The next ten years will see a re-emergence of artisans as an economic force.

Like their medieval predecessors in pre-industrial Europe and Asia, these next-generation artisans will ply their trade outside the walls of big business, making a living with their craftsmanship and knowledge. But there also will be marked differences. In many cases, brain will blend with brawn as software and technology replace hard iron and hard labor. Yet in many respects, the result will be the same as it was centuries ago: artisans will craft not only their goods, but shape the economy with an effect reaching far beyond their neighborhoods, even their nations.

Historically, artisans—valued for both their craftsmanship and knowledge—succeeded with skilled hands and savvy mercantilism. Not only did they assemble finished products, they also knew how to put together suppliers, other craftsmen, and ultimately customers. Long before “outsourcing” became popularized, they would turn to others to support parts of their labors. A carriage maker, for example, might purchase wheels from a wheelwright who, in turn, might receive iron rims from a blacksmith. Much of this outsourced work was done in homes or small, shared shops.

Technological advances and the industrial revolution imperiled the artisan’s craft. Large factories were built and mass production methods led to the manufacturing of large numbers of standardized goods. By introducing the moving assembly line to the automobile industry, Henry Ford revolutionized mass production, while simultaneously creating a sharp division of labor, with workers performing a narrow set of tightly controlled tasks. Industry embraced mass production, and by the middle of the 20th century large, vertically integrated corporations dominated most American industries. Artisans became artifacts.
The rapid technological change and economic transformation of the late 20th century laid the groundwork for the emergence of disruptive businesses that would threaten mass production’s stronghold on industry. And by the beginning of the 21st century, mass production no longer determined business success in many markets. Technology—marked by the influx of personal computers into the marketplace and the pervasiveness of the Internet—increased the forces of globalization and led to intense worldwide competition. Markets fragmented. Customers demanded products tailored to their specific needs. And business speed, agility, and innovation became more important. Size and economies of scale became less important, and the United States witnessed a substantial increase in small business activity.

The coming decade will see continuing economic transformation and the emergence of a new artisan economy. Many of the new artisans will be small and personal businesses—merchant-craftspeople producing one of a kind or limited runs of specialty goods for an increasingly large pool of customers seeking unique, customized, or niche products. These businesses will attract and retain craftspeople, artists, and engineers looking for the opportunity to build and create new products and markets.

The new generation of artisans will be amplified versions of their medieval counterparts. They’ll be equipped with advanced technology, able to access global and local business partners and customers, and will be capable of competing in any industry. Their firms will be agile, flexible, and will often partner with larger firms to accomplish their business goals. Most will be knowledge artisans, relying on human capital to solve complex problems and develop new ideas, products, services, and business models. These artisans will attract and retain highly skilled and creative talent by offering freedom and flexibility and, in many cases, highly competitive compensation.

The new artisan economy will see rapid growth in the formation of small and personal (one person) businesses. The artisans will create new organizational structures and provide greater opportunities for work-life balance. These small and personal businesses will be run by a diverse group of entrepreneurs with a wide range of business objectives, but many will choose to join the ranks of the new artisans to match their work with their values.
This installment of the Intuit Future of Small Business Series looks at three emerging trends that will affect small businesses over the next decade:

1. **Barbell Economics: Brain Meets Brawn to Create Opportunities for Small Business**
   Most industries will move to a barbell-like structure: a few giant corporations on one end, a narrow middle, and a large group of small businesses balancing the other end. As more industries move to barbell structures, small businesses will find opportunities to flourish in niches left untouched by the global giants. Small business and large corporations will also collaborate more—especially in areas such as sales, marketing, and innovation.

   - **Small businesses will be better positioned than large corporations to provide customers with highly targeted, customized, and relevant products.** Small businesses, because of their size and agility, are extremely well positioned to serve niche markets (see page 6).

   - **Outsourced innovation from big business will increase opportunities for small business.** As more corporations look outside for help with innovation, a broad array of new opportunities for small business will emerge (see pages 7–8).

2. **Lightweight Business Infrastructure: Barriers Down, Small Business Opportunities Up**
   Many business infrastructure costs will be reduced as smaller, lighter, and smarter components and manufacturing systems emerge. Barriers to obtaining big business infrastructure will be dramatically reduced and available to small and personal businesses on a lower-risk, variable-cost structure.

   - **Small businesses will reclaim manufacturing, fueling small-scale and specialized production.** New manufacturing technologies will allow small businesses to lead the market in meeting demands for customization (see pages 11–12).

   - **Plug-and-play infrastructures will make small businesses more competitive and successful.** The ability of small businesses to take advantage of large-scale infrastructure and leverage new technologies will allow them to enter and compete in industries formerly served only by big business (see pages 18–19).

   - **The shift to variable cost structures for core business operations will reduce risk and increase opportunities for small businesses.** Significantly lower capital and fixed asset requirements will reduce the risk of starting a small business, while allowing for greater operating speed, agility, and flexibility (see page 19).
3. Borderless Business: Small Businesses Will Drive the Next Wave of Globalization

Cross-border business opportunities, improvements in technology and reductions in the cost of exporting will drive small business globalization and substantially increase the number of U.S. small businesses trading globally.

- **Almost half of U.S. small businesses will be involved in global trade by 2018.** Small businesses will more readily take advantage of the global marketplace in their businesses (see pages 20–21).

- **Social networks will fuel borderless commerce.** Online social networks will mute soft trade barriers, such as language and cultural differences, and facilitate cross-border trade, particularly among immigrants (see pages 25–26).

- **Globalization will increase small business diversity and amplify economic value.** Small business diversity, particularly those businesses established by immigrant entrepreneurs, will help increase cross border trade and unlock new opportunities for all small business owners (see pages 26–27).
1. BARBELL ECONOMICS

Brain Meets Brawn to Create Opportunities for Small Business

In the 1930s, Nobel Prize-winning economist Ronald Coase argued that the economy would consist of many small, independent firms, if not for the “transaction costs” associated with coordinating and collaborating with suppliers and partners. Because of the costs of working with outside companies, large, vertically integrated firms were more efficient than smaller firms. These efficiencies of scale resulted in the emergence and growth of large organizations in the 20th century.

Since Coase’s observation, information and transportation technologies have greatly reduced the transaction costs of working with partners and suppliers. Large corporations have responded to these changes by outsourcing work to networks of suppliers, many based in China and India. So far, this has focused on the supply chain and manufacturing, but large corporations are more frequently turning to outsourcing and partner networks for innovation, sales, and marketing.

Small businesses have also taken advantage of the reduction in transaction costs, and U.S. small business growth has outpaced large firm growth over the last 20 years. Small business has generated the majority of net new jobs in the United States over the last several decades (see Figure 2), and the number of personal businesses has been growing much faster than the overall economy (see Figure 3). This trend will continue over the next decade. We expect that small and personal business growth will again outpace the growth of the overall economy, and the number of personal businesses will grow from 21 million today to more than 32 million by 2018.
But the growth of small businesses does not mean the end of large corporations. The last several decades have also seen the emergence of huge global corporations. This trend will continue, and most industries will move to what the management consulting firm McKinsey calls a “barbell-like” industrial structure, with a few global giants on one end, a relatively small number of mid-sized firms in the middle, and a large number of small businesses at the other end.¹

**SMALL BUSINESSES WILL BE BETTER POSITIONED THAN LARGE CORPORATIONS TO PROVIDE CUSTOMERS WITH HIGHLY TARGETED, CUSTOMIZED, AND RELEVANT PRODUCTS**

Our industrial system is producing a vast array of goods and services. Global sourcing, technology, and cheaper business infrastructure makes it easier, cheaper, and faster to produce products. It has also allowed companies of all sizes to serve increasingly smaller market niches. For example, in his book *The Long Tail*, *Wired* editor-in-chief Chris Anderson wrote that, “in 2003 alone, 26,893 new food and household products were introduced, including 115 deodorants, 187 breakfast cereals, and 303 women’s fragrances.”² The explosion in product variety is also true in service industries and industrial markets.

Small businesses have always served niche and customized markets, but the niche opportunities for small businesses have dramatically increased over the last decade. Technology and global sourcing have made it easier to produce niche-oriented products, while the Internet has created the ability to cost-effectively market and sell these products. Additionally, the demand for customized and niche products has increased as both consumers and industrial companies look for products that meet specific needs.

Small businesses, because of their size, agility, and cost structures, are often better positioned to serve niche markets than large corporations. They can develop deep customer knowledge and intimacy in narrow markets too small for large corporations to effectively serve. This allows small businesses to more easily and rapidly customize products for the specific needs of their customers. The automotive aftermarket, for example, has thousands of small businesses that provide highly customized products and services for car owners—everything from specialty engine parts and 20-inch spinning wheels to custom paint jobs and deluxe in-car entertainment systems. Similarly, buying one-of-a-kind clothing, or even
Small businesses, because of their size, agility, and cost structures are often better positioned to service niche markets than large corporations.

commissioning designers to produce individualized clothing, has become easy, thanks to online marketplaces such as Etsy.

Large corporations recognize that small businesses are better able to serve niche markets and are looking to small businesses as partners. This has long been a common practice in the technology industry, where firms like IBM, Microsoft, and others have long relied on small business partners to reach specialized or niche markets. This approach is rapidly spreading to other industries, and sales and marketing relationships between small and large corporations are becoming commonplace. Financial service firms, consumer goods manufacturers, media companies, and others are using small business sales and marketing partners to reach niches and customize products for specialized markets.

Simply put, small businesses are better positioned in many markets than large corporations to provide customers with highly targeted, customized, and relevant products. Because of this, the next decade will see small businesses deliver on the promise of mass customization.

OUTSOURCED INNOVATION FROM BIG BUSINESS WILL INCREASE OPPORTUNITIES FOR SMALL BUSINESS

Small businesses are a growing source of industrial innovation and several factors are driving this shift. The global increase in knowledge workers and their job mobility has created a large pool of talented innovation professionals outside of large corporations. Starting a small business based on an innovative idea is cheaper and easier, and the rewards of success are dramatically more lucrative. Small companies can also focus their innovation efforts on smaller niches or risky areas that large corporations are unwilling—or unable—to pursue.

This growth in innovation among small businesses is leading to a fundamental shift in how large corporations pursue innovation. Instead of focusing entirely on internal research and development for new ideas, corporations are now looking outside for help with innovation. This approach is generally called open innovation and large corporations are using a variety of partnership models to tap new ideas from external sources. In the technology industry, for example, Cisco, Intel, and others invest in, partner with, and acquire small businesses in addition to developing new ideas in house.
But the trend toward open innovation goes well beyond the technology industry. Other industries, including health care, automotive, finance, retail, and even consumer goods, are moving to open innovation models. Proctor and Gamble, for example, has one of the largest research and development organizations in the world, with more than 7,500 staff members. Despite this, P&G has committed to getting half of its innovations from external sources.

To help reach this goal, P&G developed the "Connect and Develop" program to cultivate innovative ideas by working with third parties. The company also created a Web site to help reach external innovators (see Figure 4). As part of this program, P&G has done more than 600 deals over the last five years with a mix of large, medium, and small businesses. The highly successful Crest Spinbrush product, for example, came from a partnership with a small company in Cleveland.

The next decade will see open innovation become common in most industries. Small innovators will grow in number and work with larger corporations to spread their innovations across markets.

Large Corporations Will Continue to Grow

While the role of small business has become increasingly significant in the U.S. economy, the last 20 years have also seen the rise of global industrial giants of extraordinary scale and scope. During this period and adjusted for inflation, Fortune 500 companies have almost doubled their combined revenue and almost tripled their combined profitability. Today, a company has to have more than seven times the inflation-adjusted revenue today as it did in 1955 to be in the Fortune 500 (Figure 5). Furthermore, most industries have consolidated, with fewer companies controlling increasing amounts of industry assets, revenue, and market share.

The growth of global giants has been driven by many factors. Globalization, and the opening and deregulation of new worldwide markets, created the need and opportunity to expand internationally. Intense cost competition has resulted in industry consolidation as firms look for ever-greater economies of scale. The equity markets have also driven the growth of global giants, with large, public company management under constant pressure from shareholders and private equity firms to increase revenue and profitability.
The demand for top-line growth, combined with competitive pressures, has pushed large firms to acquire smaller firms. Mergers and acquisitions are now commonly used by most large corporations to gain share, enter new markets, and add innovative products. Coca-Cola’s recent acquisition of the specialty beverage company Glaceau is a good example and fits Coke’s stated goal to acquire mid-sized companies that have innovative and growing product lines.6

The rise of global giants, coupled with the growth of small businesses, is greatly reducing the number of mid-sized firms in most industries — the middle piece of the barbell. Mid-sized firms tend to lack the scope and scale of global giants, and are less agile than smaller businesses. Caught in the middle, they often struggle to compete. As Coke’s acquisition of Glaceau shows, mid-sized firms are also popular acquisition targets for the global giants. This reduction in mid-sized firms, coupled with the growth of small businesses, further accentuates barbell-like industrial structures.

With the growth of global giants, a few companies now dominate most industries in the United States in terms of market share. In his book Market Domination!, Stephen G. Hannaford wrote that industry consolidation extends beyond well-known industries such as automobiles or beverages, and includes industries such as carpets, food flavoring, and toys (see Figure 6).7

While global giants have gained market share and scale, this has not necessarily translated into increased market and pricing power. In addition to competing with other large corporations and negotiating with large supply and demand chain partners, innovative smaller companies and new entrants are constant competitive threats.

Large Corporations and Small Businesses Will Compete, Cooperate and Sell to One Another—Often at the Same Time

Most large corporations historically viewed small businesses as unimportant or secondary sources of supply. Large corporations targeted either consumers or other large corporations as customers, and looked to large corporations as their major supply sources. But the growth of small business over the last two decades has started to change this relationship. Small businesses now generate more than half the economic output of the United States and employ over half of the private labor force. Small business has become too big to ignore — smaller, innovative companies and new entrants are constant competitive threats — and the small business sector has become a substantial market opportunity.
As more industries move to barbell structures, there will be increasing opportunities for small business to flourish in niches left untouched by the global giants.

In the beer industry, for example, the recent merger of SAB Miller with Molson Coors resulted in two companies, SABMiller and Anheuser-Busch, owning almost 80% of the U.S. beer market. But since 1980 the number of small commercial craft brewers has grown from eight to over 1,400 (see Figure 7). These specialty brewers provide innovative products and price competition for the large brewers. While these small brewers have a very small share of the U.S. beer market, they are highly visible to U.S. beer drinkers and compete directly with the giants for customers. But in addition to competing with the major brewers, they also source materials from larger brewers—they compete and cooperate. This same pattern will happen in most industries over the next decade.

The competition from small businesses isn’t limited to the previously mentioned craft brewers and small beverage companies, such as Glaceau. Small, startup airlines compete with large, established airlines. Small technology companies compete with Microsoft and IBM. Small consumer products companies, such as Method, compete with Unilever and P&G. And small financial firms compete with Citicorp and Bank of America. Even the automotive industry is seeing small, startup car companies using innovative new products, such as electric cars, to compete with Ford, GM, and Toyota.

Even though they are competitors, large and small companies are also partnering with one another. The marketing and innovation partnerships described earlier in this section will become more common over the next decade. Also, small companies will partner with large corporations to gain access to big business infrastructure (see Lightweight Business Infrastructure section). Technology makes it easier for large corporations to partner with a relatively large number of small businesses who stand to gain by tapping big company assets.

The next decade will see the relationships between small and big businesses become multifaceted and more complex. Just as large corporations simultaneously cooperate and compete with each other, so will small and large corporations. Large corporations will look to small companies for innovation, marketing help, product customization, and new business processes. Small companies will look to big corporations for their scale, infrastructure, and channels. David and Goliath will work together.
2. LIGHTWEIGHT BUSINESS INFRASTRUCTURE

Barriers Down, Small Business Opportunities Up

Early in the 20th century, Henry Ford was among the first to understand the power of large-scale industrial infrastructure. Ford’s implementation of mass production methods and use of vertical integration to build economies of scale resulted in the rapid growth of the Ford Motor Company. Other corporations followed suit, and by the middle of the 20th century large, vertically integrated corporations dominated most American industries.

But by the beginning of the 21st century, ownership of large-scale infrastructures no longer determined business success in a growing number of industries. Brick and mortar and heavy iron gave way to speed, flexibility, and innovation. New technologies, collaborative supply chains, and outsourced manufacturing created a lightweight infrastructure—smaller, cheaper, and more agile.

Infrastructure costs will continue to fall as smaller, cheaper, and smarter components and manufacturing systems emerge over the next decade. Perhaps more important, barriers to obtaining large-scale business infrastructure such as supercomputers, global distribution systems, and world-class manufacturing, will be reduced. Even when large-scale business infrastructures are required, large platform companies will provide small businesses with plug-and-play access, allowing small manufacturers access without hefty capital investment.

Lightweight infrastructures will expand and redefine the boundaries of the small business. They will provide greater agility and flexibility in collaborating, pooling resources, and outsourcing functions to other firms. These changes will reduce the risks of starting and operating a small business by lowering capital requirements and shifting fixed costs into variable costs. Lightweight infrastructures will also open new markets and create new opportunities for small and personal businesses.

SMALL BUSINESSES WILL RECLAIM MANUFACTURING, FUELING SMALL-SCALE AND SPECIALIZED PRODUCTION

The word manufacturing comes from the Latin *manu factura*, which means “making by hand.” Before the industrial revolution, most manufacturing was done by hand by individuals or small groups of skilled workers. But over the last century, manufacturing came to mean large-scale industrial production where raw materials are turned into finished goods in large factories.
The next decade will see a fundamental shift in how we view and define manufacturing. Just as advances in information technology have changed how we accomplish and define knowledge work, new manufacturing technologies and methods will change the nature of producing goods. Small business will reclaim a significant segment of on-demand, specialized manufacturing, enabling knowledge artisans, craftspeople, and others who “make things” to expand their markets and be viewed as “manufacturers.”

Advances in production technologies are already providing small businesses, craftspeople, and hobbyists with greater opportunities to manufacture goods. Specialized software that runs personal computers connected to machinery has created a wide range of low-cost manufacturing systems. Brother Electronics, for example, has a line of PC-controlled sewing machines that allow for the rapid creation of clothes and embroidery, including the ability to quickly and repetitively sew complex patterns on material. Brother even has software that turns digital pictures into sewing patterns. These machines retail for less than $1,000 and Brother promotes small business use of these machines through a company program.

Laser cutting is another area where PC-controlled systems have made major advances. For less than $4,000, a small business can purchase a computer-controlled laser cutting system that allows users to fabricate high-precision components quickly and cheaply. In addition to designing their own customized components, users can also purchase design files created by others. This means laser cutter owners can tap the design skills of others to create their products.

Production Moves to the Desktop

More advanced manufacturing systems are also starting to be used by small manufacturers, and even hobbyists. Rapid prototyping machines (see Figure 8) make 3-D working models from computer-aided design, or CAD, files without any tooling or traditional production equipment. For example, one form of rapid prototyping—called inkjet manufacturing—uses an inkjet printer to “print” a 3-D object by spraying fine beads of plastic or resin instead of ink. These beads then build up to create a freestanding object, as pictured in the computer design files.
Such rapid prototyping, often referred to as desktop manufacturing, has already had a significant impact on product design. Designers work faster, users test and comment on prototypes earlier and more often, and problems are caught before production begins. The cost of desktop manufacturing machines has dropped substantially over the last decade, and simple machines can be purchased today for less than $5,000. The price decreases are broadening the market, allowing small businesses, artisans, and hobbyists to purchase desktop manufacturing systems.

Rapid prototyping, coupled with CAD, also allows small businesses to cost effectively create and test complex product models. This cuts time to market, reduces manufacturing errors, and lowers product costs. Detailed and tested product plans can be provided to outsource manufacturing partners who can produce the final products quickly and cheaply. Using CAD and desktop manufacturing systems provides even an individual the ability to create complex product designs that can be efficiently turned into products by a third-party manufacturing firm.

These technologies are moving beyond the prototype and planning stages—they are now being used to make actual products. For example, Siemens and Phonak are using these tools to create silicone earbuds for music players, while aerospace and other manufacturing companies use rapid prototyping techniques to make small runs of complex parts. As more complex and sprayable composite materials become available, small businesses will be able to build a broader range of products using these tools.

Desktop manufacturing will not replace traditional manufacturing; it won’t be economical for large-scale production. But just as connecting the PC to the laser printer led to desktop publishing, connecting PCs to a wide range of machine tools will unleash a new wave of small-scale manufacturing innovation. Desktop publishing disrupted traditional printing and created a variety of new personal and small business opportunities. Desktop manufacturing will do the same across many manufacturing categories, creating enormous new opportunities for small and personal businesses to produce innovative products.

Open Source Hardware Will Present New Manufacturing Opportunities

Just as open source software changed the software industry and created new opportunities for small and personal businesses, open source hardware will fundamentally change the electronics and other manufacturing industries. Open source hardware and equipment consists of Lego-like modules that can be easily mixed and matched to create new or specialized devices. Bug Labs, for example, has created a collection of easy-to-use electronic modules that represent different gadget functions such as a camera, a keyboard, a video
output, that snap together to build a wide range of products (see Figure 9). These modules can either be plugged in to other open source modules, embedded in another product, or both.

Open source hardware enables businesses and hobbyists to build customized electronic devices without understanding hardware design or solid state electronics. Product designers simply plug in the module. Several small companies are shipping first-generation open source hardware modules that can also be used independently or embedded in other products. Because of the modular nature of the components, product designers don’t need to have detailed electronics knowledge and skills to use them.

Open source hardware also expands small businesses’ manufacturing opportunities, making it much easier to embed electronic components and capabilities into other products. For example, adding GPS capabilities to dog collars so owners can easily track and find their pets will be much easier with open source hardware. Creating niche or highly customized electronic products by mixing and matching open source modules will also become viable.

The next decade will see the open source movement extend beyond technology and electronics as other industries start to produce open source equipment. For example, office furniture is starting to be produced as modules with the final assembly done by combining components to meet the needs of the customer. This modular production concept will become common across a mix of industries, spurring new opportunities for small businesses to create, manufacture, and deliver customized products to their customers.
Niche Manufacturing Will Meet the Demand for Customization

While manufacturing industry employment continues to decline, Kaufman Foundation research shows recent growth in the number of entrepreneurial manufacturing firms. Many of these new manufacturing firms serve specialized niches that are not easily or efficiently served by overseas manufacturers.

Local niche manufacturers excel in three areas: time to market, small order sizes, and customized products. Overseas manufacturers generally require large order sizes, and transcontinental shipping requires either relatively expensive air freight or relatively slow shipment by sea. The order sizes and time required to build and ship products also makes the production of customized products overseas difficult. These contingencies allow local niche manufacturers to thrive. For example, Baltimore industrial basket manufacturer Marlin Industries has found a defensible niche by targeting customers that want small, customized orders turned around very quickly.

Local niche manufacturers can also develop deeper customer relationships, and are better positioned to participate actively in customer product design and innovation than their larger, overseas counterparts (see Barbell Economics). While communicating across distances has become easier, face-to-face interaction continues to be the best way to exchange complex ideas and information. Thus, niche manufacturers located close to their customers have a clear advantage.

Just as desktop manufacturing will not replace traditional manufacturing, niche manufacturers will not replace large manufacturing facilities. In fact, many niche manufacturers are customers of larger manufacturers. They purchase intermediate goods and materials from them, and add value or customize the products for the specific needs of their customers. By purchasing intermediate goods overseas, the niche manufacturer benefits from economies of scale and low-cost sea freight. Obtaining components in this fashion lets them quickly and efficiently manufacture higher-value, highly customized products.

With time to market and product customization becoming more important, niche manufacturing will grow over the next decade. New manufacturing methods and techniques, such as the previously mentioned desktop manufacturing and open source hardware, will expand the range of products, industries, and markets supported by niche manufacturers. Small and specialized manufacturers will use these methods to serve a broader array of niche industrial and consumer markets.
New Marketplaces, New Customers, and New Manufacturing Methods Lead to the Growth of Artisan and Craft Manufacturing

The advent and growth of online retailing has created many new opportunities for individual artisans, small businesses, and do-it-yourself (DIY) hobbyists to sell arts and crafts and other custom-made products. In addition to sites like eBay, there are online marketplaces that focus exclusively on crafts and custom made products. The online crafts fair Etsy, for example, has more than 100,000 registered sellers who market a wide variety of crafts and artwork. Etsy and other online sites provide sellers access to global customers.

While most Etsy sellers are part-time or occasional sellers, a growing number are creating full-time small and personal businesses by making and selling crafts and custom products. Many of these full-timers started out as hobbyists and DIYers, and their numbers are rapidly growing. O’Reilly’s Make: magazine is completely focused on helping hobbyists make complex products, and its Maker Faire events draw thousands of people to see what the “makers” are up to (see Figure 10).

Building on this trend, hobbyist DIYers are now using their skills and new manufacturing tools to create a wide range of devices and products.

While most DIYers and hobbyists don’t intend to create a small business, many start selling their wares to fund their avocation. Buying hobby supplies and equipment is expensive and product sales help cover these costs. For most hobbyists, this is as far as their business goes. However, a growing number move to the next level and create small businesses, with online marketplaces enabling the transition.

IFTF research reveals there is a growing demand for highly customized and unique products made by artisan and craft manufacturers. Consumers seek specialized or alternative goods and services outside the world of mass production. This growing consumer segment tends to be community focused, environmentally aware, relatively affluent and technologically savvy. While this market is currently a small one, a majority of U.S. consumers are expected to become part of this market segment by 2018.

The next decade will see strong growth in artisan manufacturing. New manufacturing technologies and methods will expand the range of products that can be made by artisans. Demand will grow as more consumers look for artisan products, and buyers and sellers will find one another via online marketplaces. The result will be the formation of many new artisan small manufacturers.
Lightweight Information Technology Extends and Expands Small Business Capabilities

The small and personal businesses of the future will build upon information technology to extend and expand their capabilities. Decreasing IT costs, coupled with increasing computer power and the growing popularity of "software as a service" delivery, will provide small businesses access to rich and complex business applications. These new applications will require less time, money, and technical skills than traditional business applications, and offer the flexibility and ease of use of desktop software. They also provide small businesses with tools and capabilities once exclusively available to large corporations (see The Connected World in the first installment of the Intuit-IFTF Future of Small Business report, Demographic Trends and Small Business).

The Internet, connective technologies, online social software, and communities like JumpUp also allow small and personal businesses to quickly and easily form collaborative relationships with others. It is now easier than ever for individual and small businesses to band together, share ideas, distribute work across far-flung team members, and be productive without being co-located or even part of the same company. Online social software, such as community sites, blogs, and wikis, solve many of the problems associated with distributed work, and allow small businesses to virtually staff and take on larger projects without assuming the costs and responsibilities of adding full-time staff.

A number of service firms are helping small and personal businesses create virtual teams and outsource work. Web sites from companies such as eLance (see Figure 11), and MyBusinessAssistant provide virtual marketplaces where small businesses can outsource work or sell their services to others looking for outside assistance. For independent workers and small businesses who need office space, co-working facilities provide both a workplace and a broadened professional and social network of like-minded individuals.
Often members of the same co-working facility will join together to bid on projects [see The Rise of Personal Businesses in the first installment of the Intuit-IFTF Future of Small Business report, Demographic Trends and Small Business]. Virtual teaming and technology-supported outsourcing will become common as more small and personal businesses take advantage of global online social networks [see Borderless Business section for more on cross-border social networks].

**PLUG-AND-PLAY INFRASTRUCTURES WILL MAKE SMALL BUSINESSES MORE COMPETITIVE AND SUCCESSFUL**

Even when lightweight infrastructures aren’t available and heavy infrastructures are required, small businesses can gain access to large-scale facilities through contract arrangements. Many large technology companies, including IBM, Microsoft, Google, and others are offering plug-and-play access to their computing infrastructures. Small and personal businesses can contract for these services and easily integrate them into their operations.

Amazon offers a wide range of infrastructure services to small businesses on a plug-and-play basis. In addition to providing IT services, Amazon actively recruits third-party companies to use its warehousing and distribution system. Amazon also provides online storefronts, billing, and shipping for a large number of small e-retailers. All of this is done on a fee basis with no fixed-cost commitment on the part of the small business.

The physical world also has a large number of companies that provide plug-and-play infrastructure services. Contract manufacturers, for example, build products for small businesses on an outsourced basis. If a small business needs design help, contract designers and original design manufacturers can do the job. Warehousing and shipping can be handled by companies such as Shipwire. Distribution and supply chain logistics are the domain of UPS, FedEx, and others. Distributors and resellers put products in customers’ hands, while billing and collection can be handled by Visa, MasterCard, and PayPal.

Sales and marketing can also be outsourced. Marketing agencies handle promotion, and contracting for a sales force has become relatively straightforward. If the merchandise fits with their product line, many large corporations provide sales and marketing assistance on a commission basis.
For those who want to avoid the hassle of assembling these services, firms are available to do everything for an entrepreneur. Mom Inventors Inc., for example, will “develop, manufacture, and sell quality Mom Invented™-branded products throughout the United States and Europe.” The entrepreneur only needs to come up with the idea; Mom Inventors will do the rest (see Figure 12).

The next decade will see a substantial increase in small businesses’ ability to capitalize on world-class, large-scale infrastructure capabilities on a plug-and-play basis. This will greatly expand the reach and capabilities of small businesses, allowing them to address industries once served only by large corporations. Also, while entrepreneurs will need to continually increase their management skills, they will no longer be required to have deep knowledge of all aspects of their business. Entrepreneurs and small businesses will turn to others for the skills or services they need to run various parts of their businesses.

**THE SHIFT TO VARIABLE-COST STRUCTURES FOR CORE BUSINESS OPERATIONS WILL INCREASE OPPORTUNITIES FOR SMALL BUSINESSES**

Plug-and-play infrastructure, contract employees, and outsourcing also reduce the need for small businesses to invest in fixed assets. This greatly lowers their capital requirements, and makes almost all their costs variable. This shift to variable costs encompasses all aspects of small business, not just manufacturing and distribution.

Sales costs can be variable through the use of commissioned third parties. Marketing expenses are also becoming variable. Cost-per-action marketing—where marketing expenses are directly linked to sales—is becoming more common. Google has even suggested that future marketing expenses will be accounted for as cost of goods sold, because of the variable cost nature of ad words and online marketing. In addition, overhead expenses, such as payroll, finance, and human resources, can all be outsourced. Through a variety of contracting arrangements even employee costs can be variable.

This shift to variable costs allows small businesses to be quick and agile, and operate with highly flexible business models. This lowers small business’s barriers to entry, expands opportunities and reduces their risk. It also greatly expands the number of people who can start a small business, changing the face of entrepreneurship (see The Changing Face of Small Business in the first installment of the Intuit-IFTF Future of Small Business report, Demographic Trends and Small Business).
3. BORDERLESS BUSINESS

Small Business Will Drive the Next Wave of Globalization

Noted communications theorist and author Marshall McLuhan coined the term “global village” in the 1960s to describe the electronic communication that would unite the world culturally. In his book, *The Lexus and the Olive Tree*, Thomas Friedman described the global economic integration of the last half of the 20th century as “the inexorable integration of markets, nation-states, and technologies to a degree never witnessed before—in a way that is enabling individuals, corporations, and nation-states to reach around the world farther, faster, deeper, and cheaper than ever before.” Clarence J. Mann and Klaus Gotz call this “borderless business” in their 2005 book of the same title.10

Economic globalization—commonly defined as increasing integration of economies around the world, particularly through trade and financial flows—is not new. Cross-border trade has existed throughout history and most of the great explorers were financed by groups looking to expand trade opportunities. However, the rate of global integration and trade has greatly increased over the last two decades, driven by the rise of global communication networks, more affordable transport, lower trade barriers, and the Internet (see Figure 13). While McLuhan’s cultural global village may or may not emerge, the global village of commerce is already here.

The next decade will see a new wave of cross-border trade as small businesses become increasingly global. Taking advantage of new business opportunities, reduced formal and informal trade barriers, improved technology and access to lightweight infrastructures, small and personal businesses will increasingly participate in cross-border trade. The leaders of these businesses and these efforts will reflect the most culturally diverse group the United States has ever seen (see the Changing Face of Small Business in the first installment of the Intuit-IFTF Future of Small Business report, *Demographic Trends and Small Business*).

ALMOST HALF OF SMALL BUSINESSES WILL BE INVOLVED IN GLOBAL TRADE BY 2018

One seller. One world market. Small businesses can now serve international markets and customers almost as easily as they serve their local customers. Globalization is changing how small businesses perceive the marketplace. Both
opportunity and risk for small and personal businesses remain real, but the opportunities are rising and risks are declining compared to even ten years ago.

Global deregulation and a shift to market-oriented economies have greatly reduced the barriers to cross-border trade. Communication networks and the Internet help local suppliers meet global demand. Money transfers and faster, more reliable global shipping make both the financing and the delivery of international transactions much more straightforward. In short, small business can do business with a global customer base, and global customers can find competitive suppliers around the world.

Overall, business opportunity will drive the growth of small business globalization. World trade is exploding and non-U.S. global merchandise imports have doubled in the last five years. According to the World Bank, the growth in world trade is going to continue and global trade is expected to triple by 2030. High-growth emerging markets, such as China and India, are increasing their imports. Trade by developed nations also continues to grow, and almost all countries are encouraging international trade.

In addition to growing world demand for goods and services, there are clear trends indicating that both hard and soft trade barriers are fading. The World Bank’s 2008 “Doing Business” survey indicates that “hard,” or formal trade barriers, such as customs taxes, quotas, and other market regulations, have fallen in most regions of the world. The world is embracing international trade as a tool for economic growth. Moreover, with transnational migration more common and workforces blending across cultures, “soft,” or informal, trade barriers, such as language, business networks and local business practices, pose less of a hurdle than they did in the past.

The worldwide Internet revolution is also enabling small business globalization (see The Connected World in the second installment of the Intuit-IFTF Future of Small Business report, Technology Trends and Small Business). There are more than 1 billion Internet users outside the United States and small U.S. businesses with an Internet presence have access to this market. Internet traffic flows freely across borders, and most of the traffic on top U.S. Web sites comes from overseas.
ComScore Networks, a Web analytics firm, reports that more than 70% of unique visitors to Google, Yahoo and eBay come from outside of the United States. As a result, many small U.S. businesses become “accidental” exporters, as foreign buyers find their products on the Internet and make a purchase. The same holds true for imports: U.S. consumers and businesses find foreign products on the Web, buy them, and discover enough domestic market potential that they consider importing merchandise for resale in this country.

**Small Business Sees Export and Import Opportunities**

Many small businesses in the United States are already export-oriented. The U.S. Commerce Department reports there were about 240,000 small business merchandise exporters in 2005, more than twice the number in 1992. These were firms with fewer than 500 employees, and roughly 100,000 had fewer than 20 employees. All told, these firms contributed more than 30% of total U.S. exports in 2005. Breaking this down further, firms with fewer than 20 employees accounted for roughly 7% of all U.S. exports.

The economic impact is impressive. The Small Business Administration reports that in 2006, small firms exported a record $375 billion in merchandise, growing exports three times faster than the overall economy. Yet there is tremendous room for business expansion as small businesses connect with other foreign markets. The U.S. Commercial Service reports that nearly two-thirds of all small business exporters sell to only one foreign market.

While the number of U.S. small business merchandise exporters is growing quickly, the overall numbers are still small. There is limited government data on small business service exports, so the number of service exporters is not easily quantified. But according to a recent study by global shipping company UPS, roughly 33% of U.S. small businesses participate in cross-border trade.

The number of small business exporters will grow substantially over the next decade. With roughly 80% of the world’s gross domestic product and 95% of the world’s population outside of the United States, export markets are simply too big to ignore (see Figure 14). Advances in technology and reductions in the cost of doing business overseas are greatly expanding the number of small businesses...
In 2006 small business exports grew three times faster than the overall economy.

Small business import activity is equally interesting. U.S. Customs data reveals more than 754,000 importers in the United States in 2004, bringing in some $1.41 trillion worth of goods. The top 1,000 importers account for 62% of total U.S. imports in value, each of them averaging $874 million. The small business story lies with the remaining 38% of import value, which is spread among 753,000 importers at roughly $712,000 per importer. After adjusting for normal profit margins, the data reveals that the United States has a considerable number of small business importers generating between $1 million and $2 million in annual revenue.

The increase in immigrant population is a clear driver for increased international trade. The history of a basic food import demonstrates this. In the early 1970s, Mexican mole sauce could only be found in select parts of California, Texas, and the Southwest. It was imported directly from Mexico and was purchased almost exclusively by immigrants. Demand has since spread beyond the Hispanic community. Imported mole sauce is now a staple on grocery shelves across the country.

The Center for Immigration Studies in Washington, D.C., reports that nearly one in eight people living in the United States is an immigrant, the highest level since the 1920s (see Figure 15). The greater the number of immigrants, the more economic sense it makes to import foreign goods. More important, as immigrant populations become a larger percentage of the diverse U.S. population, cross-cultural demand for ethnic products will become more common and increase.

More Small Businesses will be Involved in Global Trade

Over the next decade, small and personal businesses will identify and fill new market niches created by a growing demand for foreign products in the United States and abroad. The number of small business players increases as entrepreneurs test foreign products and find new market opportunities. Many of these niches will reflect the United States’ complex cultural diversity. As small businesses incorporate their knowledge of foreign customs and traditions into their market plans, they will identify unique market opportunities and better execute strategies to build business relationships across national borders.

Clearly, international markets are opening up and rapidly growing. The Internet is
connecting U.S. small businesses to overseas customers. And our culturally di-
verse and globally aware workforce is more comfortable than ever with both
foreign cultures and international entrepreneurship (see The Changing Face of
Small Business in the first installment of the Intuit-IFTF Future of Small Business
report, Demographic Trends and Small Business).

Largely driven by expanded international business opportunities, small businesses
will more readily take advantage of the global marketplace in their businesses. Ag-
gregating both export and import activity, nearly half of U.S. small businesses will
be involved in global trade by 2018.

Foreign Small Businesses are also Globalizing

The same forces that are increasing the number of U.S. businesses trading globally
are also expanding the number of foreign-based small businesses that can com-
pete in the U.S. market. As a large and somewhat homogenous market with few
trade barriers, the United States has always been an attractive market for foreign
companies.

Small foreign businesses have greatly increased their exports to the United States
over the last two decades. Starting in the 1980s, an increasing number of U.S.
companies obtained low-cost goods and services from overseas. Wal-Mart, in
particular, is effective at finding and sourcing a wide range of low-cost imported
goods. Many of these overseas suppliers are small businesses that have learned
from their early experiences to expand in the United States.

Big foreign businesses also play a role in helping their smaller counterparts in ex-
porting to the United States. Foreign direct investment in the United States is large
and growing and foreign companies already employ more than 5 million Ameri-
cans. Many of these firms look to their existing home country business partners
for products, and many smaller foreign businesses follow their customers to the
United States. Foreign firms also expose their U.S. suppliers to markets in their
home countries, spurring cross-border trade in both directions.

Many service industries will also be affected by foreign business competition over
the next decade. For instance, health tourism—traveling abroad to obtain lower-
cost health care providers or to purchase pharmaceuticals—is becoming a popular
alternative to domestic health services. A large number of retirees in the Phoenix
and Tucson areas, for example, make day trips to Mexico for ongoing dental care, booking with specialists trained at leading U.S. and Mexican universities, and paying fees less than half the domestic price. This behavior is typical of many border areas. Similarly, international valets based in India can handle your daily administrative business in Topeka, Kansas. Services like this are not uncommon; other examples include using distant providers for research, editing, tax accounting, and other administrative support.

**SOCIAL NETWORKS WILL FUEL BORDERLESS COMMERCE**

The influx of immigrants to the United States over the past several decades has created a very diverse small business workforce, many with strong business and personal connections in their native countries (see *The Changing Face of Small Business* in the first installment of the Intuit-IFTF Future of Small Business report, *Demographic Trends and Small Business*). These connections, both in person and online, greatly facilitate cross-border trade, including both exports and imports by small U.S. businesses.

Through small business formation, the growth of the U.S. immigrant pool is driving economic growth and success in a number of major U.S. cities. In the “Los Angeles Economy Project,” the Milken Institute reports that the economic recovery of Los Angeles is due in part to immigrants forming new businesses. The local economy is becoming global as immigrants and others use cross-national market knowledge and ties to develop their small businesses.

Strong social networking among immigrants enables cross-border small business success. These networks develop through family, community, church ties, and professional affiliations, as well as online through the Internet. Formal and informal, online and offline, social networking creates a system of cross-cultural market intelligence which allows immigrants to participate in the global market.

In fact, research has shown that immigrants who take advantage of their personal networks tend to lead in increased cross-border trade. In her book *The New Argonauts*, University of California Professor AnnaLee Saxenian writes:
...the ease of communication and information exchange within ethnic professional networks accelerates learning about new sources of skill, technology, and capital as well as about potential collaborators, facilitating the timely responses that are essential in a highly competitive environment.

Networking, she emphasizes, allows immigrants to “locate foreign partners quickly and to manage complex business relationships and teamwork across cultural and linguistic barriers.” While a number of these networks may be online, ethnic group affiliations, professional associations, and informal personal networks through work and community form many more.¹⁸

Broader and improved Internet access and cheaper global communications have greatly improved cross-border social networks. These online tools amplify existing social and professional networks and broaden their geographic coverage. Many immigrants use social networking sites such as MySpace and Facebook to keep up with friends and family in their home countries (see The Connected World in the second installment of the Intuit-IFTF Future of Small Business report, Technology Trends and Small Business). They use these same tools to maintain and grow their business networks. Interestingly, even more specialized online international social networks such as Tierra Natal (www.TierraNatal.com), the soon-to-be-released Culture Café (www.culturecafe.com), and One Global Economy (www.ogecorp.org) are starting to appear.

Online social networks help to mute soft trade barriers, such as language and cultural differences, encourage a broader set of social and business relationships, and increase the likelihood of cross-border trade success.

GLOBALIZATION WILL INCREASE SMALL BUSINESS DIVERSITY AND AMPLIFY ECONOMIC VALUE

The trends are clear: Global markets will continue to open and small business will more readily take advantage of international opportunities. Cultural savvy, language skills, and strong international networks give entrepreneurs with international backgrounds and know-how a clear advantage. They will be better equipped to move swiftly, with greater agility, and with greater certainty in foreign markets. Stronger positioning, and an ability to work with a diverse set of foreign partners, improves the likelihood of success for small businesses’ international ventures, regardless of the directional flow of their goods and services.
With these shifts, the United States will see the continued growth of immigrant entrepreneurs and their focus will be global. According to the U.S. Census Bureau, immigrant entrepreneurs are one of the fastest-growing segments of small business owners today [see The Changing Face of Small Business in the first installment of the Intuit-IFTF Future of Small Business report, Demographic Trends and Small Business].

In a 2005 study, the Immigration Policy Center found that the number of immigrant women entrepreneurs had increased 190% since 1990, and 468% since 1980, approaching 10% of all working immigrant women. The Kauffman Foundation also showed that immigrants form small businesses at a much higher rate than non-immigrant Americans. These immigrant entrepreneurs come with foreign market knowledge, cultural and financial incentives to link back to their home market and, as mentioned above, personal and professional networks which facilitate business development.

**Immigrant Entrepreneurs Bring New Insights**

As new entrants to the economy, immigrant entrepreneurs have the advantage of seeing a market with fresh eyes and will be able to identify and customize products for new and previously undefined market niches. They may also discover the products missing in a domestic market that were available in their home market. Increased networking and more advanced communication tools will facilitate stronger cross-national ties, making it easier and less costly to bring these new ideas to the marketplace.

As small businesses globalize, entrepreneurs with global ties will become key to the U.S. economy. Diverse entrepreneurial backgrounds will continue to create, not impede, new market opportunity. Assuming no major change in immigration policy, we expect to see exponential growth in immigrant entrepreneur startups. Globalization will amplify the economic value of diversity in the U.S. economy, leading to increased market growth here and abroad.

Creating roughly 75% of new jobs in the United States, small business owners are becoming more dominant players in the nation’s economy. They are responsible for new technology and product innovation, and for creating, not just filling, new market niches. They are the artisans who master the art of on-demand production, and they will adapt those skills to meet needs in the global market.

Small businesses’ global niche market expertise will make them appealing partners for larger firms in the marketplace. Larger firms will look to small businesses for innovation across foreign markets to help them expand global market share. Finally, small
businesses with cross-border operations will deliver new technology to less-developed markets, making the international marketplace more integrated and seemingly borderless. This helps both sides of a bilateral trade relationship, and can be an important facet for global economic development.
1 While many have pointed out the trend of industry consolidation combined with the growing number of small businesses, McKinsey is where we first heard the term “barbell industrial structures.” See the McKinsey Quarterly articles titled “Strategy in an Era of Global Giants” by Brian and Zanini (May 2005) and “Ten Trends to Watch in 2006” by Davis and Stephenson (January 2006), available at www.mckinseyquarterly.com.


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13 Kaye, Kate. “Big Ad Properties Get Over 70% of Traffic Outside of the US.” ClickZ, November 9, 2006.


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