



FDRA FACTORY SURVEY, 2017

1. EXECUTIVE SUMMARY

Every year, the Footwear Distributors and Retailers of America (FDRA), in partnership with ELEVATE, invites footwear manufacturers to share their experiences, challenges and solutions when it comes to workforce management, production and compliance performance. Over the past seven years, we have seen many changes in the footwear industry. Several years ago, the depreciation of the RMB was the topic of many discussions. Now, the issue is not as much of a concern as the industry increasingly focuses more on the heightened competition from emerging markets such as Vietnam, Cambodia, Bangladesh and the potential in Africa. The 2017 Factory Survey continues to show this trend. Chinese factories are smaller when compared to their counterparts in Vietnam, and struggle now more than ever before.

In addition, this year, labor shortages re-emerge as an issue for Chinese factories with double the percentage of factories reporting this (50%) when compared to those surveyed in 2016 (25%). The 2017 survey also shows an increase in Chinese factories (55%) who report that they are “not profitable” or “barely profitable,” up 11% from the previous year.

Survey results continue to show that factories struggle with meeting working hours and rest day requirements and that audits have not helped manufacturers improve in terms of compliance. The average number of annual audits continued to decrease from six per year in 2016 to five per year this year. This is likely a result of an increasing number of brands who are accepting mutually recognized audits and certificates from organizations such as Business Social Compliance Initiative (BSCI) and the Fair Labor Association (FLA).

The survey results also present several opportunities the global footwear industry to consider. Automation is one as factories who say they automate more than 25% of the production process are also more likely to say that they are profitable. Better client relationships and sourcing behavior is another area of potential improvement, especially in the current business environment when customer expectations are higher than ever before. 15% of Chinese factories say their clients “always” or “often” request shorter lead times. The more often factories experience reductions in lead times, the less likely they are to say they will be profitable.

1.2 KEY FINDINGS



Increasing Competitive Market: The percentage of Chinese factories reporting that they are “barely profitable” or “not profitable” increased from 44% to 55% year over year. Official export and import data also suggests that Chinese footwear manufacturing is declining.



Business Challenges: Raw material and labor costs continue to be the top concern of Chinese factories. However, labor shortage rose from the sixth most pressing challenge to the third most pressing challenge this year. An increase from 25% to 50% of respondents this year said the labor shortage is a major challenge. Chinese factories are also more concerned with stricter regulations, which might be related to the recent nationwide environmental protection movement.



Client Sourcing Behavior Matters: In a time when customers are looking for cheaper products with better quality, and expect delivery to be faster than ever, there is a major impact on how footwear is being made and sourced. 15% of Chinese factories say their clients “always” or “often” request shorter lead times. The more often factories experience reductions in lead times, the less likely they are to say they will be profitable.



A Higher Degree of Automation Helps: Survey data shows that factories who automate more than 25% of their production processes are less likely to report that they are “barely profitable” or “not profitable” indicating that automation may have a positive impact on profitability.



Wide Use of Workers That Have Reached Retirement Age: Continuing a trend first noticed in the 2014 survey, during which 60% of respondents said they utilized workers of retirement age. This year the percentage increased to 74% in China. This practice is particularly risky in nature for 1) the lack of legal protection and guidelines; 2) the lack of skills capacity of this group of workers, which leads to larger non-compliance risks.



Social Insurance Remains a Challenge: According to ELEVATE assessment data, 95% of Chinese footwear factories are not compliant with social insurance related requirements. While factory managers are aware of relevant requirements, cost is a major concern along with reluctance from workers to participate.



Working Hours and Rest Days are the Top Compliance Challenge: 70% of Chinese factories find the limit of working hours most difficult to comply with. This year’s responses, when compared to previous years, do not show any evidence of improvement when it comes to managing working hours and rest days.



Factories Seem To Be Audited Less Often Than Before: The average number of audits per year decreased for the third year in a row, from an average of six per year in 2016 to an average of five annually in 2017. This is partly due to an increase in brand recognition of audits that are accepted industry-wide.

2. INTRODUCTION

Every year, the Footwear Distributors and Retailers of America (FDRA), in partnership with ELEVATE, invites footwear manufacturers to share their experiences, challenges, and solutions when it comes to workforce management, production, and compliance performance. Over the past seven years, we have seen many changes in the footwear industry. Several years ago, the depreciation of the RMB was the topic of many discussions amongst the factory base in China. Now, the issue is not as much of a concern, but instead the industry has focused more on the increasing competition from emerging markets such as Vietnam, Cambodia, Bangladesh and the potential in Africa as well as the potential for enhanced automated production processes. In the meantime, footwear manufacturers continue to struggle with certain compliance challenges, such as working hours, rest days, and wages.

This year’s survey covers these topics and asks factories for their perspectives on other topics such as the automation and the potential for expansion to other countries.

3. SURVEY INFORMATION

The 2017 FDRA Factory Survey consisted of 73 questions and assessed new dimensions including challenges factories face with customer relationships, efficiency, and product safety. These questions were in addition to the core components assessed in previous years, which focus on performance and challenges related to their overall business, compliance, and worker-management dialogue.

Table 1: Survey Summary

Survey Respondents	Factory Managers
Survey Medium	Online
Survey Methodology	Online Voluntary Survey
# of Questions	73
Response Time Period	Apr 24 th – Aug 4 th , 2017
# of Completed Surveys	64

4. WHO ARE THE FACTORIES?

LOCATION: In comparison to last year, this survey scope was extended to emerging key manufacturing countries in South-East Asia and the Americas. This year there have been an increasing number of participating factories out of China, including Cambodia and Africa.

Table 2 illustrates the respondents’ locations. While the vast majority (73%) of the respondents remain in China, it also covers a considerable number of responses from factories in Vietnam and Cambodia (10%). The report will analyze in greater detail the similarities or differences between China based and Vietnam based manufacturers.

Table 2: Global Responses

Country	#	%
China	59	72.8%
Vietnam	7	8.6%
Cambodia	5	6.2%
Africa	3	3.7%
Indonesia	2	2.5%
Mexico	2	2.5%
Guatemala	1	1.2%
USA	1	1.2%
Total	123	100%

4. WHO ARE THE FACTORIES? (CONTINUED)

Table 3: Chinese Responses By Province

Province	# of Responses	Percent of Total
Guangdong	28	47.5%
Fujian	12	20.3%
Zhejiang	7	11.9%
Sichuan	7	11.9%
Anhui/Jiangsu/Hunan/Jiangxi	5	8.4%
Total	107	100%

In China, as in previous years, Guangdong (48%) and Fujian (20%) continue to be the top two hubs for footwear manufacturing. Zhejiang (including Wenzhou and Taizhou) as well as Sichuan (Chengdu) represent the next largest area of manufacturing centers, after the Pearl Delta Area.

PRODUCTS: In this year’s survey, we continue to see a wide range of products represented. Cement shoes, once again, represent the most popular category (63%), followed by boots (welts) shoes (42%). The percentage of athletic shoes grew considerably from 21% in the survey 2015 to 31% this year. Women’s remains as the largest wearer segment with nearly all respondents (94%) saying they produce shoes for women, which is about 30% more than those who say they produce for men. In comparison to the year before, we have a larger percentage (42%) of factories that utilize leather, (up from 33% in the survey 2016) and a decrease in number of factories using PU.

Table 4: Production Type

What Type of Footwear Makes Up The Majority of Your Production?		Which Gender do You Cater To?	
63% Shoes (Cement)	38.3% Sandal & Indoor	93.8% Women’s	64.2% Men’s
42% Boots (Welts)	25.9% Shoes- High end (Hand sewn)	44.4% Kid’s	9.9% Baby’s
		What Percentage of Your Products Use Following Material Type(s)?	
30.9% Athletic Shoes (Strobel)	13.6% Rubber Shoes (Injection molding)	Material Types	Avg. %
		PU	25.4%
12.3% Vulcanized Shoes	9.9% Special Footwear	Leather	41.88%
		Canvas	12.4%
		Rubber	9.15%

4. WHO ARE THE FACTORIES?

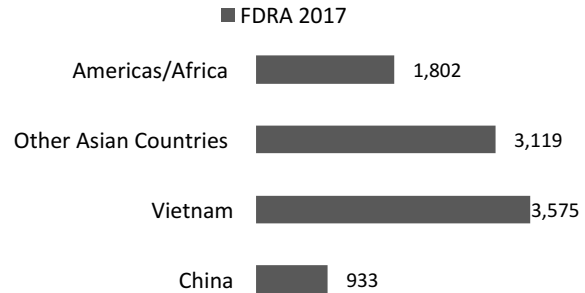
FACTORY SIZE

Footwear manufacturers vary in size. While the average number of workers per facility is close to 1,500, we see some factories that have as few as 69 workers while others employ close to 8,000.

As we have seen in previous years, in comparative analysis, Chinese factories tend to be smaller in size, whereas their counterpart manufacturers in Southeast Asia on average employ more workers. ¹The 2017 Survey results show this trend continues. The average number of workers in a Chinese factory is 933. In Vietnam, the average number of workers per factory increases to 3,575.

Table 5: Number of Workers Per Factory

Average	1,442
Minimum	69
Maximum	7,599



5. BUSINESS PERFORMANCE

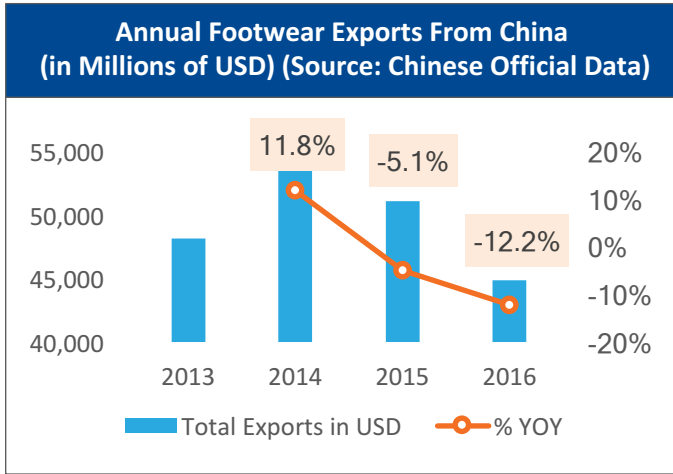
5.1 Are Chinese Factories Doing Better?

Over the past few years, we have seen the market for footwear manufacturing become more and more competitive. Chinese factories in particular face domestic challenges in terms of increasing labor costs and stricter regulations. They also need to cope with increasing competition from their overseas counterparts. This year's survey results show this trend continuing in several ways:

% of Chinese Factories are "Barely Profitable" or "Not Profitable" in 2016
(Source: FDRA Factory Survey Data, China Only)



- **Over half of Chinese factories (55%) say they were "barely profitable" or "not profitable" in 2016.** This represents an increase of 11% from the previous survey.
- Another 17% of them say they are profitable, but that their profits were worse than the year before.
- **Total footwear exports from China have declined for three years in a row** according to Chinese official data.² In 2016, China exported roughly 45 billion USD worth of shoes, which decreased by 12% from the previous year.
- **While footwear imports from China to the US has been relatively steady over the past few years, in 2016 we saw a drop of 13%.³**



5.2. What are Chinese Factories' Top Business Challenges?

When asked about their top business challenges, increasing raw material and wage costs remain the top two issues, which is in line with results from surveys in previous years. Several new trends also emerged:

- Labor shortages are becoming more of an issue now.** Close to half of Chinese suppliers (44%) said this is a major challenge. The ranking increased from number 6 in the 2016 survey to number 3 this year.
- This is in line with the fact that half of Chinese factories find it somewhat difficult to hire workers. On a scale of 1 to 10 (with 1 being not difficult and 10 being very difficult) 50% of factories gave a score of 6 or above. This represents an increase of 25% from the previous survey.
- Slicing the data by factory size, we don't see any significant differences, meaning that smaller factories do not necessarily face more challenges than larger factories in terms of hiring workers.
- An increasing number of factories are concerned with stricter regulations.** 11% of Chinese factories say the tough regulations are a major issue, which more than doubles the proportion who felt this way in previous years. This may be related to the recent nationwide anti-pollution movement initiated by the Chinese government, following a series of more stringent regulations on environmental protection. While footwear is not one of the most pollution-heavy industries the movement focuses on, certain procedures of shoe manufacturing (e.g. gluing and paint spray) are subject to inspection and necessary waste treatment measures.

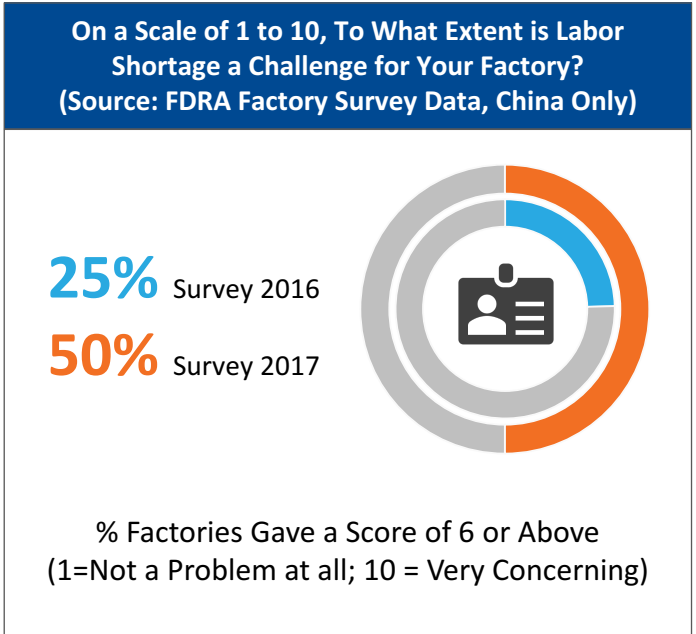
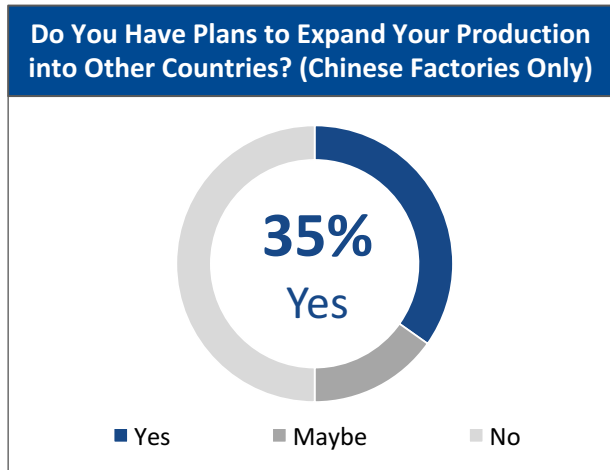


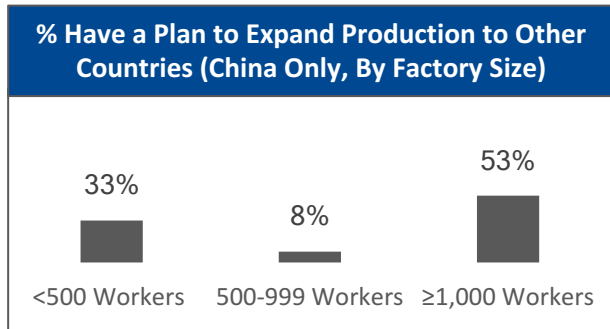
Table 5: What Are the Most Significant Business Challenges You Face?

Challenges	China					Vietnam	
	Survey 2017	Survey 2016	Survey 2015	Survey 2014	Survey 2013	Survey 2017	Survey 2016
Increasing Raw Material Costs	1 76.1%	1 73.9%	1 56.1%	1 59%	1 75.8%	2 33.3%	2 75%
Increasing Wage Costs	2 56.5%	2 69.6%	2 52.8%	3 40%	2 73.6%	2 33.3%	1 100%
Growing Business Competition	4 26.1%	3 42.0%	3 30.1%	5 19%	8 9.9%	/	3 37.5%
Economic Downturn	5 19.6%	4 24.6%	6 15.4%	8 8.2%	9 6.6%	3 16.7%	3 37.5%
Currency Fluctuation	9 4.3%	5 17.4%	7 12.2%	4 26.4%	4 16.5%	1 50%	/ 0%
Labor Shortage	3 43.5%	6 13.0%	4 25.2%	2 47.3%	3 67.0%	3 16.7%	5 12.5%
Finding Good Management	8 4.3%	7 11.6%	5 19.5%	6 15.5%	6 13.2%	/	/ 0%
Worker Retention	5 19.6%	8 8.7%	8 12.2%	7 13.6%	4 16.5%	3 16.7%	/ 0%
Resource Efficiency	9 4.3%	9 4.3%	/ /	/ /	/ /	2 33.3%	5 12.5%
Limited Raw Material Suppliers	6 13%	10 5.8%	/ /	/ /	/ /	2 33.3%	4 25%
Tougher Regulations and Legislation	7 10.9%	11 5.8%	11 7.3%	8 8.2%	10 2.2%	/	/ 0%

5.3. Is Overseas Expansion the Solution?



In previous years' survey reports, we mentioned that an increasing number of large Taiwanese and Chinese footwear manufacturers turned to other locations for cheaper labor and lower production costs, including Vietnam, Cambodia and even some countries in Africa. This year, when asked specifically about their plans to invest overseas, roughly one third of surveyed Chinese factories reported that they have plans to expand their production to other countries.



Vietnam and Cambodia continue to be the countries mentioned most frequently, followed by some parts of Africa. Some factories also mentioned expansion into Bangladesh, parts of Europe and the U.S.

Larger Chinese factories are more likely to expand than smaller factories.⁴

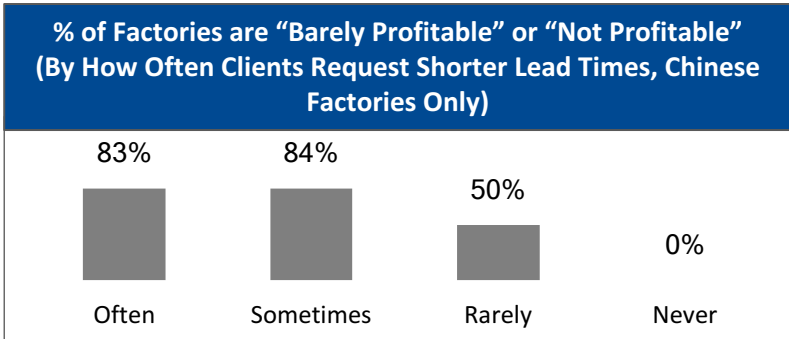
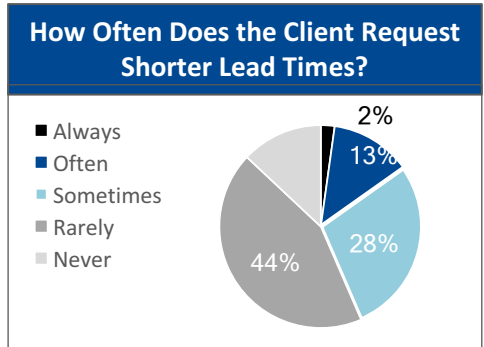
Where Do You Plan to Expand to? (Chinese Factories Only)

Vietnam, Cambodia, Africa, Bangladesh, the U.S. and Europe

6. WHAT ARE THE POTENTIAL FACTORS THAT CONTRIBUTE TO A FACTORY'S COMPETITIVENESS?

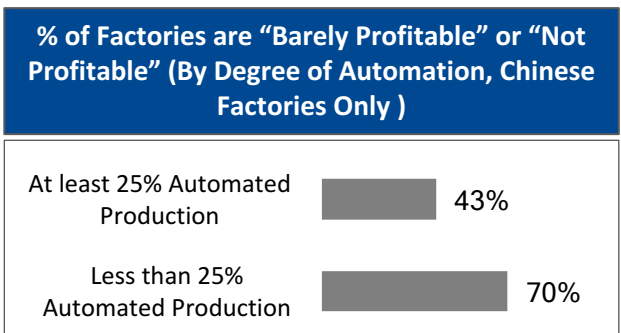
Through correlation analysis we identified the following factors may help improve factory competitiveness and profitability:

- **Client Sourcing Behavior Matters.** In a time when customers are looking for cheaper products with better quality, and expect delivery to be faster than ever, it has a major impact on how footwear is being made and sourced.
- 15% of Chinese factories say their clients “always” or “often” request shorter lead times, and another 28% say this kind of request happens “sometimes.”
- Additionally, 11% of Chinese factories reported that their clients change the product specifications after the order has been placed.
- Correlation analysis shows that the more often factories experience reductions in lead times, the less likely they are to say they will be profitable. ⁵ The majority (83%) of factories who often receive these requests say they are “barely profitable” or “not profitable.” None of the factories who say their clients “never” change lead times report this.



- **A Higher Degree of Automation Helps.** In addition, we also see a correlation between the level of automation in production process with a factory’s self-reported profitability. ⁶ 30% of Chinese factories automate less than 25% of the production, and these are the ones that struggle the most.
- Among factories that have less than a 25% of their production **automated**, 70% of them said they were “barely profitable” or “not profitable” in 2016, whereas the percentage is 43% among those who have a higher degree of automation.

30% of Chinese Factories Have Automated < ¼ of Their Production



6. SOCIAL INSURANCE

Social insurance has become a major compliance challenge in China ever since the series of strikes took place in 2014-2015 in several large footwear factories producing for high profile brands. Factories are required to cover all workers with all five types of insurances (including medical, pension, maternity, unemployment and injury). However, three years later, the level of overall compliance remains low. According to ELEVATE assessment data, 95% of Chinese footwear factories are not compliant with social insurance related requirements.⁷

95% of Chinese
Footwear Factories Have
Social Insurance Related
Violation
– ELEVATE Database

In this year’s survey, we added some questions about social insurance to get a sense of the following:

- Factory management’s awareness of related requirements and obligations
- Concerns and challenges the factory management faces in terms of achieving higher coverage

Data shows that close to two thirds (62%) of factory managers say they are “fully aware” of the requirements related to social insurance and the remaining say they’re “partly aware.” Nonetheless, lacking knowledge of relevant requirements is not the main reason for non-compliance.

While factory managers are aware, cost is a major concern along with reluctance from workers to participate. While employees are required to contribute to the insurance scheme, employers are responsible for a much larger proportion. Taking pension as an example, based on the wage level, employee pays 8% and the employer pays for 13% on a monthly basis. By covering all five types of insurance, it will lead to significant increase in labor cost for factories.

Workers are also hesitant for a number of reasons. Even though a worker’s required contribution is smaller than the required contribution from factories, workers find the monthly contribution to be too high. Benefits and usage of social insurance is somewhat confusing, especially when it comes to things like transferring funds to an account in their hometown, and necessary actions when changing jobs.

- Worker Concerns:**
- The monthly contribution is too high
 - Lack of clarity on benefits and potential usage
 - Participation in Cooperative Medical Insurance



6. SOCIAL INSURANCE (CONTINUED)

Moreover, most workers have purchased Cooperative Medical Insurance (CMI) in their hometown, which is a government led insurance program. Workers think they are covered already and thus do not see the need to purchase insurance again in the factory. The CMI comes at a lower cost with an annual fee at 150-200RMB. The social insurance scheme requires a contribution of roughly 300RMB per month and is not as flexible in usage as CMI.

7. WHO ARE THE WORKERS?

Table 6: Employee Demographics (Chinese Factory Survey Data)

	% Female Workers	% Domestic Migrants
Survey 2012	58%	67%
Survey 2013	61%	69%
Survey 2014	65%	62%
Survey 2015	62%	59%
Survey 2016	61%	67%
Survey 2017	59%	63%

% of Chinese Factories Use Workers of Retirement Age (ELEVATE Comparative Data and Survey 2017)

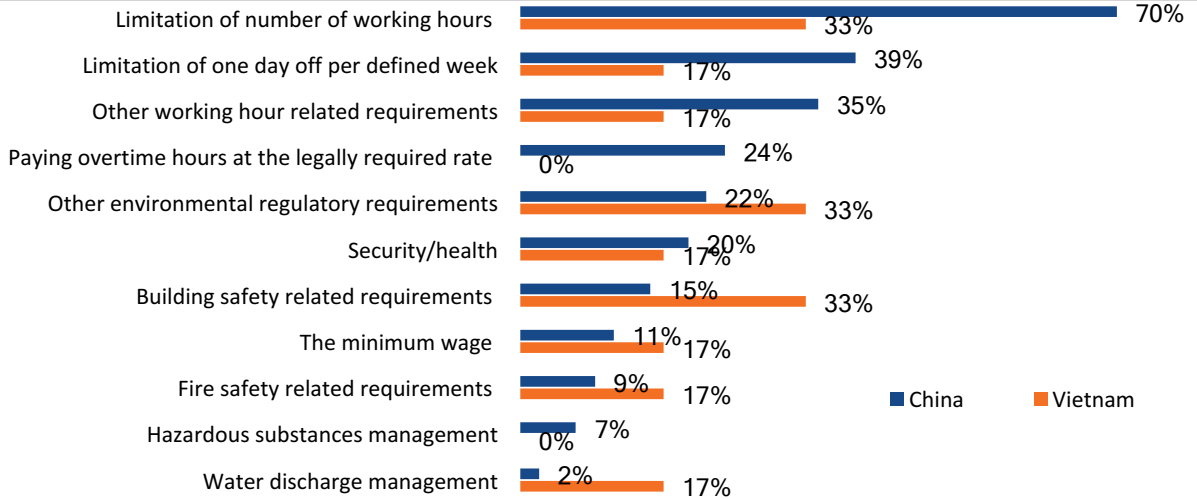
74% Footwear 2017
65% Toy 2016



- When it comes to workforce characteristics, we see that many trends continued from previous years. Primarily, female workers and migrant workers remain as the majority of workers in the footwear industry. 59% of workers in an average factory are female.
- We also noticed in this year’s survey a wide usage of workers who have reached retirement age. In China, the retirement age for blue-collar female workers is 50 and for male workers is 60. We started noticing this trend in the 2014 survey, during which 60% of respondents said they utilized workers of retirement age. This year the percentage increased to 74% in China. In comparison to comparable data on the toy industry, it is clear that using workers at a senior age is not unique to the footwear industry, as the practice is rather common in other industries as well.
- This practice is particularly risky in nature for a number of reasons:
 - **Lack of legal protections and guidelines:** Workers of retirement age are beyond the scope of Chinese Labor Law, meaning they are not necessarily subject to requirements such as working hour limits, wage regulations and social insurance schemes. This is also a gray area in the sense that there is no clear guideline provided by buyers and clients on how to manage workers that have reached the retirement age. This puts factories in a more vulnerable position when it comes to compliance violations, especially in regards to wage payments for workers who have resigned and compensation for an injury at work.
 - **Insufficient skills and capacity that leads to larger non-compliance risks:** Workers of retirement age have limited skills and capacity and usually play a supporting role on the production line. In ELEVATE’s experience, they are often paid on a piece rate system, which increases the risk of wage underpayment and transparency issues.

8. ARE FACTORIES MORE COMPLIANT THAN BEFORE?

What are the Most Challenging Compliance Requirements You Face?



Working hours and rest days was once again selected as most significant compliance challenge. 70% of Chinese factories find the limit of working hours most difficult to comply with, followed by rest days and other working hours related requirements.

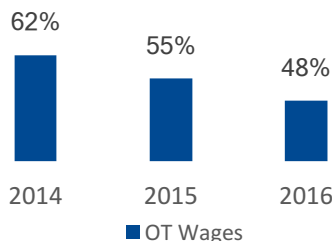
This is consistent with factories' self-reported data that 71% of factories say their workers have worked more than six days in a row in 2016, and one third (35%) have worked an average of more than 60 hours per week during peak seasons.

This year's responses, when compared to previous years, do not show any evidence of improvement when it comes to **managing working hours and rest days**. ELEVATE data also suggests that there hasn't been improvement in this regard. In 2014, 63% of Chinese footwear factories had a rest day issue, which increased to 88% in 2016. When we look at those who have exceeded the expected working hours limit, the percentage remains stable. However, ELEVATE data shows that the percentage of footwear factories with overtime wage underpayment issues has decreased from 62% in 2014 to 48% in 2016.⁸

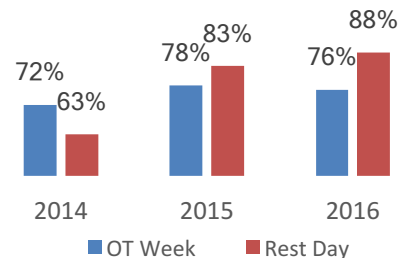
% of Maximum Number of Consecutive Working Days >6 Days



% of Factories that Have Violations on OT Wages (Source: ELEVATE Data)



% of Factories that Have Violations on OT Week and Rest Day (Source: ELEVATE Data)



9. ARE FACTORIES AUDITED MORE FREQUENTLY?

5

Average # of External Social & Environmental Compliance Audits Per Year

Survey 2016: 6 Audits/Year

28%

Experience More than 6 Audits Annually

Survey 2016: 38%

5%

Do Not Have Any Personnel Responsible for Social And Labor Compliance

Similarly to previous years, almost all factories have experienced social and environmental compliance audits. The percentage of factories that have not been audited decreases from 7% to 3% between 2014 to 2016.

However, **factories seem to be audited less often than before:**

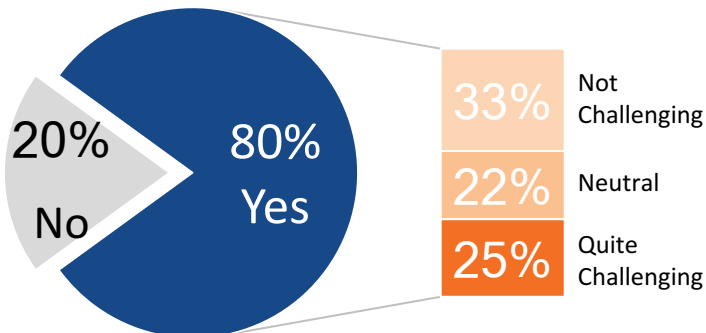
- The average number of external audits factories experience continues to decline. In Survey 2015, the average number of annual factory audits was seven. In 2016 this number dropped to six and then decreased again to an average of five this year.
- Additionally, the percentage of factories who said they were audited more than six times per year decreased from 38% in 2016 to 28% this year

This could be explained by the recent trend of mutual recognition programs. A number of companies including Walmart made the decision to accept audit reports and certifications from collaborative initiatives such as BSCI, RBA, ICTI CARE, SMETA and the FLA in lieu of their own audits with the goal to have better and fewer audits. This trend is expected to grow and be implemented by more key brands. It may also create opportunities for industry consolidation around common protocols for “mutuality”.

10. HOW WELL DO YOU KNOW FDRA'S CODE OF CONDUCT?

Do You Know FDRA's Code of Conduct?

How Challenging It is to Comply With FDRA's Code of Conduct?



In the context of growing mutual recognition program, it is important to highlight the increased level of awareness of FDRA's Code of Conduct. Two years ago, 73% percentage of factories were aware of FDRA's CoC, which increased to 80% this year.

Comparing the results by country, we continue to see that **Chinese factories appear better informed.** 85% of them say they are aware of the FDRA's Code of Conduct, whereas the percentage is 67% amongst Vietnamese factories.

When it comes to Vietnam, none of the factories feel it's challenging to be compliant with the FDRA's CoC. However, over one third (37%) of factories find it's challenging to be compliant.

FOOTNOTES

1. One-way ANOVA results show that countries differ significantly from each other, in terms of number of workers employed per facility, the significant level is 0.000.
2. “Key exports in December 2016, 2015 and 2014”, General Administration of Customs of the People’s Republic of China, November, 2017, accessible at <http://www.customs.gov.cn/publish/portal0/tab68101/>
3. U.S. IMPORTS FOR CONSUMPTION FOR SELECTED PRODUCTS”, U.S. Department of Commerce, Office of Textiles and Apparel, November, 2017, accessible at <http://otexa.trade.gov/FLT/imports/catV10.htm>
4. One-way ANOVA results show that Chinese factories differ significantly by their size, in terms of their intention to expand to oversea countries, the significance level is 0.039.
5. One-way ANOVA results show that factories’ feedback on client behavior differ significantly from each other, in terms of their profitability in 2016, the significant level is 0.001.
6. Correlation between factory’s level of automation and their profitability performance is significant at $r=0.251$, $sig=0.045$.
7. Data comes from ELEVATE Assessment database, 2016 – 2017.
8. Ibid. Data comes from ELEVATE Assessment database, 2016 – 2017.