

Market Perception Surveys Summary Report: Automotive Components, Software Development, Furniture, Marble/Stone Products and Lighting Equipment

Prepared for the USAID Turkey – US Business Partnering Alliance

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Disclaimer: The findings conclusions of this report reflect the opinions of a sample of industry players contacted by Project consultants, and not necessarily the opinions of USAID, CARANA Corporation or its consultants. Since the survey size is not scientifically significant, its results should be considered anecdotal.

INTRODUCTION

The USAID Turkey – U.S. Business Partnering Alliance aims to strengthen the ability of Turkish small and medium enterprises (SMEs) to build business partnerships in the U.S. and compete more effectively in the global marketplace. In order to accomplish this, it is important to understand U.S. and international trends as well as industry perceptions of Turkey and its SMEs' ability to penetrate the U.S. market and meet buyers' demands.

In February 2006, project consultants carried out Rapid Investor and Market Perception Surveys focused on the automotive, software development, marble, furniture and lighting sectors/product groups, which were identified by the Union of Chambers and Commodity Exchanges of Turkey (TOBB). The surveys involved interviews with approximately 15 leading firms and business associations in each of the 5 sectors or product groups, for a total of 75 interviews. Whenever possible, interviews were held with international players currently doing business in Turkey, or who were familiar with Turkey. When appropriate, the information collected from the interviews was supplemented with data collected from secondary information sources.

Specifically, the survey's addressed the following questions for each of the product groups:

- What are the current U.S. market trends (e.g. import volume, sourcing practices, sales channels, buyer preferences, and industry developments) that might impact efforts by Turkey/Turkish SMEs to penetrate or expand their presence in the U.S.
- Generally, what are the industry success factors that drive buying decisions
- What are the perceptions in the U.S. market about Turkey/Turkish SMEs and their ability to meet buyer's needs and be competitive compared to other supplier locations
- Given market trends and industry perceptions, what realistic opportunities exist for Turkey/Turkish SMEs to penetrate or expand their presence in the U.S. market

This document provides a summary of the key findings and conclusions for each of the sector/product group surveys. Full reports and data sheets, including market trends, industry success factors, industry perceptions of Turkey/Turkish SMEs and an assessment of the opportunities and challenges facing firms wishing to penetrate or expand their presence in the U.S. market are provided in separate reports.

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¹ These segments were selected based on TOBB's assessment of whether there are existing or potential opportunities for SME engagement within a given product group.

Initially, the surveys were intended to be followed by a field assessment, in Turkey, to determine the extent to which Turkish SMEs within given product groups had the capacity to compete in the U.S. market and to identify specific steps for firms to take advantage of existing opportunities and enhance their ability to penetrate or expand their presence in the U.S. market. This 'SME Capacity Assessment' was canceled to adapt to the priorities and interests of TOBB and USAID. Since project consultants were not able to interact with Turkish firms and assess their capabilities and needs, this report does not provide concrete recommendations on steps that firms can take to improve their positioning within the U.S. market.

² NOTE: The conclusions of this survey reflect the opinions of a sample of industry players, and not necessarily the opinions of USAID, CARANA Corporation or its consultants. Furthermore, since the survey size is not scientifically significant, its results should be considered anecdotal.

OVERALL THEMES

Although each of the product groups surveyed had sector specific market trends, challenges and opportunities, a number of common themes emerged when interviewees were asked about their perceptions of Turkish industries in the U.S. market:

- Reducing information gaps in U.S. market Many of those interviewed lacked a perception of Turkey as a possible sourcing location or player within a given product segment. In some cases, respondents went as far as to say that Turkey was "invisible" or "off-the-radar" in their sourcing decisions. They noted that Turkish manufacturers, or the industries as a whole, needed to be more aggressive in "getting the word out" and show that Turkey "has a story to tell." This could be achieved through concerted, collaborative promotional campaigns in the U.S. or participation in key industry-specific forums held in the U.S. every year.
- *Identify and develop niches* In each of the sectors referenced, Turkey faces strong competition from alternative sources located in Asia, Central and Eastern Europe and Latin America, particularly for 'commodity'-type (or standard) products in each of the sectors. As such, it is important that Turkish industry take steps to identify specific product niches where manufacturers' capabilities and national conditions provide a comparative advantage.³ Once a niche is identified, it is important that industry and the government work together to develop and implement a sector strategy that maps out ways to enhance Turkey's internal strengths, remove constraints to competitiveness and raise Turkey's international profile within the given niche(s).
- Continuously upgrade to improve quality, costs and delivery Given the demands of the U.S. marketplace and the level of global competition among alternative sourcing locations, Turkish companies must fight to gain and maintain a position within a given product segment/niche. This involves ongoing investments to reduce costs, improving product quality, making innovations in design or utility, developing or adding value to products, and improving logistics and delivery. In doing so, Turkish companies must be aware of specific industry success factors for a given product segment/niche and focus on issues that have the greatest impact on U.S. buyer's sourcing decisions.
- Understand that the U.S. market is not always the best fit for Turkish Companies In some cases, interviewees indicated that Europe is a more natural match for Turkish companies. Differences in production platforms, technical specifications and standards and market preferences between the U.S. and Turkey do not exist between Europe and Turkey. Companies wishing to target the U.S. may need to redesign their products or services, and/or make investments to retool their production to meet the specific demands and specifications of the U.S. market. As such, firms targeting both Europe and the U.S. markets may find it difficult to benefit from economies of scale, which could, in turn, impact cost competitiveness. In some cases, transportation and logistics challenges and Turkey's distance from the U.S. market negatively impacts the landed costs of goods, even if a company's general cost structure is favorable. Some interviewees suggested that Turkish companies should focus on expanding their presence in European, Central Asian and Middle Eastern

³ Since the surveys did not involved an assessment on Turkey's capabilities and competitiveness within the selected product groups, neither the interviewees, nor the project consultants are in a position to recommend specific niches where realist opportunities may exist.

- markets, while targeting U.S. markets in those cases where Turkey's capabilities and U.S. market demands are most aligned.
- SMEs should focus on collaborating with larger Turkish firms In a number of cases, interviewees questioned whether Turkish SMEs, or SMEs from any country for that matter, could effectively compete alone in the tough U.S. market. These persons noted challenges related to a SMEs' ability to 1) finance the production and inventory of large orders; 2) reliably deliver large orders on time with consistent quality; 3) establish linkages with often complex and fragmented markets. As such, SMEs should consider developing collaborative relationships or partnerships with other Turkish firms (e.g. larger anchor firms), and become integrated into value-chains with greater capacity and market presence.

AUTOMOTIVE COMPONENTS

The automotive components survey focused on the market for OEM parts/systems used by vehicle manufacturers in their assembly lines; OES (Original Equipment Service) parts sold by vehicle manufacturers for maintenance and repair activities; and after market automotive components. Seventeen industry players from the U.S., Europe and Turkey were interviewed.

In general, Turkey did not rank high as a sourcing point in the eyes of U.S. OEM or OES buyers, particularly when compared to China, India, Mexico, Brazil and Eastern Europe, whereas interviewees in Europe are quite familiar with Turkey as a sourcing/production location. Interviewees felt that there was little growth potential for Turkey's automotive component SMEs to supply OEM, OES and independent aftermarket parts in the US, for a number of reasons:

- Turkey's vehicle/model platforms produced (and sold) domestically differ from those sold in the U.S. Industry players felt that Turkish component suppliers are geared towards the production of parts for vehicles that, in general, are not assembled in the U.S. or North America, whereas competitors located in Canada and Mexico are already integrated into the U.S. automotive market. With no overlap between Turkey's existing vehicle platforms and those in the U.S., it is difficult for Turkish firms, particularly SMEs, to achieve the economies of scale required to be competitive in today's component market. Re-orienting towards the U.S. market could require new (possibly significant investments in new tooling and equipment). In short, Turkey is not a natural match for the U.S. market.
- The USA market for OEM, OES and independent aftermarket parts is extremely competitive. Customers (vehicle manufacturers and the independent aftermarket distribution channels) place very strict requirements (quality, price, volumes, financing) on their suppliers. In general, in order to compete in the USA, OEM/OES and independent aftermarket suppliers need to be large, sophisticated and highly capitalized companies with efficient supply chain management. Interviewees felt that it would be difficult for a SME from Turkey (or any country) to invest in the resources necessary to meet the requirements of the USA's automotive parts market.
- Although Turkey's in-country cost structure is perceived by the automotive industry to be similar to that of Mexico, the landed cost in the USA for OEM/OES parts made in Turkey are deemed higher than the cost of sourcing in Mexico. This is due in part to the cost of

logistics/transportation. For example, it can take a shipment from Turkey up to 3 weeks to reach the U.S., as opposed to the 7 days it takes to reach European markets.

Although interviewees felt that the U.S. market was not a natural fit for Turkish component manufacturers, Turkey has a reputation for quality production that is often as good or better than other European countries. Furthermore, hourly wage rates, adjusted for efficiency are 65 percent of those in the Czech republic and 15 percent of France. Turkey's workforce is generally considered to be well educated and productive.

While some interviewees agreed that there might be specific opportunities for a small number of firms, in general SMEs cannot compete alone the very demanding OEM/OES business. As such, interviewees suggested that SMEs collaborate or develop partnerships with larger components suppliers, manufacturers and other SMEs in Turkey. Specifically, Turkish SMEs should focus on increasing the local content of components/systems produced in Turkey by supplying components to automotive manufacturers producing vehicles in Turkey. Through these OEM's supply chains, they could also provide parts for similar automotive models/platforms in Europe and Central Asia. Similarly, they could supply components to Tier-1 and Tier-2 suppliers in Turkey that in turn sell components to manufacturers in Turkey, Europe and Central Asia.

SOFTWARE DEVELOPMENT

One of the surveys focused on the provision of off-shore software development services, where a company contracts an external supplier in another country, or sets up software development operations in another country, to provide a complete item or service rather than doing it in-house. The survey did not look at outsourcing of other IT-enabled services, such as business process outsourcing (BPO), data processing, or call centers. Seventeen industry players were interviewed from the U.S. and Turkey.

It is clear from the interviews that to expand the export of software development services Turkey must make strides in disseminating information on its capabilities, while at the same time, taking steps to improve its competitive position vis-à-vis other global offshore locations.

While most companies with current activities in Turkey are very pleased with the quality of Turkey's software developers (especially in Ankara and Istanbul), people in the IT and offshoring industry interviewed in the U.S. have very little knowledge of Turkey as a supplier of IT services. Interviewees noted that "Turkey is invisible" within the industry and that Turkey has no image as an international player in any particular IT niche. They commented that information on Turkey's capabilities in the IT areas is not readily found.

The lack of information on Turkey's IT capabilities also contributes to negative industry perceptions regarding its competitive position within the market place. For example, a number of interviewees said they viewed Turkey as a high cost location, even though a published industry-ranking (A.T. Kearney) placed Turkey relatively high (good) regarding its overall cost structure.

In addition to the limited knowledge of Turkey as an off shore location, the Turkish software development industry faces significant global competition, as evident when ranked in global indexes. According to A.T. Kearney, an international consulting firm that produces the "Annual Global Services Location Index," Turkey ranked 40 out of 40. While Turkey's inclusion on the ranking is significant, it faces stiff competition from Egypt (12th), Jordan (14th), United Arab Emirates (20th), Ghana (22nd) and Tunisia (30th), who all ranked higher. While ranking relatively well in overall cost structure (2.14 out of 4), Turkey ranks poorly in location maturity (0.92 out of 3 for business environment and 0.91 out of 3 for personnel skill/availability).

In general, the survey concluded that opportunities exist for the Turkish software development industry in specific IT niches, particularly as a near-shore supplier to European countries. Possible examples included the development of embedded software for industrial and military applications or software for telecom, banking, e-learning, and consumer and home electronics. Interviewees suggest that in order to expand exports of its software development industry, Turkey needs to map out what the country (and its firms) have to offer through an analysis of its strengths and weaknesses in terms of technical expertise, language skill, costs, etc., against external opportunities/global demand for IT software development services. Once identifying potential niches, Turkey should develop a strategy to support the sector in order to attract investment and new business. This strategy would address competitive bottlenecks that prevent growth (e.g. training, IT infrastructure, policies) and involve a 'frontal assault to divulge information' on what turkey has to offer. Turkey should leverage the positive image held by those companies who do work with Turkish software developers to develop success stories and profile the country as an established location for offshore services.

In its efforts to promote its software development industry, Turkey should be cognizant that other countries—in Eastern Europe, Middle East, Asia and even Africa—are also pursuing opportunities and niches in the IT industry. As such, Turkey must continuously look for ways that it can be different and better than other countries.

MARBLE / NATURAL STONE

The Marble/Natural Stone survey focused on blocks, slabs and finished products (such as tiles), particularly within the travertine product segment. Fourteen industry players from the U.S. were contacted for the survey.

It is clear from the survey that Turkey is a well-known supplier of travertine in the U.S. (as opposed to other types of stone). Turkey's travertine blocks, slabs and tiles exported to the USA are considered to be of good quality, sold at competitive prices and an overall good value. Turkish travertine is also lighter in color, which positions it well the U.S. market, which prefers light cream/brown color. In the travertine market, Turkey is perceived to provide better pricing than other sources, such as Italy, Israel or Mexico, but more expensive than China. Turkey's quality is said to be lower than Italy's, but competitive when compared to Mexico, Peru or Israel. Although Italy is the standard to match in terms of product and service quality, Turkey reportedly exports more natural stone finish products than Italy (in terms of volume). Several interviewees felt that Turkey could expand exports of products other than travertine if it promoted them more aggressively.

While interviewees had an overall positive perception toward Turkey, they did note a number of concerns. One, which is out of the hands of stone producers, is the fluctuation and overvaluation of the currency, particularly in regards to the depreciating U.S. dollar. Some interviewees noted that there is a need to improve color matching for filling and the packaging of tiles (e.g. use shrink wrap), which is considered by some as mediocre. Interviewees noted that Turkish suppliers do not always follow the instructions of buyers, often repeatedly, creating concerns over reliability. They also noted that while the U.S. market generally prefers 12 X 12 and 16 X16 tile, Turkey's tile makers prefer to sell 18 X 18 tiles, creating a market mismatch. Some small producers are known to hold orders until they have enough to ship several containers to the seaport to reduce shipping costs, while others experience occasional delays due to problems with internal transportation. Finally, Turkey lacks a national stone industry association that could serve as a central source of information, lobbying, problem resolution, marketing and promoting products other than travertine.

In addition to continuous upgrades in travertine product and service quality, and taking steps to reduce shipping costs (e.g. through consolidation) and delays (e.g. improve logistics management), Turkey's stone industry should take more aggressive steps to develop and market stone products other than cream travertine. As examples, interviewees noted that there could be a market for silver travertine (also known as pewter) and stone slabs (versus tiles). Interviewees also suggested that the industry explore the establishment of a stone products association—that would include SMEs, stressing that such an association should not add to firm's costs (through dues) without providing commensurate benefits.

FURNITURE

One of the five product segments surveyed included furniture (e.g. wooden, upholstered). Fourteen furniture industry players were interviewed.

In general, interviewees in the US are not familiar with Turkey's furniture industry, its suppliers, products and capabilities, with the possible exception of Istikbal. Interviewees indicated that Turkish furniture suppliers have not marketed themselves in the USA and that Turkey—correctly or incorrectly—is not perceived to be a player in the global furniture industry. Some interviews did, note however, that Turkey is known for its upholstery, bedding, mattress covers, drapery, as well as for its travertine.

Although some expressed an interest in receiving information about Turkey's furniture and furniture parts (e.g., types of wood available, machining/production capabilities, costs, etc.), US interviewees believe that, in general, Turkey's suppliers would find it difficult to compete in the US market given strong competition from alternative sourcing points—particularly those located in Asia (e.g. China)—that are able to achieve lower landed cost. In addition to cost issues, interviewees questioned whether Turkish firms (especially SMEs) have the ability or market familiarity to determine market preferences in the U.S. and design and market their products accordingly. Even if they were able to respond to the market, interviewees were not sure SMEs from any country would have the financial resources to promote their own products or brand in the U.S., and if successful in their marketing, meet often-large orders with consistent quality in a

timely and reliable manner. A few were concerned about the financing capabilities of firms to deliver full containers to U.S. importers, or maintain an inventory in the U.S., while meeting their technical and logistics demands (e.g. electronic data exchange, quality requirements, etc.). Due to these issues, interviewees felt that convincing distribution channels in the U.S. to carry a new line could be a daunting task for Turkish SMEs. In order to reach the U.S. market, an SME would most likely need to collaborate or develop partnerships with larger furniture companies in Turkey.

Despite these concerns, respondents suggested that specific niche opportunities may exist for advanced SMEs who target a particular product or geographic location. Since Turkey is known for its fabrics and marble, interviewees indicated that Turkey's furniture manufacturers may be able to take advantage of Turkey's strengths (design capability, cost structure), to expand into related furniture markets, such as upholstered furniture and tables with marble tops, at competitive prices. Furthermore, if Turkey was able to link fabric manufacturers and upholstered furniture makers, it could develop a "quick to market" capacity using the latest design trends (e.g. colors, textures).

LIGHTING EQUIPMENT

The lighting survey focused on products such as ceiling lamps, pendants and chandeliers, portable desk and table lamps, floor lighting, sconces, outdoor lighting, wall lights, and commercial lighting fixtures. Materials included crystal, glass, alabaster, plastic, metal (different metals and alloys), etc. Light bulbs were excluded. Thirteen industry players from both the U.S. and Turkey were interviewed.

As in some of the other product groups covered under the project, Turkish manufacturers are, in general, not known in the U.S. lighting market. Most of the US companies interviewed did not recall seeing Turkish lighting products or meeting Turkish manufacturers in a trade exhibition. Those interviewees who were familiar with the Turkish lighting industry felt the manufacturers were not well matched with the U.S. market. They noted the difference in lighting specifications (e.g. voltage, plugs, bulbs, lamp-holders) and standards (e.g. ANSI) between the U.S., Turkey and Europe. While Turkish companies could overcome these differences, they would need to invest in technology and molds specifically made for the U.S., as opposed to gearing their investments towards Western and Central Europe and the Middle East that is closer, not only geographically, but also in terms of product technology and specifications.

Furthermore, while some lighting companies do sell to sophisticated markets in Europe, respondents felt that many Turkish lighting manufacturers did not place sufficient emphasis on research and development and design innovation, often copying other companies' products. Without product differentiation (e.g. design of fashion items) and Turkey's cost structure, interviewees felt that Turkish companies would find it difficult to compete with alternative sourcing locations (e.g. China) for a number of products. Finally, if they were able to make deals, interviewees questioned whether Turkish manufacturers had the ability to finance the production and inventory costs for the large volumes demanded by the U.S. market.

Those lighting firms interested and able to export to the U.S. will find it challenging to identify the most appropriate distribution channel. The U.S. lighting market is very fragmented in terms of price points, materials, styles, colors, sizes and applications, with a variety of different sales channels (e.g. sales reps organizations, lamp and lighting stores, home improvement stores, discount stores, home accent stores, furniture stores, e-commerce) targeting different buyers (e.g. general consumers, interior designers, architects, electrical product distributors, commercial contractors). As such, the average firm, especially an SME, may find identifying the most appropriate sales or distribution channel overwhelming.

In spite of these challenges, interviewees indicated that a number of opportunities do exist in the U.S. market. These include producing under contract for U.S. lighting companies or for U.S. retailers under a U.S. brand (as many in China are doing), or establishing/contracting an in-sale representatives and holding an inventory of lighting products in the U.S. Both channels would likely require the ability to finance the production and inventory of large volumes of products. Interviewees also indicated that Turkish manufacturers should explore opportunities in 'lighting parts' such as glass and crystal, as the cost of production of glass crystal in locations like Germany and Italy are high, and the quality of glass from China is considered low. The production of cobalt glass was mentioned as a possibility, as well as wrought ion fixtures, competing with locations such as Syria and Morocco.





US/Turkey Market Perception Survey

<u>Prepared for the Turkey – US Business Partnership Alliance</u>

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AGENDA



- Overview, Objectives
- High Level Summary of Survey Questions
- Overall Themes that Emerged
- Where to Go for More Information

OVERVIEW



- Rapid Investor and Market Perception Survey (of US firms) for these Markets/Products:
 - Automotive Components
 - Software Development
 - Marble/Natural Stone
 - Furniture
 - Lighting Fixtures
- Interviewed 75 leading US firms/15 in each sector/product group.
- Where possible, interviews were held with international players currently doing business with Turkey, or who were familiar with Turkey.

Survey Questions



- What are current market trends (volume, sourcing, sales channels, buyer preferences, and industry developments)?
- What are industry success factors?
- Perceptions in the US of Turkish firms and especially SMEs – Their ability to meet buyer needs, international competitiveness?
- Given market trends and industry perceptions, what are realistic opportunities for Turkish SMEs to penetrate and/or expand their market presence?

Emerging Themes from the Surveys



- Reduce Information Gaps in the US Market
- Those who know Turkish Partners are Impressed
- Need to Identify and Develop Niche Markets
- Marketing will be Key to Success for Turkish Firms
- Continuously Improve Quality, Costs, and Delivery
- US Market Not Always the Best Fit for Turkish SMEs
- SMEs Might Need to Focus on Collaborating with/Marketing Through Larger Turkish Firms

Reduce Information Gaps in the US Market



- Turkey largely an unknown in terms of potential to be a supplier/player within several of the markets surveyed.
- Turkish firms were often described as "invisible" or "off the radar screen".
- Turkish Industry (for sectors surveyed) needs to "get the word out" or show that "Turkey has a story to tell".
- Concerted, collaborative promotional campaigns in the US.
- Regular participation in key industry-specific forums in the US.

Strengths



- Modern Industrial and Knowledge Centers
- Excellent Education/Training Facilities
- Large, Well-Trained Workforce
- Sharply Increased Domestic Access to Telecoms Facilities
- Where Known, Turkish Products are Regarded as High Quality with Excellent Workmanship
- Where Known, Turkish Partners are Viewed as Mostly or Strongly Reliable

Weaknesses



- Relatively High Cost of Labor, Energy
- Turkey Will Have to Adapt to US Market Needs
- Language Barrier (Americans Mostly Monolingual)
- American Business's Concern about the "Neighborhood" (Iraq, Syria, Iran, Israel)
- Turkey is an Unknown Quantity in Many Sectors

Opportunities



- Reduce Intermediation Costs
- Export Higher Value-Added Products
- Continue Growing the Knowledge-Based Labor Segment
- Get the Word Out About Turkey's Goods and Services (in a Focused Way)
- Build Sector Representation to US Partners
- Turkish Diaspora/Chamber (www.turkishuschamber.org)

For More Information



- For More Detailed Information...
 - http://traderoots.org/turkeydetail.asp
- To Receive Copies of the Surveys...
 - Email <u>botto@carana.com</u> and specify sector

AUTOMOTIVE COMPONENTS

Market Perception Survey

2006



Project Overview

 This report is presents the findings of an Market Perception Survey focused on obtaining buyer/investor perceptions within the U.S. Market towards the Turkish Automotive Component Industry. The survey was carried out as part of the the USAID Turkey U.S. Business Partnering Alliance Project. The survey involved telephone and electronic interviews with international industry players with knowledge of, or experience in the U.S. Market and/or Turkish industry

Survey Focus: Automotive Components:

- Parts/systems used by vehicle OEMs (vehicle manufacturers) in their assembly lines,
- **OES** (Original Equipment Service) parts used by the vehicle OEMs (vehicle manufacturers) in their service operations (i.e., "original" spare parts used for maintenance/repair activities).
- Automotive component independent aftermarket/replacement parts.

Survey Objectives:

- To identify current U.S. market trends—in terms of import volume, sourcing practices, sales channels, buyer preferences, and industry developments—that might impact efforts by Turkey and/or Turkish SMEs to penetrate or expand their presence in the U.S.
- To identify, Generally, what industry success factors drive buying decisions;
- To capture perceptions within the U.S. market toward Turkey/Turkish SMEs and its/their ability to meet buyer's needs and be competitive compared to alternative sourcing locations
- To determine, Given market trends and industry perceptions, what realistic opportunities exist to for Turkey/Turkish SMEs to penetrate or expand their presence in the U.S. market



Outline:

- Survey Findings
 - Overall Findings
 - Vehicle Models: North America and Turkey
 - OEM/OES Sourcing Criteria
 - Turkey's Perceived Image
 - Turkey's Opportunity
- The OEM/OES Components— Background Information
 - Turkey's Automotive Sector
 - U.S. Market Overview
 - Industry Success Factors
 - Opportunities for Turkey
- Independent Aftermarket
 - U.S. Market Overview
 - Sales Channels
- Companies Interviewed
- Automotive Components Events in the U.S.



Survey Findings

Automotive Components

Disclaimer: The conclusions of this survey reflect the opinions of a sample of industry players interviewed by project consultants, and not necessarily the opinions of USAID, CARANA Corporation or its consultants. Furthermore, since the survey size is not scientific, its results should be considered anecdotal.



Overall Findings

- There is questionable potential for Turkey's SMEs to sell OEM, OES or independent aftermarket automotive components in North America.
 - Limited ability to take advantage economies of scale of production targeted U.S. market, as there is no overlap of Turkey's vehicle models/platforms with the USA.
 - Very strict supplier requirements. In general OEM/OES suppliers are large and highly capitalized companies that invest heavily to meet customer demands.
 - Making it very difficult for SMEs, from any country, to supply directly.
 - Turkey is does not rank high as a sourcing point for the international automotive market.
 - High landed cost of Turkish parts in the North American market.



Overall Findings

- Interviewees believe that, instead of investing in serving the US market, Turkish component SMEs should focus on:
 - Supplying OEMs producing vehicles in Turkey.
 - Through these OEMs, supply parts for similar models/platforms they assemble in Europe, Central Asia, Russia, etc.
 - Supplying Tier-1 or Tier-2 system suppliers that sell to OEMs producing in Turkey.
 - Supplying Tier-1 or Tier-2 suppliers in Turkey that are themselves exporters (e.g., to Europe).



Vehicle Models

- The vehicle models/platforms produced and sold in Turkey are different to those produced in the USA.
 - Fiat and Peugeot, two of the leading vehicle manufacturers in Turkey, are not even present in the USA.
 - Renault has not been present in the USA since it sold American Motors to Chrysler many years ago.
 - Platforms/models produced in Turkey (e.g., by Ford, Honda, Toyota and Hyundai) are different to those produced in the USA.
 - Larger cars (such as Toyota's Avalon and Camry) are produced in the USA, compared to the smaller cars produced in Turkey (like the Toyota's Corolla).
 - As a result, to serve the USA market, Turkish SMEs that are supplying the Turkish market, would generally need to design and invest in tooling to produce parts specifically for the North American market.



North America's Vehicle Models

- Vehicle production in <u>Canada</u> and <u>Mexico</u> complements production in the USA. These vehicles are different to those produced in Turkey.
- Vehicle production in the USA, Canada and Mexico is highly integrated, with significant complementation of platforms and components in the three countries.
 - North America's automotive sector was already very integrated before the USA, Canada and Mexico signed NAFTA (North American Free Trade Agreement). After more than 10 years of NAFTA, it is even more integrated.
 - According to MEMA (Motor and Equipment Manufacturers Association of the US), in 2004 the US imported vehicles valued at US \$143 Billion, of which US \$46.5 Billion were assembled in Canada and US \$19 Billion were vehicles imported from Mexico.



Turkey's Vehicle Models

- Turkey's vehicle production is very much European oriented, and Turkish component production is focused towards Europe in terms of its main customers (Fiat, PSA, Renault, Ford of Europe), technology (e.g., diesel engines), products (European models) and corporate organizations.
- Turkey's exports of vehicles and OEM/OES parts to North America are negligible, as there are few similarities in the platforms sold in Turkey and in North America.
- Except for a few large US investors (Delphi, Lear, Arvin Meritor), some joint ventures (e.g., Federal Mogul) and some companies with limited equity/technology agreements (e.g., Tenneco), the largest international component manufacturers (e.g., Bosch, Valeo, ZF, etc.) in Turkey are European and not US companies.
 - And, in general, international component manufacturers producing in Turkey are organizationally part of European subsidiaries with their headquarters in Germany, France, Luxembourg, etc.



OEM/OES Sourcing Criteria

- Typically OEM (and OES) buyers have very strict supplier requirements.
 - E.g., GM describes its program in its website:
 http://www.gmsupplypower.com/apps/supplypoweranon/NASApp/spcds/CDSRetrieval?id=25756&togglefolder=1949&doc_lang=en&lob=purchase
- Buyers expect their suppliers to have world class engineering/design, state of the art manufacturing practices, pay attention to the environment and adhere to lean practices throughout their organization.
 - Key criteria include Quality, Service (product development, just-in-time delivery, use of Electronic Data Interchange for communications), state of the art technology and low prices (with continuous improvements).
- This makes it difficult, in general, for an SME to become a direct supplier to an OEM.



Turkey's Image - Perceived Cost Position

- Turkey's in-country cost structure is perceived by the automotive industry to be similar to that of Mexico.
- However, due to logistics costs, the landed cost in the USA for OEM/OES parts made in Turkey is deemed to be higher than the cost of sourcing in Mexico.
 - In spite of Turkey's relatively large automotive industry, relatively low labor rates, relatively attractive geographical location, and even with export programs of companies like Ford, Delphi, Bosch and Lear, interviewees within the US automotive industry does not view Turkey as an attractive sourcing location for the US market.
 - Turkey is perceived to be a logical/potential supplier for the European market, but not for the US market.



Turkey's Image - Perceived Cost Position

- Turkey does not seem to rank very high in the list of sourcing points for global automotive players.
 - In general, companies looking for alternatives to High Cost Countries (Germany, US, Japan, Canada, France, UK, Italy) looked at Low Cost Countries (Taiwan, the Czech Republic, Hungary, Poland, Slovakia, Brazil, Mexico) and now look at Ultra-Low Cost Countries (China, India, Russia, Malaysia, Thailand, Indonesia).
 - But rarely is Turkey mentioned as an alternative.
 - More international automotive investments have probably gone to countries like Poland, Hungary, the Czech Republic and even Slovakia (not to mention to Mexico, China and, more recently, India) than to Turkey.



Turkey's Image

- Interviewees in the USA's automotive industry are barely familiar with Turkey as an investment or sourcing alternative.
 - Without probing, not a single interviewee in the USA mentioned Turkey as a sourcing alternative for OEM or OES components for the USA market.
 - Turkey is not in the "radar screen" of US-based automotive investors or decision makers, but China (and India) are in their "radar screens" every day.
 - And many have invested in Mexico, Brazil and Eastern Europe.
 - However, interviewees in Europe are quite familiar with Turkey as an investment/production location (for the local and the European market).



Turkey's Image – Positive Comments

- Specific positive statements made about Turkey:
 - Turkey's economy and market is stable/growing, reassuring producers (investments are secure).
 - Quality of Turkish production is as good or better as in any of our European facilities.
 - Suppliers in Turkey in general are very good. There is potential to increase local sourcing of inputs now imported.
 - Turkish SMEs have invested in new machinery and advanced technology (but often do not have consistent quality).
 - Turkey's human resources are highly educated and productive.
 - Turkey is competitive in cost structure with Mexico and Eastern Europe, but not with China.
 - Hourly wage rates adjusted for efficiency are 65% of those in the Czech Republic and 15% of France.



Turkey's Image – Negative Comments

- Specific negative statements made about Turkey:
 - Due to logistics and differences in the automotive fleet, Turkey is not a natural match for the US market.
 - We can ship from Turkey to anywhere in Europe in less than 7 days but it takes 3 weeks to ship to the US.
 - Internal transportation costs within Turkey are very high. Turkey has no railroads. Fuel is expensive.
 - Electricity costs in Turkey are very high.
 - Acquisitions in Turkey are very expensive. The Turkish Stock Exchange over-values companies.
 - The Turkish currency is overvalued. Expectations are for a devaluation in 2007. Local cost of production is higher than it should be due to the exchange rate.
 - Large companies receive tax advantages, land grants, special financing, etc., but there is limited support for SMEs.
 - There is a perception that countries like Poland, Slovakia, etc., provide government incentives that Turkey does not.
 - Turkish companies are not familiar with the US market (market size, distribution channels, customers, etc.).



Turkey's Opportunity – OEM Market

- Becoming a new direct OEM supplier in North America is difficult for any supplier, especially for an SME.
 - OEM customers require cutting edge technology, extremely high quality, low total cost (delivered to the assembly location), seamless supply chain management, etc.
- Local lower costs, higher quality and decent productivity in Turkey are not perceived to be sufficient to offset logistic disadvantages.
- Although opportunities in North American assembly plants may exist for a few specific Turkish SMEs, the market believes that Turkish SMEs should focus on:
 - Serving OEMs assembling in Turkey (directly or indirectly via Tier-1 or Tier-2 system suppliers) and, through them, eventually penetrate equivalent (or future) models/platforms in Europe.
 - Serving Tier-1 or Tier-2 suppliers in Turkey that are themselves exporters (e.g., to Europe).



Turkey's Opportunity – OEM Market

- Challenges for Turkey as a sourcing alternative for Europe:
 - Identify Turkey's competitive disadvantages and advantages versus typical competitors such as Poland, Hungary, Czech Republic and Slovakia and Ultra Low Cost Countries (e.g., China, India, etc.).
 - Implement solutions to address these competitive disadvantages and to promote its competitive advantages.
 - And <u>then</u>, based on facts and accomplishments, promote Turkey as an attractive investment destination and sourcing alternative.



Turkey's Opportunity – OES Market

- Becoming an "approved" supplier for North
 American OES (Original Equipment Service) parts
 is also extremely competitive.
 - Once a part ceases to be used in an OEM's assembly plant, it becomes more labor intensive (less volume, more tooling change-over), often making it less interesting for current large OEM suppliers in North America to continue production of the part (for the OES market). This generates an opportunity for smaller/less costly producers.
 - However, the logistics cost and the investment requirements to develop parts and tool up in Turkey to serve the <u>large</u> North American OES market for <u>models/platforms that are</u> <u>different</u> to those assembled in Turkey are deemed likely to be too high for Turkey's SMEs.



Turkey's Opportunity - SMEs

- The North American OEM and OES markets will be very difficult to penetrate for Turkish SMEs.
 - Specific opportunities may exist if there are products that Turkish SMEs are already producing for the Turkish OEM or OES market.
 - Products mentioned as possible examples with some potential (note: these comments are based on a small number of interviews) were:
 - NERF bars (stainless steel sports bars for trucks and pick ups).
 - Low volume Heavy Duty components (such as heat exchangers, suspension components, etc.).



Turkey's Opportunity - Actions Suggested for SMEs

- Turkish SMEs should focus on increasing the local content of components/systems produced in Turkey by Tier-One or Tier-Two suppliers.
 - Selling parts to local or international Tier-1 or Tier-2 component and/or system suppliers serving OEMs in Turkey or in Europe.
- In general, SMEs cannot compete alone for the very demanding OEM/OES business.
 - Therefore, SMEs should develop collaborations/partnerships with Tier-1 and Tier-2 suppliers, and with other SMEs.

THE AUTOMOTIVE SECTOR

OEM and OEM Components— Background Information



Turkey's Automotive Sector

- Compared with global annual vehicle production of roughly 62 Million vehicles, Turkey's 766,000 (2005 figures) seems negligible. However:
 - Turkey's vehicle production has been increasing, not only to serve the growing domestic market but also to export (e.g., significant export programs by Ford).
 - Turkey has attracted new OEMs (e.g., Hyundai, Honda, Toyota).
 - Domestic component production continues to increase.
 - Some global companies are using Turkey as a sourcing point for export (e.g., Ford, Delphi, Bosch, Lear).
 - Quality is high. International interviewees familiar with Turkish automotive component production mentioned this.



U.S. Market Overview - Components Market

- For 2004, the US' Original Equipment Suppliers Association (OESA OE Industry Report 2005 – 2006) values the US market for at US \$232 Billion for <u>OE parts and chemicals</u> and at US \$176 Billion for <u>aftermarket parts and chemicals</u>.
- In 2004 the US exported US \$52 Billion in automotive components.
 - Of which US \$31 Billion went to Canada and US \$11 Billion to Mexico.
- In 2004, the US imported US \$83 Billion in auto parts.
 - US \$20 Billion from Canada and about US \$22 Billion from Mexico.
- The fleet of vehicles on the roads in the US (vehicles in service) is estimated at 234 Million units (2004).
 - Serviced by a reported 142,000 service outlets and 24,800 dealerships.



U.S. Market Overview - North America's Vehicle Assembly

VEHICLE ASSEMBLY IN NORTH AMERICA (2005)	16. 4 Million Units
•USA	12.0 Million
•CANADA	2.7 Million
•MEXICO	1.7 Million

Vehicle Assembly	16.4 Million
General Motors	4.6 Million
Ford Motors Co.	3.2 Million
DaimlerChrysler	2.8 Million
Honda	1.4 Million
Toyota	1.2 Million
Nissan	1.2 Million
Others (NUMMI, VW, CAMI, BMW, etc.)	2.0 Million



U.S. Market Overview – OEMs

- The US automotive industry is going through tremendous turmoil.
 - Over the years, GM, Ford and Chrysler (the "big three" traditional US vehicle producers) have consistently lost market share to imported vehicles and to vehicles produced in North America by "transplants" such as Toyota, Nissan and Honda (also by BMW, Hyundai, Mitsubishi, etc.).
 - Since year 2000, profitability (operating margins; return on assets) has been negligible for the large US OEMs.
 - With excess capacity and extremely low pretax margins, GM, Ford and DaimlerChrysler (the largest producers in North America) have been restructuring and rationalizing their operations, resulting in:
 - Plant closures; consolidation of purchasing (centralized global purchasing operations; **sourcing from fewer and larger suppliers**); proliferation of new models in search for increased market share; need to invest to produce in new growth and low-cost locations (e.g., China, India, Russia).



U.S. Market Overview – OEMs

- OEMs continuously buy from a smaller number of suppliers.
 - In 2005, GM reduced its global supply base by 500 (from 3,700).
 - Ford plans to reduce its suppliers from 2,500 to 800 and has identified 27 global "preferred suppliers" (e.g., JCI, Dana, Visteon and Lear).
 - Toyota only has 500 suppliers in North America.
- OEMs have global sourcing strategies.
 - Many products are purchased centrally by OEMs for their worldwide operations from "approved" suppliers.
 - In many cases, suppliers must guarantee that they will serve the needs of the OEM for any given platform wherever the OEM produces that vehicle.
 - As a result, OEM suppliers compete with the whole world, making it virtually impossible for SMEs to supply an OEM directly.
 - It is difficult for alternative suppliers to participate, unless in collaboration with the "approved" supplier (e.g., to serve the OEM's needs in a new geography).



U.S. Market Overview – OEM Suppliers

- In general, the OEM market is very crowded with many suppliers chasing after a few OEM customers.
 - As a result, it is difficult for OEM suppliers to command premium prices, not only for "commodity" products (such as electrical parts, steel stampings, injection molded plastics) that require low-cost production, but also for premium products such as airbags and navigation systems.
 - And component manufacturers must continuously reduce total costs, improve efficiency and increase quality.



U.S. Market Overview – OEM Suppliers

- Demands by OEMs from their suppliers continues to increase.
 - Customers demand lower prices, more service, global coverage, optimized supply chain management, increased warranty responsibility and liability, innovative technology, etc.
 - OEM/OES suppliers need more capital for new technology, and equipment.
 - Even though they often have excess capacity in North America and Europe, they face the need to invest in new facilities in highgrowth/low-cost countries.
 - But with lower margins, they face difficulties to attract capital.
- As a result, many automotive component suppliers filed for bankruptcy in 2005 (e.g., Delphi, Collins & Aikman, Tower Automotive, Eagle Pritcher, etc.).



U.S. Market Overview – Outlook

- Overall vehicle production and sales continue to grow worldwide, and strong suppliers will survive.
 - For example, global pre-tax margins by companies like Toyota, Nissan, Hyundai, Honda, Renault and BMW have been significantly higher than the industry average.
 - Many component manufacturers will disappear, but some component suppliers are able to maintain profitability and will grow.
 - Their strategies and reasons for success are varied, but they have some common characteristics.



Industry Success Factors for OE suppliers

- Although it is difficult to generalize on the reasons for some companies' success, some comments include:
 - Large/old industrial companies (such as Delphi and Visteon) are burdened by costs related to retirees and an aging work force (retirement costs; health care costs) and are in serious trouble.
 - Successful companies have a clear strategy and total control over costs and quality across the whole organization and for all processes.
 - Successful companies are focused on innovation and patentable developments.
 - They are industry leaders in terms of Global Supply Chain Management and Customer Relationship Management.
 - Some successful companies are "focused" while others have a "diversified" product and client portfolio.
 - However, in general, the successful companies have a global presence, a diversified customer base, multiple products and serve multiple markets.
 - And have a presence (and are expanding) in emerging growth markets.



Opportunities for Turkey: SME Suppliers

- As a result of the market forces described in this report, it is virtually impossible for an SME to supply OEM/OES parts directly to an OEM in North America.
 - Especially for a new SME.
 - And even more difficult for one located in a country without an ideal total cost structure situation (e.g., Turkey).
- Obviously there could be exceptions (a specific Turkish SME may have a particular niche – e.g., technology; cost structure), but, in general, the USA's automotive OEM/OES market is not deemed to be attractive for Turkish SMEs.

THE US AUTOMOTIVE SECTOR

Independent Aftermarket



- The US replacement market is huge and continues to grow.
 - Vehicle population has expanded year after year and the fleet of used vehicles entering their prime repair cycle expands.
 - Consumers demand convenient, reliable and affordable automotive repair parts and services.



- The key players in the independent after market are:
 - Part manufacturers: Over 8,000 companies in the US.
 - Warehouse Distributors (WDs): About 1,200.
 - Jobbers & Retailers: About 59,000 (includes independent retailers and large auto part chains).
 - Service/repair outlets: An estimated 142,000 in the US.
 - Vehicle dealerships: 24,800.
 - There are many additional players in the auto part distribution market: mass merchants and discounters (like Sears, WalMart, etc.), gasoline/petrol stations, drugstores, etc.



- The leading manufacturers of aftermarket components in North America are huge companies.
 - In addition to tire makers (the largest suppliers), they include companies like Federal Mogul, Affinia (Dana's aftermarket products), Delphi, DuPont, Johnson Controls, Visteon, Exide, Honeywell/AlliedSignal, Castrol, Standard Motor Products, etc.
 - The following page contains automotive aftermarket revenues in the US and Canada for some of the largest suppliers, as reported by US publication "Aftermarket News".

COMPANY	Aftermarket Sales
	US & Canada
Bridgestone Americas	US \$ 9.15 Billion
Michelin North America	US \$ 8.2 Billion
Goodyear Tire & Rubber	US \$ 7.85 Billion
Continental Tire North America	US \$ 1.9 Billion
Cooper Tire & Rubber	US \$ 1.87 Billion
Federal Mogul Corp.	US \$ 1.8 Billion
Affinia Group	US \$ 1.7 Billion
Delphi Product and Service Sol.	US \$ 1.5 Billion
Dupont (Coatings; A/C refrigerant)	US \$ 1.5 Billion



- Part manufacturers sell either directly (with an in-house sales force) or via "reps" (manufacturer representatives), or both.
 - Includes makers of tires, filters, spark plugs, batteries, other electrical components, brake components, belt and hoses, suspension, steering, body parts, accessories, etc.
 - Only some of the larger suppliers have national sales forces.
 - Most sales are via reps selling on behalf of manufacturers in exchange for a commission.
- Some channels (e.g., large WDs or auto part retail chains, import specialists) buy directly from overseas manufacturers. However, most do not want to deal with sales offices located overseas, and hate letters of credit, container programs, shipping logistics, etc.
 - They want to buy locally and they want delivery from a local warehouse that can replenish orders quickly.



- The automotive Rep sector is very fragmented.
 - Aftermarket News lists about 50 companies in its website. However, there are many more companies, many of which are regional.
 - Examples of Rep organizations include:
 - Associated Sales & Marketing
 - Centrum Marketing Services
 - Dan Green Sales
 - Dolan-Lynch Sales
 - Hirsig-Frazier Co.
 - Kitchins & Sons, Inc.
 - Marc Alan Associates
 - McConaughey Associates
 - Metro Reps, Inc.
 - Marketing Solutions Group
 - NAWCO N. A. Williams Co.
 - Siskel Sales Co.
 - According to interviewees, typical commissions charged by Rep organizations range around 3 – 5%.
 - However, to establish a brand/product or for slow moving parts, higher commissions may be required (up to 10% was mentioned).



- Manufacturers sell mainly to independent <u>WDs</u> (Warehouse Distributors) and to large <u>auto part</u> chains (acting as their own WDs).
 - Independent WDs sell to "jobbers" who sell to service technicians, repair shops, car dealers and independent auto part stores.
 - Many "jobbers" are also "retailers" themselves, selling to the DIY (do it yourself) public independent retailers.
 - Large auto part chains buy directly from the manufacturers and sell to service technicians, car dealers and directly to the public.
 - In addition, many replacement auto parts are sold via mass merchandisers, petrol stations, drug stores, etc.



- As is the case with OEMs and with OEM/OES component manufacturers, a relatively small number of very large companies dominate the auto part distribution segment.
 - And the US automotive component distribution segment is further consolidating, resulting in huge companies with tremendous power over component suppliers.
 - Multiple mergers and acquisitions have taken place and more are expected. Examples include the merger of importer WorldPac with General Parts (CARQUEST); Advance Auto Parts acquisition of Lappen Auto Supply and Autopart International; CSK Auto acquired Murray's Discount Auto Store; O'Reilly Automotive acquired Midwest Auto Part Distributors; etc.
 - Competition in the distribution channels keeps prices low and forces tremendous price pressure on component suppliers who have limited pricing power or risk losing business with such huge distributors.



Sales Channels - U.S. Independent Aftermarket

Warehouse Distributors

- The segmentation between "pure WDs" and "Retailers" is becoming blurred: Large auto part retail stores have their own warehouse operations and buy directly from manufacturers.
- Examples include:
 - Genuine Parts Company (GPC): it has over 60 distribution centers serving over 6,000 NAPA auto part stores in the US, including approximately 1,000 company owned stores.
 - General Parts Inc.: it operates about 45 distribution centers in the US and Canada and supplies approximately 3,400 CARQUEST stores, of which about 1,600 are company owned.
 - It recently merged with WorldPac, a specialized distributor of OEM parts for imported vehicles. Its approximately 50 warehouses sell to import car mechanics.



Sales Channels - U.S. Independent Aftermarket

Auto Part Retailers

- Large automotive component retail chains in the US include:
 - The Pep Boys Manny, Moe & Jack
 - AutoZone, Inc.
 - O'Reilly Automotive owns Midwest Auto Parts Distributor.
 - Advance Auto Parts (it owns Discount Auto Parts, Lappen Auto Supply, Autopart International)
 - CSK Auto Stores (it operates Checker Auto Parts, Schuck's Auto Supply and Kragen Auto Parts Stores). Purchased Murray's Discount Auto Store.
 - Fisher Auto Parts.
- Some of these retailers operate their own warehouses (e.g., O'Reilly).



Sales Channels - U.S. Independent Aftermarket

Mass Merchants

 In addition to specialized aftermarket auto stores, mass merchandisers such as WalMart, Sears and K-Mart have large revenues related to sales of replacement automotive components.



Sales Channels - U.S. Independent Aftermarket

Fleet Purchases

- Reportedly, some of the large fleet operators have established purchasing programs to source directly from manufacturers (directly or from their Reps).
 - One of the interviewees mentioned Yellow Freight/Roadway (a very large trucking company) as a direct buyer of spare parts.



Sales Channels - U.S. Independent Aftermarket

Purchasing and Marketing Alliances

- Auto part retailers and service centers have set up alliances (e.g., buying groups) in order to gain negotiating clout in their relationships (e.g., with suppliers).
- An example is the Aftermarket Auto Parts Alliance, Inc., the source for parts and service for over 4,400 parts stores and 2,200 certified service centers throughout North America.
 - Companies like O'Reilly Auto Parts, Big A Autoparts, Replacement Parts, Inc., and others are part of this alliance.
- HDA Parts Network is a heavy-duty truck parts marketing group.
 Its members are heavy duty aftermarket distributors with over 500 warehouses throughout the United States and Canada.
- Other examples of alliances/buying groups include Federated Auto Parts and IAPA (Independent Auto Parts of America).
 - IAPA represents14 Independently-Owned Distribution Companies with over 100 Warehouse Outlets in 45 States and Canada. IAPA negotiates and delivers over *One Billion Dollars* worth of auto parts to over 4,000 independent auto parts store members and tech centers.



Sales Channels - U.S. Independent Aftermarket

Service Dealers

- Many large repair centers operate in the US. Examples include:
 - AAMCO Transmissions
 - Gemini Operations (Goodyear Tire & Rubber)
 - Midas, Inc.
 - Jiffy Lube
 - Meineke Car Care
 - Monro Muffler Brake



Opportunities for Turkey – Independent After Market

- As a result of the structure described in this section of the report, interviewees believe that it is very difficult for a foreign SME to gain distribution into the USA's independent aftermarket.
 - The financial demands to maintain local inventory, even on a regional basis, and to support a sales force (or a commissioned "rep" organization based on small volumes) are tremendous.
 - In addition, Turkish SMEs would need to develop and invest in tooling to produce components/SKUs for the USA market, that are in general different to those being produced for the Turkish market.

Companies Interviewed and Automotive Events in the US



Automotive Components Sector

Companies interviewed:

- Aftermarket Sales and Solutions Group
- Bosch Fuel Systems
- Bosch Brake Systems
- DaimlerChrysler
- Dana Corporation
- Federal Mogul
- Ford Motor Company
- GM SPO (General Motors Spare Parts Operation)
- GPC Genuine Parts Company/NAPA
- INCI Aku (Ex-Exide)
- KALF Radiator
- Lear Corporation
- MSG Marketing Solutions Group (Rep Organization)
- MEMA Motor and Equipment Manufacturers Association
- OESA Original Equipment Manufacturers Association
- Tenneco Automotive
- TRW



Automotive Components Sector

- Key Automotive Shows in the USA
 - SAE (Society of Automotive Engineers) Takes place annually in Detroit. Caters to OEMs and OEM suppliers.
 - AAPEX (Automotive Aftermarket Products Expo) Takes place annually in Las Vegas.
 - SEMA (Specialty Equipment Market Association) Takes place annually in Las Vegas, concomitantly with AAPEX.



FURNITURE

Market Perception Survey



Project Overview

 This report is presents the findings of an Market Perception Survey focused on obtaining buyer/investor perceptions within the U.S. Market towards the Turkish Furniture Industry. The survey was carried out as part of the the USAID Turkey U.S. Business Partnering Alliance Project. The survey involved telephone and electronic interviews with international industry players with knowledge of, or experience in the U.S. Market and/or Turkish industry

Survey Focus: Furniture

Covers general furniture segment (e.g., wooden, upholstered; etc.).

The overall objectives of the survey are:

- To identify current U.S. market trends—in terms of import volume, sourcing practices, sales channels, buyer preferences, and industry developments—that might impact efforts by Turkey and/or Turkish SMEs to penetrate or expand their presence in the U.S.
- To identify, Generally, what industry success factors drive buying decisions;
- To capture perceptions within the U.S. market toward Turkey/Turkish SMEs and its/their ability to meet buyer's needs and be competitive compared to alternative sourcing locations
- To determine, Given market trends and industry perceptions, what realistic opportunities exist to for Turkey/Turkish SMEs to penetrate or expand their presence in the U.S. market



Outline:

- Survey Findings
 - Supplier Selection Criteria
 - Turkey's Image in the U.S.A.
- The Furniture Market Trends and Distribution Channels
 - Turkey's Furniture Industry
 - U.S. Furniture Market
 - U.S. Distribution Channels
- Companies Interviewed
- Furniture Events in the U.S.



Survey Findings

FURNITURE

Disclaimer: The conclusions of this survey reflect the opinions of a sample of industry players interviewed by project consultants, and not necessarily the opinions of USAID, CARANA Corporation or its consultants. Furthermore, since the survey size is not scientific, its results should be considered anecdotal.



Supplier Selection Criteria

- The US furniture industry seeks suppliers that may be better than their existing sources in terms of Quality, Price, Delivery and Design.
 - And there is tremendous global competition to supply the large US furniture market.
 - China's quality is perceived to have improved significantly and its prices are very low, making it the overall supplier to beat.
 - According to interviewees, alternative countries with high quality and competitive prices include Malaysia, Viet Nam, Indonesia, Philippines, Korea, Mexico, Brazil, etc.
 - Italy is viewed as a source of expensive/high-end furniture.



Turkey's Image in the USA

- Interviewees in the US are not familiar with Turkey's furniture industry, its suppliers, products and capabilities.
 - With the possible exception of **Istikbal**, Turkey's furniture industry is unknown in the US.
- Interviewees indicated that Turkish furniture suppliers have not marketed themselves in the USA and, correctly or incorrectly, Turkey is not perceived to be a player in the global furniture industry.
- Although some interviewees expressed an interest in receiving information about Turkey's furniture and furniture parts (e.g., types of wood available, machining/production capabilities, costs, etc.), US interviewees believe that, in general, Turkey's suppliers would find it difficult to compete in the US market.



Turkey's Image in the USA – Difficulties

- According to interviewees in the USA, the key problems facing Turkish furniture manufacturers (especially SMEs) are:
 - Their ability to identify and design in Turkey what the US market buys.
 - To identify a market niche and to design competitive products to serve it is deemed to require deep familiarity with the US market.
 - Cost competitiveness (landed cost, with all logistics included) versus alternative sourcing points (e.g., China; Far Eastern countries).
 - Need to deliver on a timely basis the required quantities with a consistent quality is believed to be problematic for SMEs.
 - Concerns about financing capability to deliver full container programs to US importers.
 - And capability to meet their demands (e.g., Electronic Data Interchange; quality requirements; etc.).
 - Questions about SMEs ability to finance inventory in the US for direct sales to retailers or consumers.
 - And establishing brand awareness (promotion) is extremely expensive.
 - Defining and attracting an adequate sales force (in-house sales staff? Independent reps?) and selecting distribution channels.
 - How to sell? Who to sell to?



Turkey's Image in the USA – Potential Opportunities

- Turkey is known for its fabrics for furniture, bedding, drapery, towels, etc., and mattress ticking (mattress cover fabric), as well as for its marble (travertine).
 - Some interviewees indicated that Turkey's furniture makers may be able to take advantage of Turkey's strengths (design capability; competitiveness) with fabrics and marble.
 - For example, linking leading Turkish fabric manufacturers and upholstered furniture makers, being quick to market with the latest design trends (colors, textures), or producing furniture with marble parts (e.g., tables with marble tops) at competitive prices.



Additional Comment

 Some interviewees indicated that IMOB, Turkey's main furniture fair, takes place too close to High Point's April show, making it difficult for US buyers to travel to Turkey at that time.



The Furniture Market

Trends and Distribution Channels



Turkey's Furniture Industry

- According to published information, several thousand large and small factories are engaged in furniture production in Turkey.
 - Turkish furniture is exported mainly to Europe and to the Middle East, with some being exported to the US.
 - According to data from Turkey's Undersecretariat of Foreign Trade, in 2004 Turkey exported furniture valued at US \$544 MM, of which US \$112 MM went to Germany.
 - According to sources in Turkey, marketing efforts by Turkish organizations (e.g., the Kayseri Chamber of Furniture Manufacturers and the Furniture Turkey Fair), target European and Middle Eastern buyers, and not the USA.
 - According to these sources, Turkish furniture makers perceive the US market as being too price competitive where profit margins are poor (or even negative).



Turkey's Furniture Industry

- A few large Turkish furniture manufacturers are present in the US market.
 - <u>Istikbal</u> (a large Turkish company) has a US distributor (Sunset International Trade, controlled by Istikbal), a warehouse in New Jersey, dedicated showrooms, etc.
 - Yatas reportedly exports to several countries (mainly to the UK), including some to the USA.
 - Alfemo sells some in the USA.
- According to one source in Turkey, Turkey is launching an export drive in the USA for mattresses.



U.S. Market Overview - Furniture

- According to industry sources, the US market for residential furniture and bedding (retail purchases by consumers) reached US \$75 Billion in 2004 and was close to US \$80 Billion in 2005.
 - In spite of booming home sales, the growth in furniture sales slowed down in 2005 when compared to previous years:
 - Higher interest rates and less access to credit (stricter requirements on credit card debt).
 - Higher gasoline prices at the pump.
 - Competition from other high-ticket items (e.g., booming car sales).
 - Tremendous disruption form hurricane devastation.
 - Some pick up in furniture sales will take place in the US' Gulf Coast in 2006 as homes are rebuilt after the 2005 hurricane season.
 - There is a general expectation for increased furniture sales:
 - Increased wealth; growing purchasing power of immigrants; more interest in investing in "the home"; demographics: growing household formation; etc.



U.S. Market Overview - Furniture Imports

- Wood furniture is imported to the US mainly from China and Canada.
 - Also from Malaysia, Italy, Indonesia, Thailand, Mexico, Vietnam, Brazil, etc.
- Upholstered furniture is imported mainly from China and Italy.
 - Also from Mexico, Canada and other countries.



U.S. Market Overview – Furniture Imports: China

- China is, by far, the leading supplier of furniture in the US.
 - According to industry sources, in 2004 China represented close to 50% of all wooden furniture imported to the US (Canada accounted for 15%) and 30% of all imported upholstered furniture (Italy represented 20%).
 - However, China increased its share of imports in 2005, while Italy's share decreased.
- The main sourcing alternatives to China are in Asia.
 - Some Latin American countries (e.g., Brazil, Colombia, Mexico) export furniture to the USA.



U.S. Market Overview - Furniture Suppliers

- Well known traditional national brands dominate the US furniture market. The better known brands are La-Z-Boy, Ashley, Ethan Allen, Thomasville, Drexel-Heritage, Bassett, Broyhill, Lane and Henredon.
 - Some companies own multiple brands.
 - For example, Furniture Brands International (the largest furniture supplier in the US) markets under brands such as Broyhill, Lane, Thomasville, Henredon, Drexel Heritage, etc.
 - Many brands sell in stores with the name of the furniture (e.g., Ethan Allen stores).
 - It is common for furniture suppliers to license names.
 - For example, Ralph Lauren, Cristina Saralegui (Hispanic TV talk host), Marta Stewart, etc.



US Distribution – Imports

- Many large retailers have in-house buyers sourcing furniture directly from foreign manufacturers (mainly in China but also in other countries).
 - Many large retailers design furniture lines that are then made overseas, exclusively for them.
 - And they import full containers ("container programs").
- Small retailers are usually not willing to import full containers (they do not have the financial strength and/or warehousing space).
 - They look for the manufacturer to set up warehousing in the US in order to deliver from local inventory.
 - Inventory/warehousing may be undertaken by the manufacturer or by an importer/distributor.
 - Retailers are competing by offering same day (or 24-hour) delivery to their customers, and want their inventory replenished very quickly.



US Distribution – Imports

- Most furniture is sold in the US by traditional US furniture companies (the well known brands mentioned earlier) that are importing it (mainly from China).
 - Most of the traditional furniture companies became importers and no longer produce in the US. Others buy parts and assemble in the US.
- In addition, some foreign furniture manufacturers have showrooms and sales organization selling directly to retailers and/or consumers.
 - For example, <u>lstikbal</u> of Turkey has set up distribution in the US.
 - Several Chinese companies also have their own warehouses and distribution in the USA.
 - For example, China's Lacquer Craft distributes its products via its own US marketing companies (Universal Furniture International and Legacy Classic Furniture), both located in North Carolina.
- And there are organizations representing foreign manufacturers and sell to retailers.



US Distribution – Sales Organizations

- US furniture manufacturers (or importers) use either in-house sales forces or "reps" (or a combination of both) to sell to retailers.
 - There are numerous furniture "rep" organizations in the US.
 - Most of them are small (one or two persons) and are very local/regional in nature.
 - Many also represent lines of accessories, lighting, etc.
 - Rep commissions range from 10 15% for low-volume (e.g., accessory lines) to 2% for very expensive furniture.
 - Most commissions (e.g., for upholstered furniture, case goods, casual outdoor furniture) are in the 4 − 7% range.
 - However, many retailers/channels are by-passing the rep organizations and are buying (or commissioning) their products directly from foreign suppliers.



US Distribution – Retailers

- In the past, furniture manufacturers sold via three channels: furniture stores, department stores and mass merchants.
 - Today, furniture distribution is increasingly fragmented with a broad variety of channels, including Rent-To-Own stores, specialty stores (like Crate & Barrel, Pottery Barn, Restoration Hardware), discount stores (like Costco, Wal-Mart), etc.
 - At the same time, furniture distribution is becoming "flatter", with more retailers looking to source directly from manufacturers (at the expense of importer re-sellers).
 - And many of the large furniture suppliers (e.g., Ashley, Ethan Allen, etc.) are vertically integrated, selling to the public from their own stores.



US Distribution – Retailers

- Consumers buy furniture in many ways and in many places.
 - Furniture retailers are, by far, the largest channel in the USA.
 - The largest 100 furniture retailers account for a reported 20% of sales.
 - National, local and regional furniture store chains represent 30% of sales.
 - Mass merchandisers (e.g., Wal-Mart, Sears, K-Mart, Target) account for about 5% of sales.
 - Department stores represent an additional 4 5%.
 - Additional channels include office supply stores, lifestyle stores (e.g., IKEA, Pier-One, etc.), decorators, rental-to-own stores, manufacturers of mobile homes and boat makers, the internet, catalogs, TV shopping, etc.
 - As an example of the level of fragmentation of the industry, a search in <u>www.yellowusa.com</u> for listings of "furniture dealers/wholesalers" in the Bronx (a city in NY) resulted in a list of over 100 companies.



US Distribution – Retailers

- The main furniture retailers are Rooms-To-Go, Pier One, Ethan Allen, Berkshire-Hathaway Group, IKEA, La-Z-Boy, Levitz Furniture, Ashley Home, American Signature and Haverty.
 - The number of large furniture retailers in the US is decreasing with companies consolidating (e.g., financial groups such as Berkshire-Hathaway purchasing several retailers) and as some of them go bankrupt and disappear.



US Distribution – Buying Groups

- Several "Buying Groups" operate in the furniture industry.
 - For example, Furniture First is a national organization serving the retail home furnishings industry, establishing relationships between furniture manufacturers and retailers.



Companies Interviewed Furniture Events in the US



Furniture Sector

- Companies interviewed:
 - Adden Furniture
 - Alfemo (Izmir)
 - Ashley Furniture
 - Commercial Furniture Group
 - Ethan Allen Furniture
 - Furniture Today
 - IFSA International Furniture Suppliers Association (affiliate of the National Home Furnishings Association).
 - IHFRA International Home Furnishings Association.
 - The Karges Furniture Company
 - Kelebek
 - LEFA
 - O'Sullivan Industries
 - Pulaski Furniture
 - Seemac Incorporated



Furniture Events in the U.S.

- Two cities hold the US' largest Furniture Shows:
 High Point (NC) and Las Vegas (NV).
 - High Point is, by far, the largest Show and it attracts a larger number of visitors.
 - The High Point Market takes place in April and October.
 - However, Las Vegas is highly competitive as well.
 - The Las Vegas show takes place in January and July.
 - There are other regional "furniture markets" such as Dallas (TX), Tupelo (MS), etc.

MARBLE/NATURAL STONE

Market Perception Survey



Project Overview

• This report is presents the findings of an Market Perception Survey focused on obtaining buyer/investor perceptions within the U.S. Market towards the Turkish Marble/Stone Industry. The survey was carried out as part of the the USAID Turkey U.S. Business Partnering Alliance Project. The survey involved telephone and electronic interviews with international industry players with knowledge of, or experience in the U.S. Market and/or Turkish industry

Survey Focus: Marble/Stone Products

 Blocks, slabs and finished products (such as tiles), particularly within the travertine product segment.

The overall objectives of the survey are:

- To identify current U.S. market trends—in terms of import volume, sourcing practices, sales channels, buyer preferences, and industry developments—that might impact efforts by Turkey and/or Turkish SMEs to penetrate or expand their presence in the U.S.
- To identify, Generally, what industry success factors drive buying decisions;
- To capture perceptions within the U.S. market toward Turkey/Turkish SMEs and its/their ability to meet buyer's needs and be competitive compared to alternative sourcing locations
- To determine, Given market trends and industry perceptions, what realistic opportunities exist to for Turkey/Turkish SMEs to penetrate or expand their presence in the U.S. market



Outline:

- Survey Findings
 - Overall Findings
 - Supplier Selection Criteria
 - Market Position Turkey
 - Opportunities for Turkey
- U.S. Marble/Natural Stone Market Market Trends and Distribution Channels
 - U.S. Market Overview
 - U.S. Distribution Channels
 - Standards
- Companies Interviewed
- Natural Stone Events in the U.S.



MARBLE

Survey Findings

Disclaimer: The conclusions of this survey reflect the opinions of a sample of industry players interviewed by project consultants, and not necessarily the opinions of USAID, CARANA Corporation or its consultants. Furthermore, since the survey size is not scientific, its results should be considered anecdotal.



Overall Findings

- Turkey is a well known travertine supplier in the USA.
 - Turkey's stone blocks, slabs and tiles exported to the USA are perceived to be of good quality and sold at competitive prices.
 - The US market prefers light cream/brown colors, and Turkish travertine is lighter in color than stone from Mexico or Peru.
 - Turkey is perceived to have better pricing than Italy, Israel or Mexico, but higher pricing than China.
 - Although Turkey is perceived to have lost some competitiveness due to currency exchange fluctuations/over-valuation.
 - However, the US market identified specific problems with Turkish suppliers' reliability and professionalism.



Supplier Selection Criteria

- The key purchase criteria for natural stone are "product" (color/texture/look), "price" and "supplier reliability".
 - Product: being a natural product, the stone's characteristics vary by country, by quarry, and often even by location within a quarry.
 - The market looks for specific color/texture/finish that are provided mainly by the quarry but also by the processing (filling, surface treatment).
 - Within product characteristics, **color is** the key differentiating factor.
 - In general, buyers do not care if a product is from Turkey, Italy, Mexico, Peru, etc. They are looking for a particular grade of **color** (e.g., cream, beige, nocce, chocolate, etc.) and for a specific **texture/look**.
 - Price: relatively similar products are often available from several countries, but some suppliers have lower prices (e.g., due to currency variations, cost of production, etc.).
 - Supplier reliability/professionalism: responsiveness, quality of delivery, etc.



Supplier Selection Criteria

- Italy is the "standard" to match in terms of product and service quality.
 - "Italy has been exporting stone for the longest time".
 - Specific comments made about Italy include:
 - Consistency of quality (product and service).
 - Excellent timeliness of shipments.
 - Quality of communications ("if there is a problem, the Italians provide information about it and suggest solutions and alternatives").
 - Ability to follow special instructions.
- In general, positive comments were also made in the USA about Brazil's granites and marbles:
 - "Brazil is getting close to Italy in terms of professionalism and reliability".



Market Position – Turkey

- Turkey has expanded its stone output, and it exports large quantities of travertine to the US.
 - Proven stone reserves in Turkey are huge and the country is increasingly playing an important role in the world's natural stone market.
 - Reportedly, Turkey already exports to the US more natural stone finished products than Italy (in terms of volume).
 - Turkey is known mainly for its marble (i.e., travertine marble) versus, for example, Brazil which is better known for its granite.
 - According to industry sources, Turkey's producers have invested heavily in modern equipment, delivering good quality.



Market Position- Turkey

- Turkey exports travertine blocks, slabs and finished products (e.g., tiles) to the US.
 - The USA is Turkey's largest market for natural stones.
 - According to data from Turkey's Undersecretariat for Foreign Trade, in 2004, 36% of Turkey's US \$620 MM stone exports went to the US, followed by 9% to China.



Market Position– Turkey

- Although Turkey produces many types and colors of marble (e.g., brown, red, black, etc.), when asked about Turkey, every US interviewee immediately focused on <u>Turkey's cream (light brown/beige) travertine</u>.
 - In general, Turkey's cream-colored travertine is perceived to be of lower quality than that of Italy, but very competitive in terms of quality and price with travertine from Mexico, Peru, Israel, etc.
 - Its lighter color and lower prices are deemed to be very attractive and more in line with current US consumer taste.
- Several interviewees feel that Turkey has stone products other than cream travertine but is not aggressively promoting them.
 - One interviewee is sourcing a silver travertine, also known as pewter, from Turkey ("it is gorgeous and well priced, but it is hard to get").



Market Position– Turkey

- Interviewees in the US had positive comments about Turkey's marble suppliers. Specific positive comments include:
 - US fabricators, specifiers and consumers are familiar with Turkish travertine, and consider it to be of good value.
 - Turkish travertine is of lighter color than stone available from Mexico and Peru; the US market prefers Turkey's lighter brown.
 - Israel offers similar products but its prices are less competitive.
 - Mexico was more competitive but now Turkey has better prices.
 - However, there is a feeling that Turkey is affected by exchange rate fluctuations and currency over-valuation.
- According to a recent article in Italy's "Giornale del Marmo",
 Turkey's average prices for finished marble products are lower
 than Italy's, but higher than China's.
 - The article indicates that, in 2004, Italy's average marble export price was US \$40/m2, compared with \$26/m2 for Turkey, \$24/m2 for Portugal and \$14/m2 for China.



Market Position- Turkey

- Specific negative comments/criticism were made in the USA related to Turkey's <u>products</u> (based on a small sample of interviewees):
 - Color matching of filling for travertine is poor. Other countries typically do a better job at selecting and applying filling colors and materials.
 - Turkey's packaging of tiles is mediocre. Marble tiles (packed in cardboard boxes) should be shrink wrapped, as boxes often get wet during shipping.
 - "Turkey could learn from Brazil's tile packaging".
 - Turkey is focusing on tiles and paying little attention to slabs.
 However, there is a market for slabs that could be addressed.
 - Turkey's tile makers prefer to sell 18 x 18 tiles. According to specific interviewees, the US market prefers 12 x 12 and 16 x 16 tiles.



Market Position– Turkey

- Specific negative comments/criticism were made in the USA related to Turkey's <u>logistics</u> (based on a small sample of interviewees):
 - Some Turkish suppliers are too small and they hold orders until they can ship several container to the seaport in order to reduce their average shipping costs.
 - Suppliers face occasional delays with internal transportation (to the Turkish port), usually due to weather problems in central Turkey.



Market Position- Turkey

- Specific negative comments/criticism were made in the USA related to Turkey's <u>customer service</u> (based on a small sample of interviewees):
 - Challenging language difficulties with personnel in Turkey, especially with smaller suppliers.
 - Turkish suppliers often do not follow instructions. The same issues happen repeatedly. No learning curve. Counterparts forget right away and do not learn from experience.



Opportunities for Turkey

- Some interviewees indicated that Turkey could benefit from:
 - Reducing the degree of intermediation (less distribution steps).
 - Exporting higher value-added products, such as fabricated stone products.
- However, these suggestions must be evaluated very carefully.
 - What would be the impact of increasing direct sales (e.g., to retailers or fabricators) on Turkey's future sales to importers and distributors, who still control a large portion of the US market?
 - What is the financial impact on the suppliers (especially SMEs) of eliminating the intermediaries? Who will finance the inventory? Who will warehouse it for delivery further down the distribution chain? Who will be responsible for selling it?
 - What is the real potential fabrication in Turkey versus exporting slabs for fabrication in the US?
 - In spite of digital design/auto-cad, how feasible is it to produce and ship from Turkey in terms of accuracy, timeliness, additional packaging and insurance cost for finished products?



Opportunities for Turkey

- A few interviewees in the USA indicated that Turkey lacks a national stone industry association.
 - According to these interviewees, other countries (e.g., Italy, India, Brazil, Spain, the US, China, Canada) have national organizations (i.e., ABIROCHAS in Brazil; the American Marble Institute; the Canadian Stone Association; etc.) that serve as central sources of information, lobbying, problem resolution agencies, marketing entities, etc.
- HOWEVER: Turkey needs to be careful that a National Stone Association should benefit Turkish suppliers (especially Turkey's SMEs) and not add to their costs without a commensurate benefit.
 - Its focus should be in supporting the development of Turkey's stone industry, improving its competitiveness and promoting its markets.



Opportunities for Turkey

- Turkey's stone sector should review, study and address, as appropriate, the comments made by interviewees.
 - Organizational issues
 - Analysis for the design and formation of a Natural Stone Association.
 - Financial analysis of the opportunity to change the distribution and market focus in the USA (reduce intermediation; fabricate in Turkey).

Product related issues

• Color matching for fillings; tile packaging; tile sizes; analysis of the market attractiveness for slabs versus tiles (product mix focus); analysis of the supply and market potential for other color stones.

Logistics issues

 Consolidation to reduce costs delays shipping (mainly by SMEs); delays in road transport to Turkish ports due to weather and bad roads.

Customer service issues

 Language problems (especially by SMEs); problems following instructions and learning curve.

The US Marble and Natural Stone Market

Background Information on the US Market and Distribution Channels



U.S. Market Overview

- Natural Stone includes blocks, slabs and finished products (e.g., tiles) of many materials. The main materials are:
 - Marble (including "travertine").
 - Granite
 - Other stones.
- Almost every country in the world produces natural stone.
 - Historically, the best known producer was Italy.
 - Portugal, Spain and Greece have also been leading suppliers.
 - Today, many countries are significant producers (e.g., India, China, Brazil, Turkey, Mexico) and many more participate in global trade (Morocco, Egypt, etc.).
 - Each country offers specific products of varying colors, specifications, etc.



U.S. Market Overview

- The natural stone market in the US has expanded tremendously in the past 10 years.
 - According to published information (The Stone Report), the US market is the second largest natural stone consumer in the world, after China.
 - Most of the growth is represented by imports, but domestic stone production in the US has increased significantly, more than doubling in 10 years.
- The quantity of blocks processed in the US has increased significantly.
 - Industry sources indicate that around 30% of US natural stone finished goods are made at local production plants.



U.S. Market Overview

- The USA's natural stone market is extremely fragmented.
 - In terms of product offer (materials, colors, textures, finishes).
 - One seller's website indicates that the company has access to over 2,500 samples of different stones, including numerous colors and textures for granite, onyx, marble, limestone, travertine marble, slate, quartzite, sandstone, etc.
 - In terms of suppliers (countries and companies).
 - Almost every country of the world sells natural stone in the US.
 - In terms of channels of distribution.
 - Multiple Importer/Distributors and over 22,000 fabricators.
 - In terms of applications.
 - Interior and exterior uses; floors, walls, counters, landscaping.



U.S. Market Overview – Imports

- US stone imports have boomed. According to the Stone Report, the US imported over US \$1.7 Billion of stone products in 2003, 18% more than the previous year.
 - In 2003, marble imports, increased by over 20% in terms of volume and by 12% in terms of value, while granite imports grew by almost 40% in volume and almost 30% in value.
 - Imports from Turkey increased by 120% between 2002 and 2003.
- Average prices in the US have decreased, in line with expansion of imports from lower-cost countries.
 - Italy has been the main market share loser but other traditional exporters (e.g., Portugal, Spain, Greece and other European countries) have also lost share.
 - Imports have increased from China, India, Brazil as well as many other countries, including Turkey, South Africa, etc.



U.S. Market Overview – US Imports: China

- China is both a major exporter and a large importer.
 - According to the National Chinese Natural Stone Association,
 China's worldwide exports of natural stone grew from US \$815
 Million in 2000 to US \$1.7 Billion in 2004.
 - Its overall imports grew from US \$400 Million in 2000 to \$750
 Million in 2004.



U.S. Market Overview - Natural Stone Suppliers

- Stone suppliers include domestic quarries (US producers) and a multiplicity of stone exporters located all over the world.
 - There are many types of foreign suppliers. Some are large and others are small; some have local reps, others have their own sales offices in the US and others sell from their country.
 - Reputedly, few have warehouses or inventory in the US but some have considered doing this.
 - In general, the market is very competitive and suppliers must provide excellent service to maintain their presence.
- Most imported products (blocks, slabs and finished products, such as tiles) are purchased by Importer/Distributors.
 - However, increasing quantities of marble (mainly tile) are purchased by fabricators/installers and home centers from foreign suppliers.
 - And there is increased interest in importing specified/customized fabricated products from low-cost countries.



U.S. Distribution Channels - Importers/Distributors

- There are many Importer/Distributors in the US.
 - These are stocking distributors who, in general, have fleets of trucks delivering full crates/truckloads to their customers.
 - The better known Importers are AGM Marble & Tile Importers, Arizona Tile, Dente Stone/Dente Trading, MS International, Dal-Tile, Marva Marble & Granite, Mystic Granite & Marble, etc.
- Some Importers have purchasing offices and inspectors in supply countries, controlling the goods that are bought prior to shipping.
 - Importers/Distributors may have showrooms but typically they do not sell "to the public".
 - Some (e.g., Dal-Tile) have company owned stores.
 - Usually selling ceramic flooring as well (e.g., Dal-Tile produces ceramic tile, sold in its company stores).
 - A few (e.g., M S International) also have fabrication facilities.



U.S. Distribution Channels - Importers/Distributors

- Importers/Distributors are wholesalers serving mainly licensed Fabricators/Installers.
 - Sales are made by the importers/distributors directly to fabricators/installers or to general contractors and builders, often via specifiers (such as architects or designers).
 - Additional customers include:
 - Home center retailers (who also sell to the do-it-yourself market).
 - Landscape dealers.
 - Monument dealers (e.g., cemetery).
 - Mass merchants (mainly tiles in standard sizes).



U.S. Distribution Channels - Fabricators/Installers

- Reportedly, there are 22,000 fabricators in the US.
 - Some are relatively small but many are very large companies.
 - Examples include Artisan Tile and Marble (NJ), Great Lakes Granite & Marble Company (MI), Luck Stone Architectural Stone (VA), etc.
- Fabricators sell to the end-users (residential, commercial) often via specifiers (e.g., designers and architects) or general contractors, builders.
 - Fabricators also have relationships with home centers who act as "selling arms" of the fabricators.
- Increasingly, large fabricators/installers are buying stone (mainly tiles) directly from foreign suppliers.
 - However, most fabricators buy stones from Importer/Distributors.



U.S. Distribution Channels— Home Centers

- Reputedly, home centers buy from a variety of sources.
 - Some are sourcing/buying marble tiles directly from foreign suppliers.
 - Others buy from local Importers/Distributors.
 - Most have relationships with fabricators/installers who cut and polish marble products (e.g., counters) for them.
 - For example, Stone Interiors (AL, SC), claims to be a supplier and installer of fabricated stone products for Home Depot.



Natural Stone – Standards

- Several standards and regulations affect sales of natural stone in the US. For example:
 - ANSI Standards. The American National Standards Institute.
 Standards for issues such as safety, installation, specifications for mortars and grout, etc.
 - ASTM (American Society for Testing and Materials)
 International Standards. Voluntary standards for materials, products, systems and services.
 - Stones are impacted by various ASTM standards. For example, slip resistance, abrasion resistance, absorption, compressive strength, bending strength.



Companies Interviewed Natural Stone Events in the US



Marble

- Companies interviewed:
 - Arizona Tile
 - Dal-Tile
 - Dente Stone
 - Dente Trading
 - G & L Marble
 - Hudson Economics Institute
 - Luck Stone Architectural Stone
 - Marble Institute of America
 - Marva
 - M S International
 - O H M International
 - Salem Stone Design
 - Stone Interiors
 - Terrazzo & Marble Supply



Marble – Shows

The better known exhibitions in the USA are:

- Marble Institute Annual Meeting/StonExpo Las Vegas, NV (November, 2006).
- Coverings exhibition Orlando, FL (April, 2006).
- Building Stone Institute Convention BSI San Diego, CA (March, 2006).



LIGHTING

Market Perception Survey



Project Overview

• This report is presents the findings of an Market Perception Survey focused on obtaining buyer/investor perceptions within the U.S. Market towards the Turkish Lighting Equipment Industry. The survey was carried out as part of the the USAID Turkey U.S. Business Partnering Alliance Project. The survey involved telephone and electronic interviews with international industry players with knowledge of, or experience in the U.S. Market and/or Turkish industry

Survey Focus: Lighting Equipment

- Products such as ceiling lamps, pendants and chandeliers, portable desk and table lamps, floor lighting, sconces, outdoor lighting, wall lights, and commercial lighting fixtures.
- Materials include crystal, glass, alabaster, plastic, metal (different metals and alloys), etc.
- Light bulbs are excluded.

The overall objectives of the survey are:

- To identify current U.S. market trends—in terms of import volume, sourcing practices, sales channels, buyer preferences, and industry developments—that might impact efforts by Turkey and/or Turkish SMEs to penetrate or expand their presence in the U.S.
- To identify, Generally, what industry success factors drive buying decisions;
- To capture perceptions within the U.S. market toward Turkey/Turkish SMEs and its/their ability to meet buyer's needs and be competitive compared to alternative sourcing locations
- To determine, Given market trends and industry perceptions, what realistic opportunities exist to for Turkey/Turkish SMEs to penetrate or expand their presence in the U.S. market



Outline:

- Survey Findings
 - Supplier Selection Criteria
 - Turkey's Image
 - Opportunities for Turkey
- The Lighting Market Background Information
 - Turkey's Lighting Industry
 - U.S. Market Overview
 - U.S. Distribution Channels
- Companies Interviewed
- Lighting Events in the U.S.



Survey Focus

Lighting

- Products such as ceiling lamps, pendants and chandeliers, portable desk and table lamps, floor lighting, sconces, outdoor lighting, wall lights, and commercial lighting fixtures.
- Materials include crystal, glass, alabaster, plastic, metal (different metals and alloys), etc.
- Light bulbs are excluded.



SURVEY FINDINGS

Lighting

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- The US lighting fixture market is very fragmented in terms of price points, materials, styles, colors, sizes, applications, etc.
 - Many products are classic commodity items, but the industry also looks for "fashion items" in terms of style, color, size, materials, etc.
- Sourcing location/supplier depends on each product.
 - Once they identify a market need, US lighting sellers select the most competitive vendor based on quality, delivery capability and price.
 - Sources of information regarding style trends include home builders (e.g., trends in ceiling heights, room sizes, colors), furniture manufacturers (lighting follows furniture trends), retailers (what are customers looking for) and trend setters (e.g., interior and fashion designers, TV personalities, etc.).



- Usually US lighting companies have designers (or hire contract designers) to develop product concepts.
 - And then ask manufacturers (typically located in China) to quote on these specific designs.
- In addition, lighting companies review design suggestions from independent lighting manufacturers.
- In order to be considered by a US lighting supplier, a foreign manufacturer needs to become known to the lighting company's buyers.
 - Maintaining contacts with the US lighting companies, showing them product concepts, providing pricing information, and demonstrating their capabilities.



- US lighting companies, in general, require from their suppliers the ability to supply large quantities of each product at the most competitive price.
 - Typically, lighting companies are interested in a range of products from a supplier, instead of just one product.
- Most imports are made in 40-ft containers; a large lighting company (e.g., Quoizel) imports hundreds of containers each month for national distribution.
 - Of consistent quality ("we cannot afford to wait for the supplier to go up the quality learning curve") at the lowest price.



- In addition to the criteria mentioned (capacity to produce and deliver needed quantities at competitive prices, quality, design capability), lighting products imported to the US must meet US specifications and certification requirements.
 - For example, UL certification, approved wires, plugs, sockets, according to ANSI (American National Standards Institute).
 - Any other industry/application specification/requirement for each product and application.
 - E.g., specific standards for outdoor lighting, for healthcare and for other applications.



Turkey's Image

Based on interviews with US' lighting suppliers:

- Turkish manufacturers are, in general, not known to US lighting suppliers.
- Most US companies interviewed do not recall seeing Turkish manufacturers in trade exhibitions.
- Those companies familiar with Turkish manufacturers believe that they copy other companies' products and do not innovate.
 - They believe that Turkey's manufacturers do not invest in R & D, quality certifications and do not meet US standards.
- They are deemed to be undercapitalized and unable to finance the production and inventory costs for large volume demand.
- Interviewees feel that Turkish companies would not be cost competitive with China.
- They are not known for investing in developing the market (e.g., channels of distribution).



Opportunities for Turkey

- The US lighting market is extremely large and fragmented and each Turkish SME needs to identify a niche where it can be competitive.
 - A niche refers to a product (technology/design such as intelligent lighting), and a market segment (by application, such as residential, hospitality, etc.; by geographical area, such as a state, or region; by customer; etc.).
- The low prices prevalent in the US market, given China's competitiveness, probably would make it difficult for lighting suppliers in other countries to compete with commodity products.
 - The challenge for any Turkish supplier is to identify specific niches where it can be competitive and to identify the appropriate distribution channels to serve that niche.



Opportunities for Turkey

- In addition, a supplier needs to define a <u>distribution</u> <u>strategy</u> to serve the product/market segment selected.
 - Alternatives for Turkish lighting suppliers are:
 - To produce under contract for US lighting companies or for US retailers (as many in China are doing).
 - To hold inventory in the US and establish an in-country sales organization (e.g., via reps).
 - Few companies in the US are willing to buy, import and warehouse full containers from overseas suppliers for re-sale to retailers.
 - Today, almost all imports to the US are made by US lighting companies or by large retailers (e.g., mass merchandisers).



Opportunities for Turkey – Lighting Parts

- Several interviewees mentioned "lighting parts" as a possible opportunity for Turkey.
 - For example "glass" and "crystal" parts, if Turkey can be competitive.
 - Reputedly, the cost of production for crystal in Germany is high and German production is moving to Poland.
 - Quality of China's glass is perceived to be low ("thin glass"; "inadequate molds").
 - Italian hand-made colored art glass diffusers are expensive.
 - Cobalt blue glass was mentioned as a possibility.
 - Some mentioned wrought iron fixtures, in competition with Morocco, Syria, etc.



The Lighting Market



Turkey's Lighting Industry - Suppliers

- Many companies with varying degrees of capability and sophistication produce lighting fixtures in Turkey.
 - Ranging from small companies/artisans, to industrial makers of classical lighting (such as Lumes, making crystal chandeliers), to manufacturers of intelligent lighting (such as Fersa).
- However, the US lighting industry is not familiar with Turkey's suppliers.



Turkey's Lighting Industry - Suppliers

- Reportedly, lighting specifications/standards in Turkey are different to those of the United States.
 - Specific differences mentioned include:
 - Different voltage (220 in Turkey versus 110 in the US).
 - Different type of plugs for different electrical outlets.
 - Different type of lamp-holders ("screw-type" lamp caps in Turkey versus "bayonet type" in the US).
 - Different type of light bulb (E-27 and E-14 are the most common in Turkey versus E-26 and E-12 in the US).
 - Clearly Turkish companies can overcome these differences, as long as they invest in technology and molds specifically made for the US market.
 - If they find a "market" and can profitably meet the market's requirements.



Turkey's Lighting Industry - Suppliers

- According to AGID (Turkish Association of the Lighting Industry), in 2005 Turkey exported lighting valued at approximately US \$120 MM, up from US \$100 MM in 2004. In 2004:
 - 68% of exports went to Europe.
 - 21% to Asia.
 - 4% to Africa
 - Only 3% went to America (including the USA, Canada, etc.).



Turkey's Lighting Industry - Suppliers

- In general, Turkish companies have a "natural" market in Central Europe, Western Europe and the Middle East.
 - The European market is closer geographically and in terms of product technology/specifications to Turkey's.
 - Also it is easier for Turkish companies to attend lighting shows in Europe (e.g., Frankfurt, Milan) than to travel to shows in the US.
 - Several Turkish lighting companies sell in Germany, with its relatively large, competitive and sophisticated market.
 - However, Turkish lighting companies may feel overwhelmed by the size, competitiveness and fragmentation of the US market and by the cost and difficulties to establish distribution in the US.



US Market Overview

- According to Home Accents Today, US retail sales of lamps/lighting surpassed US \$11 Billion in 2004.
 - Portable lamps account for an estimated US \$7.2 Billion while sales of lighting fixtures is estimated at US \$4.2 Billion.
- Under lamps/lighting are included many types of products and manufacturing materials:
 - Products include ceiling lamps, pendants and chandeliers, portable desk and table lamps, floor lighting, sconces, outdoor lighting, wall lights, etc., in addition to commercial lighting fixtures.
 - Materials include crystal, glass, alabaster, plastic, metal (different metals and alloys), etc.



US Market Overview

- Over the recent past, average US retail prices for lighting have decreased while quality has increased.
 - As a result of increased competition from low-cost countries (mainly China), consumers pay less for lighting and receive better quality.
 - However, several interviewees mentioned that, in general, US consumers purchase cheaper but less sophisticated lighting than consumers in many other countries.
 - Typically, "price" is the main purchase criteria in the US (and not design or function).
 - There are exceptions: some suppliers cater to the more "sophisticated" consumers with high-end (expensive) products.
 - For example, US manufacturer Fine Art (producing in the US with four manufacturing plants located in Miami, FL), importers from Italy (such as Artemide, Targetti), Germany (Bega, Erco, Hoffmeister, etc.) and others.



US Market Overview - Lighting Suppliers

- There are hundreds of lighting suppliers in the USA. Most are importing and re-sell lighting products made in other countries by themselves or on their behalf by other companies.
 - The better know lighting companies in the US include Arteriors Home, Artmax, Fine Arts Lamps, Frederick Cooper, John-Richard, Kichler Lighting, Murray Feiss, Oriental Accent, Quoizel, Schonbek Worldwide Lighting, Sea Gull, The Uttermost Company, etc.
 - There are hundreds additional lighting suppliers.
 - Although some suppliers produce in the US (e.g., Miami's high-end manufacturer Fine Arts Lamps), others import basically everything (e.g., Feiss Industries, Quoizel, Kichler, The Uttermost Co.).
- In addition, several foreign manufacturers have sales and distribution organizations in the USA selling with their own name.
 - For example, Hoffmeister, Bega, Erco and others from Germany;
 Artemide, Targetti and others form Italy; Antares from Spain; etc.).



US Market Overview - Imports

- Most US lighting manufacturers no longer produce in the US but are importing from other countries.
 - This trend started a few years ago and has accelerated.
 - Some companies (for example Quoizel, Kichler) import everything and may do some light assembly (even painting) in the US.
 - Although the bulk of lighting products are imported from China, other countries export lighting to the US:
 - Including designer products from Italy, intelligent lighting from Germany, expensive crystal or glass lamps from Germany and Poland, a variety of products from Spain, India, Philippines, Taiwan and others.
 - The source depends on product type and design, material, price points, etc.



US Market Overview – Imports: China

- China is the dominant supplier of lighting products for the US market.
 - Many US lighting companies own or control production facilities in China.
 - For example, Feiss Industries, Kichler Lighting and many others have either their own plants or exclusive partnerships with manufacturers in China that produce solely for them.
 - Due to the large volumes imported from China, several companies have "inspectors" in China controlling production and shipments.



US Market Overview - Importers

- Imports are made by the traditional US lighting companies, by retailers, by foreign producers themselves and, rarely, by importer/wholesalers.
 - Lighting companies include Oriental Accent, Quoizel, The Uttermost Company, Murray Feiss, Arterior Home, Kichler, and many more.
 - Foreign producers with their own US offices include Artemide, Erco, Bega, Targetti, Antares, Hoffmeister, etc.
- A few wholesale distributors import lighting and re-sell to retailers, designers, the hospitality trade, etc., but they do not seem to be large companies.
 - Names mentioned include Crown Mark Imports (Houston, TX) and Garcia Imports.



US Distribution Channels – Sales Organizations

- Lighting suppliers sell either directly with their own sales force, via "reps", or use a combination of both.
 - There are thousands of lighting "reps" in the US.
 - Some lighting companies have dozens of reps in any given state while others have a few large reps each covering large territories.
 - Some reps carry a limited range of products (lighting only) while others carry broad product lines (lighting; accessories; etc.).
 - Some reps are focused on geography while others specialize in market segments (e.g., hospitality – hotels and restaurants; healthcare; designers and specifiers; retailers; etc.).
- Reportedly, rep commissions for lamps and lighting range between 5 and 15% (commissions for large volume business are in the 5 – 10% range).



US Distribution Channels – Sales Organizations

- Depending on the product/market segment served, sales organizations may need to contact a diversity of market factors.
 - Such as architects, engineers, electrical product distributors, contractors, interior designers, purchasing arms of contract projects (including buildings, restaurants, hotels, corporations, etc.), lighting showrooms for residential and decorative lighting, etc.



US Distribution Channels – Reps

- There are thousands of "rep" organizations. Some examples:
 - Headquartered in Winter Park, FL, SESCO Lighting has eight offices in Florida, Georgia and Puerto Rico focusing on commercial lighting, lighting controls, decorative lighting, contract and hospitality, etc.
 - Based in Akron, OH, Lighting Dynamics represents approximately
 40 lighting suppliers in multiple states. Some of the companies are:
 - Alera Lighting, Ameron, Architectural Area Lighting, Atlantic Lighting, Baselite, Best Lights, Beta-Calco, B-K Lighting, Bruck Lighting Systems, Cathode Lighting, Columbia Lighting, Design Galleries, Devine Lighting, Dual-Lite, ELP, Elliptipar, EYE Lighting, FC Lighting, G Lighting, Guth Lighting, Hampstead Lighting, Healthcare Lighting, Hemera Lighting, Hess America, Hubbell Lighting, Kim Lighting, Litelab, Luminaire Lighting, Oval Lighting, Prescolite, Security Lighting, Solera Lighting, etc.
 - Based in Atlanta, GA, Napp Deady has showrooms in Atlanta and High Point carrying multiple product lines.
 - In addition to lighting, it has artwork/prints, candles, china/crystal, frames, mirrors, baskets, ceramics, glassware, etc.



US Distribution Channels – Showrooms

- Some lighting companies use showrooms to display their products.
 - For example, Italy's Artemide uses showrooms in Atlanta,
 Dallas, Miami, Philadelphia, Seattle, Boston, Denver,
 Minneapolis, Rancho Mirage, Chicago, Los Angeles, New York, San Francisco and Washington, DC.



- There are numerous points of purchase for lighting products.
 - In addition to the traditional channels (e.g., lighting stores), the number of alternative channels where consumers can buy lighting is increasing (e.g., e-commerce; TV-shopping; mass merchants; etc.)
 - Distribution is becoming "flatter" with more retailers specifying and/or importing directly versus buying from traditional US lighting suppliers.



- Lighting sales takes place via many channels.
- The table on this page is based on information from Home Accents Today:
 - "Other Channels" include interior designers, direct sales to consumers (e.g., catalog sales; e-commerce), furniture stores, etc.

Channel	Lamps	Fixtures
Discount Department & Off-price Stores	19%	10%
Home Improvement & Membership Stores	18%	38%
Lamp & Lighting Stores	17%	36%
Home Accent & Gift Stores	13%	4%
Other Channels	33%	12%



- The lighting retail business is extremely fragmented. For example, a search for "lighting" in Brooklyn, NY yielded almost 100 listings.
- Examples of lighting retailers:
 - Discount Department Stores: Wal-Mart; Target, K-Mart; etc.
 - Off-price Retail Stores: Big Lots; Tuesday Morning; etc.
 - Home Improvement and Warehouse Clubs: Home Depot; Lowe's; BJ's Wholesale; Sam's Club; Costco; etc.
 - There are thousands of local and regional electrical, light and lighting stores:
 Lamps Plus; Shades of Light; etc.
 - In addition, lamps and lighting is sold via interior designers, department stores (e.g., JC Penney; Macy's, etc.), furniture stores (e.g., Ashley's; Ethan Allen; Thomasville), life-style stores (e.g., Anthropologie; Crate & Barrel; Pier 1 Imports), craft/fabric stores (e.g., Michael's; Jo-Ann Stores), Direct to Consumers (catalogs such as Spiegel; TV Shopping, such as HSN and QVC; e-commerce, such as Lightology; 100watt Network; LampsUSA; Lighting Showplace), antique shops selling reproductions, art shows, garden centers, and even supermarkets and drugstores.



- Several retailers are importing directly.
 - Purchasing full containers directly from manufacturers.
- Reputedly, companies like Wal-Mart, Pottery Barn, LL Bean, Williams & Sonoma and many others have buyers purchasing directly from sources overseas.
 - Typically, their suppliers are large companies that manufacture significant volumes of any given item and/or a variety of times that can fill a 40-ft container.
- These companies often have their own designers specifying the products but often they have "an idea" and look for a manufacturer to make it.



Companies Interviewed Lighting Events in the US



Lighting Sector

- Companies interviewed:
 - AGID Istanbul
 - Arterior Homes
 - Ayev Istanbul
 - Feiss Industries
 - Fersa Istanbul
 - Fine Arts Lamps
 - Gul Elektrik Istanbul
 - Hepis Industriyel Istanbul
 - Home Lighting
 - Kickler Lighting
 - Napp-Deady
 - Quoizel
 - The Uttermost Company



Lighting – Shows

- The better known exhibitions in the USA are:
 - LightFair Las Vegas (May 2006).
 - International Lighting & Accessories Market (Dallas Market Center) – Dallas (January and June).
 - The Dallas Trade Mart claims to house the largest collection of lighting resources in the world, with over 250 lighting companies exhibiting.
 - COSMIT New York (May 2006). Mainly furniture but it includes lighting.
- There are other specific Fairs and Exhibitions catering to the Hospitality Trade, to Designers, etc.
 - Multiple products and services are included.

SOFTWARE DEVELOPMENT

Market Perception Survey



Project Overview

 This report is presents the findings of an Market Perception Survey focused on obtaining buyer/investor perceptions within the U.S. Market towards Turkey's software development industry. The survey was carried out as part of the the USAID Turkey - U.S. Business Partnering Alliance Project. The survey involved telephone and electronic interviews with international industry players with knowledge of, or experience in the U.S. Market and/or Turkish industry

Survey Focus: Offshore software development

- Contracting of an external supplier in another country, or setting up development operations in another country, to provide a complete item/service rather than doing it in-house.
 - Can be categorized by sector (e.g., Finance, Telecommunications, Automotive, Education, etc.) or by application (e.g., ERP – Enterprise Resource Planning, PeopleSoft, SAP, etc.)
- Other IT activities such as hardware and software maintenance, network administration, etc., and outsourcing of business related activities have been excluded from the survey.

Survey Objectives:

- To identify current U.S. market trends—in terms of import volume, sourcing practices, sales channels, buyer preferences, and industry developments—that might impact efforts by Turkey and/or Turkish SMEs to penetrate or expand their presence in the U.S.
- To identify, Generally, what industry success factors drive buying decisions;
- To capture perceptions within the U.S. market toward Turkey/Turkish SMEs and its/their ability to meet buyer's needs and be competitive compared to alternative sourcing locations
- To determine, Given market trends and industry perceptions, what realistic opportunities exist to for Turkey/Turkish SMEs to penetrate or expand their presence in the U.S. market



Outline:

- Survey Findings: Software Development
 - Overall Findings
 - Location Selection Criteria
 - Market Position Other Countries
 - Market Position Turkey
 - Opportunity Development Turkey
- Market Trends and Information
 - Market Overview Off-shoring
 - The Leader India
- Companies Interviewed
- Software Development Exhibitions in the U.S.



Survey Findings

Software Development

Disclaimer: The conclusions of this survey reflect the opinions of a sample of industry players interviewed by project consultants, and not necessarily the opinions of USAID, CARANA Corporation or its consultants. Furthermore, since the survey size is not scientific, its results should be considered anecdotal.



Overall Findings

- In general, people interviewed in the USA have very little knowledge of Turkey as a supplier of IT services ("Turkey is invisible").
- Although several interviewees perceive relative labor rates for developers to be high in Turkey, published rankings rate Turkey relatively high (good) on its overall cost structure but rank Turkey low (poor) on location maturity (business environment and people skills and availability).
- However, companies currently running IT activities in Turkey are, in general, very pleased with the quality of Turkey's software developers, especially in Ankara and Istanbul (versus the country as a whole).



Overall Findings

- The main problems identified by industry players outside of Turkey, regarding opportunities for Turkey in the software development market include:
 - Turkey has no image as an international player in any particular IT niche.
 - Lack of information about Turkey's capabilities in the IT area.
 - Almost no published information is available (or readily found) about Turkey's IT industry and services.
 - Perception of relatively high "country risk" due to its location near "problem" countries (like Iraq).
 - Perceived high labor rates vis-à-vis competitors such as India, China, the Philippines, Malaysia and many others.
 - Perceived relatively high non-labor costs, such as electricity and a comparatively weak corporate tax environment.



Overall Findings

- According to several interviewees outside the country, Turkey is not known for its IT activities, and, in order to compete globally in the software development industry, Turkey needs to select, develop (invest in) and promote specific IT niches.
 - According to a few players interviewed in Turkey, interesting niches could include:
 - Embedded software (software over hardware) for industrial and military applications.
 - Other possibilities include software for telecom, banking, e-learning, consumer and home electronics, ERP, etc.
 - In order to be able to promote itself, Turkey would need to:
 - Map its resources versus market needs and competition (analysis of the market's requirements and Turkey's strengths and weaknesses in terms of technical expertise, infrastructure, taxation, comparative costs, etc.).
 - Invest to improve its rankings in those critical issues.
 - Promote itself as a competitive off-shore location for these niches.



Location Selection Criteria

- Companies focus on two main criteria when selecting an offshore location for IT activities:
 - Long term competitive <u>cost structure</u> (financial considerations):
 - Direct salary for labor; management/administration/oversight; real estate; communications; equipment; training; electricity; taxation; international travel; etc. Productivity and staff turnover are inputs into cost calculations.
 - Location maturity (means mainly "environment" and "skills"):
 - Skilled labor resources; stable political and economic environment; good legal and regulatory framework; language skills; cultural compatibility; infrastructure quality and availability; government support.
- Factors making up "cost/cost savings" and impacting "maturity" are quite specific for a given activity (process), depending on its "needs, and for a city/region within a country, depending on its resources.



Location Selection Criteria

- When selecting a location a process or activity, the relevant factors (criteria) and relative importance (weight) of each factor, vary depending on the specific requirements of the specific activity.
 - For example, a company looking to offshore a bandwidth intensive process (such as server maintenance) would give greater importance the location's infrastructure than a company looking to relocate more labor-intensive activities.



Market Position – Alternative Countries

- A. T. Kearney, an international consulting firm, produces an "Annual Global Services Location Index" that ranks countries in terms of their attractiveness for off-shoring of activities (such as IT, business processes and call centers).
 - To establish the Annual Global Services Location Index, A. T.
 Kearney ranks countries based on three factors:
 - <u>Financial Structure</u> accounts for 40% (of which compensation is 80%, infrastructure is 10% and tax/regulatory is 10%).
 - <u>Business Environment</u> accounts for 30% (country risk is 60%, country infrastructure is 20%, cultural adaptability is 10% and security/intellectual property is 10%).
 - <u>People Skills</u> accounts for the final 30% (relevant experience is 40%, size and availability of labor force is 20%, education is 15%, language is 15% and attrition risk is 10%).



Market Position – Alternative Countries

- India, China and Southeast Asian countries lead the overall Index.
 - For 2005, India remains A. T. Kearney's best offshore location by a wide margin.
 - China and Thailand's attractiveness have increased over time.
- In other regions:
 - Egypt, Jordan, the United Arab Emirates and Ghana ranked well in 2005.
 - In Europe, offshore attractiveness continues to migrate east, searching for high skills and lower costs.
 - Bulgaria, Slovakia and Romania entered the index in 2005.
 - The US (San Antonio, TX), UK (Belfast), Germany (Leipzig) and France (Marseilles), rank quite high, in spite of their high labor costs.



- Turkey ranks number 40 out of 40 countries in A. T. Kearney's latest (2005) Annual Global Services Location Index.
 - The good news is that Turkey is included in the ranking (only 40 countries made the ranking).
 - However, countries like Egypt (number 12), Jordan (number 14), the United Arab Emirates (number 20), Ghana (number 22) and Tunisia (number 30) ranked higher than Turkey.
 - These countries have very low compensation costs, a pool of highly educated technical people and language ability (e.g., English or French).
- Based on this index, Turkey faces tough competition.



- According to A. T. Kearney, Turkey's ranking was as follows:
 - Turkey ranked 2.14 for <u>Financial Structure</u> (maximum 4.00).
 - The highest rankings were given to Philippines (3.58), Ghana (3.57), Viet Nam (3.55) and Egypt (3.55).
 - India (3.47) and China (3.21) ranked high, as did Bulgaria (3.29),
 Romania (3.07), Jordan (3.02), Russia (2.83), Slovakia (2.72) and Poland (2.67).
 - Turkey had a ranking of 0.92 for <u>Business Environment</u> (maximum 3.00), compared to Singapore with the highest ranking (2.67).
 - Other countries with high rankings include the UK (2.41), Canada (2.40) and Australia (2.29).
 - The Czech Republic had a ranking of 1.90, Hungary 1.63, Slovakia 1.55 and Poland 1.44.
 - Turkey scored 0.91 out of 3.00 for <u>People Skills and Availability</u>.
 The US was highest (2.74), then were France (2.24) and India (2.14).
 - Russia ranked 1.31, the Czech Republic 1.12, Poland 1.06, Slovakia 0.96, Egypt 0.95 and Romania 0.92.



- In general, people interviewed in the US have very little, if any, knowledge of Turkey as a supplier of IT services. One interviewee called Turkey "invisible".
 - Interviewees feel that, if Turkey has "a story to tell", it needs to undertake a "frontal assault to divulge the information".
 - Some mentioned Eastern European countries but, without probing, few mentioned Turkey playing a role in IT off-shoring.
 - Turkey is not perceived to be at the forefront for IT services.
 Although Turkey is not totally "off the radar", it is not one of the priority countries for offshore IT services.
 - In general, interviewees do not have "bad news" about Turkey, but have little knowledge of Turkey as an IT sourcing location.
 - Some interviewees searched for information in their files regarding Turkey's IT sector and found little or no data.
 - Others identified <u>HIGH LABOR COSTS for relevant personnel</u> as a critical limiting factor for Turkey.



- Some interviewees provided examples of companies undertaking software development in Turkey:
 - International companies that reportedly are developing software in Turkey include Siemens, Sony Europe, Northern Telecom and others.
 - Local companies that were mentioned include Logo, Likom, Havelsan, Mikes, Meteksan Group and Probil.
- However, there is limited information on what these companies actually do in Turkey.



Market Position – Turkey, Positive Comments

A few positive comments were made about Turkey:

- Turkey is a "pluralistic society", "tolerant", with an "established democracy" and with an "aggressive growing economy".
- Turkey has a young and "educated workforce".
- Turkey is well located geographically to serve Europe.
- One interviewee mentioned an article about high growth of internet access in Turkey.
 - According to published information quoting Point Topic Ltd. (London), in 2004/2005 Turkey emerged as one of the countries with high growth in terms of number of broadband lines added.
 - In the second half of 2004 it added over 150% to its broadband installed base and led the growth rankings at the beginning of 2005, achieving a 73.6% growth.
 - Growth continued in the third quarter of 2005 but it was overtaken (in terms of rate of growth) by Morocco.



Market Position- Turkey, Positive Comments

- All companies operating IT activities in Turkey that were interviewed made positive comments:
 - The quality of software developers in Turkey is very high.
 - Companies in Turkey have experience not only with BPO, Call Centers, etc., but also with software development.
 - Including embedded software for industrial and military applications (software over hardware for motion control devices, drives, human-machine interface, etc.), software for banking, telecommunications, e-learning, home electronics, etc.
 - Companies operating in Turkey stressed that Ankara and Istanbul would rank quite high in an international comparative analysis.
 - Versus using averages for Turkey.



- According to the IT companies operating in Turkey that were interviewed, Turkey has the opportunity to increase its presence in the software development area.
 - Especially as a near-shore supplier to the European Union.
- However, as stated before, companies interviewed outside of Turkey have very little knowledge about the activities of these companies in Turkey.



Current Situation – Turkey, Challenges

- Turkey is perceived by the market to face several challenges:
 - Turkey is perceived to have higher labor rates than India, China, the Philippines, Malaysia and many others for relevant professionals.
 - And Turkey's entry into the EU is of concern as there is an expectation of future cost increases.
 - Turkey is also perceived to have relatively high non-labor costs (e.g., electricity) and a comparatively weak corporate tax environment (resulting in tax evasion by some companies).
 - In general, Turkey is perceived as facing a relatively high "country risk", mainly due to its geographical location.
 - Some interviewees indicated that, to serve clients in the European market, they want to be in a member country of the European Union (e.g., Hungary).
 - Or in countries accessing the EU before Turkey.



- Turkey's image as a participant in IT off-shoring and marketing of its capabilities is weak.
 - Searches in the specialized literature about Turkey's IT activities and services yielded almost no information.
 - For example, attempts to find information regarding a relevant
 IT fair or exhibition in Turkey was disappointing.
 - Even after identifying CeBIT (in an interview) as having an IT fair in Turkey (coming up in September of 2006), it was difficult to obtain detailed information about it from on-line sources.
 - Searching secondary sources for information on IT off-shoring yields hundreds of articles related to India and China; it also provides plenty of results for many countries including Bulgaria, Belarus, Philippines, Russia, Romania, etc., but almost nothing related to Turkey's IT industry.



- According to several interviewees, in order to properly market Turkey as a player in the IT offshoring sector, it is important to carefully identify a market niche (or niches) for Turkey.
 - Mapping what Turkey has (analysis of its internal strengths and weaknesses in terms of technical expertise, outlook for college graduates, languages, costs) against external opportunities for IT software development requirements from the international providers and users of the services.
- And developing a strategy to support the sector in order to attract investment from more players.
 - E.g., training of developers in the particular niche (s);
 marketing of available services; improve infrastructure;
 streamline taxation; etc.



- Before undertaking a marketing effort, it is important for Turkey to identify a specific market niche (s) where it can be "different" and "better" than other countries.
- Interesting niches could include:
 - Embedded software ("software over hardware") for industrial and military applications.
 - Reputedly, several companies are doing this already in Turkey.
 - Other possible areas may be software for telecom, banking, elearning, consumer/home electronics, ERP, etc.
- However, this report is based on a limited number of interviews and additional interviews and analysis are required in order to clearly identify and quantify specific niche opportunities.



- Once a niche (or niches) are identified and analyzed, further activities should include:
 - Addressing competitive bottlenecks that prevent growth for each specific niche.
 - Studying, documenting and promoting case studies of successful IT companies operating in those niches in Turkey.
 - Establishing a "united front", including all key players in Turkey, to develop and market the niches.
 - In addition to companies developing software in Turkey, other organizations could play a role, including, for example, the Turkish Informatics Foundation (TBV); the Turkish Information Technology Services Association (TUBISAD); the Informatics Association of Turkey (TBD), CeBIT; etc.
 - Promoting international IT exhibitions (or conferences) in Turkey focusing on the specific niche (s) relevant to Turkey.
 - Networking with Turkish executives/researchers working with leading IT companies overseas (e.g., inviting to conferences, interviewing).
 - Endeavoring to gain press coverage/editorial for the sector.
 - Convincing potential clients that doing business in Turkey is safe (e.g., providing information on Turkey's economy, trends, institutions).



Competitors

- Turkey's competition will depend on the specific niche (s) identified.
 - In addition to off-shore competition from India and China, other competitors could include:
 - Romania (niches: R&D outsourcing, for example in chip design; embedded software for telecoms and automotive; information security; broad European language skills in addition to English).
 - **Belarus** (has spawned several leading IT companies such as International Business Alliance, EPAM Systems and ScienceSoft, and has attracted several multinational corporations).
 - Bulgaria (has attracted investments from several international companies such as SAP - for Java software development, e.g., new advanced NetWeaver Java-based platform; IBM; HP; and others).
 - Other countries in similar time zones and with similar levels of expertise (Russia, Jordan, etc.)



Market Information



Market Overview

- The global software development market is huge.
 - According to a report by "Research and Markets" entitled "Software: Global Industry Guide", the <u>global software</u> market reached a value of US \$132.2 Billion in 2004, up from US \$112.7 Billion in 2000.
 - According to published information, the <u>global IT market</u> in 2003 reached close to US \$600 Billion and the need for IT services (and professionals) continues to expand.
 - IT is used in all functions of business, science and technology, government, etc.
- Outsourcing to third parties and off-shoring to lower cost countries is a growing trend for software development.



Market Overview – Outsourcing

- Outsourcing means using an external supplier to provide a complete item or service, rather than doing it in-house.
 - Many IT users are <u>outsourcing</u> their needs to external service suppliers.
 - Recently, for example, ABN AMRO bank announced a series of outsourcing deals valued at US \$2.2 Billion, including:
 - IT infrastructure services (to IBM).
 - Application support and enhancements (to Infosys and Tata Consultancy Services).
 - Application Development (to Accenture and Patni Computer Systems, but also to IBM, Infosys and Tata Consultancy).



- Off-shoring means to locate an activity or operation outside the home country. Locations are segmented into:
 - Near-shore (e.g., for the US: Mexico, Canada, Panama, the Caribbean; for Western Europe: Eastern Europe, North Africa and the Middle East; for Japan: Asia-Pacific countries such as Thailand, Philippines, etc.).
 - Off-shore (e.g., for the US: India, China, Russia, Philippines).
 - <u>"Best-shoring"</u> is used to refer to niche locations/providers that meet specific criteria, such as a location in a similar time zone to the company's in-house staff, or that focus on a specific skill set.
- Companies looking for <u>off-shoring</u> services are now comparing and selecting specific **cities** (instead of **countries**) that offer a fit in terms of skills, cost, language, culture and time zone before they select a specific provider.



- According to neoIT
 ("Mapping Offsore Markets
 Update, 2005") fourteen
 countries are the key off shore suppliers of IT and
 BP (Business Processes).
 - The chart on this page shows neolT's estimates for IT and BP exports by country (in millions of dollars).

COUNTRY	IT Services	BP Services
India	US \$12,200 MM	US \$5,200 MM
Canada	8,200	5,500
Ireland	2,200	NA
China	700	300
Russia	550	25
Philippines	330	800
South Africa	220	NA
Brazil	200	NA
Malaysia	120	40
Poland	110	70
Mexico	100	200
Czech Rep.	60	40
Hungary	50	25
Romania	30	25



- Despite the tremendous growth in off-shoring to developing countries, developed countries still retain a huge portion of the global IT businesses.
 - For example, the UK and the US have large trade surpluses in their services sectors.
 - Despite their higher costs, they benefit from their positive business environment and the availability of skilled labor, established infrastructure (telecommunications, etc.).
 - Most of the large IT service providers (such as EDS, IBM, Computer Science, SAP, Hewlett-Packard, etc.), and many of the Fortune 500 companies (e.g., Siemens, Alcatel, GE, etc.) operate in-house technology centers in the US, Western Europe and Japan.



- Accenture is a typical example of the trend in IT off-shoring:
 - According to published information, in the next three years
 Accenture plans to more than double its off-shore staff in India,
 China and the Philippines from 24,000 in 2005 to about 50,000.
 - Of the 24,000 employed in the three countries, 16,500 are based in India.
 - Around 10,000 of Accenture's employees in India are in IT services, 5,000 in BPO and the remainder are corporate employees or consultants working in the Indian market.
 - India accounts for 13% of Accenture's 126,000 staff worldwide.



- According to McKinsey, India is the leading global offshore destination, attracting 65% of the global IT offshore industry, and 46% of the global offshore BPO sector.
 - The proliferation, growth and profitability of IT companies in India (such as Wipro, Tata Consultancy Services, Infosys Technologies and Patni Computer Systems) has forced IT users and service suppliers to establish operations in India (as well as in other low-cost countries) in order to remain competitive.



- International companies with development staff in India include Oracle, Dell, IBM, Perot Systems, EDS, Unysis, SAP, Accenture, etc. According to published information:
 - In 2006 Dell is adding 5,000 call center employees and an additional 300 software development staff in India.
 - Oracle has announced plans to increase its workforce in India to 10,000 from the current 8,600.
 - IBM employed 28,000 people in India last year, up from 3,000 in 2002.
- Smaller international companies also have invested in centers in India (e.g., Ness Technologies of Israel).
- In addition, many Indian companies serve the outsourcing needs of international clients.
 - Some are large and well-known suppliers (such as Wipro, Infosys, Tata Consultancy Services, Satyam, Cognizant, HCL).
 - Others are smaller companies, providing development/outsourcing services (e.g., Aspire Systems, Symphony, etc.).



- India continues to be "the place to go".
 - India has advantages such as:
 - A large pool of trained IT personnel.
 - IT infrastructure (IT centers in several cities).
 - Positive business environment for IT activities. National focus on attracting and serving the industry.
 - Low Cost and High Quality focus.
 - In addition to its domestic IT industry, India's IT and BPO professionals work all over the world, generating large remittances of foreign exchange back to India.
 - And India's IT corporations have set up operations in many countries, including the US.



- India faces two key challenges:
 - Personnel turnover: attrition rates are high (15 20% seems to be common).
 - Wage inflation: According to Hewitt Associates, Indian IT wages grew 14.5% in 2004 over 2003.
- As a result, companies are taking actions such as:
 - Opening facilities away from traditional IT centers in Bangalore, Delhi, Hyderabad, Chennai and Mumbai and establishing centers in cities such as Kolkota and Pune.
 - Hiring college graduates from schools other than the leading engineering and computer science Universities to increase the pool of available employees.
- But India continues to be "the off-shore competitor to beat" in the IT sector in general.



Companies Interviewed and IT Events



Software Development

- Companies interviewed:
 - ACS Affiliated Computer Services
 - Center for Global Outsourcing
 - Cognizant Technologies
 - CSC Computer Sciences Corporation
 - Dell Computer Corporation
 - EDS- Electronic Data Systems Corporation
 - Everest Group
 - IBM
 - Long Island University Journal of IT Case and Application Research (JITCAR)
 - Microsoft
 - neolT
 - NIIT Technologies Limited
 - RTECC Real-Time & Embedded Computing Conference
 - Siemens Automation and Drives
 - TPI
 - Unisys
 - University of Arizona Eller School of Business and Public Administration



Software Development – Exhibitions

- Several IT and Outsourcing meetings take place in the USA.
 - The relevance of each will depend on the specific niche (s) relevant to Turkey. Examples of upcoming conferences and meetings include:
 - The 2006 Outsourcing World Forum (Orlando, FL in February 2006).
 www.corbettassociates.com
 - The World Congress on Information Technology 2006 WCIT 2006 (Austin, TX in May, 2006). http://www.wcit2006.org
 - Outsourcing Conference (Los Angeles, September 2006).
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 - ITSMF IT Service Management Forum (Salt Lake City, September 2006). http://www.itsmfusa.org/mc/page.do
 - The Conference Board The 2006 Strategic Outsourcing Conference (New York, April 2006). www.conference-board.org
 - CeBIT (in Hanover) is the leading trade show for solutions, products and services related to IT and Telecommunications. This year's CeBIT (2006) will take place from March 09 to 15.