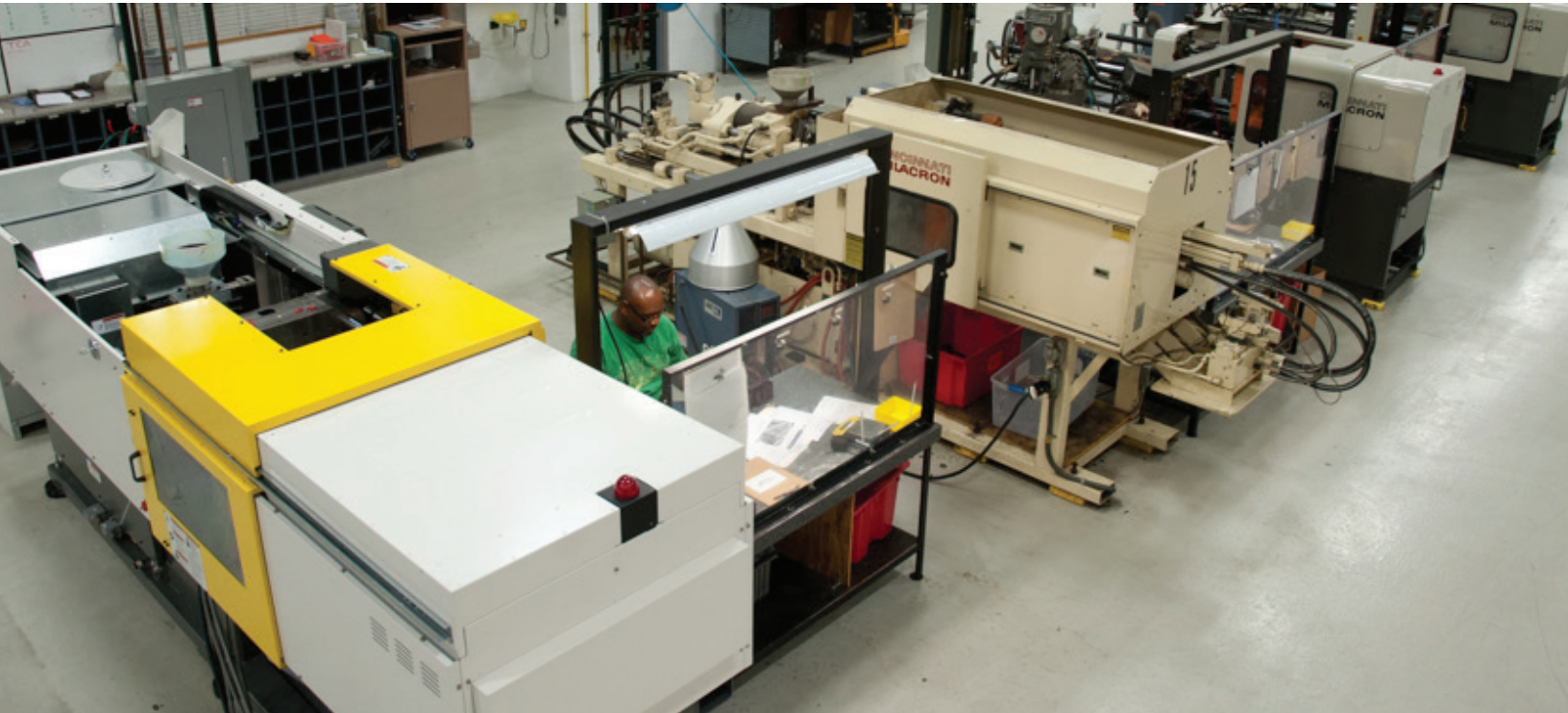


ON THE THRESHOLD: REFOCUSING U.S. EXPORT ASSISTANCE STRATEGY FOR MANUFACTURERS

Stone & Associates

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STONE
& ASSOCIATES



I. EXECUTIVE SUMMARY

Without significant growth in exports, the U.S. cannot hope to decrease its trade deficit, reduce its reliance on domestic consumption, or offset sluggish job creation. Manufacturing represents a large portion of the traded sector and without significant expansion of manufactured exports, the U.S. will not make appreciable improvements to the trade deficit or to its broader economic objectives. Within the manufacturing sector, large companies represent the bulk of exports, but small and mid-sized manufacturers (SMMs) play a critical role.

FINDINGS

Why is exporting important to SMMs?

- U.S. manufacturers underperform in exports versus other developed nations because historically they have been able to rely on the large domestic market. But this is no longer the case: the U.S. market offers limited growth and intense competition, including from imports.
- Global markets offer growth opportunities and help to improve company performance. Exporters grow faster than non-exporters, have higher productivity, and are exposed to new ideas that stimulate innovation.
- Moreover, it is not just about growth, but survival. International sales reduce vulnerability to domestic demand volatility, and manufacturers that do not reap the benefits of competing in international markets are vulnerable to those that do.

Who are the SMMs with the greatest export growth potential, and how do export assistance providers identify them?

- Given limited resources, export assistance organizations must focus on those companies and products with the greatest export potential. The reality is that not all SMMs have global opportunities.
- Based on what is known about *successful* exporters, firms with the greatest export growth potential - which we call *threshold* firms - have two key characteristics:
 1. They have a differentiated product/service, i.e. there is something unique, superior or specialized about an exporter's product, service or capabilities;
 2. They are ready to commit resources to become more proactive, aggressive, and systematic about exporting.
- *Threshold* firms have not fully realized their export potential, but are positioned for rapid international growth. If these firms can commit resources to export sales and become more proactive, they can realize their full potential.
- The *threshold* segment is comprised of two distinct categories of SMMs: *moderate* exporters that export to a few foreign markets but are often reactive in their approach to exports; and *new-to-export* companies that have received foreign inquiries. Because both groups of companies already sell to, or receive inquiries from, foreign markets, there is evidence of global demand and differentiation from competition.

- Export assistance resources should be focused on *threshold* companies (among manufacturers). The oft-cited statistic that only 1% of U.S. small businesses export is misleading, as it implies that the other 99% have export potential. The reality is that only a limited percentage of companies that do not export have a tradable, differentiated product with export potential.
- But there remains a huge opportunity. The export assistance community serves fewer than half of the *moderate exporters*, and probably a low percentage of the export-ready *new-to-export* companies.ⁱ Based on these numbers (and assumptions about how many companies are ready to commit resources to export growth) we roughly estimate that 25-80,000ⁱ *threshold* SMMs are not being served by the export assistance world. This is a large but manageable number. If export assistance providers can reach more of these *threshold* firms (particularly those with 20 or more employees) and help them to become *successful* exporters, export assistance organizations will help move the needle on U.S. export performance.
- A straightforward way to identify *new-to-export* companies with export potential is to determine whether they have received inquiries from foreign customers.

What type of assistance do exporters — particularly *threshold* companies — need?

- Helping *threshold* firms progress from a reactive mindset to a proactive one will unlock their full export growth potential. Because of their scale, SMMs are resource-constrained, and a lack of management capacity for export — both expertise and bandwidth — is a key barrier to overcome. SMMs need support and programs that help them expand their leadership team's capacity to manage export sales.
- Marketing campaigns about exporting rarely compel SMMs to act. Concrete export sales opportunities, such as those that come from personal connections in

foreign markets, foreign customer inquiries, or specific market intelligence, help to open the eyes of company leadership to international prospects and thus drive action. Consequently, business matchmaking services and trade missions, as well as funding support for participating in tradeshow, are invaluable to helping companies see opportunities and trigger a more proactive mindset.

- SMM exporters are often niche players and thus need market data that is far more in-depth and specific, relative to their products and value propositions, than broad data at the country or Harmonized System (HS)/NAICS code level.
- To reach their full potential, *threshold* firms need international business coaches, not just “technicians” on export mechanics. Trade counselors must be able to “go deeper” with clients, providing guidance on more advanced topics, such as how to manage distributor and rep relationships, or international marketing.

Why are innovation and the supply chain important for growing exports?

- Promoting innovation programs will help established manufacturers in particular, but startups as well, to develop new products, processes and technologies, enabling them to become or remain differentiated in global markets.
- The role of SMMs is often in the supply chain of OEMs, and that role is critical to export performance: large manufacturers may represent the bulk of exports, but suppliers contribute indirectly to a significant portion of export value added. This indirect contribution by SMMs is as important to the U.S. economy as direct exports. The U.S. needs a strong, innovative and diversified supply base that collaborates with OEMs on innovation, that can defend itself against competition from imports, and that also exports directly to customers worldwide.

ⁱSee page 20 and Appendix I for an explanation of these estimates.

RECOMMENDATIONS

How does the export assistance community help SMMs fulfill their export potential in an environment with limited additional funding?

- We can identify and reach a greater percentage of *threshold* companies by expanding export assistance capacity in several ways. First, in a world of limited resources, USEACs, state trade organizations and SBDCs should coordinate to avoid duplication of effort. Each organization may provide different sets of services to a particular SMM, but identifying one lead trade counselor will allow the export assistance world to serve a greater number of companies. Second, overseas federal and state networks should leverage partners/subcontractors and voluntary representatives to augment Foreign Commercial Service staff and paid state trade office foreign representatives. Third, metro area economic development communities can also be assets in identifying *threshold* companies. In sum, the U.S. should not allow capacity constraints in export assistance organizations to limit U.S. export opportunities.
- We can help companies expand top management capacity – both time and expertise – through *intensive* forms of support, including *in-depth* counseling and innovative group project delivery models (such as ExporTech and VALET), as well as through university internship programs and connections to intermediaries (such as export management companies). There is no substitute for in-depth services.
- We must avoid losing ground to competitor nations in in-country and tradeshow support. This support provides concrete leads and contacts that “open the eyes” of SMMs to global opportunities and drives them to become more proactive exporters.
- We need to take export assistance services to the next level by employing more counselors with private industry experience, who can be true international business

coaches and not simply technicians on export mechanics. We also need to provide the in-depth market intelligence that exporters need. This will require hiring staff with market research skills and deepening partnerships with industry associations that can help furnish in-depth market intelligence and global industry knowledge.

- Innovation programs contribute to exports. Although there is a national emphasis on spurring innovation — and a parallel emphasis on exporting — the two efforts often fail to intersect in a meaningful way. The export assistance community needs to support the expansion of programs that help *established* companies differentiate themselves, and we need to better integrate export assistance resources with the innovation eco-system (e.g. cluster initiatives, executive peer learning groups, and university-industry collaborations such as research parks), which will put us in a position to work with clients that have a greater chance of success in global markets.
- We need to support programs that help SMM suppliers develop innovative capacity and specialized capabilities, so they can help their OEM customers innovate for global markets.
- We also suggest establishing an “ambassador” program that would enlist multinational U.S. OEMs and Tier 1 suppliers to open doors abroad for SMM suppliers.

If the export assistance community can adopt some or all of these strategies, we can unlock the export potential of tens of thousands of small and mid-size manufacturers. The payoff could be tens of billions of dollars in manufactured exports and hundreds of thousands of manufacturing jobs.



II. INTRODUCTION

The National Institute of Standards and Technology's Hollings Manufacturing Extension Partnership (NIST MEP) works with small and mid-sized U.S. manufacturers to help them achieve profitable growth, increase efficiency, and create and retain jobs. MEP's nationwide network provides a variety of services, from innovation strategies to process improvements to green manufacturing initiatives. MEP also works with partners at the state and federal levels on programs that position manufacturers to develop new customers, expand into new markets and create new products. MEP has over 1,300 technical experts – located in every state — who serve as business advisors, focused on solving manufacturers' challenges and identifying opportunities for growth.

MEP has been building its capacity to help clients see and exploit top-line growth opportunities — in both domestic and international markets. Growth for manufacturers is increasingly found in international markets, as billions of new consumers in emerging economies join the global market, and competition in domestic markets becomes fiercer than ever. Small and mid-sized manufacturers (SMMs) represent a tremendous opportunity. They account for 97 percent of U.S. manufacturing exporters, but almost 3/4 of those that export sell to only four or fewer markets. MEP's expertise in manufacturing makes it an ideal organization to assist manufacturers to enter and/or expand into global markets.

Six years ago, MEP and the U.S. Commercial Service (USCS) developed and implemented ExporTech (see box), an intensive program designed to help SMMs grow in global markets. Working for MEP, a team of consultants from Stone & Associates and its partner Clear Intent Strategy developed the program's design and content and continue to

ExporTech

ExporTech is a joint program offered by MEP and the U.S. Commercial Service, and deployed by local MEP and U.S. Export Assistance Centers along with other regional partners (such as District Export Councils, state trade offices and other federal, state and local organizations).

ExporTech is an intensive group project that accelerates export growth for small and mid-size manufacturers. The program assists participating companies to develop an international growth plan and connects them with experts that help them move quickly beyond planning to actual export sales. It combines innovative group sessions – customized to the learning needs of participants – with individualized coaching. Each program is limited to six to eight companies to provide sufficient attention to each company's challenges.

ExporTech's customized format ensures that companies walk away with information that specifically applies to their business. The companies meet for three one-day sessions over a three-month period, and in between sessions develop their export plans with the support of a coach. Throughout the program, local experts in exporting are brought in to provide information and guidance. In the final session, a panel of experienced international businesspeople provides feedback on each company's export growth plan.

To date, 71 ExporTech programs have been delivered in 25 states with 450 participating companies. Participants have reported impressive results:

- On average, companies reported increased/retained sales of \$164,000 attributed to ExporTech as a standalone service; and \$772,000 when combined with other MEP services;
- Many companies generate export sales within 6 months of program completion.

serve as the program's national master facilitators. Because the program is a collaboration among multiple export assistance organizations in each region, Stone & Associates has jointly delivered services with numerous U.S. Export Assistance Centers, District Export Councils, State Trade Offices/Organizations, Small Business Development Centers (SBDCs), and other organizations. Additionally, Stone & Associates has conducted major joint research projects for MEP, again with its USCS partners, to learn about exporter needs and behavior. (See box that provides an overview of Stone & Associates).

In 2010, President Obama established the National Export Initiative (NEI), with the objective to double exports in five years (by the end of 2014). Under the NEI, the federal government identified a number of priority activities intended to support this increase in exports. Many of these recommendations are focused on export assistance for small and mid-size enterprises (SMEs).ⁱ

In the context of the National Export Initiative and MEP's sharpened focus on growth, innovation, and exports, NIST asked Stone & Associates to look more broadly at what export assistance organizations, particularly at the federal level, could do to help small and mid-size manufacturers expand international sales.

The focus of this report is on firm-level assistance, since that is MEP's primary mission, rather than broader challenges such as trade policy, the availability of trade financing, or investments in logistics infrastructure. Stone & Associates' goal was not to offer a comprehensive assessment of export policy, but to offer selected recommendations on how firm-level assistance programs could be improved to assist SMMs to increase exports.

Based on over two dozen interviews (see the interview list on the following page) with participants and observers in the export assistance world, including exporters themselves; hundreds of reports, studies, documents and articles; experience with hundreds of ExporTech clients; and major

joint research efforts undertaken by MEP and the U.S. Commercial Service, which included interviews and surveys of over 1000 exporters, this report offers Stone & Associates' observations and recommendations on how to increase SMMs' contribution to manufacturing exports.

This paper answers the following questions:

- Why is exporting important to small and mid-size manufacturers (SMMs)?

Stone & Associates

Stone & Associates is a strategic research and consulting firm that helps client organizations - in the government, non-profit and private sectors - identify growth opportunities, enhance competitive position, improve service offerings, and make better strategic decisions. Our firm's consulting experience has included assignments with Fortune 1000 companies, small industrial firms, and government/non-profit organizations that serve manufacturing companies. Engagements have primarily involved competitive strategy, market research and analysis, export/international growth strategy, and strategic cost analysis. Our work has required an understanding of markets and competitors throughout North and South America, Europe, and Asia and has covered a wide range of industries and products.

Stone & Associates has completed dozens of major projects for the U.S. Department of Commerce, primarily for NIST MEP, as well as for the U.S. Commercial Service. These efforts included a series of major studies that identified successful competitive strategies employed by manufacturers in global markets and assessed the service needs and buying behavior of the manufacturing sector and manufacturing exporters.

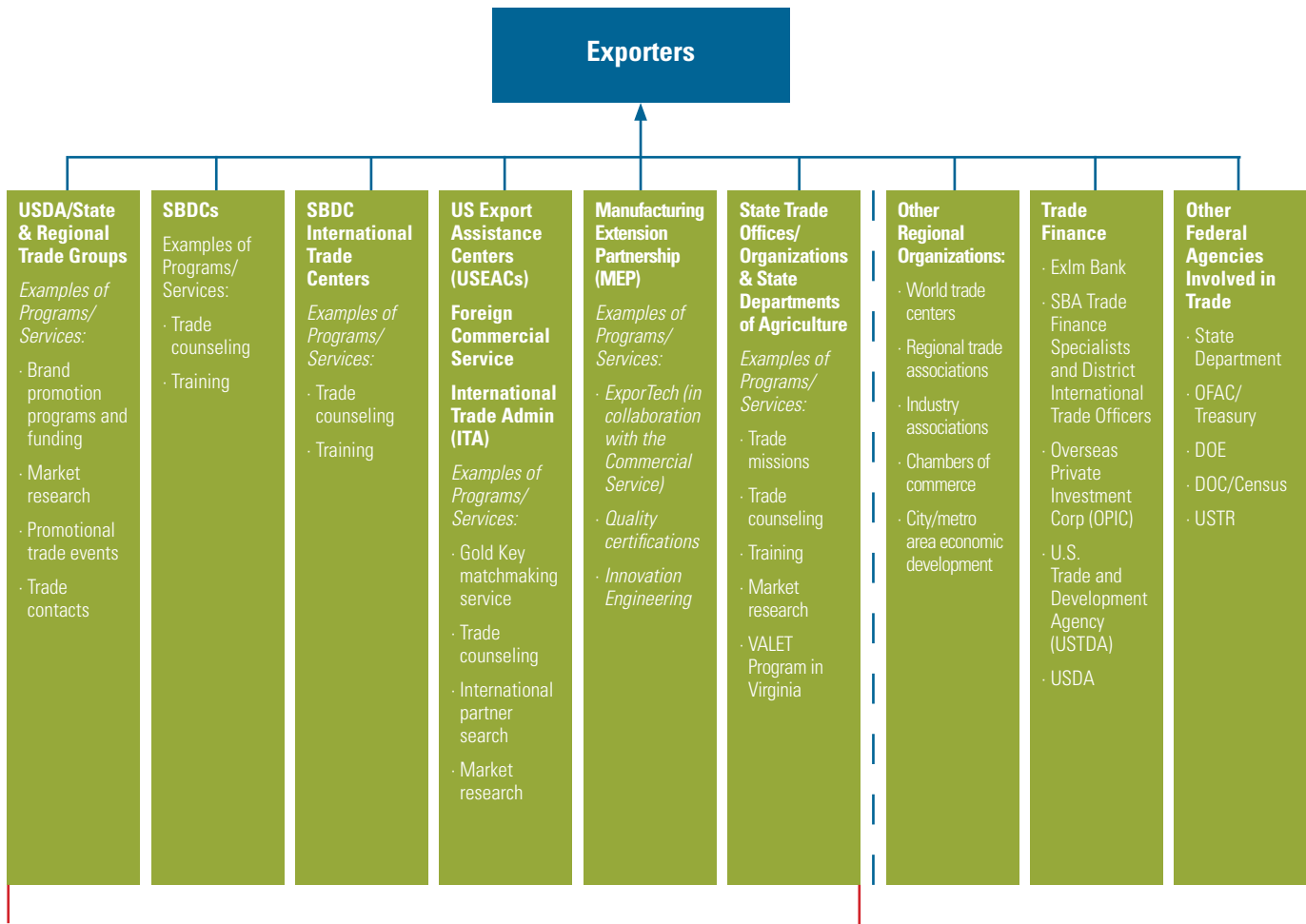
Michael Stone, President of Stone & Associates, is one of ExporTech's program leaders, master facilitators and content developers.

ⁱ The NEI has five major components: improved advocacy and trade promotion, expanded access to trade financing, removal of trade barriers, enforcement of trade rules, and promotion of balanced global growth. Specific recommendations have been outlined in eight priority areas: Priority #1 Exports by Small and Mid-sized Enterprises (SMEs); Priority #2 Federal Export Assistance; Priority #3 Trade Missions; Priority #4 Commercial Diplomacy; Priority #5 Increasing Export Financing; Priority #6 Macroeconomic Rebalancing; Priority #7 Reducing Barriers to Trade; Priority #8 Export Promotion of Services." (Sources: 2012 National Export Strategy, Report to the President: National Export Initiative, September 2010)

- Who are the SMMs with the greatest export growth potential, and how does the export assistance community identify them? (The export assistance landscape is depicted in the chart on page 10.)
- What types of assistance do exporters need?
- Why are innovation and the supply chain important for growing exports?
- How does the export assistance world help SMMs fulfill their export potential in an environment with limited additional funding?

Organizations Interviewed for this Report		
Export Assistance (federal and state)	Exporting Companies	Other (associations, research institutions, consultants)
U.S. & Foreign Commercial Service - Office of Domestic Operations and Office of Strategic Planning	Macron Dynamics	Association for Manufacturing Technology
U.S. Commercial Service - Global Manufacturing Team	Joint Production Technology	Brookings Metropolitan Policy Program
U.S. Export Assistance Center – Baltimore	Superior Tube Company	Atlantica Group
Trade Promotion Coordinating Committee (TPCC) Secretariat	Beam's Industries	Clean WaterNet
Illinois SBDC International Trade Center at Bradley University	Rekluse	Innovation Policyworks
Small Business Administration - Office of International Trade	ElectraTherm	Fourth Economy
Pennsylvania Department of Community and Economic Development, Center for Trade Development	Axis International	
Maine International Trade Center	SportChassis	
North Carolina Department of Commerce - International Trade Division		
Nevada Governor's Office of Economic Development, Global Business Development		
South Carolina MEP		
Virginia Economic Development Partnership, International Trade, VALET Program		

Export Assistance Landscape (Government and Non-profit)



Government Export Assistance Field Networks (focus of this report)



III. WHY IS EXPORTING IMPORTANT TO THE U.S. AND TO SMMs?

Manufacturing Exports are Critical to National Prosperity and SMMs Play a Key Role

Without significant growth in exports, the U.S. will struggle to reduce its trade deficit, decrease its reliance on domestic consumption, and offset sluggish job creation. Manufacturing represents a large portion of the traded sector, accounting for 65% of U.S. goods exports in 2011 and 46% of total exports (including service exports).ⁱ Without sizeable growth in manufactured exports, the U.S. cannot hope to make significant progress in reducing the trade deficit or attaining its broader economic objectives.

In fact, because of globalization, the health of the manufacturing sector and export performance are closely linked:² a competitive manufacturing sector boosts exports, and a successful export policy drives manufacturing growth.³

Within the manufacturing sector, large companies represent the bulk of exports, but SMMs play a critical role.⁴ SMMs represent roughly 19% of manufacturing sector export value^{i,5}, but they also contribute indirectly to the exports of large companies as part of the supply chain. The U.S. International Trade Commission (USITC) quantified this contribution based on an analysis of 2007 data; in that period, SMMs represented 16% of manufacturing sector exports, but an estimated 32% of export value added when intermediate goods (supplied to exporting firms) were included.⁶

The value of SMMs in the supply chain is often overlooked.ⁱⁱ If domestic SMMs are not competitive, i.e. if at a given price they provide less value (in terms of innovation, quality,

or service), Original Equipment Manufacturers (OEMs) will substitute imported content. This would negatively impact the U.S. trade balance. Alternatively, strong SMM suppliers help OEMs to be more competitive and thus export successfully.

For SMMs, Exporting is Not Just About Growth, But About Survival

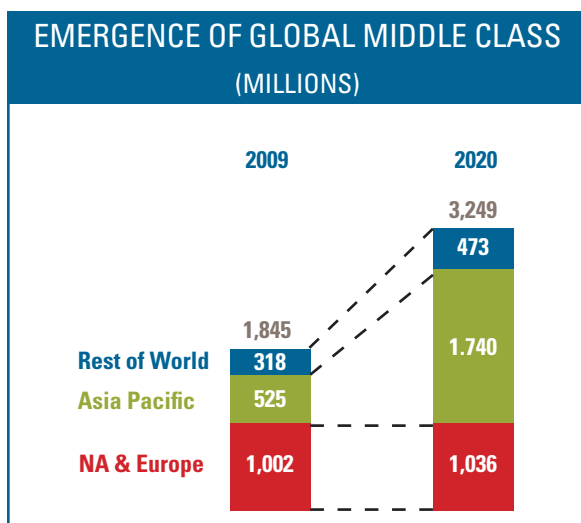
It is urgent that the U.S. increases the number of SMMs that enter into and expand in global markets. For many of these companies it is not just about growth, but about survival. A former export assistance provider stated in Senate testimony that many of the “very small companies” she worked with “would no longer be in business, were it not for their foreign sales.”⁷

Although the U.S. is a manufacturing powerhouse, it has traditionally underperformed in exports versus other large developed nations, because historically U.S. companies could rely on the large domestic market.⁸ But, this is no longer the case.

The U.S. market offers limited growth and intense competition, including from imports. Thus firms that only focus on the domestic market are fighting over a shrinking pie. In contrast, foreign markets represent tremendous growth opportunities: 80% of global purchasing power is outside of the U.S.⁹, and emerging markets are growing fast, particularly their burgeoning middle class sectors. (See Chart 1)

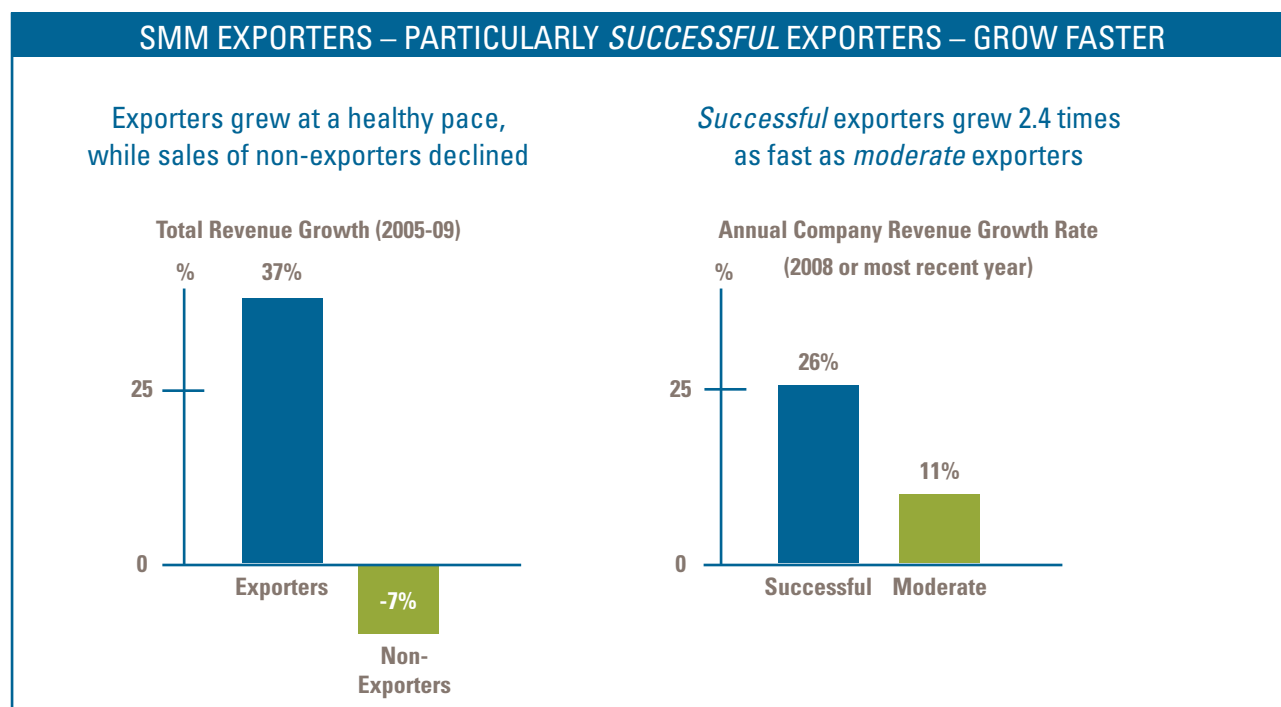
ⁱ 2010 data

ⁱⁱ A discussion of supply chains appears in Section VI.



Source: The Emerging Middle Class in Developing Countries, Kharas, Jan 2010, OECD Development Center

Furthermore, studies validate the growth opportunity for exporters: overall company revenue growth for SMM exporters is much higher than for non-exporters. According to a U.S. International Trade Commission (USITC) report, exporters grew by 37% over a 4-year period versus a 7% **decline** for non-exporters. And an internal study conducted by the U.S. Commercial Service and NIST MEP indicated that “*successful*” exporters grew 2.4 times faster than “*moderate*” exporters.ⁱⁱⁱ (See chart 2)¹⁰



Source: USITC, Nov 2010

Source: Internal USCS & NIST MEP 2009 Study (n=864)

ⁱⁱⁱ *Successful* exporters in this study were defined as follows: 1) at least 20% of total sales were international; and 2) international sales were growing at a minimum of 10% per year. *Moderate* exporters were all other exporters that did not attain the criteria for “successful.” Source: Internal U.S. Commercial Service and NIST MEP Market Segmentation Research, 2009.

Global Expansion Improves Company Performance and Reduces Risk

The economic contraction in the domestic market has made it challenging for U.S. SMMs to survive, let alone prosper. However, SMMs that export have a greater chance to do both.

Higher Labor Productivity Studies show that SMM exporters have much higher labor productivity than non-exporters: 72% higher according to a U.S. International Trade Commission (USITC) study.¹¹ Some of this can be attributed to self-selection – in other words, productive companies are more likely to export.¹² But exposure to ideas, technology, and best practices at the international level also contributes to improved productivity.¹³ In addition, diversification into international markets (discussed below) can improve productivity by increasing volume and capacity utilization.

Greater Innovation^{iv} As discussed in Sections IV and VI, innovative companies are more likely to export, but engagement in global markets also spurs innovation.¹⁴ For example, frontier-edge technology or features are often defined by global markets and competitors. As Mario Winterstein, Business Development Director of the Association of Manufacturing Technology (AMT), told us “if you don’t look globally ... competitors will come here [to the U.S.] and eat your lunch because the demand for faster, better, cheaper products in [in our industry] is stronger outside the U.S.”¹⁵

International markets may also reveal or spark new applications for a product. For example, an ExporTech client that manufactured a cleaning agent used in hospitals and laboratories expanded into a new market when its distributors in Asia began selling to the semiconductor industry. At first, the company did not even know how this new market used their product. Eventually, the semiconductor market became nearly a third of its business and is now one of its most attractive growth opportunities.

Niche Players Can Thrive Many *successful* SMM exporters sell in niche markets. International sales help to support niche products by allowing SMMs to leverage their operations over a much larger market thus achieving scale economies.¹⁶ In other words, if you manufacture an item for a narrow segment of customers, you are more likely to survive, grow, and prosper if you cast worldwide for those customers.

Market Diversification Reduces Risk Non-exporters are extremely vulnerable during domestic downturns, whereas exporters who proactively sell into multiple global markets are cushioned from a slowdown in any given market.

Exporting can also allow SMMs to balance seasonality, which smooths production and increases utilization. For example, Osagian Canoes (an ExporTech client) is targeting the southern hemisphere (South America and Australia) to sustain production levels during the offseason.¹⁷

An International Trade Administration (ITA) study validated the importance of diversification, finding that industries with higher exports had less overall shipment volatility.¹⁸ And — not surprisingly — reduction in revenue volatility increases survival rates.¹⁹

Lastly, and maybe most importantly, manufacturers that do not compete aggressively in international markets are vulnerable to those who do. Even in the domestic market, companies that do not sell internationally are at a disadvantage versus foreign (and domestic) competitors who gain all the advantages from selling globally discussed above.

Given that budgets at the federal and state level are unlikely to increase significantly in the near term, **the export assistance community must laser focus on SMMs with the greatest export growth potential, help create more of these firms and provide the highest value assistance.**

^{iv} Innovation has multiple definitions. In some cases, it means frontier-edge, science-based discoveries. In this paper we are employing a broader definition of innovation to include the development of unique or superior products, even if they use existing technology, as well as adapting products and technologies for new applications and new markets, and adopting new or innovative business models.



IV. WHO ARE THE SMMs WITH THE GREATEST EXPORT GROWTH POTENTIAL, AND HOW DOES THE EXPORT ASSISTANCE WORLD IDENTIFY THEM?

Not All Products Have Export Potential

The export assistance community must first acknowledge that not all manufacturers have an exportable product. As an indication of untapped export potential, it is widely cited that fewer than 1% of U.S. small businesses export.²⁰ However, as SBA Administrator Karen Mills pointed out during a meeting of the President's Export Council, of the 28 million U.S. small businessesⁱ, only 6 million have employees, and only 2 million have goods or services traded outside of their local markets.²¹ (See Chart 3)

While a large percentage of the manufacturing sector is traded nationally and internationally (as compared to the service sector), there are some products and companies that are primarily traded regionally. In some industries, for example, customer proximity factors such as reduced transportation costs, short lead time, and face-to-face customer interaction are the foundations of local providers' value propositions (examples: fresh baked goods, outsized custom concrete products); thus they have no export potential. In addition, some companies in industries that *are* tradable outside the region may utilize a strategy that relies on customer-proximity advantages. Their value proposition is similar to those listed above, relying on speed (short lead time), small lot size/customization, and/or faster new product iterations. Examples include small run, customized, high engineering change wire harnesses or printed circuit boards. These types of businesses may sell as far away as Canada or Mexico, but generally no farther. If proximity to the customer is a manufacturer's primary selling point, the company may have limited export potential.

Finally, commodity products have limited potential for U.S. exporters. It is difficult for a high-wage nation to compete solely on price in exports against products from low-wage nations or against locally produced goods which do not involve export-related logistics and marketing costs (such as freight, duties, inventory, and travel).²²

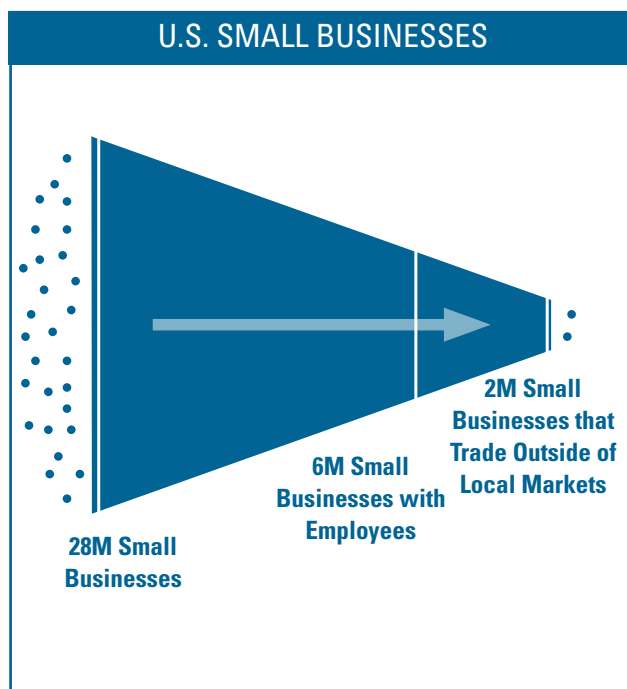


CHART 3

Source: SBA Administrator Karen Mills comments during a President's Export Council meeting (Transcript: The President's Export Council Holds a Meeting to Discuss the Council's Recommendations on Export Promotion, March 11, 2011)

ⁱ Includes all types of firms, such as service, retail/wholesale, construction, agricultural, as well as manufacturing.

Understanding What Makes SMM Exporters Successful Allows Us to Identify SMMs with the Greatest Export Growth Potential

*Successful*ⁱⁱ exporters have two key characteristics:

- They have a differentiated product
- They have committed resources to **proactively** and **aggressively** pursue exporting

1. Differentiated Products and Services As stated above, U.S. SMM exporters are unlikely to compete successfully solely on price. Thus, they must articulate a value proposition that differentiates their products and services. The company may offer a unique or innovative product, superior performance or quality, or specialized capabilities. Or the company may differentiate itself based on services, for example, lead time, customization or technical support.²³ **Customers in foreign markets will buy from a local supplier (or from foreign competitors) if a U.S. exporter cannot articulate a value proposition that distinguishes its products and/or services.** The box (Chart 4) on the next page illustrates sources of differentiation for *successful* exporters.

2. Proactive Leadership Committed To Exports MEP's research collaborations with the U.S. Commercial Service and other organizations concluded that *successful* SMM exporters have a proactive approach to global sales.²⁴ This means that they commit the necessary time and resources to aggressively pursue international opportunities, and they have an explicit export game plan or strategy.²⁵

Resource Commitment Successful exporters are much more likely to dedicate staff to their international business, are willing to wait for profitability, are prepared to invest in new products and capabilities for the international market, and are prepared to travel abroad extensively.²⁶

Aggressiveness An internal USCS/MEP survey indicated that *successful* exporters were 76% more

likely than *moderate* exporters to say they want to “aggressively” grow export sales.²⁷ On the other end of the spectrum, reactive exporters export only in response to foreign inquiries; they may serve a few customers in a few countries, but are not actively soliciting export sales.²⁸

Planning Successful exporters are much more likely to have an export game plan, as shown in Chart 5. 71% of *successful* exporters have identified specific target countries for expansion, whereas only 42% of *moderates* have done so. Similarly, *successful* exporters are twice as likely to have established international revenue targets.²⁹

Research from other sources corroborates these conclusions that *successful* SMM exporters take a strategic approach³⁰ and have a “bias-for-action” or “entrepreneurial orientation” related to exporting.³¹ In addition, export assistance practitioners agree that SMMs cannot achieve export success by pursuing global sales sporadically and ignoring international whenever the domestic market gets busy.

Successful exporters may have been reactive initially, but pursuing success required a change in mindset from opportunistic to proactive.

In Order to Identify Companies with the Greatest Export Growth Potential, and to Determine How Best To Serve Them, We Segment SMMs by a Combination of Mindset and Export Performance³²

Successful Exporters

- These companies are proactive and have committed resources to aggressively pursue international sales. They generally have an explicit export plan or strategy.
- Most of these companies ship to 10 or more markets, generate over 20% of sales from exports, and are experiencing growth of at least 10% in international sales (many are growing at much faster rates).
- They are easily identified in the export assistance world, and they have the highest awareness of export

ⁱⁱ MEP and U.S. Commercial Service internal studies defined *successful* exporters as firms where: 1) international sales were at least 10% (2006 study) or at least 20% (2009 study) and ; 2) international sales were growing at a minimum of 10% per year. The category of *moderate* exporters includes all other exporters that do not meet the criteria for *successful*.

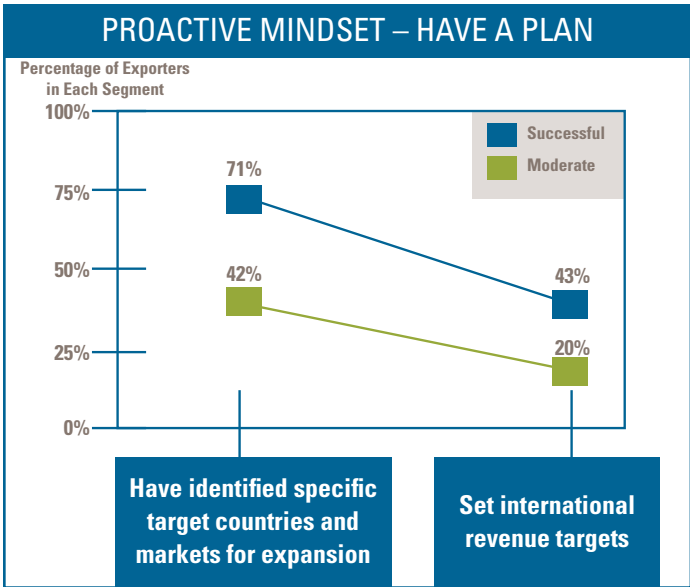
DIFFERENTIATION – COMPANY EXAMPLES (MEP AND EXPORTECH CLIENTS)		
Company Name and Location	Strategic Advantage	Product Offering and Differentiators (i.e. Why Customers Buy from them Versus Competitors)
Timberline Tool Montana	Unique, patented product	Sells patented tools used by utility operators to squeeze off the flow of natural gas through a polyethylene pipe to allow for repairs. Compared to traditional pipe repair methods, Timberline keyhole technology reduces excavation costs (including avoidance of costly under the pipe excavation) and reduces the number of operators and operations required.
Stress Indicators Maryland	Better performing product than competition	Sells tension indicating bolts for critical applications where the bolt must be tight. DTI SmartBolts® indicate whether a bolted joint is loose or tight with a clear, visible indicator that gradually darkens from bright red to black as the fastener is tightened. Their product allows for visual inspection of tightness, from several feet away, allowing maintenance people to focus on loose bolts. In a typical two week maintenance cycle, on an installation of 1000 fasteners, SmartBolts® can reduce maintenance time by 80% and costs by up to 50%.
Joint Production Technology (JPT) Michigan	Unique or specialized process capability and application knowledge	Designs and manufactures specialized cutting tools and tooling systems, mainly for the auto industry. Their differentiator is application knowledge, developed from machining a variety of specific components to tight tolerances. For example, differential cases are a focus for JPT, and they have established a “library” of 70 differential case part prints. Elements of their designs have U.S. and international patents (and patents pending).

assistance resources.

- The assistance they need is typically focused on new market entry and finding sales channel partners.
- They are generally well-served, compared to other segments. Consequently, we focus this paper on the underserved categories below: *moderate* exporters and *new-to-export* companies.

Moderate Exporters

- Although this group has international sales, their needs and behavior are distinctly different from *successful* exporters. These exporters need help on their journey toward becoming *successful*. They ship to fewer than 10 markets (typically 4 or fewer) and exports represent less than 20% of sales (generally less than 10%).
- This segment includes a range of company mindsets. The purely reactive - as described by



Source: Internal USCS & NIST MEP 2009 Study (n=864)

Brookings in Chart 6 - are at one end of the spectrum and they represent a large percentage of this segment. They have exported only in response to foreign customer inquiries i.e. do not actively solicit export sales, and they serve only a handful of customers and markets. On the other end of the spectrum are companies that have achieved some success in exporting. They may be somewhat proactive but are still struggling to develop systematic export processes (e.g. compliance programs, or methods for evaluating distributors) and an overall international growth strategy. (See examples of *moderate* exporters that participated in ExporTech in Chart 7.) They need help at the management level to deal with these issues, in addition to help with new market entry.

- The category of *moderate* exporters is large — it makes up roughly 85% of SMMs who already export.³³ For the purely reactive companies, every geographic market they have shipped to represents untapped potential. A customer from another part of the world found these companies and chose to buy from them, which is a clear indication that the product is desirable in foreign markets and is differentiated from local suppliers. These companies are, in a sense, pre-screened for international growth potential. In addition, for many *moderate* exporters, countless new markets may be successfully targeted, particularly for those that have shipped outside of North America because this indicates that a customer is willing to pay the additional shipping and logistics costs.
- Helping these SMMs to become *successful* exporters requires targeted assistance and will have the greatest impact on SMM export growth.

Non-exporters (also known as new-to-export or NTE)

- These SMMs have not exported — and not all have export potential. The challenge for export assistance organizations is to identify the high potential companies.
- **The best indication that a product has export potential is that the company receives inquiries from foreign entities, particularly from outside of North America.** (Again those that receive interest

REACTIVE EXPORTERS

In contrast to *successful* exporters, many companies approach export sales reactively. A Brookings-led export strategy for Minneapolis/St. Paul aptly describes the reactive approach we have observed of many exporters nationwide:

“Many companies in the Minneapolis-Saint Paul region that do currently export lack a strategic, intentional approach to identifying new international market opportunities. Local companies that do export often export a particular product to a single market but have not incorporated exports into their business plan or identified other growth opportunities beyond U.S. borders. Many companies became exporters accidentally in response to direct sales opportunities or through distributors in other countries. Often, the client finds the local company and not the other way around. Trade specialists at the Minnesota Trade Office and U.S. Commercial Service office tell of company visits where an owner or sales representative opens a drawer full of unanswered international inquiries about their products”

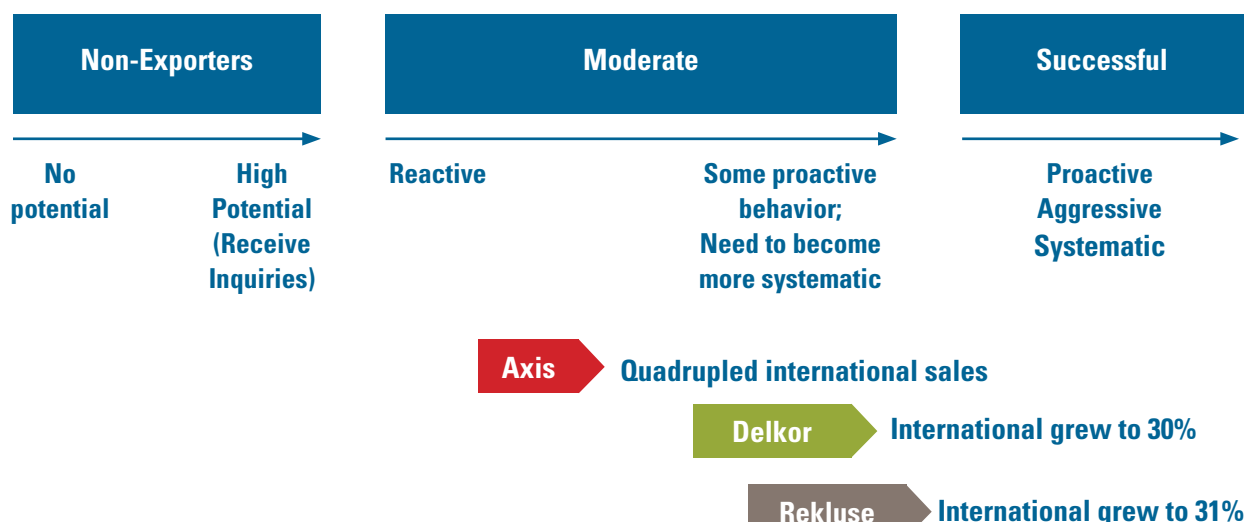
Source: Brookings Metro Export Initiative, Minneapolis-St. Paul Export Plan

only from Canada and/or Mexico may have more limited potential.)

- SMMs within this segment that receive inquiries and are ready to commit resources to pursuing exporting also represent high potential, and their assistance needs are similar to *moderate* exporters.

We refer to the segment that is poised for rapid international growth as *Threshold* companies, defined as SMMs who want to commit resources to expand exports and are currently *moderate* exporters or *new-to-export* companies with differentiated products.

EXPORTER SEGMENTATION – MODERATE EXPORTER EXAMPLES (EXPORTECH CLIENTS)



AXIS INTERNATIONAL

Situation

- Metal fabrication equipment manufacturer - reactively sold to Canada and Mexico
- Received inquiries from Russia, Middle East

Assistance

- “[ExporTech] outlined the entire process and in some ways it really showed me that it is more complicated than I thought. It also made me aware of things we, as a company, needed to be cautious about.”

Outcome

- International sales quadrupled

Looking ahead

- Working on how to provide service support in other countries (ExporTech provided contacts)

DELKOR SYSTEMS

Situation

- Innovative leader in packaging machinery
- Wanted to be more proactive but didn’t know how

Assistance

- ExporTech helped them make connections with experts in Latin America
- Resources helped them identify best markets and develop a strategy

Outcome

- Achieved 30% of sales from exporting in 6 months; hired 29 new employees

Looking ahead

- Researching new target markets

REKLUSE

Situation

- Over 20% of sales were already international for this innovative leader in auto-clutch technology. Had 12 foreign distributors, but also had growing problems: unauthorized pricing, black market issues, end user complaints
- Needed help with issues such as: how to select distributors, training to ensure export compliance and internal process efficiency, guidance on whether to go dealer-direct, etc.

Assistance

- ExporTech helped them create a plan that was repeatable. They can now identify partners who will be long term fits.
- ExporTech helped them make their shipping system more efficient.
- “The connections ... were priceless” “We are a small company. We have limited resources and this made our team huge... we now know who to contact when we need something.”

Outcome

- International is now 31% of sales
- Brought on new partners; new distributors on track to exceed sales targets

Looking ahead

- Plans to create an outline for future international plans
- Plans to expand (from EU) to New Zealand, Australia, and South America

Helping a Larger Number of *Threshold* Companies – and Serving Their Unique Needs – Will Move the Needle on U.S. Export Performance

The export assistance community needs to assist as many *threshold* companies as possible to become *successful* exporters. We can tap the latent export potential of this group for the U.S. economy if we focus on their needs.

How Many *Threshold* Firms Are There?

There are 266,000 manufacturing companies in the U.S., of which 262,000 are small and mid-size (fewer than 500 employees). Chart 8 illustrates Stone & Associates' size estimates for SMM exporter segments. We estimate that there are 10,000 *successful* exporters, most with over 20 employees. There are 59,000 *moderate* exporters and 193,000 *non-exporters*, the vast majority of which are smaller companies with fewer than 20 employees. *Threshold* companies include the portion of *moderate* exporters and *non-exporters* (that receive foreign inquiries) that are ready to commit the necessary resources to pursue exporting more aggressively.

We Estimate That There Are Roughly 25,000-80,000 *Threshold* Firms That Are Not Served by the Export Assistance World

It is often stated that only 1% of 28 million small businesses export, which implies that there is an almost limitless opportunity to help firms become exporters. This premise is faulty (as explained above), and it causes export assistance providers to lose focus on the finite set of target firms that can meaningfully impact U.S. export performance.

Available data suggests the export assistance community serves ***less than half of the moderate exporters, and probably a low percentage of the export-ready non-exporters (NTEs).***ⁱⁱⁱ Based on this, we estimate that the number of companies that need help is an additional 25,000-

80,000 *threshold* firms^{iv} that are un-served today. This is a manageable number and the export assistance world can realistically reach these *threshold* firms over the medium and long term (recognizing that short-term budgetary constraints may not allow us to do so right away).

Threshold Companies with 20 or More Employees Should Receive “Extra” Attention

We also believe that, in general, companies with 20+ employees should receive extra attention and priority. These manufacturers are more likely to have sufficient scale to make them better equipped to handle the overhead related to international activities. We recognize that “number of employees” is a very rough proxy for assumptions about capacity to invest in export (capital, time, and effort), and that there are many companies with fewer than 20 employees that are highly *successful* exporters. However, in general, companies with 20-499 employees are more likely to export: 61% of SMMs with 20-499 employees export versus only 16% with fewer than 20 employees.^v

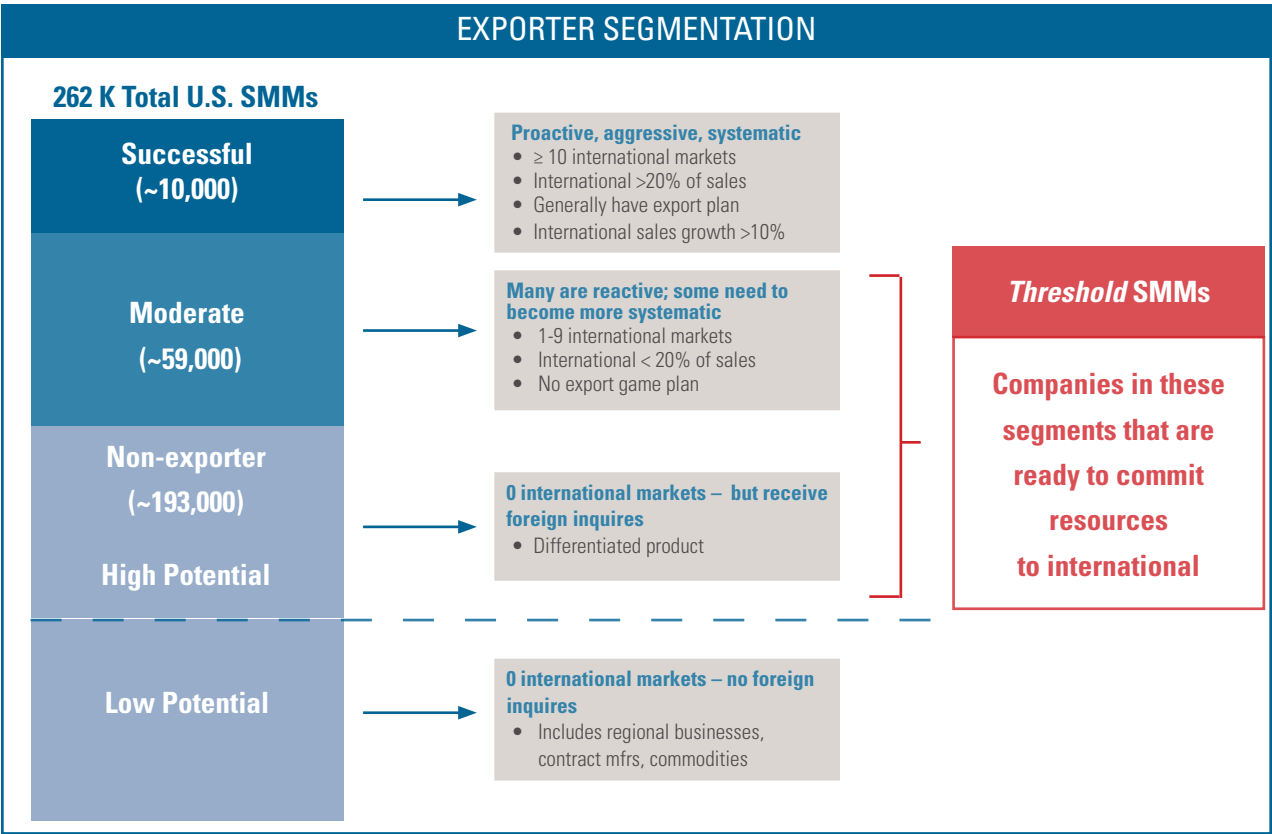
In addition, companies with 20-499 employees represent greater potential for generating export revenue for the country: SMM firms with 20+ employees account for over \$90 billion in export sales (\$3 million in exports per company) while firms with <20 account for only \$8 billion (only \$300,000 in exports per company).³⁴ Consequently, doubling the exports of the 20+ category would make a sizeable impact on trade, whereas doubling the sales of the <20 group would not.

We are not suggesting that firms with fewer than 20 employees have no export potential. We *are* recommending that firms with more than 20 employees receive extra attention in outreach and marketing, and that firms with fewer than 20 employees are screened to make sure they are able to make investments of time and resources in export growth.

ⁱⁱⁱ See Appendix I for sources, backup and methodology.

^{iv} See Appendix I for sources, backup and methodology.

^v Based on Census Profile data. It was assumed that companies with no size category identified were distributed by size category in the same proportion to those that were identified.



Sources: Stone & Associates analysis based on: a) U.S. Small Business Administration, Office of Advocacy, based on data provided by the U.S. Census Bureau, Statistics of U.S. Businesses; b) RSM McGladrey Manufacturing & Distribution Monitor, Fall 2011 for data on percentage of manufacturers that export; c) Census Bureau, *Profile of U.S. Importing and Exporting Companies 2009-10.*; d) Stone & Associates, *International Growth: Successful Export Strategies for Manufacturing CEOs*, Prepared for NIST MEP, February 2006; e) CS/MEP Market Segmentation Survey 2009; f) Interviews in export assistance community

EXPORT PROMOTION CABINET PLANNING EFFORT

The Export Promotion Cabinet (EPC) recently led an interagency planning effort which developed an EPC Action Plan, finalized in July 2012. The EPC plan adds three important objectives to the NEI export promotion strategies: (1) increase the national base of small business exporters; (2) make it easier for U.S. businesses to access federal export assistance; and (3) improve strategic delivery of federal export assistance. An important element of the 3rd strategy is better coordination and integration of the federal field networks that work with exporters. They have also proposed a client segmentation approach and referral procedure to make sure that each company is directed to the right federal resource. Many of our recommendations are consistent with their approach. Both Stone & Associates' approach and the EPC strategy focus scarce U.S. Export Assistance Center (USEAC) and Small Business Development Center International Trade Center (SBDC-ITC) resources on either existing exporters or export-ready *new-to-export* companies (*NTEs*). *NTEs* that are not yet ready to export would be referred to SBDCs (non-ITCs) for counseling and training. The major differences in our proposed approach are to 1) screen *NTEs* based on foreign inquiries, to ensure they have an exportable, differentiated product; 2) prioritize firms with > 20 employees; and 3) recognize that the export assistance community needs to reach many more existing exporters (as well as *NTEs*) than we do today.

Sources: EPC/TPCC Interagency Communique, 9-27-12; Interview with TPCC; 2012 National Export Strategy

The Export Assistance Community Should Target High Potential *New-to-Export* Companies that have Received Foreign Customer Inquiries

Given resource constraints, much of the federal and state export assistance world is understandably less focused on *New-to-Export (NTEs)* companies.^{vi} However, that means we are missing an important opportunity for export growth. We need to identify *NTEs* that have potential. The most important qualifying question we can ask to determine whether *NTEs* have an exportable product is: "Do you receive foreign inquiries, particularly from outside North America?"

In summary, if the export assistance world can **provide meaningful assistance to a larger percentage of *threshold* firms – and create a larger cadre of these firms (discussed in Section VI) – we will generate significant and measurable results**, well beyond the valuable contribution we make today.

Chart 9 discusses how this targeting strategy compares to the approach outlined in a recent Export Promotion Cabinet effort to strategically coordinate the services of federal export assistance organizations.

^{vi} SBDCs to some degree have taken on this role of serving *NTEs*, but only a portion of their network has expertise in trade counseling, and it is only recently (through the Jobs Act) that they have expanded their export counseling capabilities.



V. WHAT TYPE OF ASSISTANCE DO EXPORTERS NEED?

This section answers two key questions:

1. How does the export assistance community help *threshold* companies to become *successful* exporters?
2. How do export assistance services need to change to better respond to the needs of exporters, particularly *threshold* exporters?

1) How Does the Export Assistance Community Help *Threshold* Companies to Become *Successful* Exporters?

Helping SMMs progress from a mindset that is reactive/opportunistic to one that is proactive/aggressive will yield the greatest export growth. To determine how to help companies become more proactive, the export assistance world must consider what is really holding *threshold* companies back.

International business requires a new set of knowledge and skills for SMMs. This unique set of know-how represents a host of potential barriers to *threshold* companies. A 2010 U.S. International Trade Commission (USITC) study surveyed exporters on a wide variety of impediments to trade. Eighteen distinct obstacles were encountered by over 50% of the SMMs surveyed, and there was little consensus on which was the “greatest.”³⁵ Obstacles ranged from

transportation costs, the ability to obtain financing, high tariffs, the difficulty of finding sales prospects, language and cultural barriers, to foreign and U.S. regulations.

We see two key needs that the export assistance community can address that will help SMMs make the leap toward aggressive, proactive exporting:

- A lack of management bandwidth or capacity, which has two components - time as well as knowledge.
- A lack of awareness of concrete foreign market opportunities.

Intensive Export Assistance or “Case Management”ⁱ is Required to Accelerate the Progress of *Threshold* Companies by Enhancing the Capacity and Expertise of their Leadership

Because of their scale, SMMs are resource-constrained. Leadership is pulled in multiple directions, and a lack of management capacity - both available time and international expertise - is particularly challenging to overcome. It takes management effort to penetrate a new market, and SMM leaders face a significant learning curve in pursuing international sales. In fact, the Pennsylvania Center for Trade Development cites “lack of managerial time to focus on corporate export strategies” as one of four primary impediments to exporting for SMMs.ⁱⁱ

ⁱ Term “case management” was coined by the BROOKINGS Metropolitan Policy Program, in Key Lessons and Observations from the Four Metro Export Initiative Pilots

ⁱⁱ The other three are: lack of corporate funds to explore new market opportunities, lack of reliable and trustworthy contacts at the international level to validate markets, and insufficient knowledge of exporting mechanics and regulations, both foreign and domestic (source: Congressional Documents and Publications, Testimony by Peter O’Neill, Executive Director, Center for Trade Development PA, House Small Business Subcommittee on Agriculture, Energy and Trade Hearing - “Impact of U.S. Trade Policies on Small Businesses and Manufacturing,” April 2, 2012).

Threshold companies need individual guidance, tailored to their specific situation.³⁶ As one state trade office director told us, “Companies need individual attention, face time.”³⁷ While a relationship with a client often begins by responding to a specific question or resolving a specific problem (e.g. “my shipment is stuck in customs!”) that contact can be the entry point for the development of a more intensive relationship. These in-depth relationships are how export trade specialists enhance the management capacity and knowledge of their clients and help them to move toward becoming *successful* exporters. An internal U.S. Commercial Service Focus Group study indicated that: “customers cited the importance of local Trade Specialists acting as a single point of contact for all trade related assistance and counseling... Trade Specialists were lauded for their ability to navigate multiple USG [U.S. Government] trade agencies and resources to either solve a problem or steer clients to the right resource for answers.”³⁸ Furthermore, counseling was the primary service provided in 1/4 of all “export successes” recorded by the U.S. Commercial Service (USCS) during 2008-10.³⁹ For state trade organizations, client export counseling (along with trade missions) is the most common service provided.⁴⁰

In summary, U.S. Export Assistance Centers (USEACs), Small Business Development Center International Trade Centers (SBDC-ITCs) and state trade offices provide needed *in-depth*, individual trade counseling to a certain percentage of their clients. For these in-depth clients, trade specialists offer intensive support in navigating export markets, and clients benefit from – and value – that service.

What We Need To Do Differently The export assistance world must expand its capacity to provide in-depth assistance, so we can reach a greater percentage of the 25-80,000 *threshold* companies that are un-served. This includes the need to expand capacity to deliver individual counseling - we offer some ideas on how to do so in Section VII - and the need to explore new approaches to offer intensive assistance.

We Must also Look for Innovative Delivery Models for this Intensive Support – such as Group Project Intensive Programs that Assist Multiple Companies at a Time

One challenge of the counseling model is that it is costly to provide intensive one-on-one support. In recent years, programs structured as group projects have emerged to provide intensive assistance with a more efficient delivery model that brings together multiple export assistance organizations, and other expert resources, in one place to work with multiple companies at once.

Two examples include the ExporTech program (see chart on page 7), which is a national program offered by the Manufacturing Extension Partnership and the U.S. Commercial Service, and the state of Virginia’s VALET program. As shown in Chart 10, both ExporTech and VALET have strong track records of measurable results - each resulting in significant increases in export sales for participating companies. These group projects take export assistance to a whole different level by combining a number of elements, including education, individual counseling, export plan development, peer learning and networking, and connection with a wide range of local expert resources. Both programs offer a concentration of resources in an intensive assistance program, target high potential (*threshold*) companies and have generated impressive results.⁴¹

It is also important to note that both programs have application processes to ensure that participating companies are a good fit and have export potential. The VALET program eligibility criteria explicitly include company size (at least 20 employees or \$2M in annual sales) and a readiness to commit \$20K toward export business.

What We Need To Do Differently We need to identify innovative new models for efficiently providing intensive export assistance, including highly effective group project programs such as ExporTech and VALET. These programs create efficiencies and expand reach by working in-depth with multiple companies at once.

GROUP PROJECT INTENSIVE PROGRAMS		
Program	ExporTech	VALET (Virginia Leaders in Export Trade)
Description	<ul style="list-style-type: none"> Offered jointly by the Manufacturing Extension Partnership and the US Commercial Service, in collaboration with other federal, state and regional partners. Assists groups of 6-8 companies to enter or expand in global markets. Each company develops an export plan, vetted by a panel of experienced exporters at the end of the 3 month program. Involves three innovative group sessions along with individual coaching/counseling Group session content is customized to the needs of each group of companies. During group sessions companies connect with a wide range of experts, who have volunteered their time Provides tools and resources to make export growth more systematic 	<ul style="list-style-type: none"> Assists 25 companies each year to ramp up their global marketing efforts through a two-year program Group meetings are held twice a year, for the purposes of education and networking Program partners agree to provide professional services pro bono, in range of areas such as marketing, logistics and financial services Provides reimbursement of up to \$15,000 for export-related expenses; funds not dispersed unless a plan is developed and the company is adequately engaged in the program "These companies viewed their participation in VALET as a jumping off point for committing time, resources, and personnel to accelerating the growth of their international business." – <i>VALET 2011 Annual report</i>
Target Audience	<ul style="list-style-type: none"> Reactive exporters that want to become more proactive, systematic <i>New-to-export</i> companies where leadership is ready to commit resources to export growth Generally asked to complete application 	<ul style="list-style-type: none"> Committed to export as an expansion strategy. At least 20 employees / \$2M in sales Established for at least 3 years Commitment to participate in VEDP-sponsored trade mission or independent market visit Commit \$20,000 toward export trade Completed international market research Required to complete an application
# of Programs & Participating Companies	71 programs run in 25 states (2007 – present) 450 participating companies	22 classes (2002 – 2012) 174 participating companies
Results	<p>Clients where ExporTech was a stand-alone service (i.e. the only MEP center service received):</p> <ul style="list-style-type: none"> Average sales increase/retention of \$164K Average cost savings and investment avoidance of \$10K Export sales often generated within 6 months of program completion <p>All ExporTech clients – including those where ExporTech is combined with other MEP center services:</p> <ul style="list-style-type: none"> Average sales increase/retention of \$772K 	<ul style="list-style-type: none"> 2011 VALET graduates increased international sales by 69% 2008 Evaluation: On average, companies experienced an 88% increase in international sales during and immediately following the program.

Sources: ExporTech Program materials and Overview Presentation 10-14-12; VALET website, *VALET Program Annual Report 2011*; Evaluation of the Virginia Economic Development Partnership's VALET Program: Final Report, December 2008; Interview with VALET Program Manager

Companies Can also Supplement Management Capacity to Pursue Exports Through the Use of Interns and Export Intermediaries

Lack of management capacity can be partly circumvented with other types of outside support.

Business school and undergraduate interns can be used by SMMs to help with export activities such as “deep dive” market research or due diligence on international partners.⁴² We discuss this approach in more detail in section VII.

Export intermediaries, such as export management companies, export trading companies or wholesalers, can provide the knowledge and effort to pursue international sales for a pool of companies. “Small and new exporters benefit greatly from the services of export intermediaries, as these firms provide skills and economies of scale that are unavailable to SMMs or inefficient for them to acquire.”⁴³ However, intermediaries are often regional and specialize in markets and/or countries; thus not all products would align with existing intermediaries.⁴⁴

Today, referrals by export assistance organizations do occasionally take place, but not in a systemic way.⁴⁵ In an attempt to make this process more systematic, the SBA has launched a new matchmaker program through which intermediaries and companies meet during SBA–hosted conference events.⁴⁶

What We Need To Do Differently The SBA’s Matchmaker Conference events are one way to bring SMMs and intermediaries together. Export assistance providers can also maintain lists of vetted intermediaries that could be connected to small company clients when a good match is identified, i.e. when the intermediary’s specialization is appropriate and the company’s international goals fit with this indirect approach. We should note that intermediaries may be most appropriate for smaller, *new-to-export* companies that are at an early stage in their export journey. As exporters become more experienced, it often makes sense for them to control their own selling, marketing and client relationships.

Concrete Opportunities Drive Companies to Become Proactive and Aggressive About International Sales

Threshold companies are driven to action after identifying concrete opportunities. Marketing campaigns about exporting are rarely sufficient to compel SMMs to pursue global growth. Business leaders want tangible evidence of a market opportunity before committing resources. In an internal U.S. Commercial Service (USCS)/MEP survey, 87% of respondents cited “strong demand from foreign customers” as the primary reason for becoming aggressive about international sales.⁴⁷ Furthermore, as one export consultant told us, “don’t waste time training on export mechanics until the client has a purchase order.”⁴⁸

What are “concrete opportunities”?

In-person Foreign Market Connections These are one of the most compelling drivers of a more proactive and aggressive approach to international sales. A U.S. International Trade Commission (USITC) report on SMMs determined that “... personal connections or business contacts were the most important way for SMMs to enter foreign markets.”⁴⁹ Personal connections are so powerful that a recent internal Commercial Service Focus Group Report found that companies target foreign markets based on a “specific contact in a specific market” rather than on data.⁵⁰ And, we’ve heard similar comments from other export assistance providers.⁵¹ The Pennsylvania Center for Trade Development cites “lack of reliable and trustworthy contacts at the international level to validate markets” as another of four primary impediments to SMM proactive exporting.ⁱⁱⁱ

Foreign Customer Inquiries These inquiries – most commonly driven by a company’s web presence – are direct indicators of global demand.⁵²

Specific Market Intelligence. To prompt an exporter to see global market opportunity, market data must be highly specific. Examples of these highly specific indicators of demand include knowledge of a competitor’s foreign customers, intelligence about a particular project that might create demand for an exporter’s product, or awareness of a U.S. customer setting up foreign operations.

ⁱⁱⁱ See footnote i on pg 20.

Given the importance of concrete opportunities, it's not surprising that three of the most effective methods to jump-start proactive globalization are business matchmaking, trade missions and tradeshow.

Business Matchmaking This is the core of what most export assistance organizations offer. A recent internal Commercial Service Focus Group report found that its Gold Key Matching Service is deemed by clients to be its "most valuable" program. According to the report, "Many companies credited CS as a primary method for finding new partners."⁵³ Most state trade organizations, and even some industry associations, provide this service as well.⁵⁴ For *threshold* companies, matchmaking gives them a concrete sales contact that compels action.

Trade Missions and Tradeshow According to export assistance participants interviewed, tradeshow and trade missions are also extremely effective ways for companies to capture market intelligence, generate leads, and make contact with potential partners. According to the 2011 National Export Strategy report, "For export-ready companies, participating in a major foreign tradeshow is one of the fastest ways to increase exports."⁵⁵ It also appears to be an excellent way to deepen a company's international experience and commitment.

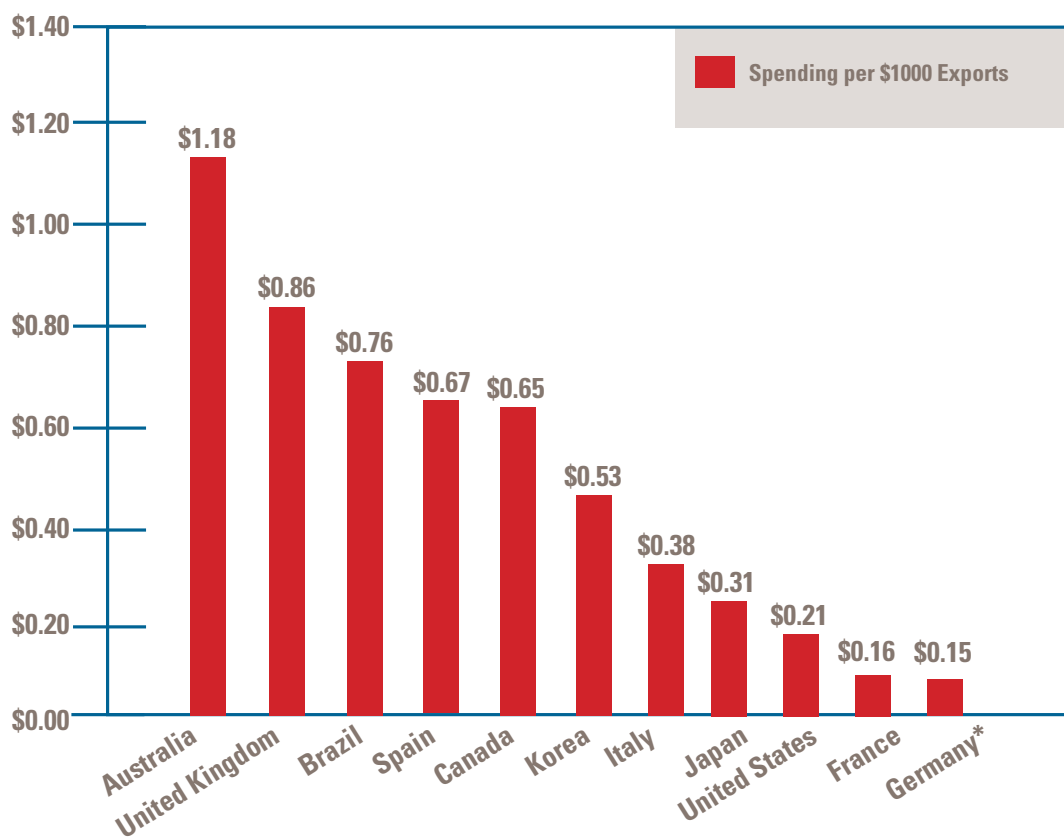
In 2011, the U.S. Commercial Service organized or certified 39 overseas trade missions with 527 U.S. company participants, and hosted 2,700 U.S. company exhibitors at 95 certified overseas tradeshow.⁵⁶ In addition, many states are funding participation in tradeshow, trade missions and the Gold Key business matchmaking service, as part of the SBA-funded STEP (State Trade and Export Promotion) grant programs.

What We Need To Do Differently. Capacity constraints have resulted in delays in service from the Foreign Commercial Service in many regions around the world. Despite the budgetary environment, we cannot allow these delays to continue. The Commercial Service is already shifting staff to high demand areas and looking for other ways to expand capacity to meet demand, including partnering with, or subcontracting to, other organizations. Nevada (and other states) is using a voluntary foreign representative program, which is another way to expand foreign delivery capacity without requiring additional government investment.

Export assistance providers told us that small monetary incentives are often highly effective for encouraging SMMs to participate in tradeshow.⁵⁷ But we're currently at a disadvantage versus foreign competitors on tradeshow incentives, and this will get worse if State STEP funds go away.⁵⁸ An analysis by the national District Export Council indicated that "several competitor countries subsidize services to small companies, including participation on trade missions, in foreign trade shows, and to introduce SMEs to key markets." Further, as shown in Chart 11 below, the International Trade Administration estimates that the U.S. spends less on export promotion than most of its competitor nations.^{iv} (Note that "export promotion" includes spending beyond tradeshow incentives, but the data are indicative.) **This spending disadvantage puts the U.S. in a vulnerable position, as tradeshow/ trade mission participation is one of the most effective ways to encourage companies to become more proactive and committed to international business, thus unlocking their full potential.**

^{iv} One exception appears to be Germany, but that is misleading as considerable tradeshow support is channeled through Chambers of Commerce and industry associations.

ESTIMATED GOVERNMENT EXPORT PROMOTION SPENDING OF THE UNITED STATES AND SELECTED MAJOR TRADING PARTNERS, 2011



Source: 2012 National Export Strategy, Trade Promotion Coordinating Committee (Data is from ITA analysis of foreign trade promotion programs.)

* Data on Germany excludes substantial indirect support funded by mandatory fees. German firms are required by law to join a domestic chamber. Mandatory membership fees are used to support the German Chambers of Commerce Abroad. Additionally, the Association of German Trade Fairs organizes trade fairs abroad on behalf of the Government. Association funding comes from a fee levied on all exhibitors at German trade fairs. (Source: National District Export Council, Foreign Competition and Trade Promotion Assistance, May 2010)

2) How Do Export Assistance Services Need To Change To Better Respond To the Needs of Exporters – Particularly *Threshold* Exporters?

Export Assistance Organizations Need to Take Their Services to the Next Level

Export assistance organizations do a great job of providing business matchmaking, and their in-depth counseling (as discussed above) is highly valued. However, *threshold* companies need more if we're going to help them reach their export potential.

Although there are a wide range of possible roadblocks, barriers to international business can be roughly grouped into two categories: 1) strategic marketing/planning and management of sales channels and 2) export mechanics.⁵⁹ An internal 2009 U.S. Commercial Service (USCS) / MEP study reported that, in general, exporters rate themselves considerably lower in the effectiveness of their management

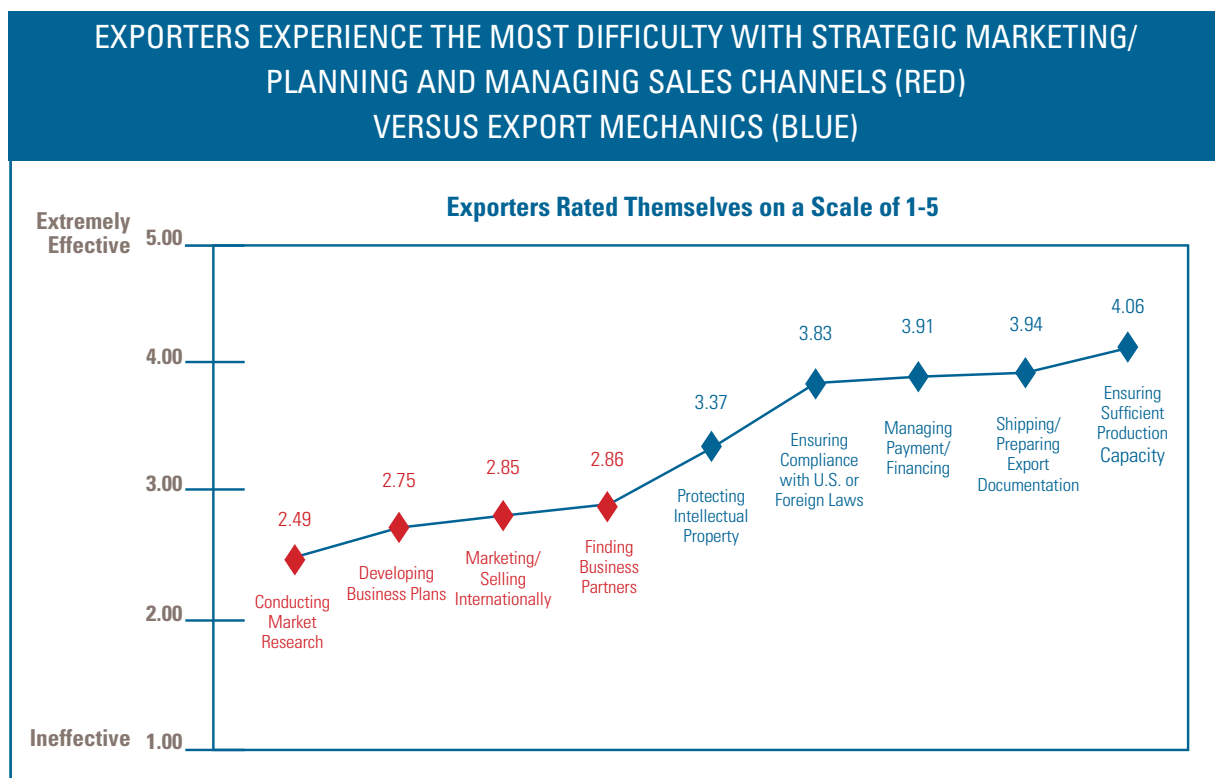
of strategic marketing export issues as compared to export mechanics. (See Chart 12)

This does not mean that less experienced exporters do not struggle with export mechanics, but as we heard from export assistance providers, once a purchase order is in hand, companies will generally find a way (often leveraging the services of export assistance services or logistics companies) to manage the mechanics and fulfill orders.

Consequently, it is in the areas of front-end strategic marketing/planning where the export assistance world has important opportunities to enhance their services.

Market Data is Often at Too High a Level to Be Useful

SMM exporters are often niche players, which means that they require global market intelligence that is highly specific to a company's particular product, market and value proposition. The data required must be more granular and relevant than what is often provided to exporters, such as trade data or broad indicators of a country's sectoral growth patterns.



Source: Internal USCS/MEP Market Segmentation Study, 2009

According to an internal report by an export assistance organization, client feedback indicated that “research in their industry and markets of interest does not ‘drill’ deeply enough.”⁶⁰ Often, U.S. export assistance organizations provide Harmonized System (HS) code-based trade data as an indicator of demand, and/or supply other country-level information. Then, they generally contact a foreign post or partner, which may or may not be able to offer information relevant to the company’s niche.

The example of a pet grooming product (See Chart 13) illustrates the challenge of relying on broad HS or NAICS code based data. This type of analysis not only requires in-depth market data, but also a fundamental understanding of how the client competes.

The U.S. Commercial Service has recognized the challenge of providing adequate market data to clients and is in the process of establishing a “Global Knowledge Center” as part of a set of improvements in this area.⁶¹

NICHE PRODUCTS REQUIRE SPECIFIC MARKET DATA - PET GROOMING PRODUCT EXAMPLE

A 2011 International Trade Administration Trade Newsletter profiled a manufacturer of pet grooming products. In this case, potentially relevant HS (Harmonized System) and NAICS data would be captured under a variety of codes depending on what material individual products were made of, and these codes would likely capture similar products for human use (e.g. brushes, shampoos). In other words, they would be useless for assessing market potential. Furthermore, finding data on pet ownership by nation would be of limited value because this company focuses on *high-end* grooming products. The owner finds markets by tracking dog shows because these are the type of events that would be attended by her *high-end* potential customers.

Source: ITA, “Exporting, with a Warm Touch,” International Trade UPDATE, June 2011

What We Need To Do Differently Export assistance providers need to hire domestic and foreign staff who are experienced in market research and have enough business expertise to help companies find market data that is useful and relevant to their product, needs, and value proposition. We also should train staff on research techniques useful for niche markets and consider working with outside partners who are both good and efficient at market research (as one of the key challenges is providing valuable information in a cost effective and timely manner).

Threshold Companies Need International Business Coaches, Not Just Technicians on Export Mechanics (documentation, payment methods, shipping, etc.)

Helping *threshold* companies with strategic export marketing issues requires experienced domestic counselors who can provide guidance on a wide range of challenging topics. Having staff that focus primarily on specific matchmaking or due diligence service requests is not enough to help *threshold* firms to reach their full export potential.

There are some federal and state trade specialists with industry experience (particularly in foreign offices) who can “go deeper” and coach on more advanced topics, such as how to manage foreign distributors and representatives or international marketing strategy. Some states have focused on hiring trade staff with industry backgrounds. Jean Davis, Director of North Carolina’s International Trade Division, told us: “Most (of our) Business Development Managers came out of industry – this is not common in other states... What really matters is our guys can go talk about business, [because they are a] business person who has sold overseas before.”⁶² But most trade counselors do not have this type of experience or expertise, and are unable to provide this kind of assistance.⁶³

What We Need To Do Differently Customers are asking for more industry knowledge. The previously cited internal export assistance organization report indicated that clients “expressed a preference for trade counselors with industry knowledge...” and reported that the organization would

be “more critical to their business development efforts if staff had stronger industry expertise.”⁶⁴ Export assistance providers need to hire more counselors with industry experience in international trade and specific sectors. Hiring people with these skill sets is feasible, as demonstrated by the fact that people with this level of expertise exist in the export assistance world today.^v

In addition, the export assistance world should deepen partnerships with industry associations that can contribute in-depth market intelligence and industry knowledge. Some industry associations are primarily lobbying organizations, but others provide significant value added services to members related to international business development and market intelligence. (See Chart 14)

An association with global market intelligence and staff experience in the industry can go deeper in assisting an export client. Federal export assistance should be able to develop partnerships with these associations to gain access to their expertise and market intelligence for clients. In some cases it will be best to refer clients to these associations for export assistance, allowing government/non-profit to focus on the many un-served companies in sectors that do not have associations that can support global business growth.

AMT PROVIDES ROBUST EXPORT ASSISTANCE TO MEMBERS

The Association for Manufacturing Technology (AMT), a group primarily comprised of machine tool builders, proactively monitors and provides global market intelligence on a series of products/technologies as well as end use sectors and countries that purchase machine tools. This research is free to members and annual dues are modest. Many of its staff have significant global industry experience, and they leverage this expertise to provide guidance to companies. For example, they offer “Business Development Day” to individual companies, which involves multiple staff providing input and guidance on international business development activities, including market entry strategy and managing sales and distribution channels. This service is also covered by member dues.

Source: Interview with Mario Winterstein, Business Development Director, AMT, 9-6-12

^v Encouraging trade counselors to achieve the NASBITE Certified Global Business Professional designation is also a valuable approach to deepening their skills sets. However, it is not a complete substitute for industry experience.



VI. WHY ARE INNOVATION AND THE SUPPLY CHAIN IMPORTANT FOR INCREASING EXPORTS?

Innovation and the U.S. manufacturing supply base can significantly impact U.S. export performance, but they are not traditional areas of focus for the export assistance world. In this section we address the following two questions:

- How does the U.S. help current exporters innovate to remain competitive and increase the pool of *threshold* companies with differentiated, exportable products?
- Why are suppliers important to exports and how can we support them?

How does the U.S. Help Current Exporters Innovate to Remain Competitive and Increase the Pool of *Threshold* Companies with Differentiated, Exportable Products?

The Economic Development Administration (EDA) calls innovation, “the key to new and better jobs, a resilient economy, and global competitiveness.”⁶⁵ Many studies have confirmed the two-way link between innovation and trade. As we stated in Section IV, differentiation confers competitive advantage which allows companies to be *successful* exporters, and engagement in global markets spurs innovation. Given this linkage, it is clear that the export assistance world should:

1. Support the expansion of innovation programs that help established manufacturers to develop new products,

processes, and technologies, enabling them to become or remain differentiated in global markets.

2. Strategically connect the export assistance world to the innovation eco-system, for both
 - a. Established manufacturers
 - b. Startups

Innovation = Exports: The U.S. Needs to Support and Expand Innovation Programs That Help Established Manufacturers to Develop New Products, Processes, and Technologies, Enabling Them to Be Differentiated in Global Markets

One of the best ways to grow exports is to help established manufacturers develop (or continue to develop) unique or superior products, services, and capabilities, and to help them access technology to develop products for global markets. This enables these companies to remain competitive in global markets and creates a pool of new *threshold* companies with high potential export products.

What We Need To Do Differently The U.S. needs to support the expansion of programs that can help individual established companies differentiate themselves. The MEP program offers a number of tools and services that help manufacturers to accelerate innovation. Two particular MEP services that assist SMMs to differentiate themselves are Innovation Engineering and Lean Product Development. See Chart 15. Programs such as these can help companies become more effective and efficient at developing new products, which increases their international potential.

MEP INNOVATION SERVICES

There are many obstacles to overcome when moving an idea from conception to the commercial marketplace. Challenges exist that can derail innovation at every step along the way: ideation, market research, design, prototyping, manufacturing, identifying suppliers, financing development expenses, marketing and product rollout. On top of that, the single step likely to yield the highest economic benefit to the region – manufacturing the product locally – is often neglected. When manufacturing leaves the region or the nation, an opportunity for capturing value and creating jobs is missed. As manufacturers work to develop new products, diversify into other markets, and seek out ways to compete on product superiority and quality, MEP has developed a range of tools and services to help. Two examples include:

The Innovation Engineering Management System (IEMS), which accelerates a continuous flow of innovations to address a manufacturing firm's problems and opportunities. It transforms innovation from a random event into a reliable system for profitable growth. IEMS projects include one or more stages of a four-stage process – Define, Discover, Develop and Deliver – intended to encourage company culture change or to help companies adopt a system for moving innovative ideas from the concept stage to the introduction of new products, services and processes. IEMS services might include a series of team workshops to identify product line extensions, new customers, or new products/services. It could also involve a series of coaching activities over several weeks using the Innovation Engineering tool kit to translate ideas into written concepts, to mine for new technologies, to address death threats or to bring clarity to a new concept.

Lean Product Development applies the waste elimination philosophy of lean operations to the product development process. The service helps manufacturers reduce time to market, improve resource utilization, and reduce new product development risk, while cutting waste and reducing product costs and product development expense. Firms that embrace the practical, waste-eliminating methods of Lean Product Development and Lean Product Design have reported up to a 50% reduction in launch schedule, dramatic improvements in gross margin and enhanced customer satisfaction.

Sources: NIST MEP Program website; NIST MEP, *Hollings Manufacturing Extension Partnership: A Commercialization Collaborator*, 2013; NIST MEP, *From Idea to Design to Manufacturing to Market: The Manufacturing Extension Partnership's Role in Innovation*, October 2011

The U.S. also needs to encourage connections between current exporters and sources of technology, so these companies can continue innovating. A program that addresses this is the MEP National Innovation Marketplace, which facilitates connections between sources of innovations and companies that need them to develop new products or processes or overcome technical barriers.

Integrate the Export Assistance World with the Innovation Eco-system for Established Manufacturers

Although there is a national emphasis on spurring innovation and a parallel emphasis on exporting, the two efforts seem rarely to intersect in a meaningful way.⁶⁶ This is a missed opportunity to assist innovators with international growth opportunities.

What We Need To Do Differently Studies find that companies that innovate tend to be more collaborative and information-seeking, which are behaviors that correlate with export intensity.⁶⁷ The export assistance community needs to be better integrated with networks of companies that are working to innovate, such as cluster initiatives, executive peer learning groups, and university-industry collaborations such as research parks. This would put export assistance providers in a position to work with clients that have a greater chance of success in global markets.

In addition, export assistance organizations should more closely coordinate with the innovation services programs offered through MEP centers. Rather than being separate activities, export assistance and innovation services should ideally be coordinated as part of an overall global growth

strategy for SMM clients. For example, introduction of an innovative new product may drive SMMs to attend foreign tradeshows, expand into new countries, or distribute through new channels. Clients will benefit if export specialists and MEP innovation consultants work together to facilitate a client's global growth and innovation strategy.

Regional cluster initiatives, in particular, can support exports in several ways – they facilitate innovation, partnerships, networking, mentoring, and peer-learning about international, and they can help SMMs to join supply chains. Promoting “export opportunities among competitive industry clusters” is a National Export Initiative strategy. In a 2011 President's Export Council meeting, Gene Hale, a member of the council and its SME committee, suggested that NEI needed to become REI – or regional, in effort. He said, “We have to go to the grass roots and formally establish — and I say formally — establish support for regional export initiatives and fully utilize public private partnerships.”⁶⁸

The export assistance world can do more to promote exports through cluster initiatives. Although increasing exports is one of the goals of the SBA's Regional Cluster Initiative program, of the 89 participants who wanted to increase exports, only 14 (69%) reported that they did so because of cluster activities.⁶⁹ On the other hand, the clusters were effective at helping companies form alliances and spurring companies to develop new products.

Connect the Export Assistance World to the Innovation Eco-system for Start Ups

Many start-up/early stage, technology-based companies have innovative products with global potential. So increasing the pool of startup technology companies also increases the pool of *threshold* companies with high potential export products. Federal and state governments invest in a number of programs to advance commercialization of innovative technologies, increase the number of *successful* startups, and develop advanced manufacturing technologies. Specific examples range from incubators, technology transfer programs, university technology commercialization centers, and new programs

such as the federal Advanced Manufacturing Partnership which intends to “support applied research programs in new technologies with the potential for transforming impact.”⁷⁰ All of these programs foster the creation of *threshold* companies.

Furthermore, many start-up companies are compelled to pursue global markets right away – i.e. are born global – for a number of reasons: 1) They target niche markets that require global sales to drive scale and growth and to amortize R&D costs; 2) they need to exploit global markets quickly before a technology advantage evaporates (this includes the need to obtain patent protection in global markets soon after obtaining a U.S. patent); and 3) global markets are sometimes easier to access, for example, in medical devices, where it may be easier to obtain regulatory approval to conduct clinical trials or to conduct R&D outside the U.S. For these reasons, startups often need to exploit international markets quickly to increase their chance of survival and success.

By connecting technology startups – and the R&D and technology commercialization ecosystem more generally – with international market demand, the export assistance community should be able to increase the success rate of these companies and the commercialization rate of new technologies. In other words, export assistance organizations should be able to help startups and technology development networks to fully exploit global market opportunities.

However, the export assistance world rarely targets startups because of current measures and incentives. We tend to focus on established companies, where the likelihood of significant measurable results, in a short period of time, is much greater. Startups companies have a high failure rate, and it may take years before products and sales come to fruition. However, some of these companies offer the potential for significant future growth.

There have been some recent attempts to determine how best to serve technology startups. For example, Pennsylvania's Center for Trade Development (CTD), together with the Pittsburgh Technology Council launched

TechExport, a program designed to “raise awareness of international business opportunities among technology businesses and to assist them in launching or increasing their export sales.”⁷¹

What We Need To Do Differently Given the high failure rate of startups, the ROI of the new programs described above has not yet been determined. But it is worth exploring the economic benefit of this approach and learning from the experimental programs taking place. If the export assistance community can determine how to provide help to these companies in a targeted way that generates long-term results (as they won’t happen overnight) and avoids wasting too much effort on companies that fail, we may be able to make a significant contribution toward export growth.ⁱ

Why Are Suppliers Important to Exports and How Can the Economic Development World Support Them?

The role of SMMs is often in the supply chain of Original Equipment Manufacturers (OEMs). And that role is critical: “...the health of an economy’s large manufacturers depends on the strength of the SME suppliers in their value chain...”⁷² In terms of exports, large manufacturers may represent the bulk of shipments, but suppliers contribute indirectly to a significant portion of value added. Based on an analysis by the U.S. International Trade Commission (USITC) in 2007, 16% of manufacturing sector exports were shipped by SMMs, but SMMs represented an estimated 32% of export value added when intermediate goods (supplied to exporting firms) were included.⁷³

OEMs select supply chain partners based on value. If domestic SMMs provide less value (in terms of innovation, quality, or service) at a given price than foreign competitors,

OEMs will substitute imported content (thereby reducing domestic value added of their export shipments) or risk becoming less competitive themselves, thus losing market share to global competitors. Our opportunity is to strengthen the competitive position of the supply base – in other words, to maintain and grow its value added. The U.S. needs a strong, innovative and diversified supply base, that supports OEM innovation globally and can defend itself against imported competition.

In addition to indirect exporting through OEMs, suppliers also export directly. In many respects, these companies have the same needs as finished product exporters discussed throughout this report. However, suppliers also face unique opportunities and threats.

First, suppliers often have opportunities to expand by exporting to overseas affiliates of their U.S. multinational customers. 45% of SMBs, in a 2010 survey by CompTIA (a non-profit trade association), reported that they sold products/services to U.S. subsidiaries of foreign companies.⁷⁴ Second, suppliers should also strive to expand and diversify their customer and market base by exporting to other international supply chains. At a global conference on SMEs, the Organisation for Economic Co-operation and Development said... “the smart enterprise is (a)lways seeking ways of spreading its involvement across two or more global value chains... it looks to expand its options and capabilities. This leverages skills, enhances capabilities and reduces the risk of being tied to a single global value chain.”⁷⁵

It is also worth noting that for companies with finished products, supply chain participation itself (i.e. adding OEM sales to their mix of business) can make SMMs stronger – it increases stability, growth, and productivity,⁷⁶ and spurs globalization.⁷⁷

ⁱ We recognize that assisting start-ups runs counter to our recommendation that export assistance organizations prioritize companies with over 20 employees. That is another reason why we must find models that avoid expending too much effort until a company has demonstrated a high likelihood of export growth.

MEP helps suppliers to be stronger supply chain partners through services such as Lean, quality system certifications, and operational improvements. Other programs that target suppliers include: an Export-Import Bank financing program to support supplier cash flowⁱⁱ, and the Michigan Manufacturing Technology Center's Market Diversification program that encourages suppliers to diversify to avoid being too dependent on one or a few OEM chains.

What We Need To Do Differently As a nation, we need to encourage suppliers to develop innovative capacity and specialized capabilities to collaborate with OEMs on innovation. (As mentioned in the section on innovation, this might include Lean Product Development services or affordable access to modeling and simulation tools.) Also, we need more programs like MMTC's Market Diversification program that assist suppliers with diversification. The MEP program should expand initiatives like these that help suppliers innovate, access new technology, or diversify.

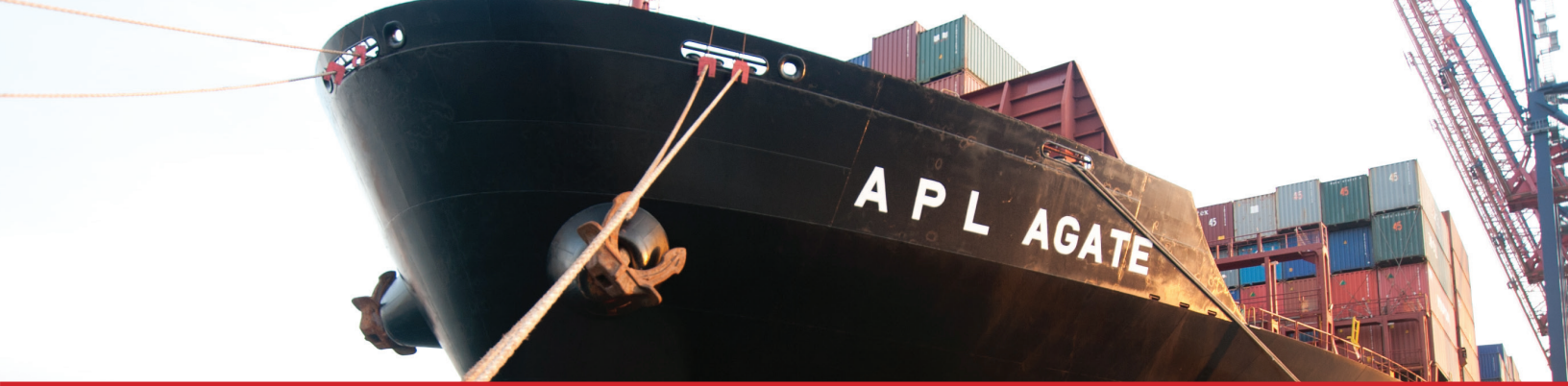
In terms of direct export assistance, Stone & Associates suggests an "ambassador" program where U.S. companies open doors (i.e. make introductions, not twist arms) for their domestic suppliers with their foreign affiliates.ⁱⁱⁱ Many suppliers ship to foreign affiliates of their U.S. customers (OEM), but rarely get help from the U.S. parent. Gregory Tassey, Senior NIST economist, opined that U.S. OEMs put profit-maximization ahead of supplier health, not recognizing that, "...effective supply-chain integration... requires an understanding by large manufacturers that smaller suppliers need both adequate profits and some minimum level of orders during down portions of the business cycle to sustain R&D and update productive capacity."⁷⁸ He contrasted this attitude to Japanese companies as well as to some German

firms that are known to maintain their supplier relationships in offshored products to standardize their products worldwide.^{iv} In a 2010 discussion on exports, Grant Aldonas (former undersecretary, DOC, International Trade), suggested that it may be more productive for the government to focus increased attention on supplier capabilities and linkages in supply chains, because "the new commercial gate keepers in the global economy, are actually the companies themselves and who they bring on as suppliers."⁷⁹ We suggest that the benefit to OEMs of an ambassador program is a supply base that – through the benefits of global scale and activity – is more stable, innovative, and cost competitive.

ⁱⁱ The Ex-Im Bank's Supply Chain Finance Guarantee program is "designed to inject liquidity in the marketplace and provide U.S.-based suppliers — particularly small businesses — with access to capital faster and at a lower cost." (source: Ex-Im Bank, *Report To The U.S. Congress On Export Credit Competition And The Export-Import Bank Of The United States: For The Period January 1, 2011 Through December 31, 2011*, June 2012.)

ⁱⁱⁱ A foreign branch, subsidiary, joint venture or licensee of a U.S. parent company

^{iv} Ford also has a preferred suppliers program (Aligned Business Framework) that allows it to standardize across global markets; but Ford's program has no U.S. bias, in other words, its preferred suppliers may or may not be American.



VII. HOW DOES THE EXPORT ASSISTANCE COMMUNITY HELP SMMs FULFILL THEIR EXPORT POTENTIAL IN AN ENVIRONMENT WITH LIMITED ADDITIONAL FUNDING?

This section elaborates on how the export assistance world can assist SMM exporters, particularly *threshold* firms. These recommendations reflect the fact that significant additional government funding may not be available.

Export Assistance Providers (particularly USEACs, state trade organizations, SBDCs and MEP centers) Need to Reach a Greater Percentage of *Threshold* Companies by Coordinating Federal and State Resources and by Leveraging Partners

If we can reach a larger number of *threshold* companies and help them become more proactive, systematic exporters, we can have a meaningful impact on manufacturing sector export performance. Because *threshold* firms are either already exporting or have received foreign customer inquiries, it is likely that they have differentiated products with export potential. Stone & Associates estimates that the export assistance community serves fewer than half of *moderate* exporters and probably a very low percentage of the export-ready *new-to-export* companies. Based on these percentages, we estimate that there are roughly **25-80,000 *threshold* firmsⁱ that are not served by the export assistance world.** To reach more of the right companies, the export assistance community needs to adopt the following strategies.

We can reach more companies through increased coordination of federal and state export assistance.

With limited capacity to provide intensive services needed by *threshold* companies – such as in-depth counseling or group projects like ExporTech – it is critical that the state and federal networks coordinate to avoid duplication of effort. Under NEI, this is a priority and the STEP program has helped to accelerate progress in this area, but additional opportunity exists to coordinate client services. In some regions, federal and state export assistance organizations view each other as competitors and duplicate trade counseling efforts. In a world of limited resources, it does not make sense for USEAC, state, and SBDC trade organizations in each region to all be counseling the same companies. Instead, these organizations should coordinate (within each region) by identifying a lead trade counselor for each exporting client. This approach does not mean that, for example, a USEAC would not provide Gold Key services to a client that is working with a lead counselor from a state trade office. It simply means that one counselor would provide overall coordination and guidance to that company, allowing the export assistance community to expand its reach to additional clients. (Note that an important first step toward this coordination would be for the U.S. Commercial Service to share client data with state partners.⁸⁰)

ⁱ Discussed on page 20 and see Appendix I for backup/methodology

Metro partners can also be leveraged to expand reach.

The Brookings Institution is leading the development of a series of export plans for metropolitan areas. They view the metro region economic development community as a logical and underexploited outreach channel that can be leveraged to educate companies about the international opportunity and qualify/refer them to the appropriate export assistance organization.⁸¹ Metro economic development partners can identify *threshold* companies and connect them with federal and state export assistance resources.

Export assistance organizations **should adjust their targeting strategies.** Given current resource constraints, it is understandable that *new to export* companies (*NTEs*) are lower priority for federal and state export assistance organizations. However, if we can expand capacity (through strategies outlined in this section) then *NTEs* become an important export growth opportunity. The challenge is to identify those that have potential. The most important qualifying question we can ask to determine whether *NTEs* have an exportable product is: “Do you receive foreign inquiries, particularly from outside North America?” For both *moderate* exporters and *NTEs*, we also need to prioritize companies with 20 or more employees, which represent a greater potential for significant export sales growth.

There is no Substitute for Intensive Forms of Support such as In-depth Counseling and Innovative Group Project Intensive Programs like ExporTech and VALET

Because of their scale, SMMs are resource—constrained, and a lack of management capacity is challenging to overcome. They need intensive support that expands their leadership team’s bandwidth.

As we strive to reach additional *threshold* companies, we cannot reduce our commitment to providing in-depth support. This includes a need for in-depth counseling capacity and the highly effective group project programs, such as ExporTech and VALET. These types of programs should be expanded because they create efficiencies by working with multiple companies at once.

An expanded use of vetted intermediaries, such as export management companies (EMCs), export trading companies (ETCs), and wholesalers with international experience, could be used by export novices instead of developing in-house expertise (as well as by the export assistance community to expand capacity of the system). This approach would require that federal and state export assistance organizations leverage programs and systems to match exporters to intermediaries. This would include the SBA Matchmaker Trade Fair and Conference program, as well as the systematic development of lists of vetted intermediaries (categorized by product and market specialty) for referrals.

Finally, creating more programs that leverage university interns to help *threshold* companies would increase SMM management bandwidth. Export assistance providers need to encourage business school and university internship programs to match interns with companies to do medium and long-term projects, allowing interns to develop strong relationships with the companies and to become familiar with the company’s products/markets. This approach has the potential to truly expand management bandwidth by adding a team member that develops familiarity with the company, its products, and its technologies. Short-term projects, while helpful, do not offer the same potential to fundamentally enhance management knowledge and capacity.

Concrete Opportunities Drive Companies to Become Proactive and Aggressive About International. Therefore the U.S. must not Fall Behind Foreign Competitors in Our Support of Business Matchmaking or Tradeshows that Help Create These Opportunities

Concrete international opportunities — personal connections in foreign markets, foreign customer inquiries, or specific market intelligence — can help open the eyes of company leadership and drive action. For that reason, business matchmaking services and trade missions, as well as support for participating in tradeshows, are critical to helping companies become more proactive.

The Foreign Commercial Service and state trade offices must expand overseas delivery capacity by leveraging partners/subcontractors and voluntary representatives (and through staff increases when feasible).

As is already happening, federal and state organizations should continue to aggressively leverage subcontractors and partners to overcome bottlenecks in overseas delivery of business matchmaking and other services. This includes the use of American Chambers of Commerce overseas and industry associations, as well as voluntary rep programs used by state trade organizations. This requires services to be fee-based so there is revenue that can be provided to these partners to support delivery. Also, the U.S. Commercial Service is shifting resources to countries with high demand. Additional foreign staff (at the federal and state level) would also be valuable, budget permitting.

The U.S. must reduce or eliminate its disadvantage versus foreign competitors on tradeshow incentives.

The situation will worsen if STEP funds are discontinued. This puts the U.S. in a vulnerable position, as tradeshow and trade mission participation is one of the most effective ways to encourage companies to become more proactive and committed to international. The U.S. government should provide incentives that offset the cost of participation by SMMs in tradeshows.

Export Assistance Organizations — USEACs, SBDCs, state trade organizations and MEP centers — Need to Take Their Services to the Next Level

Export assistance organizations do a great job of business matchmaking, and their in-depth counseling is highly valued. However *threshold* companies need more if we're going to help them reach their export potential.

Market data is often at too high a level to be useful for niche players. Over time, export assistance providers need to hire domestic (and foreign) staff who are experienced in market research and have enough business expertise to help companies find market data that is useful and relevant to their product, needs, and value proposition. We also need to train staff on research techniques useful for niche markets. Finally, we should also consider working with outside

partners who are skilled and efficient at market research, as one of the key challenges is providing valuable information in a cost-effective manner.

Clients will benefit if export assistance providers hire more trade specialists / export counselors that have private industry experience in international sales and in specific industries. *Threshold* companies need international business coaches, not just technicians on export mechanics (documentation, payment terms, shipping, etc.). We know it is feasible to hire these types of staff because a number of them exist in the export assistance community today.

Deepening partnerships with industry associations that have international assistance programs (e.g. Association for Manufacturing Technology, PMMI) can augment industry expertise and expand delivery capacity.

Some industry associations provide value added services to members related to international business development and market intelligence. Federal export assistance organizations should develop or deepen partnerships with these associations (possibly with overall coordination by the TPCC) to gain access to their expertise and market intelligence for clients. In some cases it will be best to refer clients to these associations, allowing government/non-profits to focus on the many un-served companies in sectors that do not have associations that can support global business. Furthermore, the Commercial Service and state trade organizations can refer or subcontract business matchmaking to these associations in foreign markets where they have offices. In these ways, associations can expand the capacity of the export assistance network.

Innovation = Exports. Innovation Programs Help Manufacturers to Develop New Products, Processes and Technologies, Enabling Them to Be Differentiated in Global Markets

The U.S. needs to expand programs that help established companies differentiate themselves, such as MEP's Innovation Engineering Management System and Lean Product Development, as well as technology related programs such as the Advanced Manufacturing Partnership. We also need to facilitate connections between current

exporters and sources of technology, so these companies can continue innovating, such as through the MEP National Innovation Marketplace.

The export assistance world needs to be better integrated with the innovation eco-system – to better support both innovative established manufacturers and technology-based start-up firms.

USEACs, SBDCs and state trade organizations need to be better integrated with networks of companies that are working to innovate, such as cluster initiatives, executive peer learning groups, and university–industry collaborations such as research parks. This would put export organizations in a position to work with clients that have a greater chance of success in global markets. Export assistance organizations should also more closely coordinate with the innovation services programs offered through MEP centers. Rather than being separate activities, export assistance and innovation services should be coordinated as part of an overall global growth strategy for SMM clients. We also want to make sure that startups are fully exploiting global market opportunities. Because of the high failure rate of startups, the ROI of new export programs to assist startups has not yet been determined, but it is worth exploring the economic benefit of this approach. If the export assistance community can determine how to provide help to these companies in a targeted way that generates long-term results (as they won't happen overnight) and avoid wasting too much effort on companies that fail, we may be able to make a significant contribution toward export growth.

The Nation Needs a Strong, Innovative and Diversified Supply Base that Supports OEM Innovation Globally and Exports Directly to Customers Worldwide

Indirect exports of SMM suppliers are as important to the U.S. economy as direct exports of SMM finished goods. **We need to encourage suppliers to develop innovative capacity and specialized capabilities to collaborate with OEMs on innovation.** For example, this might include expanding MEP program services to suppliers, such as Lean Product Development, or facilitating access to affordable, shared modeling and simulation tools as suggested in the PCAST report on Advanced Manufacturing.

We should consider an “ambassador” program

(implemented through the MEP network) that would enlist large, multinational U.S. OEMs and Tier 1 suppliers to open doors overseas for SMM suppliers, i.e. facilitate opportunities with their foreign affiliates and subsidiaries. While they could not be expected to *require* their foreign subsidiaries to do business with their U.S. suppliers, they could at least open the door.

These recommendations are summarized for each export assistance organization in Chart 16.

If the Export Assistance World Can Adopt Some or All of These Strategies, We Can Unlock the Export Potential of Tens of Thousands of Small and Mid-size Manufacturers. The Payoff Could Be Tens of Billions of Dollars in Manufactured Exports and Hundreds of Thousands of Manufacturing Jobs.

SUMMARY OF RECOMMENDATIONS BY ORGANIZATION	
U.S. Federal and State Export Assistance Offices - USEACs, state trade offices, SBDCs, MEP Centers	<ul style="list-style-type: none"> Focus resources on <i>threshold</i> SMMs: <ul style="list-style-type: none"> Continue to focus resources on <i>moderate</i> exporters that export to a few countries, and have the potential to expand to many more; Adjust targeting strategies by prioritizing <i>new-to-export</i> companies that have received foreign customer inquiries from outside North America; Prioritize <i>threshold</i> SMMs with 20 or more employees, as they are more likely to have the scale necessary to be successful globally. Find ways to expand capacity (without budgetary increases) to provide in-depth assistance to the 25-80,000 un-served <i>threshold</i> SMMs: <ul style="list-style-type: none"> Trade organizations in each region should coordinate (and thereby reduce duplication of effort) by identifying a lead trade counselor for each exporting client; Expand group programs like ExporTech and VALET to efficiently work in-depth with multiple companies at the same time (versus individual counseling); Systematically connect exporters with vetted intermediaries (EMCs, wholesalers) and university intern programs. Take export assistance services to the next level: <ul style="list-style-type: none"> Enhance market research to go beyond HS-code based trade data and offer more specific and in-depth information by: a) hiring staff with experience in gathering market intelligence; b) training staff on research techniques for niche markets; c) hiring staff that have sufficient business expertise to help companies find market data that is useful and relevant to their product, needs, and value proposition; d) consider working with outside partners who are skilled and efficient at market research; Hire trade specialists / export counselors with private sector experience in international trade that can serve as business coaches and not just as technicians in export mechanics; Deepen partnerships with industry associations that have international assistance programs (e.g. Association for Manufacturing Technology, PMMI) that can augment industry expertise and expand delivery capacity. Better integrate with the innovation eco-system – such as cluster initiatives, university-industry collaborations and MEP Innovation programs – to better support both innovative established manufacturers, and technology-based start-up firms.

SUMMARY OF RECOMMENDATIONS BY ORGANIZATION	
Foreign posts/offices of the Commercial Service and state trade organizations	<ul style="list-style-type: none"> • Avoid falling behind foreign competitors in our ability to offer concrete sales and market opportunities for U.S. exporters through business matchmaking and support for participation in tradeshow: <ul style="list-style-type: none"> ◦ Continue to expand capacity through partnerships/subcontractors (Foreign Commercial Service) and voluntary reps (state trade offices/orgs) and charge fees for matchmaking services to fund these activities; ◦ Partner with industry associations that have international assistance programs and foreign offices.
NIST MEP and MEP Centers	<ul style="list-style-type: none"> • Expand programs that assist SMMs to differentiate themselves in global markets, such as Innovation Engineering and Lean Product Development: <ul style="list-style-type: none"> ◦ Offer these programs specifically to suppliers to help them develop new technologies and specialized capabilities so they can collaborate with their OEM and upper tier customers on innovation. • Offer programs to help suppliers diversify and reduce reliance on a small number of customers (as well as stimulate product innovation). • Establish an “ambassador” program that would enlist multinational U.S. OEMs and Tier 1 suppliers to open doors overseas for SMM suppliers, i.e. facilitate opportunities with their foreign affiliates and subsidiaries.
U.S. Government (in general)	<ul style="list-style-type: none"> • Reduce or eliminate the U.S. disadvantage versus foreign competitors on tradeshow incentives. • Continue to support and expand programs that foster innovation and the commercialization of new technology, since “innovation = exports.” • Encourage federally funded innovation programs – such as cluster initiatives – to more closely collaborate with export assistance organizations.
Metro area economic development organizations	<ul style="list-style-type: none"> • Identify <i>threshold</i> (high potential) exporters and connect them with federal and state export assistance resources.

Appendix I: Backup Methodology

P. 20: “Available data suggests the export assistance community serves less than half of the *moderate* exporters, and probably a low percentage of the export-ready *non exporters* (*NTEs*).”

- The U.S. Commercial Service and NIST MEP conducted a survey of “*moderate*” manufacturing exporters (internal report). Only 35% of respondents indicated that they had worked with the U.S. Commercial Service (USCS)/ Dept of Commerce (DOC)/ U.S. Export Assistance Center (USEAC), and on an annual basis the percentage is probably much less.⁸² Assistance from state trade offices and Small Business Development Centers (SBDCs) would increase the percentage served, but it is unlikely that the majority of these companies receive services annually. A survey by Brookings of exporters in the Minneapolis area indicated only 44% had received export assistance from any government or non-profit organization (in this case primarily USCS and the state trade office).⁸³
- *NTEs* have generally been a lower priority for the export assistance community, given limited resources.⁸⁴ As an example, *NTEs* represented only 5% of USCS export successes over the fiscal years 2008-10.⁸⁵ As a result, we would expect to have served only a limited percentage of those with export potential.

P. 20: “25,000-80,000 *threshold* firms are un-served today”

- This estimate was developed by making a rough, order of magnitude estimate of how many *moderate* exporters and *non-exporters* meet Stone & Associates’ criteria for *threshold* companies and are un-served.
- Of the 59K *moderate* exporters, we believe from data discussed above that fewer than 50% are served. The question is how many are ready to commit resources to international and work toward becoming successfully proactive? We assumed a range of 10-40% were not served but ready to commit.

- The second part of the *threshold* segment is *NTEs* in tradable sectors with differentiated products that are ready to commit resources. There is no data available to size this segment. In order to estimate a number of target firms the export assistance world needs to reach, we assumed a range of 10-30% are receiving foreign inquiries and are ready to commit resources to international. This relatively low percentage is intended to be conservative, but it is also based on our research which indicates that many SMMs have good reasons not to export (such as being a regional business which must manufacture close to the customer, or having a commodity product that can be supplied by local foreign competitors).

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