rest have fewer than 100 employees.   The large firms have a global scale (offices and operations around the world), and operate their own retail stores, in addition to distributing their products through independent retail outlets.   Smaller firms in the industry specialize in product design and marketing.  As noted, only a few firms ( custom bike frame builders, paddle makers and boutique apparel and footwear firms) manufacture their own products domestically.  In addition to firms with a payroll, we also estimate that there are about 3,200 self-employed persons working in apparel, footwear and sporting goods design, manufacturing, and distribution.

**Brand and Marketing:**  A hallmark of this industry is brand recognition and marketing. Nike and Adidas are among the most recognized brands in the world.  These companies spend more than ten percent of gross revenues on advertising, promotion, and demand creation, including endorsement and sponsorship contracts.  Together, Nike and Adidas spend more than $4 billion on these activities.  Smaller firms also develop their brands as well, although not through general consumer awareness, so much as in niche user markets.

**Rivalry and Cooperation.**  The rivalry among individuals and firms in the athletic and outdoor industry is legendary.  And while it continues in earnest on some levels—competing for market share, signing endorsement contracts, hiring employees and developing new products—our interviewees said that at the personal level and within the region there is a widespread ethic of cooperation.  The frequent movement of workers between firms in the industry means that most persons have a web of professional contacts that include many other firms.  Because of its large size and long history, Nike has alumni in a large fraction of the athletic and outdoor firms in the region. And while the large incumbent firms (Nike, Adidas and Columbia) generally confine their collaboration to a few very large scale issues (i.e. trade and tariff regulations affecting footwear and apparel imports and anti-counterfeiting initiatives), key executives at each firm acknowledge that the presence of a cluster of firms works to the benefit of all.

**Intellectual/creative rather than physical and logistical.** The core value proposition of most athletic and outdoor firms is creating and marketing new products, not producing or moving them. Almost all firms are continually developing and producing new designs and new models, emphasizing performance, style or both. Large firms get patents to protect their intellectual property; most smaller firms do not patent their designs, but continually refine and upgrade them to maintain a competitive edge. Because most firms rely on a common set of manufacturing partners – contract suppliers in Asia – there are not significant production cost differences among firms. Of Portland's three largest athletic and outdoor firms, only Columbia maintains distribution operations in Portland—Nike has centralized most of its distribution in Memphis; Adidas has its principal distribution center in South Carolina. Some smaller firms like Hanna Andersson are headquartered in Portland but do their distribution out of Kentucky. Even Columbia has a large distribution center in Kentucky. The reason that most of the large brands have distribution centers in these areas is that they are closer to the population centers i.e., the East Coast.

**Key location factors.** Athletic and outdoor firm managers assert that there is no physical reason why their businesses need to be located in Portland. Their products are generally manufactured elsewhere; their products are distributed and sold nationally or internationally. In a sense, many of them could be located anywhere. Pressed to define the reason they locate in Portland, we were consistently told: this is where our company was started and/or this is where we want to live. In addition, the ease of finding relatively skilled workers, coupled with the strength of the cultural and physical environment for those interested in active recreation were decisive advantages.

**Access to capital.** Especially working capital to finance inventories, is a constraint on the expansion of small, fast-growing firms. Most small firms are privately held, and with a handful of notable exceptions, few athletic and outdoor startups get any venture capital funding. Most firms have financed growth internally, by plowing net revenue back into the business. Because the typical firm has relatively few physical assets, and relies on contract manufacturing, working capital is the key limit on revenue growth. Firms typically have to pay Asian manufacturers in advance to produce goods, and then wait 30 to 60 days after they are shipped to retailers to receive payments. Given production lead times, shipping time, and warehouse turnover, the typical small firm has a four to six month lead time between paying manufacturers and receiving sales revenue. Firms have to have sufficient working capital to bridge this gap. Small firms rely on a combination of investor equity capital, retained earnings, and bank lines of credit to fill the gap.

There is a strong interplay between financial needs, owner objectives, and the firm life cycle. Some firms are established and run with the explicit objective of generating optimal economic returns for investors; others may represent the passion and personal interests of their owners. In the first case, firms seek as rapid a growth as possible, and are often constrained from growth by working capital limitations. Many owners prefer to retain greater control, and avoid risk by growing more slowly through internal finance. Ultimately, most firms have to identify exit strategies for their investors: going public if they are successful enough, otherwise selling the brand or the business to another firm. Owners of smaller start up firms may look to transfer ownership to younger partners as the firm grows. There are many multi-brand apparel and sports equipment companies ranging from very large firms like VF and AmerSport that have broad portfolios of brands, usually purchased from smaller firms. (VF owns Lee, Wrangler, and Lucy, etc.; AmerSports based in Finland owns Wilson, Salomon, and local firms Bonfire Snowboards and Demarini bats). Some firms get purchased by smaller companies with multiple brands, for example, former Oregon startup Nau is owned by Horny Toad of Santa Barbara

**Portland's cost structure.** In general, athletic and outdoor firms did not point to any significant operating cost differences between Portland and other locations. However, the cost of living for employees is lower than in alternative locations on the West Coast (California, and Seattle), and the region has a higher quality of life at a lower cost. Small businesses located in Bend pointed to the shipping cost disadvantage associated with their more remote location, but felt that it was at least offset by the lower cost of living.

**Tax policy.** Athletic and outdoor company managers large and small voiced their dismay with the rhetoric employed by the advocates of Measures 66 and 67 (increasing the personal and corporate tax rates in Oregon). The anti-business and "soak the rich attitudes" expressed in the campaign made them question the public support for businesses. However, none of those interviewed identified the specific bottom-line impact on their business, or said that it would affect their plans to operate in Oregon. The higher level of taxes on business activity in the City of Portland, compared to other parts of the region, was also viewed as a disadvantage by several firms.

**Suppliers.** The industry makes use of a range of supporting industries, especially professional and creative services. There are freelance designers who develop new products for firms. There are attorneys who specialize in trademarks, patents, intellectual property, organizational structure, mergers & acquisitions, fundraising, trademarks, patents and intellectual property as well as launching a new business. Advertising and public relations firms help design promotional campaigns. Human resource companies help find and place the right talent. And you also have companies that handle distribution & logistics domestically and globally.

## Recommendations

Based on our analysis of the industry's development and competitive positioning, and on the comments offered by industry observers, we offer the following recommendations for consideration by state and regional leaders interested in promoting the further development of the athletic and outdoor cluster. These recommendations reflect the comments and observations made by participants in interviews and focus groups. Selecting and implementing these recommendations is an opportunity for future collaboration among industry participants and with a range of local and state governments and other institutions.

- **Acknowledge and promote the region's leadership position as the world's premiere athletic and outdoor industry cluster.** Many in the industry feels that the region's leaders and population have only a partial understanding of the important economic role and close connections between the athletic and outdoor cluster and the regional and state economies. Because it is such a dynamic, global, and knowledge-based industry, and because it is so closely tied to the state's ethic of active recreation, athletic and outdoor ought to play a more prominent role as a symbol and example of the state's economic prowess and opportunities. Showcasing the cluster at venues like Portland International Airport and featuring it in promotional material about the Oregon economy would help Oregonians (and the rest of the world) better understand this unique industry and its connections to this place.

- **Promote networking in the industry.** Our interviews revealed a cluster of independent, often fiercely competitive firms, but along side that, a diverse array of personal social networks and small professional and discipline specific networking organizations. Unlike other industry clusters, for example, the Software Association of Oregon or the Oregon Association of Nurseries, there is no single industry-wide trade group that serves as the convenor or spokesperson for the industry. We didn't detect a strong demand for a single umbrella organization, but in its absence, more effort could be invested in supporting the array of smaller networking organizations that link the industry together.

- **Support the Portland Center for Design & Innovation (PCDI), an industry-led initiative.** PCDI Phase I is to establish a materials library including 1) a physical collection of materials and finishes that provide designers with a source of inspiration through a tactile resource/experience to help them think about materials uses in different/innovative ways; 2) an online database of information about the materials (manufacturer, production process, price, etc) with onsite and remote access; and 3) access to materials research librarians, scientists and sourcing experts. Subsequent phases will include partnerships with higher education around materials innovation and testing, educational programs, studio labs, exhibits, lecture and retail space.

- **Nurture entrepreneurship and startup activity.** A key factor in the athletic and outdoor cluster's growth has been the accelerating rate of new firm formation. While large firms get frequent attention in public discussion and the press, the region has actually spawned many local startup firms that fly below the radar of public discussion and policy attention.

- **Work to improve working capital availability.** While it is easy to start an athletic and outdoor company, it is challenging to grow one, and a key limitation on growth is the availability of capital, especially working capital to fund inventory. The industry's bi modal structure, with a few large publicly traded firms with strong access to capital markets, and many small firms with relatively limited capital, means that this is a problem chiefly for small firms. Most firms reconcile themselves to growing only as fast as their equity will let them, but many could undoubtedly grow faster if it were easier to finance working capital. The city and state should partner with financial institutions to improve information and develop new tools to facilitate working capital.

- **Expand industry specific education to prepare more Oregonians to compete for jobs in this globally competitive industry.** While there are a few pioneering educational programs to develop skills needed in athletic and outdoor firms, the state has a far more highly developed industry than it does higher education infrastructure for apparel, footwear and gear design, manufacturing and marketing. And there are no specific programs that have been developed to give creative designers the opportunity to learn the business side and what is feasible.

- **Actively pursue opportunities to "on-shore" manufacturing.** Many in the industry believe that the combination of the appreciation of Chinese currency—which will raise overseas production costs—and the growing demand for faster turnaround times for product delivery will create increasing opportunities for domestic manufacturing of athletic and outdoor and gear. Currently Oregon has a thin supplier base in some key functions, like cutting and sewing. Many smaller Oregon firms do manufacture locally, especially high value products, and report having benefited from state assistance in applying lean manufacturing concepts to improve productivity and reduce cycle time.

- **Address key state and local policies on taxes and education funding.** Our interviews with athletic and outdoor industry leaders consistently identified two key sets of public policy concerns. First, many raised concerns about the growing cost of doing business in Oregon, and in Portland, and specifically identified the anti-business rhetoric used in the campaign in favor of Measures 66 and 67. Second, many business leaders voiced concern about the quality of education, especially K-12 schooling, and worried that further deterioration of the school system would have an adverse affect on their companies, their employees, and their ability to attract and retain talented workers.

- **Develop cross cluster connections to the region's other "alpha clusters."** Industry leaders noted the strong common base of creativity and innovation shared by the athletic and outdoor industry, and other local clusters including food, music, and arts and culture. There is also the prospect of technological convergence, encouraging athletic and outdoor firms to tap into the knowledge base of the state's electronics and software businesses.

- **Expand the public sector economic development tools to address the challenges of a globalized, knowledge-driven sector of the economy**. Many of the tools available to public development agencies like the Portland Development Commission and the Oregon Business Development Department were designed for businesses with different competitive issues and cost structures than athletic and outdoor firms. For example, most firms rent, rather than own their facilities, and need capital to finance inventory, rather than buildings and equipment. The economic development tools appropriate to financing buildings and infrastructure (tax increment finance, loans secured by physical plant) are of limited use to most athletic and outdoor firms. Even training programs, like the Workforce Investment Act, are chiefly for entry level workers, of which there are few in this knowledge-based industry.

## *Sidebar: Seven Factors Influencing Clustering*

The report, Making Sense of Clusters (2006) identifies seven different sources of business or economic advantage that help drive cluster success. The athletic and outdoor cluster in Portland and Oregon exhibits all of these different characteristics.

- Labor Market Pooling
  The athletic and outdoor cluster is characterized by a strong local concentration of designers, marketing specialists, managers and others with deep knowledge of the athletic and outdoor industry. Several companies have moved to the region to tap the local talent pool
- Supplier Specialization
  Local supplier firms have developed near the industry. The most prominent is Weiden and Kennedy, which got its start as the advertising agency for Nike. A host of other consultants, independent designers and professional service firms now specialize in serving the needs of this industry.
- Knowledge Spillovers
  There are widespread spillovers of knowledge within the cluster. Knowledge about marketing trends, product development, and sourcing environmentally responsible materials circulates among firms and professionals within the region.
- Entrepreneurship
  The industry has grown over the past few years through many startup firms, most of them tracing their roots to one of the large incumbent firms in the industry.
- Path Dependence and Lock-In
  The presence and success of Nike triggered critical mass in the industry, attracting Adidas' North American headquarters, and establishing a self-reinforcing process of talent attraction. These firms all used a different business model than the

traditional apparel and footwear firms based in the US, i.e. with global sourcing, and strong performance and brand development.

- Culture
  The athletic and outdoor industry interacts closely with the outdoor recreation culture that is prominent in the Pacific Northwest. The increasingly blurred line between work and active living creates a sympathetic environment for athletic and outdoor firms and the people they employ. Growing concerns about childhood obesity, environmental awareness and global sustainability also resonate with the local population and athletic and outdoor firms.
- Local Demand
  Oregon residents were early adopters of jogging and running for exercise, and a host of other outdoor activities. This has created a fertile market, and demanding customers for a wide range of products and gear. As well as a population that is willing to try new products and provide feedback and now there is almost an expectation to have this dialogue between the firms and their customers.

# Technical Appendix:  Cluster Analysis

Portland's athletic and outdoor cluster is a group of innovative, world-class firms that designs, markets, and distributes footwear, apparel and related gear for sports, recreation and active lifestyles.  It is anchored by Nike, the global leader in this field, Adidas' North American headquarters and Columbia Sportswear.  In addition, the industry cluster includes hundreds of smaller firms that develop and market their own products, and provide a wide range of specialized services to other firms in the cluster.  The competitiveness of the cluster is tightly bound up in the skills, interests, and values of its workers, and the strong interconnections with the local tendencies for active living, sustainability, and innovation.

Statewide, the athletic and outdoor industry directly employs more than 14,000 workers and includes more than 700 firms with a payroll.  Total statewide payroll in 2008 was more nearly $1.2 billion.  Average wages in this industry are more than $80,000 annually, about 70 percent higher than the statewide average for all workers.  (These figures represent employment in eight core NAICS codes).  In addition, we estimate that there are as many as 3,200 self-employed persons with sales revenues of about $100 million annually working directly in the athletic and outdoor cluster or in closely related occupations like specialized design services.

Portland is one of a handful of leading global centers for the athletic and outdoor industry.  Oregon has a high location quotient for athletic and outdoor business:  1.67, meaning that the industry's employment is about 67% larger share of the local economy than in the typical state in the United States.  In the United States its competitors include Los Angeles (for fashion apparel), New York (high fashion and merchandising), Boston for footwear, and Boulder for outdoor gear and apparel.  Historically, the San Francisco Bay area has been a center for apparel, gear and cycling, but according to industry sources, it has been in relative decline for a decade.  In focus groups, many industry observers attributed the relative decline of the San Francisco Bay area to the high cost of living, especially housing costs.

## 1.0  Cluster Definition.

We define athletic and outdoor as firms that design, produce and market apparel, footwear and related equipment for recreational and casual use.  The industry cluster includes firms that are suppliers to these businesses, as well as related institutions.

Nike describes the industry it competes in as "the design, production, marketing and selling of sports and fitness footwear, apparel, and equipment" Nike 10K page 5, July 27, 2009.  The distinction between different aspects of the apparel industry are sometimes difficult to define, and for outsiders to fully grasp.  Industry observers told us that Portland's athletic and outdoor cluster differs from the apparel industries found in other parts of the country.  While Portland firms specialize in activewear, firms in New York firms specialize in “sportswear” and those in Los Angeles specialize in “beachwear.” One observer suggested this: “think of activewear as being apparel you might plan to sweat in.”

Operationally, we use a series of eight NAICS industry code categories to identify the core aspects of the athletic and outdoor industry cluster. It is important to note that while these categories correspond to the largest firms, and capture a majority of the jobs and economic activity directly associated with the athletic and outdoor cluster, many firms, including principal firms, suppliers, professional service providers and others are represented in other industries.

Core NAICS Codes for Athletic and Outdoor Cluster

| NAICS Code | Sector Name |
|---|---|
| 315 | Apparel Manufacturing |
| 3162 | Footwear Manufacturing |
| 33992 | Sporting and Athletic Goods Manufacturing |
| 42391 | Sporting and Recreational Goods and Supplies Merchant Wholesalers |
| 4243 | Apparel, Piece Goods and Notions Merchant Wholesalers |
| 5414 | Specialized Design Services |
| 3322 | Cutlery and Handtool Manufacturing |
| 336991 | Motorcycle, Bicycle, and Parts Manufacturing |

This is an indicative, but not an exhaustive list of NAICS codes that include athletic and outdoor companies. In employment statistics, some companies have all or a portion of their operations classified as being in other NAICS categories, including NAICS 55 (management of companies), because they are primarily headquarters offices.

The industry has several distinct market segments.

Footwear: Makers of athletic shoes and boots
Apparel: Makers of sportswear, garments, accessories, and other fashion items.
Gear: Sporting goods, knives, tools, specialized gear
Cycling: Bicycles, bicycle parts, and cycling accessories
Supporting Services: Design, legal, marketing, human resources, logistical, and other related services, professional organizations, and educational institutions.

There are additional sub-specializations and offshoots of these clusters. While most of the region’s apparel makers specialize in outdoor, recreational and sporting apparel, a number of small firms specialize in fashion apparel. Some aspects of these clusters overlap with other regional industry clusters. Knife and tool makers like Leatherman, Gerber (a subsidiary of Fiskars), Benchmade Knife, and others, are also part of the region’s metals industry cluster, and benefit from the concentration of firms and workers with specializations in metalworking in the Portland area.

### *Firms, Employment and Payroll*

In 2008, the latest full year for which such data are available, the Bureau of Labor Statistics reports that there are more than 800 firms in the athletic and outdoor industry cluster NAICS codes in our definition, and that they employed an annual average of more than $82,000 annually.  Average wages in athletic and outdoor related industries in Oregon are about 70 percent higher than in the same industries nationally.  Employment in these athletic and outdoor industries is much more concentrated in Oregon than in the typical state; the location quotient, a standard measure of relative industry concentration, shows that the athletic and outdoor industry in Oregon increased from about 10% more concentrated in the state in 2001, to more than 66 percent more concentrated in the state in 2008.  This measure of concentration is by total employment; a concentration measure based on wages would be substantially higher.

State of Oregon, Firms, Employment, Payroll and Wages for Athletic and Outdoor Firms, 2001-2008

| | | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|
| Firms | Number | 760 | 766 | 757 | 740 | 776 | 820 | 824 | 822 |
| Employment | Number | 12,629 | 12,525 | 13,221 | 13,807 | 14,190 | 14,371 | 14,026 | 14,100 |
| Payroll | Millions | 646 | 685 | 804 | 972 | 1,012 | 1,057 | 1,112 | 1,166 |
| Average Wage | Thousands | 51.1 | 54.7 | 60.8 | 70.4 | 71.3 | 73.5 | 79.3 | 82.7 |
| | | | | | | | | | |
| Avg. Wage, % of US | | 152% | 153% | 161% | 174% | 168% | 163% | 169% | 173% |
| LQ | | 1.10 | 1.21 | 1.36 | 1.48 | 1.57 | 1.60 | 1.59 | 1.66 |

Source:  Impresa analysis of Bureau of Labor Statistics data.
Athletic and outdoor definition based on eight NAICS categories.

### *Non Employer Businesses*

A large number of self-employed persons work in fields closely related to athletic and outdoor.  Non-employer businesses are a category of firms that report business revenue in a given year, but have no independent employees, i.e. all of the income of the business goes to the proprietor or proprietors of the business.  These data are tabulated by the Census Bureau from tax records.  Approximately 3,200 businesses with total receipts of more than $80 million in 2007 were categorized in one of four NAICS industries closely related to athletic and outdoor.

Athletic and Outdoor-Related Non-Employer Firms, 2007,
Portland-Vancouver MSA

| NAICS | Description | Non-Employers | Receipts |
|---|---|---|---|
| 4243 | Apparel, piece goods, and notions merchant wholesalers | 186 | 8,430 |
| 315 | Apparel manufacturing | 318 | 7,289 |

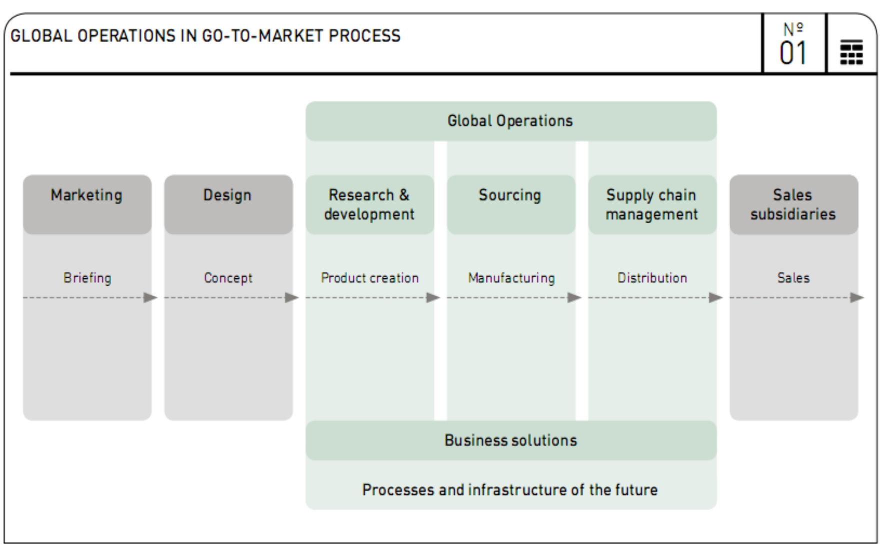
| | | | |
|---|---|---|---|
| 3162 | Footwear manufacturing | 7 | 291 |
| 5414 | Specialized design services | 2,729 | 79,344 |
| | Total | 3,240 | 95,354 |

Source: Census Non-Employer Statistics, 2007

Our cluster definition does not include several partly related industry classifications. For example, we do not include retail clothing and footwear stores, providers of outdoor and recreational services (gyms, health clubs, camping grounds, fishing guides), nor do we include employment by sports teams and recreational clubs. Our definition also does not include companies in other industries that make products that are tangentially related to outdoor recreation, like motor homes and camping trailers.

## 2.0 Athletic and Outdoor Cluster Characteristics and Value Chain

Like other industries, there is a value chain in athletic and outdoor—different tasks involved in imagining and creating the product, manufacturing it and distributing it to the end consumer. Athletic and outdoor is characterized by a global division of labor in these tasks, with different aspects of the value chain taking place in different parts of the world. While individual companies have their own definitions and name for these tasks (the Adidas description of these tasks is shown below, for the purposes of this report, we focus on four key steps in the athletic and outdoor value chain: design, manufacturing, marketing, and distribution.



Source: Adidas Annual Report, 2009, page 88

## 2.1 Design

Design consists of the creating the technical and fashion aspects of footwear, apparel and outdoor gear. Design is a key differentiator among athletic and outdoor firms. Firms develop products to meet the specific technical needs of end users and or the tastes of different consumer groups. Product design and development is usually a collaborative process integrating designers (to develop ideas) marketing (to identify customer interests), and manufacturing (to assure products can be manufactured economically.

Large companies produce hundreds of thousands of distinct products, varying by size, color, and features. Rapid and continuing changes to product designs are an important competitive factor. Because it is difficult to accurately forecast customer demand for every single product months in advance, speed and flexibility in responding to customer demand is important. Companies invest in information technology to track inventory, and quickly identify hot selling products. Insights from what is selling well also drive the development of new products. As a result, the speed with which a firm can alter its designs and get new designs to stores in volume is one source of competitive advantage. Adidas reports using fast turnaround design techniques at its Portland location to reduce the amount of time needed to produce new products.

Firms continually need to reinvest in design in order to meet fashion trends and refresh their product lineups. The pace of product turnover is relatively rapid. Adidas reports that for each of its brands, a majority of sales came from products which had been brought to market in the last 12 to 18 months (Adidas Annual Report, 2008, page 113).

Some innovations and product designs are protected by patents and trademarks. Patents are more common for footwear and for gear than for apparel. Nike has key patents for its air sole technology and Leatherman has patents for its multi-tool products.

Patents

Although much of the innovation in the athletic and outdoor industry involves designs and branding that are not covered by patents, a small but significant number of innovations are patented. Industry observers told us that for many ideas, the benefits of patenting wasn't worth the expense, and that unless a company was prepared to invest considerable resources in enforcing patents, as well as obtaining them, it wasn't worth the effort. One industry executive told us: We're better off investing in our brand, and developing our creativity. Despite the limits of patenting in the apparel industry, it does provide some rough indications of the relative concentration of innovative activity.

Five Oregon based companies rank among the most active patenters in Oregon in the five year period 2004 through 2008.

Leading Oregon Patenters, 2004-2008

| Rank | Patent Holder | Total |
| --- | --- | --- |
| 6 | Nike, Inc. | 167 |
| 23 | Leatherman Tool Group, Inc. | 29 |
| 79 | Wilson Sporting Goods Co. | 7 |
| 82 | Fiskars Brands, Inc. | 6 |
| 88 | Adidas International Marketing B.V. | 5 |

Source: U.S. Patent and Trademark Office, Impresa calculations

Patents also provide a way of measuring the relative concentration of innovative activity in an industry in different parts of the nation. The U.S. Patent and Trademark Office classifies patents according to product technology, and has a separate classification for innovations in footwear: "Patent Classifcation 36: Boots, Shoes and Leggings" By this measure, Oregon is clearly one of the strongest centers for innovation in footwear in the United States. Over past two decades, about 1,638 patents were issued for footwear. Oregon accounted for more of these patents than any other state.

Footwear Patents, by State, 1990 to 2010

| | | |
| --- | --- | --- |
| 1 | Oregon | 274 |
| 2 | California | 239 |
| 3 | Massachusetts | 182 |
| 4 | Washington | 72 |
| 5 | Florida | 54 |
| 6 | Michigan | 54 |
| 7 | North Carolina | 49 |
| 8 | New York | 48 |
| 9 | Ohio | 44 |
| 10 | Vermont | 44 |

Source: U.S. Patent and Trademark Office, Impresa calculations

## *2.2 Manufacturing*

Most athletic and outdoor gear is manufactured overseas, principally in China and other Asian newly industrializing countries. While some firms own some of the production facilities in these countries, the bulk of production is done by independently owned local production companies. The larger firms (Nike, Adidas, and Columbia) have literally hundreds of different supplier firms in Asia. Among major domestic athletic footwear producers only New Balance produces a substantial portion of its product in the United States.

Nike got its start in the 1970s selling shoes made in Japan—first those of a firm called Onitsuka (now ASICS)—and later its own designs. In the later 1970s and 1980s, outsourcing moved to Korea and Taiwan, and then to China. Over the past decade, Vietnam and Indonesia have been increasingly important manufacturing locations. Asian production, which one of Nike's initial innovations is now common industry practice. Columbia has 67% of its apparel and 99% of its footwear manufactured in China and Vietnam. (Columbia 10K, 2009. page 10).

Nike: Locations

Location for Production of Nike Footwear, 2009

| Country | Share of Production |
|---|---|
| China | 36% |
| Vietnam | 36% |
| Indonesia | 22% |
| Thailand | 6% |

Because all of the firms in the industry use a similar outsourcing strategy—in fact, one supplier may make product for several different firms in the same factory—manufacturing is not a principal source of competitive cost advantage of differentiation for most athletic and outdoor firms. For imported apparel and footwear, the cost of goods sold, including transportation to the United States averages slightly less than fifty percent of the total value of sales.

For large firms, there are a few key exceptions to the general tendency to manufacture products in Asia due to the need to protect the technology which is proprietary informationNike manufactures its Air-Sole cushioning materials and components at its company-owned NIKE IHM, Inc. facilities located in Beaverton, Oregon and St. Charles, Missouri.

A few large firms use manufacturing location or characteristics to differentiate their product. New Balance and American Apparel highlight the fact that to some extent, their products are "Made in the USA." Locally, LaCrosse manufactures its high end Danner boots locally for military and government markets as well as premium buyers. The federal government requires domestic manufacturing for some of the products it procures, and for some foreign buyers, American-made products have a special cachet. Other firms emphasize the quality of the inputs into their product (i.e. Merino wool in Icebreaker products).

Smaller firms in some market segments specialize in domestic manufacturing. Leatherman tool employs several hundred people to manufacture and assemble its tools in Portland. Kialoa paddles does the bulk of its manufacturing in Central Oregon. Local bicycle gear and frame makers, like Chris King Precision Components – manufacture their products locally.

Over the past three decades, the trend in apparel and footwear has been for manufacturing activity to move away from the United States and towards Asia. Many in the industry think that the rising value of Asian currencies, and growing labor costs in key markets, are nearly at a tipping point where some manufacturing activity could profitably return to the United States. The long supply chain (typically months between ordering from a Chinese manufacturer and receiving goods for sale at a U.S. store) and the challenge of responding to quickly changing consumer tastes, means that for some products, the speed and certainty of domestic manufacturing could offset higher costs of U.S. labor.

## *2.3 Marketing*

Marketing includes advertising and promotion of products and the development of brands. A key feature of the athletic and outdoor industry is developing a distinctive brand identity and differentiating one's products both by performance characteristics and consumer perception.

Larger athletic and outdoor firms spend an amount equal to ten percent or more of their sales on advertising and promotion; smaller firms generally spend a smaller amount. (Note: this is not the same as saying that advertising costs are equal to ten percent of the retail price of athletic and outdoor products; advertising is equal to about 10 percent of the wholesale price of athletic and outdoor). A considerable amount of promotion expenditure includes endorsement contracts with athletes, coaches and sports teams.

Nike spent about $2.3 billion on "demand creation" expense in both 2008 and 2009. Demand creation consists of advertising and promotion expenses, including costs of endorsement contracts. (Nike 10K Report, Page 26). Advertising expense was about 12% of gross revenues: Adidas spent a similar amount and a slightly higher fraction of its sales on advertising. Smaller firms like Columbia and LaCrosse spend a smaller fraction of their sales—two to five percent—on advertising costs. Data for privately held firms are not available.

**Advertising Expenditure**

| Company | Amount (Millions) | Percent of Sales |
|---|---|---|
| Nike | 2,351.0 | 12.3% |
| Adidas | 2,000.6 | 13.2% |
| Columbia | 65.2 | 4.9% |
| LaCrosse | 3.1 | 2.2% |

Source: Latest Annual reports
Nike: includes endorsement contracts.
Adidas: Amounts converted from Euros to Dollars at 1.40 dollars/euro

Nike and Adidas each spend billions of dollars annually on advertising and promotion. With prodigious exposure, not only in paid advertising, but through the televised sports events, their logos are instantly recognized. Not surprisingly, they are among the most highly valued brand names in the world. Interbrand magazine estimates that Nike is the 26th most valuable brand in the world; Adidas ranks 62nd (Interbrand 2010). Only one other company with its principal operations in Oregon – Intel, at number 9 – is in the top 100.

Smaller firms also seek brand recognition, but generally with niche markets, rather than competing head-to-head with the leaders in global markets.

### *2.4 Distribution*

Distribution includes the physical movement of goods from the places they are manufactured—typically in Asia—to retail locations around the world. Large athletic and outdoor firms sell their goods and services through tens of thousands of retail locations around the world.

Historically, athletic and outdoor firms relied exclusively on local and national retailers to sell their products. Over the past two decades, it has become increasingly common for athletic and outdoor firms to develop their own retail operations, including physical retail outlets and web-based retailing.

Many firms contract with third-party logistics providers (3PL) to arrange for the transportation of their products from manufacturing plants (generally in Asia) to worldwide markets. The companies can outsource all, or portions of the logistics function, including freight forwarding, packaging, and data and tracking. There are both local and global companies that provide these services. Oregon International Airfreight (OIA) is one local logistics provider that works with the athletic and outdoor industry.

Portland is not a major port of entry for footwear into the United States. In 2006, 33 million pairs of shoes were imported into Portland (Thomas 2007). In that same year, 371 million pairs of athletic shoes, and 2.4 billion pairs of all kinds of footwear were imported into the United States (American Apparel and Footwear Association 2008)

| Container Imports | Firms | TEUs | Typical Firms |
|---|---|---|---|
| 100 or more | 6 | 3,258 | Columbia, Keen, Fred Meyer, Danner, Doc Martens |
| 50 to 99 | 5 | 342 | Nike, LaCrosse, Nordstrom |
| 20 to 49 | 7 | 228 | Pendleton, Chinook Trading, Dakine, Lucy |
| 10 to 19 | 7 | 96 | Ringor, Posh Footwear, Masai |
| 5 to 9 | 8 | 53 | Korkers, Dreamsacks, VF |
| 5 or fewer | 111 | 150 | Hanna Andersson, Ruffwear, Showers Pass, Wicked Quick |
| Total | 144 | 4,126 | |

Source: Port of Portland, 2010

In contrast, the Port of Los Angeles reports importing more about 500,000 containers of apparel and footwear in 2008, about 120 times more than entered the country in the Port of Portland. (This total does not include imports from the equally large Port of Long Beach).

Nike's largest footwear distribution center is in Memphis, Tennessee. The company ships other products via locations in other states. Apparel and equipment products are shipped from its Memphis, Tennessee, and Foothill Ranch, California distribution centers. Cole Haan products are distributed primarily from Greenland, New Hampshire, Converse products are shipped primarily from Ontario, California, and Hurley products are distributed from Irvine, California. (Nike, Form 10-K, 2009).

The role of Portland as a distribution center for products has been steadily diminishing. Nike has relocated principal US distribution facilities to Memphis. Nike closed its Wilsonville Distribution Center in 2008 laying off 176 employees and also resulting in the layoff of another 130 Kelly Services employees (Heschmeyer 2008). Nike filed the required 60 day WARN notice in July, and closed the distribution center in September (Oregon Department of Community Colleges and Workforce Development, Notice # 1707--http://www.odccwd.state.or.us/warn/ ) Adidas has never had distribution operations in Portland, and has consolidated its US distribution in South Carolina. Of the big three, only Columbia has a large local distribution presence (its 859,000 square foot Rivergate distribution center), and it to has a separate, though smaller center for national distribution in Kentucky. Danner has a distribution facility in Portland, but its largest distribution facility is in Indianapolis.

Midwest locations are preferred for distribution centers because they are closer to the geographic center of population for the North American market. Nearly 90 percent of the U.S. population is within a 48 hour drive of locations in Memphis or Indianapolis. Both cities are also the central hubs for major airlines

Principal U.S. Distribution Facilities for Selected Athletic and Outdoor Firms

| Firm | Location | Size (Square Feet) |
|---|---|---:|
| Nike | Memphis, TN | 3,000,000 |
| Adidas | Spartanburg, SC | 1,900,000 |
| Columbia | Portland, OR | 859,000 |
| | Robards, KY | 428,000 |
| Hanna Andersson | Louisville, KY | n.a. |
| Lacrosse | Indianapolis, IN | 360,000 |
| | Portland, OR | 140,000 |
| ASICS | Memphis, TN | 870,000 |
| Wolverine | Rockford, MI | 475,000 |
| | Cedar Springs, MI | 356,000 |
| | Howard City, MI | 460,000 |
| New Balance | Lawrence, MA | 360,000 |
| | Ontario, CA | 360,000 |
| Under Armour | Glen Burnie, MD | 650,000 |
| Puma | Carson, CA | 122,500 |

Source: Company and Press Reports.

Distribution is a relatively automated function, with principally low skilled jobs. Average pay for Nike's distribution center in Memphis is reported to be about $25,000 annually, far lower than for design, marketing and administrative functions centered in Portland . Nike reportedly employs about 2,000 workers at its Memphis operations; Adidas employs about 1,500 at its distribution center in South Carolina (more than at is headquarters in Portland). Employment levels fluctuate with peak shipments during retail seasons and many firms make use of temporary and contract employees during these periods.

For large apparel and footwear companies, Most products are sold by independent retailers. For example, Nike reports that its products are sold at more than 23,000 locations throughout the United States. A few large national retail chains (like Foot Locker, Finish Line and Nordstrom) play a disproportionate, but not dominant role in selling products. The company's three largest U.S customers account or about 25 percent of its U.S. sales. Columbia reports that it has 9,000 wholesale accounts in over 100 countries.

In the early years of the athletic and outdoor industry, footwear and apparel firms relied exclusively on a variety of retail firms to sell their products to end consumers. Over the past two decades, it has become increasingly common for athletic and outdoor firms to establish their own company-owned or branded retail outlets. Nike established its first Niketown store in downtown Portland in 1990, and today has 15 of its flagship Niketown stores that showcase its products.

Number of Owned Stores

| | |
|---|---|
| Nike | 774 |
| Adidas | 338 in US, 336 abroad, includes other brands such as Cole Haan |
| Columbia Sportswear | 45 company owned stores in the US, 400 independent franchisees worldwide |

Source: Company Annual Reports

Increasingly, like all businesses, athletic and outdoor firms are selling their products through the Internet. Companies generally have to be careful in selling through the Internet to avoid competing directly with their retail partners, and so consequently try to provide different products, and reach different market segments through on-line retailing. Large firms like Nike sell customized products, like Nike Fit (where customers can go on-line and choose the colors and patterns to be used on their shoes, and have them specially manufactured and delivered directly to them). Smaller firms, especially startups and those serving niche markets, rely more heavily on web-sales. Internet sales are often the first way firms reach international markets.

## 3.0 Firm Structure, Strategy and Rivalry

The industry has a strongly bi-modal size distribution with a handful of very large firms, and a relative large number of much smaller firms.

### *3.1 Firm Size and Structure*

Three very large firms are at the core of the region's athletic and outdoor cluster. Nike, which is the largest such firm in the world. Nike played a critical role in anchoring this cluster in the Portland metropolitan area, and its presence greatly influences the evolution, growth and operation of other firms in the region. Columbia Sportswear is a considerably older firm, its Portland operations dating from the 1930s. Adidas is a relative newcomer, but has the headquarters of its important North American operations in Portland.

Number of Employees

| Firm | Portland | Worldwide |
|---|---|---|
| Nike | 5,700 | 34,300 |
| Columbia | 1,500 | 3,100 |
| Adidas | 800* | 38,982 |

*Manning (2010). Manning, Jeff. (2010). "Portland Adidas HQ to layoff some workers, hire others." *The Oregonian*. (February 10).

#### Nike

Nike is the largest and most influential athletic and outdoor firm in Portland. It employs nearly 6,000 workers, and is the world's largest apparel and footwear company, with total sales of about $19 billion. The company was established as Blue Ribbon Sports in 1964 by Phil Knight and Bill Bowerman and was an innovator in developing and marketing high performance athletic footwear. The company's world headquarters is located in the 177-acre Nike Campus in unincorporated Washington County, in Portland's western suburbs.

#### Adidas

Adidas is Nike's leading global competitor with a similar product portfolio and a longer, and equally storied history. The company is headquartered in Herzogenaurach Germany, but its North American headquarters of Adidas is located in a renovated former hospital facility in North Portland. The company grew out of a family shoe business started in the 1920s. The company became known as Adidas in 1948, when founder Adolf (Adi) Dassler had a falling out with his brother Rudolf, who then founded the rival firm Puma, headquartered in the same town. In the 1970s, Adidas was the dominant athletic and outdoor firm in the world, but following Adi's death in 1987, the company was sold to outside investors, and struggled for several years. It was revived in the early 1990s, following the hiring of ex-Nike employees Rob Strasser and Peter Moore, who overhauled the company structure and strategy and reinvigorated the Adidas brand. They also insisted on moving the company's North American headquarters to Portland from New Jersey.

### Columbia Sportswear

Columbia Sportswear is one of Oregon's oldest athletic and outdoor firms, founded in 1937 as Columbia Hat company.  The company, privately held until 1998, is led by its founding family:  Tim Boyle is President, and Gert Boyle is Chairman.  Columbia's headquarters f was in North Portland, during the period of the 1930s to the 1990s, and in 2001 they moved to a new headquarters in unincorporated Washington County, about one mile from Nike's campus.

Portland is not a classic hub-and-spoke, or value chain industry cluster, nor does its dominance in the industry strongly influenced by the localized production or physical presence of the products the industry sells.

Local physical production for this cluster is principally limited to prototyping of new products, the manufacture of key high value proprietary components, short production runs of relatively low volume high value and/or customized products, manufacture of those products that require high domestic content (i.e. for military and government contracts) and some specialized processing (i.e. final screen printing).  The principal local manufacturing operations include, for example, Nike's manufacturing of its proprietary air soles—which are exported to Asia to be incorporated into shoes made there.  Danner manufactures many of its high-end boots locally, especially those sold to the U.S. military.  Tool manufacturer Leatherman and optics maker Leupold and Stevens both employ several hundred persons at their local factories where they still manufacture and assemble a majority of their trademark products.

## *3.2 Globalization*

Athletic and outdoor is a global industry.  The design, marketing and sales of any particular product may span two or three continents.  A majority of the design for Portland area athletic and outdoor companies are designed in Portland.  The manufacturing for firms both in and outside of Portland is  overwhelmingly in Asia, principally in China, Vietnam, and Indonesia.  Most products are shipped (usually by container) around the world, principally to markets in North America and Western Europe.  In the United States most shipments transit through the ports of Los Angeles and Long Beach.  Products are then distributed to retail locations throughout the nation with some direct to consumer.

The larger companies maintain offices and distribution facilities throughout the world. Nike has its principal European operations in Amsterdam and obviously its US headquarters in Portland with distribution in Memphis, Tennessee..  Adidas is headquartered in Germany with North American headquarters in Portland and distribution in Spartansburg, North Carolina.  Columbia is headquartered in Portland with a significant distribution function in Portland and a distribution facility in Cambrai, France.  Many smaller companies also have either foreign offices or maintain relationships with international distributors.

A majority of purchasers of Nike and Adidas products are consumers outside the United States, thanks to the growing worldwide popularity of athletic and outdoor, and the company's formidable branding and advertising campaigns.  Even Columbia Sportswear reports that nearly 45% of its sales are to international markets.  Smaller firms tend to be more focused on the U.S. market, but thanks to improving technology and globalization even very small firms sell their products internationally, both on the web, and through foreign representatives.

**Sales by Market Area**

| Company | U.S. | Rest of World |
|---|---|---|
| Nike | 34.1% | 65.9% |
| Adidas | 23.3% | 76.7% |
| Columbia | 55.2% | 44.8% |
| LaCrosse | 94.8% | 5.2% |

Note:  For Adidas U.S. data covers is N. America.

Source:  Company Annual Reports

## *3.3  Competitors and Competitor Regions*

Portland is arguably the leading center for athletic and outdoor in North America.  Its combination of firms specializing in footwear, apparel, outdoor gear and cycling is not exceeded anywhere in the United States. Other cities are competitors in specific fields, but differ in their product portfolios and industrial specializations.  New York and Los Angeles are leaders in the apparel industry and have more robust infrastructures including manufacturing capabilities.

Portland is the dominant center for footwear wholesaling in the United States, with a location quotient of more than 20 for this industry.  (Since firms are classified under a single industry code, a company that sold both apparel and footwear might be classified as solely in the "footwear wholesaling" category.  Portland is also relatively strong in footwear manufacturing, ranking second behind only Boston, among major metropolitan areas in this industry.  Only in apparel manufacturing is Portland's location quotient for one of these four industries less than one.

Los Angeles remains the dominant center for apparel manufacturing in the United States, with more than 60,000 people employed in this industry.  New York has declined substantially as an apparel center, but still employs nearly 30,000 in this industry. Together, these two metropolitan areas account for nearly half of the 198,000 apparel manufacturing jobs remaining in the United States.

Like Portland, Boston has specializations in footwear manufacturing and footwear wholesaling, although the employment in these industries is, overall, much smaller than in Portland. Seattle has a modest concentration in footwear wholesaling; but only about 500 people work in this industry in Seattle. Boulder does have a significant concentration of apparel wholesaling firms, but total employment of fewer than 900 people. Memphis is a major center for footwear distribution. Salt Lake City and Ogden Utah are also centers for outdoor gear—Salomon, USA, a subsidiary of Amer is located there—but BLS data for employment are not published at a detail that would allow computation of a location quotient. Based on Census data, we estimate that Salt Lake City would have a location quotient of about 3.1 for sporting goods wholesaling (NAICS 42391).

Principal Athletic and Outdoor Competitor Regions,
Employment and Location Quotients, 2008

| NAICS | 315 | 3162 | 4243 | 43434 |
|---|---|---|---|---|
| Industry | Apparel | Footwear | Apparel Wholesaling. | Footware Wholesaling |
| Portland | 500 (0.32) | **345 (2.77)** | **6,017 (5.17)** | **5,246 (24.87)** |
| Los Angeles | **63,010 (7.31)** | 786 (1.14) | **23,309 (3.6)** | **3,557 (3.04)** |
| New York | **28,634 (2.32)** | | | |
| Boston | 1,551 (0.42) | **929 (3.13)** | **3,916 (1.41)** | **866 (4.99)** |
| Seattle | 1,621 (0.63) | | | 503 (1.44) |
| San Francisco | 3,148 (1.02) | | 2,051 (0.89) | 419 (1) |
| Boulder | 71 (0.63) | | **866 (1.44)** | |
| Memphis | 295 (0.32) | | **1,851 (2.69)** | |

Source: Bureau of Labor Statistics, Impresa calculations
Note: Figures shown in bold represent industry concentrations with location quotients above a critical value of 1.2. Footwear wholesaling is a subset of apparel wholesaling. Blank cells indicate that there was either no employment, or no publishable data for that industry/region combination.

## *3.4 Industry Rivalry*

Passionate rivalries between firms are the stuff of legend in this industry. The two giant German athletic and outdoor companies, Adidas and Puma, were created when the two Dassler Brothers had a falling out during the 1940s, and each started his own firm. Based on opposite sides of the river in the small town of Herzogenaurauch, in Bavaria, the feud polarized the entire community, with each firm having its own schools and bars.

With Nike's emergence in the 1970, the rivalry was quickly transplanted in the United States. Nike set as an explicit objective toppling the Adidas dominance of the running shoe market. The two companies sponsored competing running teams in the 1970s; Adidas went so far as to put its logo on the scoreboard at Eugene's Hayward Field in

1980. “Loyalties were questioned. Common purpose was set aside. An Oregon legislator who walked in unaware later declared that if you could survive the politics of track and field in Eugene, you were ready for Lyndon Johnson’s Texas.” (Strasser, 1990, p. 370).

By the early 1990s, Nike’s rise had eclipsed Adidas’ leadership in athletic footwear in the US, but the rivalry continued. After a falling out with Nike founder Phil Knight, Nike’s long time marketing director started his own firm, Sports, Inc., and then was hired by Adidas to run its North American operations. He insisted that the firm relocate their offices from New Jersey to Portland.

When Adidas built its North American headquarters in Portland in 1999, it intentionally chose a location and architectural style that directly contrasted with Nike. While Nike was located on a suburban campus in Beaverton surrounded by a a high, grassy berm, Adidas chose to establish a village by enovating an obsolete inner City Hospital , and open its athletic fields to neighborhood residents. The contrasting design philosophies between the two companies headquarters merited an article in the New York Times on the subject (Brick 2002).

Among smaller firms, there is much more fraternization and interaction. Many of those who lead smaller firms worked at one of the large incumbent companies, and have friends and colleagues with similar backgrounds. Relationships among these small firm leaders are both business and personal. “We’re all frenemies in this,” one entrepreneur told us.

## *3.5 Industry life cycle*

Firms in the athletic and outdoor cluster tend to follow a distinctive life cycle. Most start out as small startup firms with a few products. Most of these stay small or fail, but a few grow to become relatively large players in the industry and/or the firms or their technology may be acquired by medium-large sized firms. Examples include: End,a local startup footwear company that was acquired by Lacrosse/Danner; and Lucy a women’s athletic and outdoor apparel company acquired by VF.

<u>Startups.</u> There are relatively low barriers to entry in the athletic and outdoor cluster. Firms can start with a few products, arrange for production overseas, and then sell or distribute their products. Most firms are started without formal venture capital. (Lucy and Nau would be two exceptions to this rule.) Many small firms reported that availability of capital was a limiting factor on growth, but not a barrier to starting a small firm.

<u>Small/Growing Firms</u>. A majority of firms in the athletic and outdoor business are smaller firms, i.e. with fewer than 100 employees and sales of less than $100 million. As a general rule these firms are privately held, and self-financed (i.e. not from formal venture capital).

Large Scale. A few firms are large firms with annual sales of more than $100 million. Of the publicly traded firms based in the region, four have annual sales of this level or higher: Nike, Adidas, Columbia, and Danner/LaCrosse . Several other companies that are privately-held, including Leatherman and Leupold Stevens, are likely in this category, but do not publicly disclose annual sales data.

Exits/Acquisitions and Legacy Brands. Firms that falter or fail to keep growing frequently become acquisition targets for one of the large scale firms in the industry. Reebok, which was a principal rival of Nike in the 1980s, was acquired by Adidas in 2004. Nike acquired one-time basketball shoe rival Converse for $300 million in 2003. Jantzen, once a free-standing local company, was acquired by Blue Bell (later VF), and then sold to Perry Ellis. Typically these acquisitions reflect the purchase of the brand equity built up by the firm. A large firm like Perry Ellis then uses its established and larger scale capability to source, market and distribute products to continue to extract market value from these "legacy" brands. (Perry Ellis operates a design center in Portland, but manages production and distribution from multi-brand corporate locations elsewhere). New Balance pursues a similar strategy with PF Flyers a brand originated in the 1930s by B.F. Goodrich, and popular in the 1950s and 1960s. LaCrosse similarly acquired the rights to the Red Ball line of sneakers originally popular in the 1960s.

Firms typically offer a range of brands to appeal to different market segments. LaCrosse provides three different levels. 1) The Danner range is a high end product, described as "a select line of high quality, feature driven leather footwear products at premium prices;"2) The LaCrosse brand covers a more extensive product line including rubber, vinyl and leather footwear and rainwear, that is distributed to a broad base of independent retailers and appeals to mid-range consumers; and 3) The Red Ball and Lake of the Woods lines are lower priced and directed to a broad consumer market.

| Parent | Other Brands |
|---|---|
| *Locally Headquartered* | |
| Nike | Converse, Cole-Haan, Umbro, Hurley |
| Adidas | Reebok, Taylor-Made, Rockport |
| Columbia | Mountain Hardware, Sorel, Montrail, Pacific Trail |
| LaCrosse | Danner, Red Ball, Lake of the Woods |
| *With **Local Subsidiaries*** | |
| Amer Sports | **Bonfire, DeMarini,** Salomon, Wilson |
| Wolverine | Patagonia, **Merrell,** Sebago, Hush Puppies |
| Perry Ellis | **Jantzen** |
| VF | Vans, **Lucy**, North Face, Lee, Wrangler, |
| *Other Firms* | |
| Russell | Brooks, Spalding |
| Payless Shoes | Stride Rite, Keds, Sperry Top-Sider |
| New Balance | PF Flyers |

Note: Firms with Oregon operations or locations shown in **bold.**

Competition in the athletic and outdoor cluster is fierce and continuous. Most athletic and outdoor products are "non-durable" goods with short lifetimes that need to be replaced regularly. Consumers make new purchases of footwear, apparel and gear, and going out of fashion is just as important as loss of function in triggering replacement purchases. Unlike information technology, there is little physical or technological "lock-in": consumers can easily mix products from a range of different manufacturers and easily change brands from purchase to purchase.

Markets change continually, and the emergence of new types of gear or new fashions can force changes in the marketplace. Keen helped popularize a whole new category of close-toed sandals for active recreation. Another such example is UnderArmour, a company started in 1996 which popularized tight-fitting "compression" garments. The company tripled its sales from $280 to $860 million between 2005 and 2009, and has diversified its product range to include shoes as well as apparel, and now competes directly in many product segments with products from larger, established firms like Nike and Adidas.

Worldwide Sales, Selected Athletic and Outdoor Firms, Latest Fiscal Year (2009)
(Millions of Dollars)

| Company | Total |
|---|---:|
| Nike | 19,176.1 |
| Adidas | 15,118.6 |
| Columbia | 1,317.8 |
| LaCrosse | 139.2 |
| | |
| Puma | 3,444.0 |
| Asics | 2,468.8 |
| New Balance | 1,640.0 |
| Wolverine | 1,106.0 |
| Under Armour | 856.0 |

Source: Company Annual Reports

**Sales by Segment**

| Company | Footwear | Apparel | Other |
|---|---:|---:|---:|
| Nike | 53.7% | 27.4% | 18.9% |
| Adidas | 45.6% | 44.2% | 10.2% |
| Columbia | 16.5% | 78.2% | 5.3% |
| LaCrosse | 100.0% | | |
| | | | |
| Puma | 54.0% | 34.7% | 11.4% |
| ASICS | 73.2% | 19.4% | 7.4% |
| Under Armour | 22.2% | 77.8% | |

# 4.0 Factor Conditions

Human capital is a key resource for the athletic and outdoor industry. As Columbia Sportswear CEO Tim Boyle told us: “This business is fundamentally about creative people.”

The athletic and outdoor industry depends on the talent of its workforce to understand market trends, develop new designs and technologies, and rapidly and successfully market new products. Recruiting and retaining key talent is a critical issue for competitiveness. Industry observers stressed that success wasn’t simply about creativity; the best workers have a combination of creativity and a strong business sense

The defection of highly skilled workers to other firms is a risk for all firms in the industry. Highly skilled workers frequently move from firm to firm within the industry—or start their own companies. In one recent case, Columbia Sportswear sued one of its former designers for allegedly designing products for one of its competitors while working for Columbia. The designer in question had worked for Nike for seven years prior to joining Columbia (Hunsberger 2009). To minimize this kind of problem, Adidas has set a goal of making itself the “Employer of Choice” within the industry, offering attractive reward and incentive packages and long term career opportunities(Adidas Annual Report, 2008).

Columbia Sportswear’s latest annual filing with the Securities and Exchange Commission specifically identifies competition for talent in the Portland labor market as a source of risk for the corporation:

> Our future success will depend in part on the continued service of key personnel and our ability to attract and retain key managers, designers, sales people and others. We face intense competition for these individuals worldwide, and there is a significant concentration of well-funded apparel and footwear competitors in and around Portland, Oregon.
> Columbia Sportswear 10K, March, 2010, page 16.

The rich base of athletic and outdoor talent and firms in the Portland metropolitan area is a double-edged sword for employers looking to find highly skilled workers. On the one hand, there are many good employees available locally. But on the other hand, there are always tempting opportunities to go to work for competitors, or to set up shop on one’s own. Indeed, the falling out between Phil Knight and Rob Strasser, led Strasser to partner with Peter Moore—who had designed Nike’s hugely successful Air Jordan line in the mid-1980s—to form Sports, Inc., which eventually led to the establishment of Adidas operations in Portland, intensifying the competition for talent between the two firms (Wallace 1997).

Athletic and outdoor firms from other states and nations also come to Portland to hire seek designers and managers: before it was acquired by Nike, Converse recruited designers here (Portland 2001); Two senior managers at UnderArmour previously worked at Nike.

Our interviews with industry observers indicated that it was relatively common for workers to move among different firms within the industry, and from generally from larger firms to smaller firms and startups. The Oregon Employment Department provided us with a special tabulation of data that tracked the movement of workers from the large incumbent firms in the industry (employers with 500 or more workers in athletic and outdoor industry). These data examined the workers who were employed in Oregon as of the first quarter of 2008, and determined what firm they worked for in the third quarter of 2009. These data are restricted to employees who worked in Oregon in both 2008 and 2009.

In all, nearly 8,500 persons worked for a large, incumbent athletic and outdoor firm in 2008. Of these, nearly 1,800, or slightly more than 20 percent was employed by a different Oregon firm in the third quarter of 2009. About 300 of these workers continued to work in the athletic and outdoor cluster, with slightly less than half of these choosing moving from one large incumbent athletic and outdoor firm to a different large incumbent athletic and outdoor firm.

Some 437 of the workers who left a large incumbent firm went to work at a startup company. Of these, 275, or about 60 percent went to work for a startup in athletic and outdoor, or in a closely related field. The remainder, 162 workers, went to work for startup firms in unrelated industries. About 1,000 workers left employment with one of the large incumbent athletic and outdoor companies and worked for an Oregon employer who was neither a new startup company, nor in the athletic and outdoor industry cluster.

Worker Mobility from Leading Athletic and Outdoor Firms

| | | | |
|---|---|---|---|
| Workers at incumbent firms, 2008 | 8,490 | | |
| Number of workers moving to other Oregon firms | | 1,767 | 20.8% |
| To other athletic and outdoor cluster firms | | 295 | |
| To other incumbents | | | 133 |
| To startups | | 437 | |
| To athletic and outdoor/related industry startups | | | 275 |
| To unrelated industry startups | | | 162 |
| To other firms in Oregon | | 1,035 | |

. Source: Oregon Employment Department

The average age of persons working in the athletic and outdoor industry is much younger than the overall workforce. At Adidas, for example, the overall average age of the company's workers is 28 (Adidas Annual Report, 2008, data are companywide).

# 5.0 Local Demand

The origins of today's athletic and outdoor industry in Oregon are closely connected to the demanding local customers for a variety of athletic and outdoor gear. Local customers are not so much quantitatively important—the typical firm sells far more of its product outside the state than locally—but local customers often are the early adopters who signal a market for new products.

The classic story of local demand and athletic and outdoor is reflected in the co-evolution of the running for fitness movement in Oregon in the 1960s and 1970s, with the formation and growth of Nike. Eugene was one of the hotbeds of the jogging movement: University of Oregon track coach—and Nike co-founder—Bill Bowerman authored a book called "Jogging" in 1964, which helped popularize the activity. The popularity of running sports, and fitness in Oregon provided the initial market for the small startup company—Blue Ribbon Sports, that eventually became Nike.

New firms frequently emerge from market opportunities identified by close interaction with local customers. For example, Corazzo is a small apparel firm started in 2004 to make gear specifically for motor scooter riders. The founders of the firm had previously worked in the motor scooter retail business, and identified the lack of stylish gear appropriate to the demographics and riding habits of its customers. The relatively high popularity of scooters in Portland, relative to other U.S. metropolitan areas, and the proximity to design talent from the athletic and outdoor industry helped enable this firms growth (Gardiner 2009).

As in high tech industries, applied scientific research by companies is one source of innovation. Companies carefully study the properties of materials, and the bio-mechanics of athletic activity, to develop or refine new materials or designs that offer improved performance. Nike has developed its patented "Air" and "Shox" technologies to minimize shock and fatigue in running. According to Adidas, its proprietary compression gear – TECHFIT Power Web – focuses muscle energy and results in 5.3% more power, a 4.0% higher jump and 1.1% greater speed (2009 Annual Report, page 218).

There is a growing body of evidence of the importance of user-led innovation to the growth of many industry clusters. In some cases, the insights and knowledge that come from using or applying technology lead to improved designs or entirely new products (von Hippel 2005). This is frequently the case for sporting products and recreational gear. The mountain bike was developed by extreme sports hobbyists in the San Francisco Bay area in the 1970s, and evolved from one-off adaptations of existing bike frames (with improved brakes and better tires) to small, craft-based producers, and then to global mass manufacturing. By the 1990s, a majority of bicycles sold in the U.S. were mountain bike designs. In his study, von Hippel found that 19 percent of advanced mountain bikers, 38 percent of extreme sports participants surveyed reported modifying their gear or equipment to improve its functionality. Users apply existing products in difficult situations and to solve new problems or engage in new activities, and the learning and insight from these experiences helps manufacturers improve existing products or develop new ones.

In the classic case of user led innovation, the users are different than the producers. In Portland/Oregon's athletic and outdoor cluster, the user is often the producer. A typical example of user-led innovation in athletic and outdoor is Leatherman Tool. Portlander Tim Leatherman traveled across Europe in an aging Fiat, which constantly needed minor repairs and adjustments. He hit upon the idea for a simple folding tool that would incorporate screwdrivers, a knife blade, and pliers in a form that could be carried anywhere. The company website invites users to contribute stories of how they've used their Leatherman tools to solve unusual problems, and highlights the best story each month. Many companies have similar creation stories based on the insights from practical experience: Bend-based Ruffwear made its first product, a collapsible dog-dish for hikers, after seeing a friend struggle to share water out of a canteen with her dog.

The connection to place is a part of the industry DNA for many firms. Leatherman is explicit about the deep relationship between place, its employees, and the ideas behind its products.

> It's a place of immense beauty, and a paradise for outdoor recreation of every sort. It's a place that gets into your blood, and becomes part of how you define yourself as a person.
>
> That means Leatherman is a company of campers, hunters, fishing fanatics, spelunkers, mountain bikers, boaters, skiers, snow shoers, and participants in pretty much anything that's fun to do outside. And, in keeping with our individualistic spirit, we're also avid do-it-yourselfers.
>
> As a result, our products aren't merely tested in our QC department. They're tested by employees on bike trails, in hunting stands and campsites, on the face of nearby Mt. Hood, and in any number of circumstances within our own homes.
>
> Conditions in Portland are so perfect for gardening that we're called "The City of Roses." So it's only natural that the world's first garden shear / multi-tool was designed here. And when your city is also known as "Beervana," someone's gonna have the bright idea for a carabiner that doubles as a bottle opener.
>
> Out here, there are so many sources of inspiration for our work, and so many ways to test the limits of our tools. So no matter where you are – from Portland, Oregon to Portland, Maine – from Saskatchewan to Key West – when you have a Leatherman, you'll be ready.
>
> Leatherman Tool: "Oregon Proud"
> (http://www.leatherman.com/about/oregonproud.asp?c=62)

Not all companies embrace the local identity as part of their branding or advertising, although they do acknowledge the importance of the local environment and culture in facilitating their firm's strategy. For these companies it is important to generalize from and promote these outdoor, active, work-life balance concepts as universal, rather than specific to Portland.

Some segments of the industry depend heavily on demanding local customers; this is especially true for small startup firms. The region's bicycle frame makers sell a large portion of their output to local customers., and the city's reputation as a hotbed of bicycling then enables firms to sell to a wider national market. New and customized designs—like the one-off bike-bar built by Metrofiets for Hopworks Organic Brewery—are the product of imaginative and unusual interactions between customers and producers (Foyston 2009).

In Portland, it is common for employees of athletic and outdoor firms to also be the innovative users who come up with new ideas. Companies hire employees from the local base of users, many of them passionate participants in the recreational activities that identify the customers for their products. The support for live/work balance in the community generally, and in athletic and outdoor firms in particular, means that the boundaries between work and play, and making and using, producer and user are less clear-cut than they are in other industries. Many of the user-based innovations in Portland athletic and outdoor firms are the product of insights from employees using the products there companies produce.

## 6.0 Related and Supporting Industries

In addition to the firms that directly design and/or manufacture their footwear, apparel and gear, there are a wide array of suppliers and services firms that are active in the cluster. To identify the scope of the supplier sector, we analyzed the entries in the Athletic and Outdoor Directory, based on the descriptions of the firm's services and activities. About one fourth of the firms in the directory are identified as service providers. For purposes of description, we've classified firms according to their principal activity; many supplier firms may provide a portfolio of services that span several of the categories listed below. In addition, the list of firms contained in the directory is not exhaustive, but is indicative. It principally represents firms that work primarily or exclusively in the athletic and outdoor cluster. Some firms that are service or material suppliers to athletic and outdoor businesses may not be listed because athletic and outdoor is not a primary focus of their businesses.[1] For example, most firms make use of shipping firms like Fedex or UPS, but these firms are not listed here as suppliers.

**Marketing**

[1] Note that the Athletic and Outdoor Directory is not an exhaustive list of firms that are suppliers to the athletic and outdoor industry. In addition to the firms counted and identified here, there are other firms in each category that provide similar services. As the Athletic and outdoor Directory is revised and updated, it will identify these additional supplier firms.

A wide variety of firms provide advertising, public relations and marketing and merchandising services for athletic and outdoor firms. These include large global firms with a strong Oregon presence (like Weiden and Kennedy), as well as small firms with local operations. This is the largest category of supplier firms, with 31 firms in marketing and closely related fields.

**Design**

More than two dozen firms specialize in providing design services to firms in the athletic and outdoor cluster. Again, this includes larger firms like Ziba and smaller local shops. Some of these design firms provide their services to firms located outside of Oregon.

**Human Resources**

Six firms specialize in human resource management, recruiting, and consulting for the athletic and outdoor industry. Among these firms are Generator Group, Plum, and Core Recruiting.

**Information Technology**

Four firms specialize in information technology for athletic and outdoor. Information technology is widely used in the industry for production and inventory management, as well as for marketing (especially through the Internet).

**Legal Services**

Three law firms—Lane Powell, Stoel Rives, and Perkins Coie--are listed as service providers for the athletic and outdoor industry. Firms in the athletic and outdoor cluster often require services related to intellectual property, contracts (especially with suppliers), and business organization.

**Manufacturing**

Three firms are listed as manufacturers that supply other firms in the athletic and outdoor industry. As noted previously, much of the manufacturing of footwear and apparel and gear is outsourced to suppliers in Asia. This list of suppliers includes firms that provide printing and embroidery services to apparel producers.

**Finance**

Two firms—Bridgetown Capital and D. A. Davidson—provide financial services and investment research in the athletic and outdoor cluster. These firms provide industry analysis and track performance of athletic and outdoor firms. They may also help firms arrange financing, and assist in valuation.

**Research and Development**

Two firms BioMechanica LLC, and i-generator LLC are listed as providing research and development services.

**Other Services**

Nineteen other firms provide other services that do not fit into one of the above classifications.

# 7.0 Industry Growth

Over time, the growth of the athletic and outdoor cluster has been fueled both by the growth of the major incumbent firms—described above—and by the establishment of new startup businesses, and the relocation of athletic and outdoor businesses from other locations to Oregon.

## *7.1 Startups*

Over time, the size of the industry has been increased by substantial startup activity. Most of the athletic and outdoor firms in Oregon today were started locally. There has been considerable spinoff activity from the larger incumbent firms. According to data compiled by the Oregon Employment Department, over the eight years following 2001, former employees from one or more of the three major athletic and outdoor firms in the state went on to found or work at 281 different startup businesses in athletic and outdoor or closely related sectors of the Oregon economy.

In addition, there are a growing number of persons who are self employed in the athletic and outdoor industry. Since 2002, the number of self-employed persons in apparel wholesaling (NAICS 4243) in the Portland metropolitan area has increased from 154 to 186, a 20 percent increase, while the number of persons self employed in design services (NAICS 5414) has increased by more than 50 percent to more than 2,700.

## *7.2 Relocation of firms from other regions*

A key factor in the growth of the athletic and outdoor cluster in the past decade has been the large number of firms that have established operations in Oregon. Since 2000, at least 25 companies have either relocated their operations to the region, or established a subsidiary operation here. In our interviews with companies that relocated, most cited Portland's strong established base in the industry, great recreational activities and deep labor pool as key reasons for choosing to locate here.

Athletic and Outdoor Firms Relocating and Expanding in Oregon

| COMPANY NAME | Year | Prior/HQ Location | Type | Expand/Relocate |
|---|---|---|---|---|
| Bonfire Snowboarding | 1994 | Salem | Subsidiary | Relocation |
| Castelli Cycling | 2006 | Minnesota | Subsidiary | Relocation |
| Chris King Precision Components | 2005 | Santa Barbara, CA | HQ | Relocation |
| Frank Creative | 2008 | Los Angeles, CA | HQ | Relocation |
| Icebreaker | 2007 | Ketchum, ID | Subsidiary | Expansion |
| Keen | 2007 | Alameda, CA | HQ | Relocation |
| Lacrosse Footwear | 2005 | Gresham | HQ | Relocation |
| Merrell Apparel Design | 2007 | n.a. | Subsidiary | Relocation |
| Montrail | 2008 | Seattle, WA | Subsidiary | Relocation |
| Sandbox Studios | 2008 | San Francisco, CA | Subsidiary | Expansion |
| Splash Northwest | 2010 | New York, NY | Subsidiary | Expansion |
| United Bicycle Institute | 2010 | Ashland, OR | Subsidiary | Expansion |
| Yakima Products Inc. | 2007 | Arcata, CA | Subsidiary | Relocation |
| Agave Denim | 2006 | Los Angeles, CA | HQ | Relocation |
| Airtime | 2008 | Hood River | Subsidiary | Expansion |
| CiloGear | 2008 | Turkey | HQ | Relocation |
| Dunderdon | 2009 | Stockholm | Subsidiary | Relocation |
| Korkers Products LLC | 2000 | Grants Pass | HQ | Relocation |
| Li Ning Sports USA, Inc. | 2007 | Beijing | Subsidiary | Expansion |
| lucky13 | 2009 | Mt. Kisco, NY | HQ | Relocation |
| Plum | 2008 | White Salmon, WA | Subsidiary | Expansion |
| Queen Bee Inc. | 2002 | Olympia, WA | HQ | Relocation |
| Quixote Cycles, LLC | 2009 | Los Angeles, CA | HQ | Relocation |
| Rapha | 2008 | London | Subsidiary | Relocation |
| Specialized Bicycle Components | 2009 | Morgan Hill, CA | Subsidiary | Relocation |

Source: Compiled by Portland Development Commission.

## References

Data on company finances, sales and principal operations is drawn from publicly available reports, including annual reports and 10-K reports filed with the Securities and Exchange Commission.

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