

Results of 2015 Survey on Japan's International Competitiveness

June 21, 2016
KEIDANREN

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Survey Summary

- Companies in Japan generally assess themselves to be competitive enough to strive with their competitors in the global marketplace, and have a brighter outlook for the future.
- Regarding assessment of the current status for their international competitiveness, approximately 40% (38.6%) of the companies responded that they “have a high level of competitiveness / have a somewhat high level of competitiveness.” As for the outlook in 3 years, more than 60% (67.1%) of the companies replied that their competitiveness “will be at a higher level than the present /will be at a somewhat higher level than the present.”
- For the strengths of Japanese companies in the global marketplace, respondents cited “performance and quality of products and services” and “R&D and technologies.” “Marketing and sales” and “development and production costs of products and services” were cited as their weaknesses.
- For Japan’s business environment, many respondents assessed it as “inferior” especially when compared with that of the U.S. There were many items assessed as “same level” in the comparison with Germany, while Japan was assessed to be superior in many items in the comparison with ASEAN countries.
- For strengthening competitiveness, responses that “tax burdens,” “regulations” and “labor flexibility” should be reformed came to the top of the list.
- Nearly 90% of the companies believe that use of IoT and big data, etc. will affect their own competitiveness, while only approximately 40% of the respondents actually utilize IoT and big data in their actual business operations.

1. Survey Overview

Intent: The survey is conducted to understand the competitiveness of Japanese companies and to what extent Japan's business environment is being fulfilled through comparisons with competitors and rivaling countries and reflect the findings to the creation and implementation of appropriate policies.

Survey period: March through April 2016

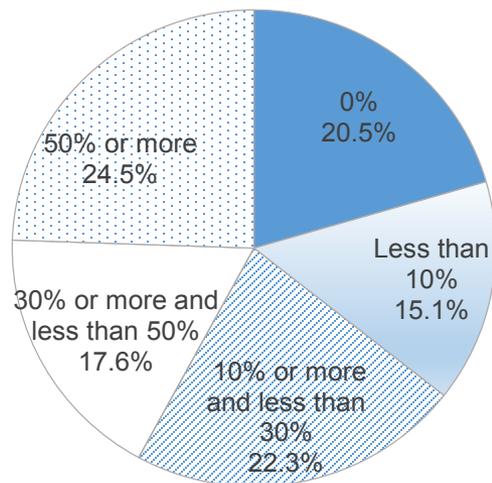
Companies subject to the survey: Member companies of the KEIDANREN

Survey method: Selection from answer choices and free description

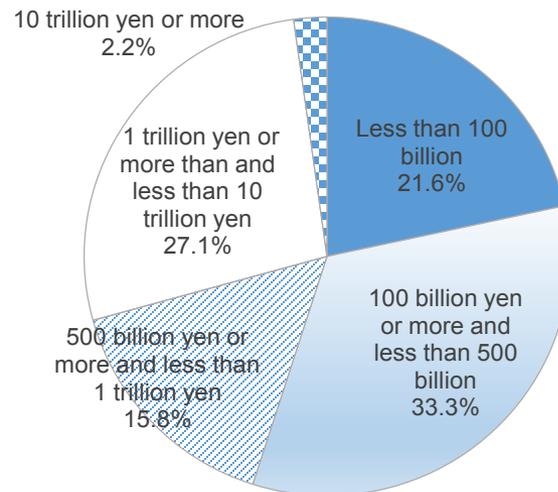
No. of respondents: 278 companies (173 manufacturing and 105 non-manufacturing companies)

Attributes: Refer to the graphs below

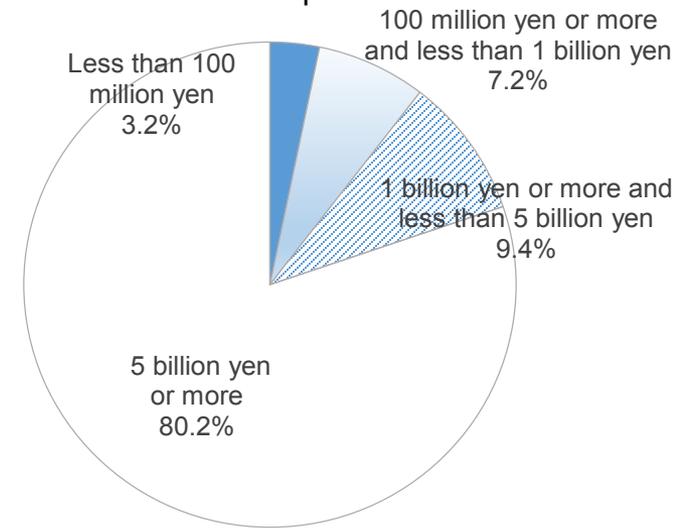
Overseas Sales Ratio (Fiscal 2014)



Net Sales (Fiscal 2014)



Paid-in Capital



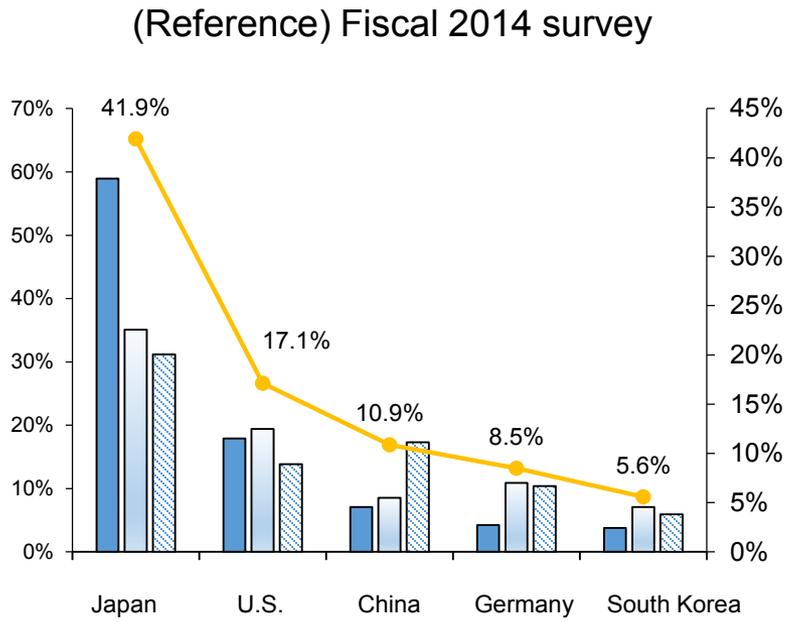
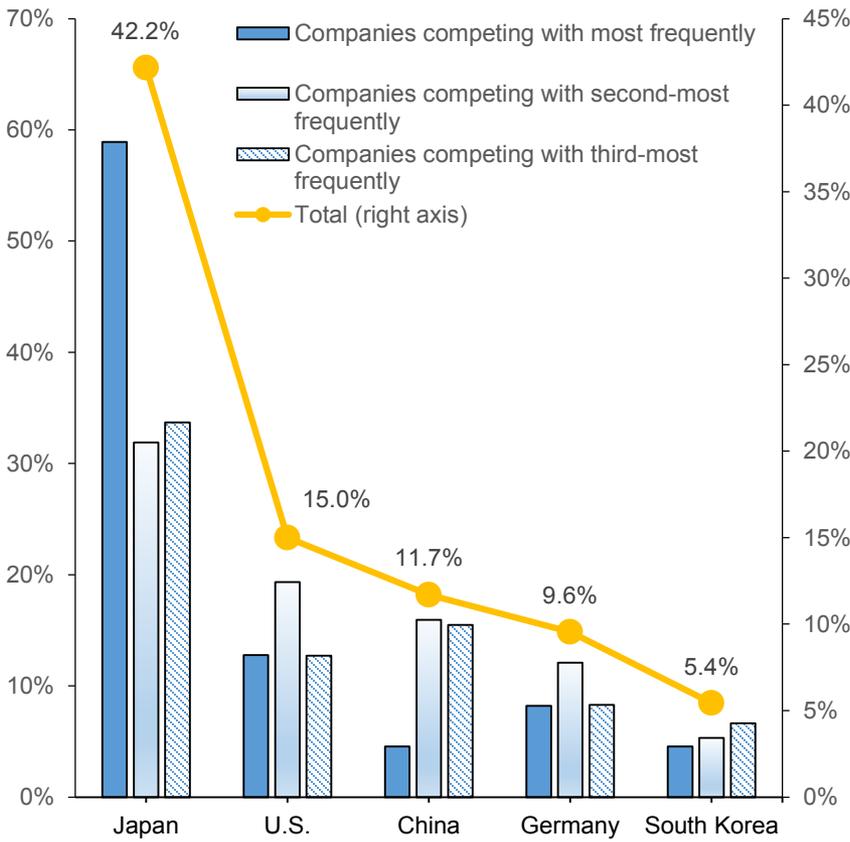
Note 1: Manufacturing (food and beverage, textile and apparel, pulp and paper, chemicals, pharmaceuticals, petroleum and coal products, rubber products, glass and stone and clay products, iron and steel, non-ferrous metals, fabricated metal products, machinery, electric equipment, transportation equipment, precision instruments, other products)

Note 2: Non-manufacturing (fisheries and agriculture/forestry, mining, construction, utilities, land transportation, marine transportation, air transportation, warehousing and transportation-related, information and communications, wholesale trade, trading company, retail trade, banking, securities and futures commodity dealing, insurance, other financial institutions, real estate, services)

2. International Competitiveness of Japanese Companies

2-1 Nationalities of Competitors

- By nationality of the respondents' competitors, Japanese companies have the largest share (42.2%), followed by U.S. companies (15.0%), Chinese companies (11.7%) and German companies (9.6%).
- The proportion trend of the competitors by nationality has remained almost unchanged from the survey conducted in the previous fiscal year.

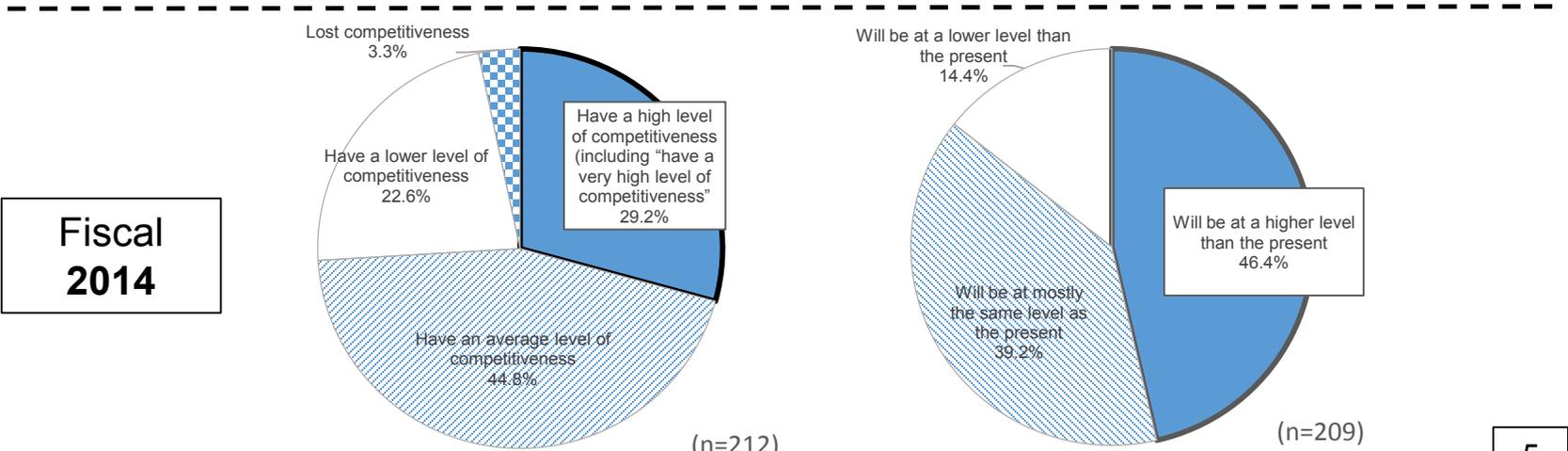
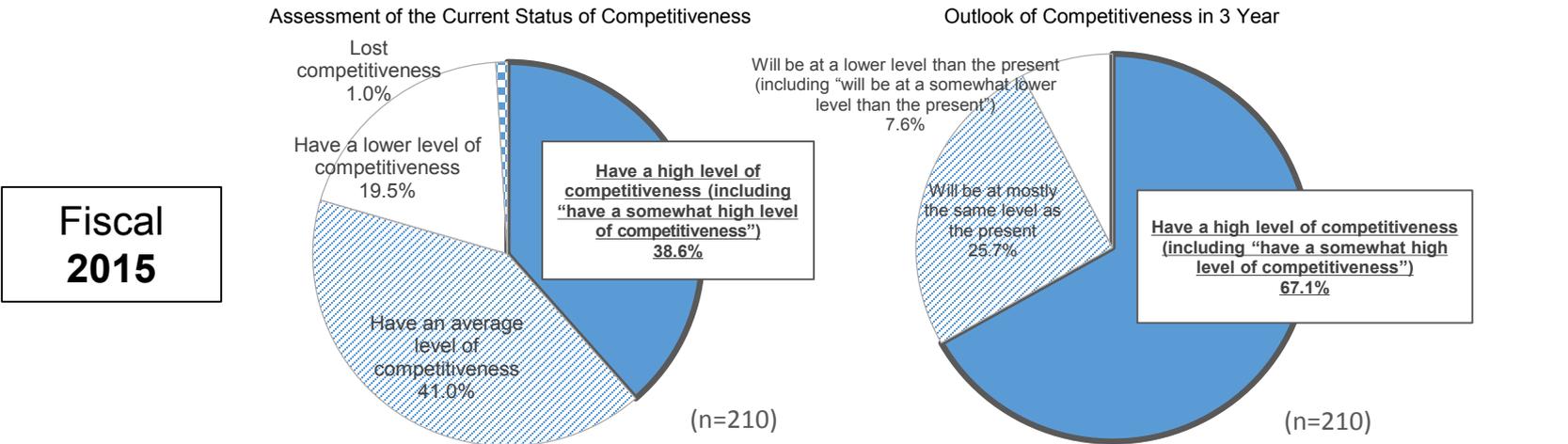


Note 1: Responses from respondents with an overseas sales ratio of 0% are excluded. The parameters of “companies competing with most frequently,” “companies competing with second-most frequently” and “companies competing with third-most frequently” are 219, 207 and 181, respectively.

Note 2: The line graph represents the ratio of responses that cited the relevant countries to the number of total responses.

2-2 Current Status Assessment and Outlook of Competitiveness

➤ Regarding assessment of the current status of their competitiveness in the global marketplace, approximately 40% of the respondents said they “have a high level of competitiveness (including “have a somewhat high level of competitiveness”).” As for the outlook in 3 years, more than 60% of the companies replied that their competitiveness “will be at a higher level than the present (including “will be at a somewhat higher level than the present”).”

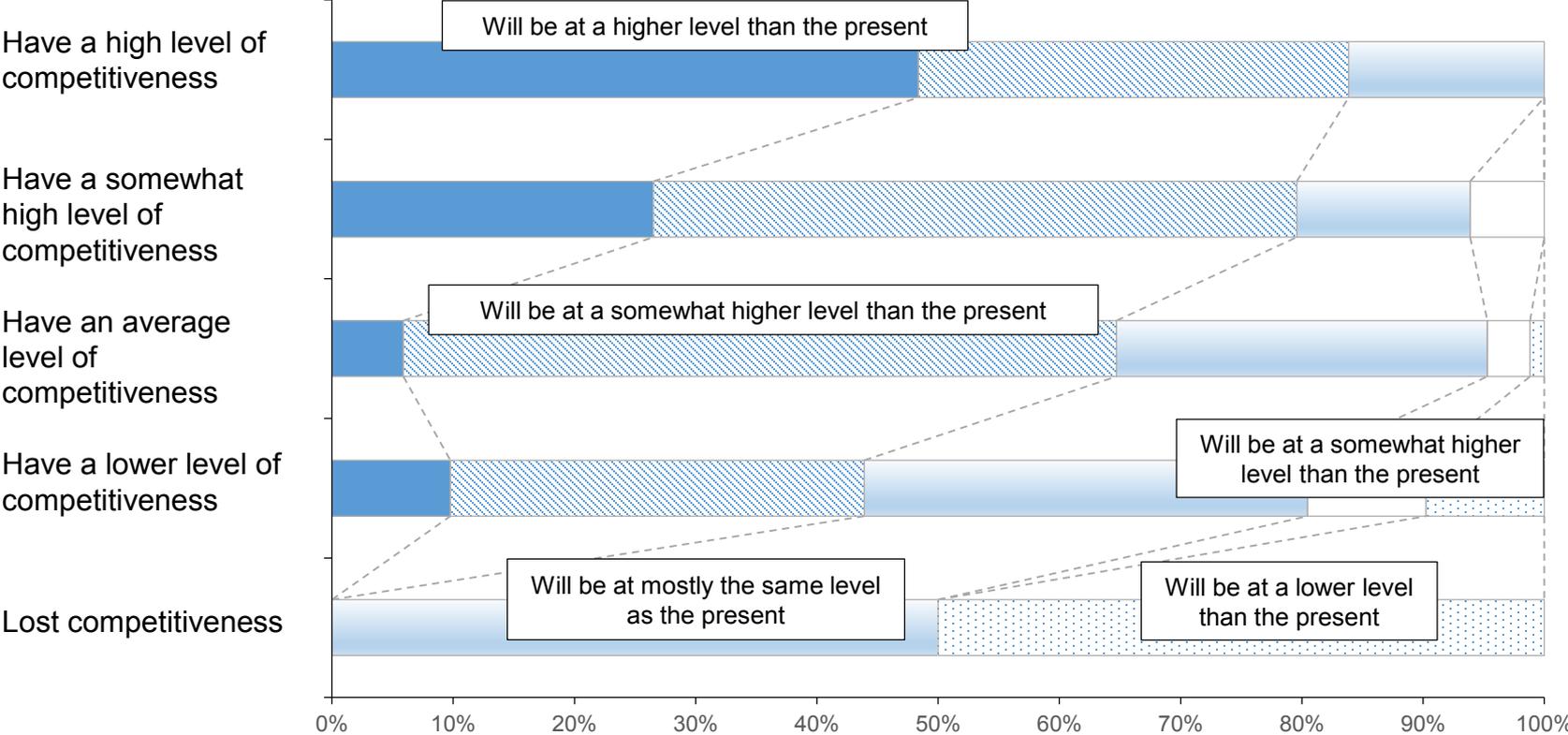


Note: Responses of “cannot assess” has been excluded from the compilation.

2. International Competitiveness of Japanese Companies

2-3 Current Status Assessment and Outlook of Competitiveness (Response Tendencies)

- Many of the companies that responded “have a high level of competitiveness” or “have a somewhat high level of competitiveness” for the assessment of the current status of their competitiveness also demonstrated a bright outlook for their competitiveness in 3 years, saying that it “will be at a higher level than the present” or “will be at a somewhat higher level than the present.”
- On the other hand, many companies that responded “have a lower level of competitiveness” or “lost competitiveness” for the assessment of the current status of their competitiveness showed uneasiness for the outlook of their competitiveness in 3 years, saying that it “will be at mostly the same level as the present” or “will be at a lower level than the present.”

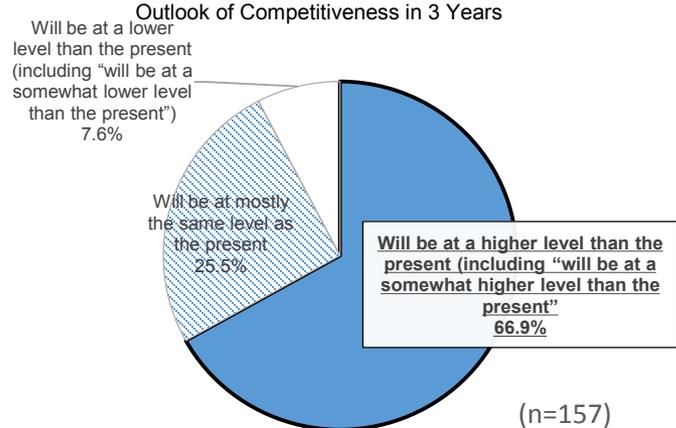
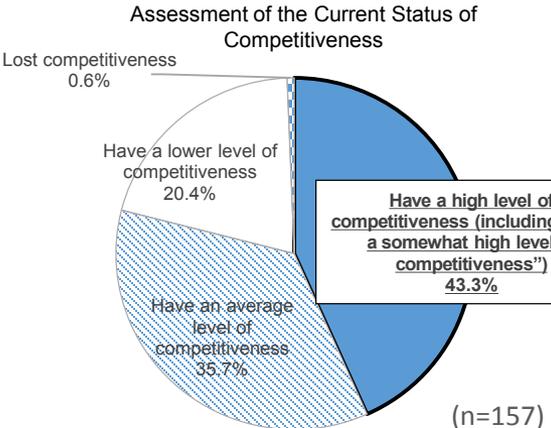


2. International Competitiveness of Japanese Companies

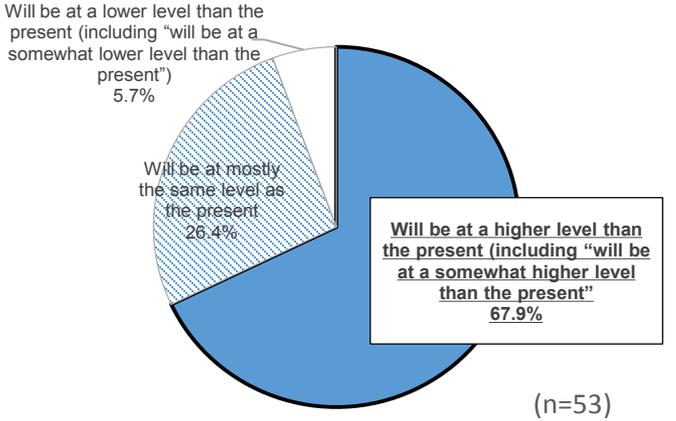
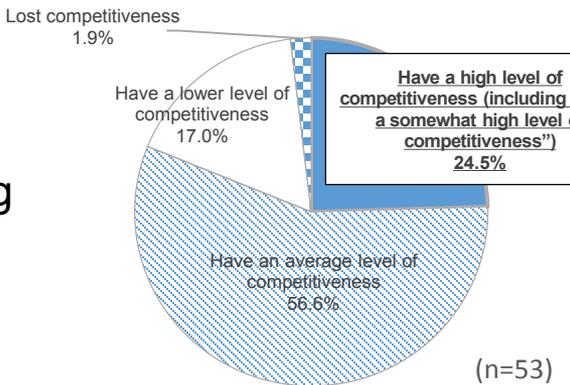
2-4 Current Status Assessment and Outlook of Competitiveness (Manufacturing and Non-Manufacturing)

- Regarding assessment of the current status of their competitiveness in the global marketplace, more than 40% of manufacturing companies responded that they “have a high level of competitiveness (including “have a somewhat high level of competitiveness”)” while less than 30% of non-manufacturing companies did so.
- As for the outlook of their competitiveness in 3 years, over 60% of respondents replied “will be at a higher level than the present (including “will be at a somewhat higher level than the present”)” both in manufacturing and non-manufacturing sectors.

Manufacturing (Fiscal 2015)



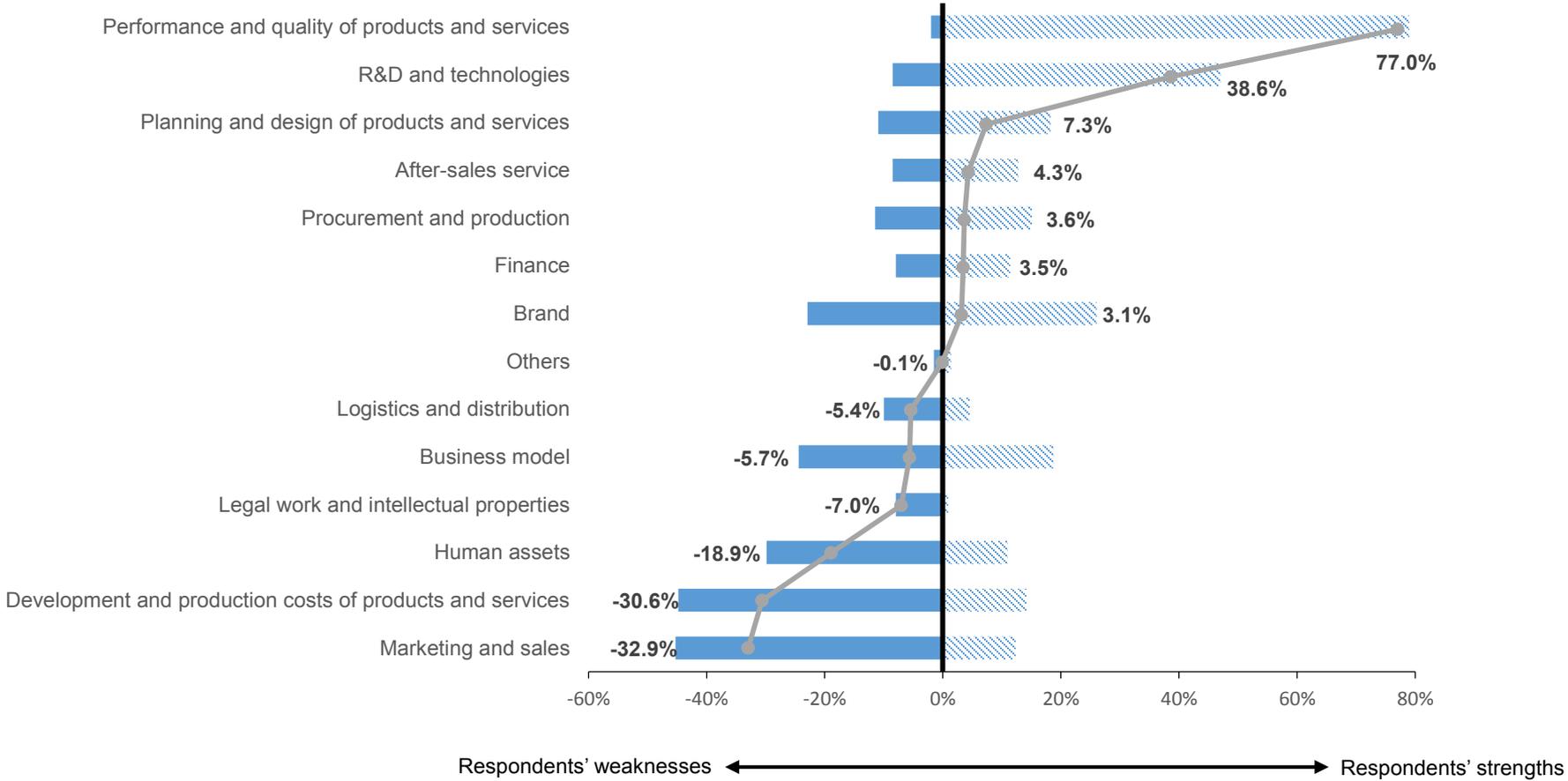
Non-Manufacturing (Fiscal 2015)



2. International Competitiveness of Japanese Companies

2-5 Respondents' Strengths and Weaknesses (Fiscal 2015)

➤ For the strengths of Japanese companies in the global marketplace, respondents cited “performance and quality of products and services” and “R&D and technologies.” Meanwhile, many respondents cited “marketing and sales” and “development and production costs of products and services” as their weaknesses.

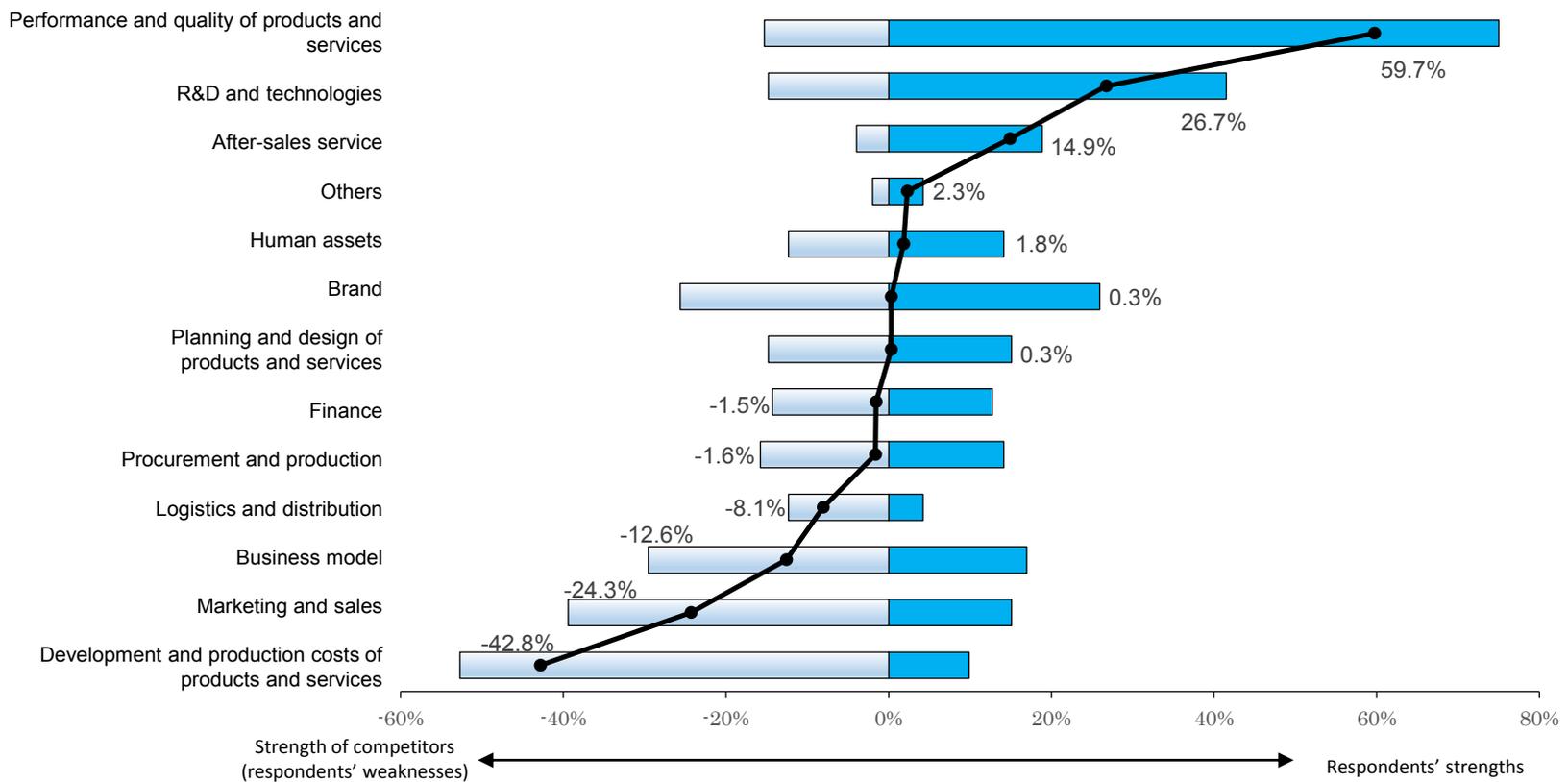


Note 1: Respondents are allowed to select up to three items. Responses from respondents with an overseas sales ratio of 0% are excluded. The parameters of the responses were 219 for respondents' strength and 201 for respondents' weaknesses.
 Note 2: Percentages of responses for respondents' weaknesses have been indicated as negative numbers.
 Note 3: Figures of the line graph represent the difference calculated by subtracting the ratio of responses as “respondents' weaknesses” from the ratio of responses as “respondents' strengths” for each item.

2. International Competitiveness of Japanese Companies

(Reference) Respondents' Strengths and Weaknesses (Fiscal 2014)

◆ As the sources of Japanese companies' strengths in the global marketplace, respondents cited "performance and quality of products and services," "R&D and technologies" and "after-sales service," among other items. On the other hand, respondents cited "development and production costs of products and services," "marketing and sales" and "business model," among other items, as strengths of their competitors (respondents' weaknesses).

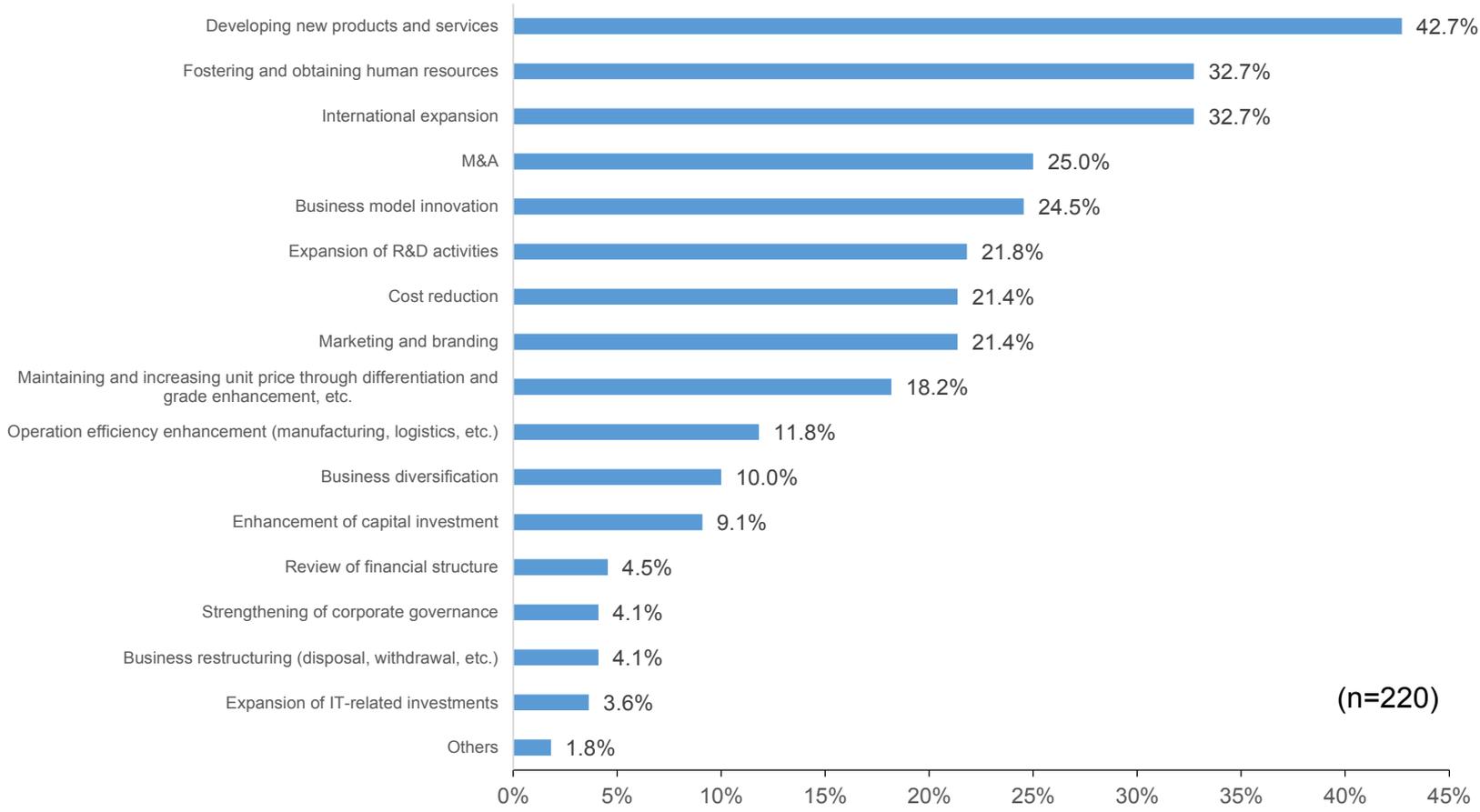


Note 1: Respondents are allowed to select up to three items. Responses from respondents with an overseas sales ratio of 0% are excluded. The parameters of the responses were 212 for respondents' strengths and 203 for respondents' weaknesses.
 Note 2: Percentages of responses for competitors' strengths have been indicated as negative numbers.
 Note 3: Figures of the line graph represent the difference calculated by subtracting the ratio of responses as "respondents' weaknesses" from the ratio of responses as "respondents' strengths" for each item.

2. International Competitiveness of Japanese Companies

2-6 Future Endeavors to Strengthen Competitiveness

➤ The survey suggests that companies will focus on “new product and service development” (42.7%), “fostering and obtaining human resources” (32.7%), “international expansion” (32.7%), “M&A” (25.0%) and “business model innovation” (24.5%) for strengthening their competitiveness going forward.

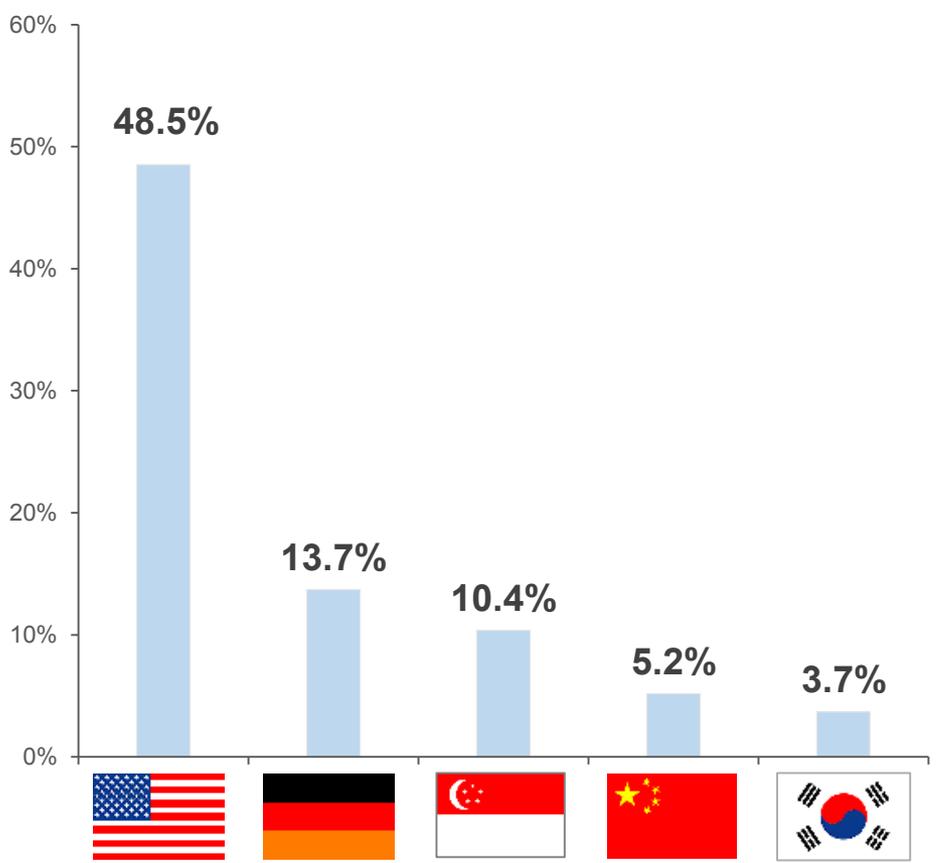


Note: Responses from respondents with an overseas sales ratio of 0% are excluded.

3. Assessment of Japan's Business Environment

3-1 Benchmark Countries^(Note 1)

➤ As countries that are believed to have an excellent business environment, the U.S. was cited by nearly half of the respondents, followed by Germany and ASEAN countries.



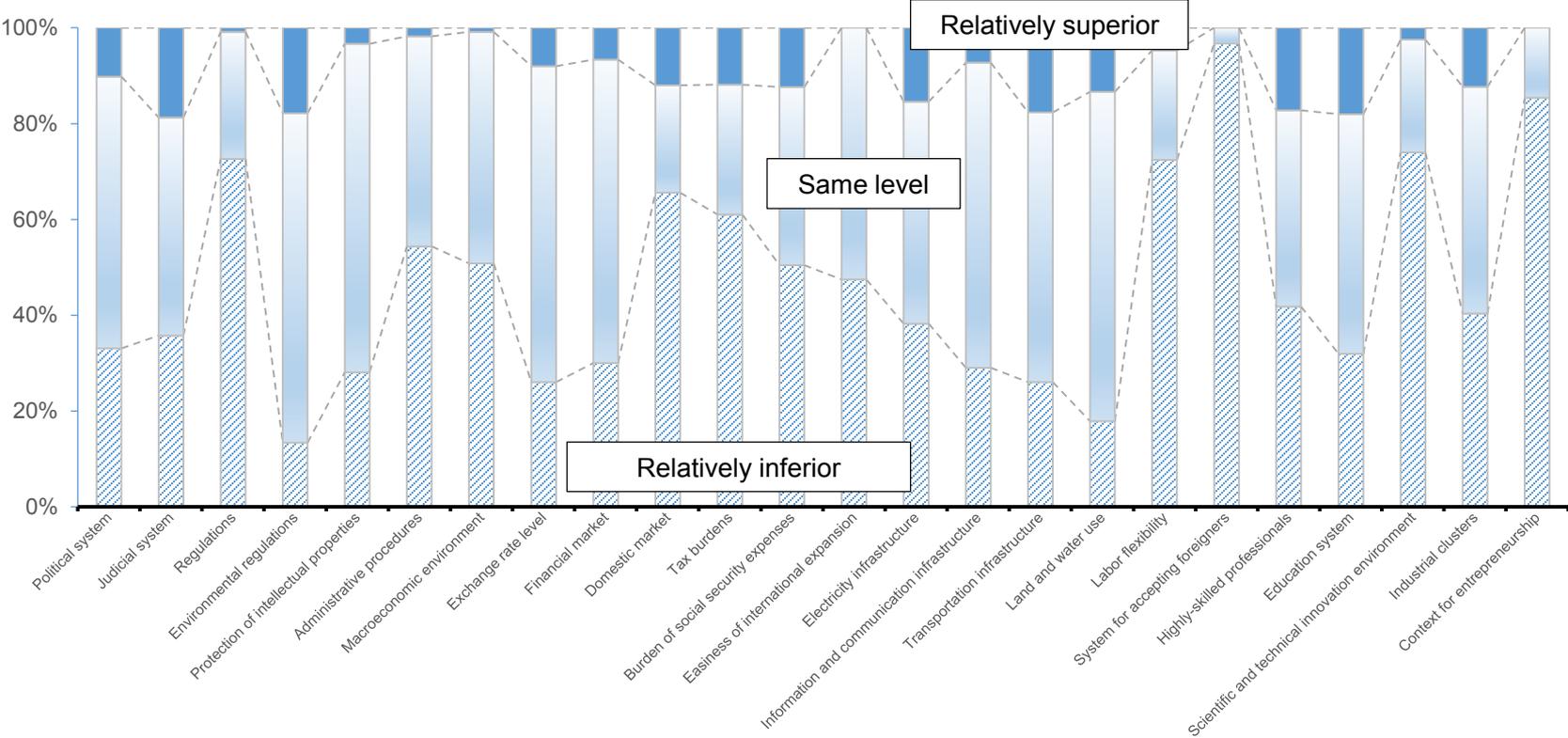
	Benchmark Countries(n=270)	Share (%)
1	U.S.	48.5%
2	Germany	13.7%
3	ASEAN countries	10.4%
4	China	5.2%
5	South Korea	3.7%
6	U.K.	1.1%
6	Japan	1.1%
8	France	0.7%
9	India	0.4%
9	Brazil	0.4%
Others (Switzerland and other European countries)		14.8%

Note 1: Benchmark countries refer to the countries that the respondents consider to have an excellent business environment, in reference to such factors as the countries where they conduct businesses and the nationalities of their competitors.
 Note 2: ASEAN countries refer to the ten countries comprising Indonesia, Cambodia, Singapore, Thailand, the Philippines, Brunei, Vietnam, Malaysia, Myanmar and Laos.

3. Assessment of Japan's Business Environment

3-2-1 One-on-One Assessment of Japan's Business Environment (Comparison with the U.S.)

➤ When compared with the U.S., Japan's competitiveness is considered to be inferior in many items. In particular, many respondents assessed such items as "system for accepting foreigners," "context for entrepreneurship," "labor flexibility," "scientific and technical innovation environment (quality of research and development organizations and quality and quantity of scientists and engineers)," "regulations" and "domestic market (market size and consumers' quality)" as "relatively inferior."



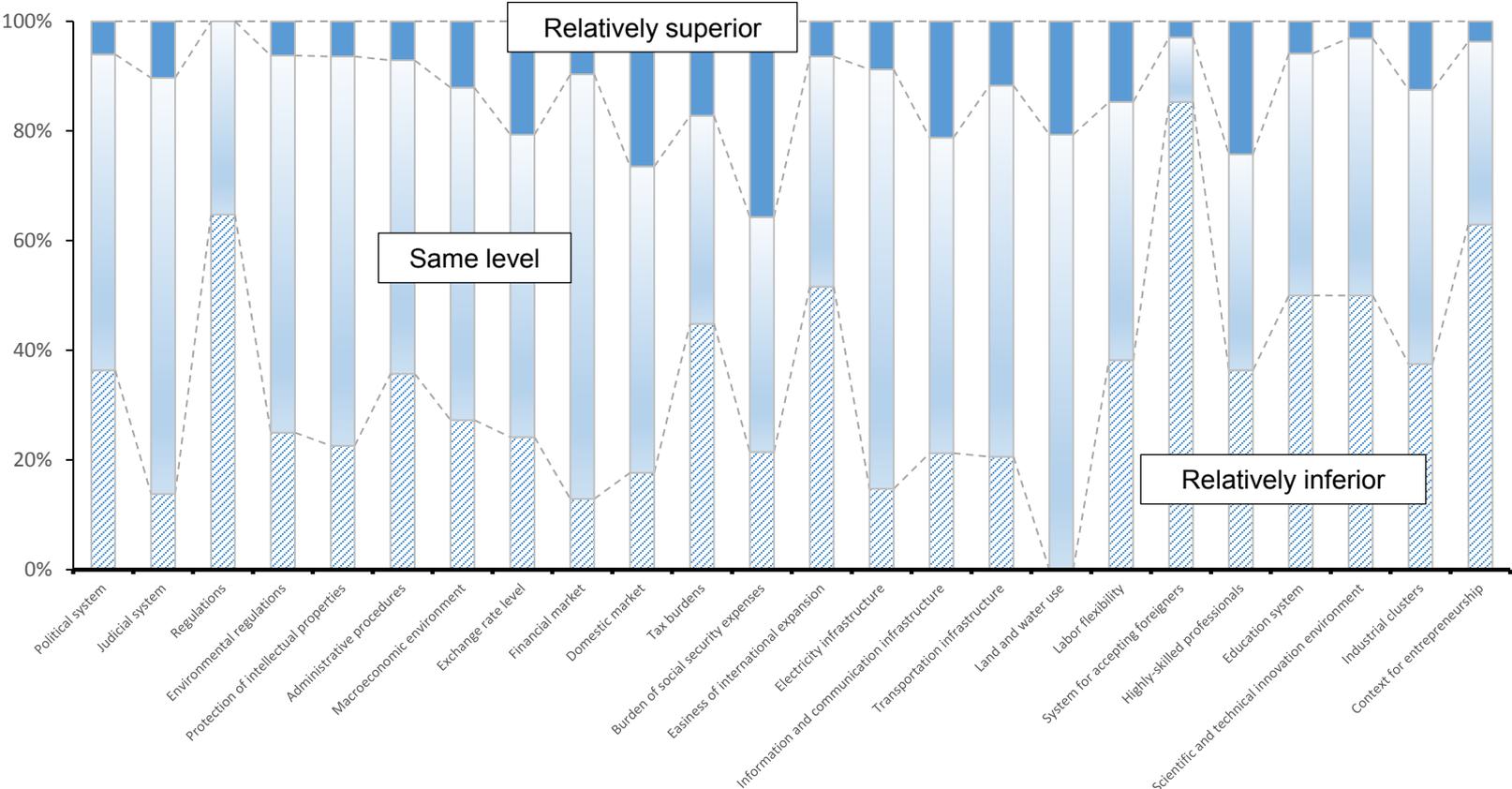
Note 1: "Environmental regulations" refers to the assessment as to whether the strictness of global warming countermeasures and regulation for location, etc. is excessively restricting business implementations.

Note 2: "Easiness of international expansion" refers to the assessment as to the status of concluding free trade agreements (FTAs) and how much such factors as tariff and foreign investment restrictions have been eased.

3. Assessment of Japan's Business Environment

3-2-2 One-on-One Assessment of Japan's Business Environment(Comparison with Germany)

➤ When compared with Germany, Japan is judged to have a similar level of competitiveness in many items. On the other hand, many respondents assessed “system for accepting foreigners” and “regulations,” etc. as “relatively inferior.”



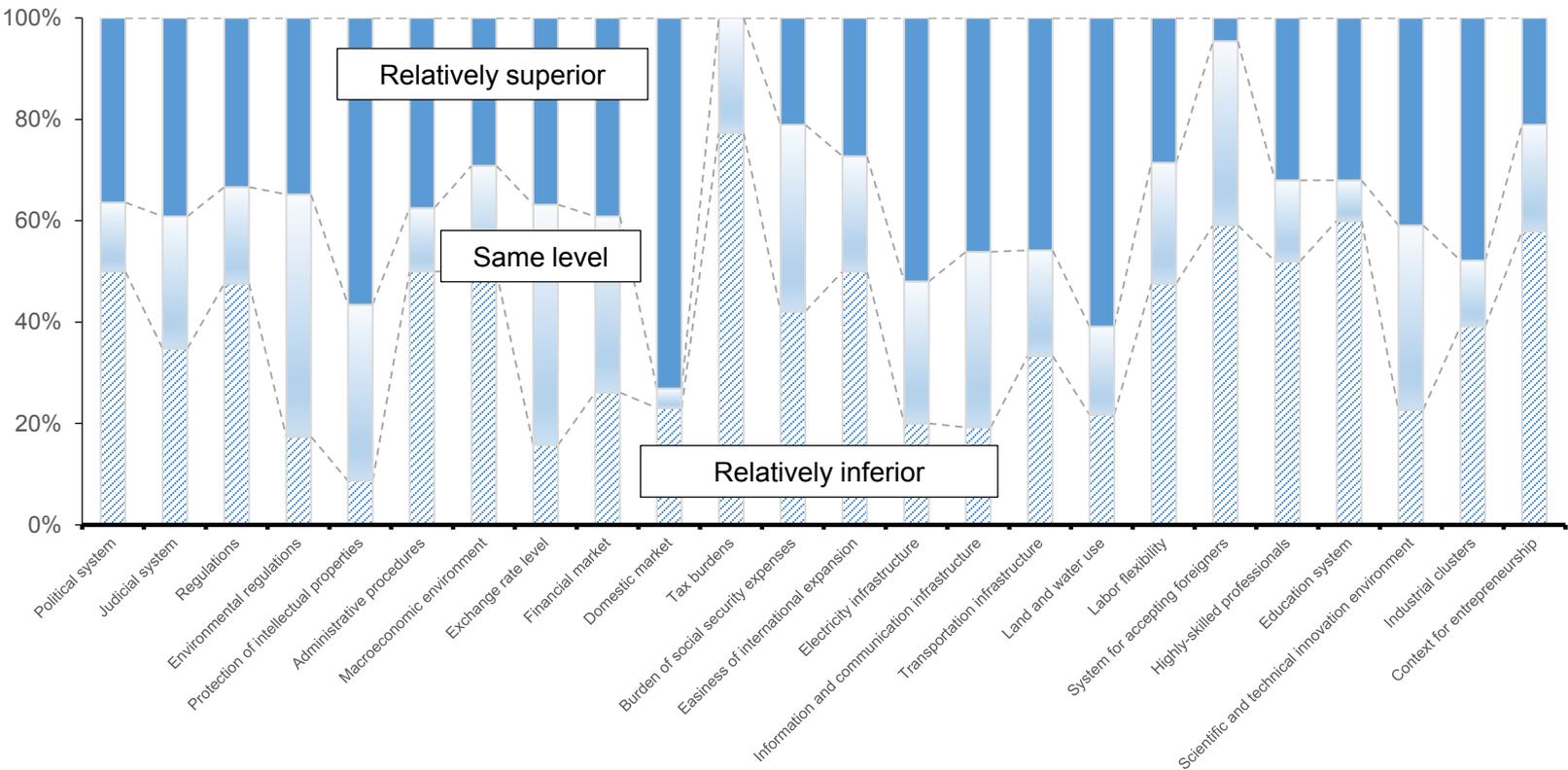
Note 1: “Environmental regulations” refers to the assessment as to whether the strictness of global warming countermeasures and regulation for location, etc. is excessively restricting business implementations.

Note 2: “Easiness of international expansion” refers to the assessment as to the status of concluding free trade agreements (FTAs) and how much such factors as tariff and foreign investment restrictions have been eased.

3. Assessment of Japan's Business Environment

3-2-3 One-on-One Assessment of Japan's Business Environment (Comparison with ASEAN Countries)

➤ When compared with the ASEAN countries, Japan is understood to have competitive advantages in many items including “domestic market (market size and consumers’ quality),” “land and water use (difficulty in finding locations for stores and plants, access to water, etc.)” and “protection of intellectual properties.” On the other hand, respondents assessed “tax burdens,” “education system,” “system for accepting foreigners” and other items as relatively inferior.



Note 1: ASEAN countries refer to the ten countries comprising Indonesia, Cambodia, Singapore, Thailand, the Philippines, Brunei, Vietnam, Malaysia, Myanmar and Laos.
 Note 2: “Environmental regulations” refers to the assessment as to whether the strictness of global warming countermeasures and regulation for location, etc. is excessively restricting business implementations.
 Note 3: “Easiness of international expansion” refers to the assessment as to the status of concluding free trade agreements (FTAs) and how much such factors as tariff and foreign investment restrictions have been eased.

3-3 Business Environment Reforms Necessary for Strengthening Competitiveness

- With regard to business environment reforms necessary for strengthening companies' competitiveness, many respondents made comments about tax burdens (30.6%), regulations (28.5%) and labor flexibility (18.6%).

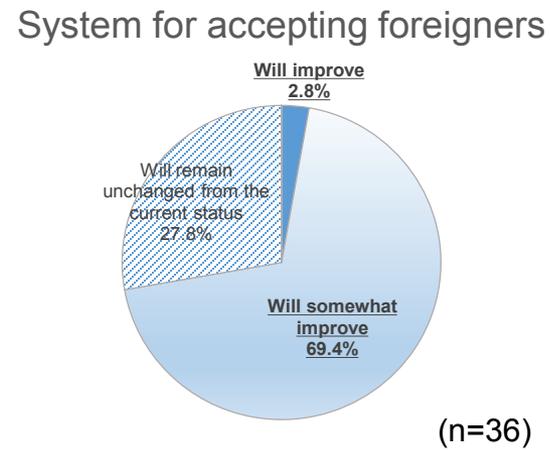
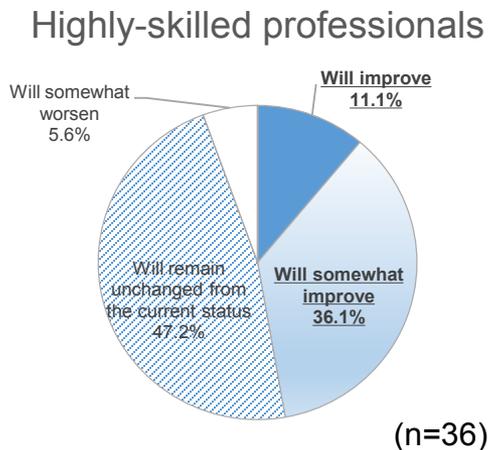
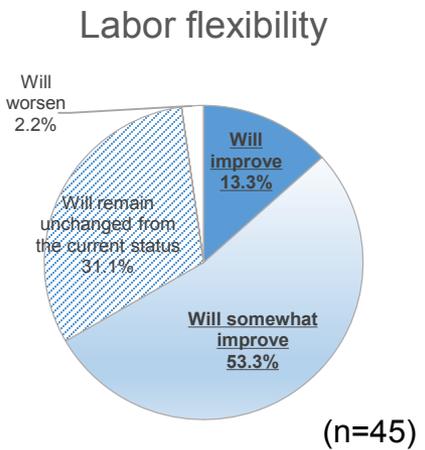
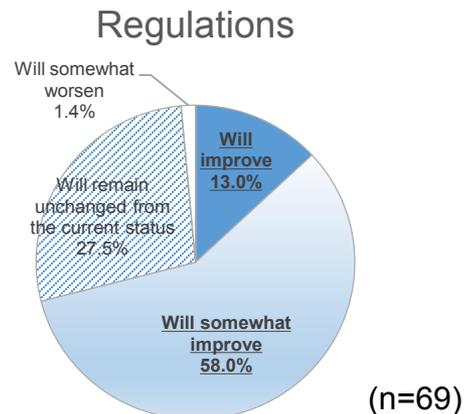
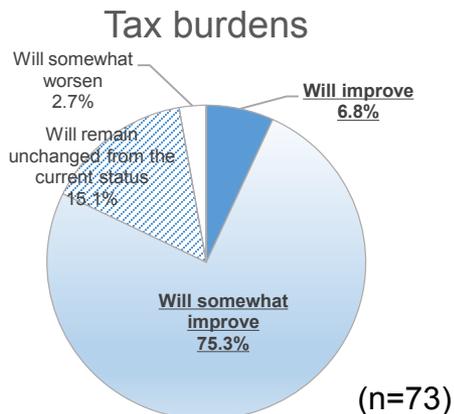
Business Environment Reforms Necessary for Strengthening Competitiveness		Examples of Specific Reform Ideas			
Tax burdens	30.6%	Tax burdens	<ul style="list-style-type: none"> ✓ Aim to realize effective corporate tax rate of 25%, which is comparable with that of neighboring countries in Asia ✓ Maintain and expand the research and development tax relief system, etc. ✓ Establish an international taxation system that takes into account enhancing competitiveness and reducing administrative burdens of companies 		
Regulations	28.5%		Regulations	<ul style="list-style-type: none"> ✓ Relax regulations relating to hydrogen infrastructure (such as permission of filling by drivers at hydrogen stations) ✓ Revise the Radio Act for wireless transmission in response to IoT (bandwidth improvement, increase of the numbers of channels, etc.) ✓ Review excessive delegation of authority to municipalities ✓ Establish regulations assuming that machines and devices drive vehicles in place of humans (automatic driving) 	
Labor flexibility	18.6%	Labor		<ul style="list-style-type: none"> ✓ Establish legal systems that should contribute to reforming the way of working (including expansion of discretionary working systems) ✓ Create an environment where a variety of workers including females and elderly people find it easier to work ✓ Establish systems to support employment flexibility including re-employment support and the safety net expansion. 	
Highly-skilled professionals	14.9%			Highly-skilled professionals	<ul style="list-style-type: none"> ✓ Make national efforts to enhance worker skills, like the Meister (master craftsman) system of Germany, and secure workplaces for them ✓ Organize and arrange university education and vocational college education (arrangement and integration of universities and enhancement of vocational education) ✓ Make further focuses on practical English education ✓ Enhance the system to invite and accept students and researchers from abroad
System for accepting foreigners	14.9%				Foreigners
Education system	12.8%				
Scientific and technical innovation environment	11.2%				
Electricity infrastructure	10.3%				
Domestic market (market size and consumers' quality)	10.3%				
Macroeconomic environment	9.5%				
Easiness of international expansion	9.5%				
Exchange rate level	9.1%				
(n=242)					

Note 1: Respondents are allowed to select up to five items. The table above indicates the top 12 items from the response results.

Note 2: Highly-skilled professionals refer to the available quantity of what is called highly-skilled professionals and highly-skilled workers.

3-4 Outlook of Reform Results in Three Years

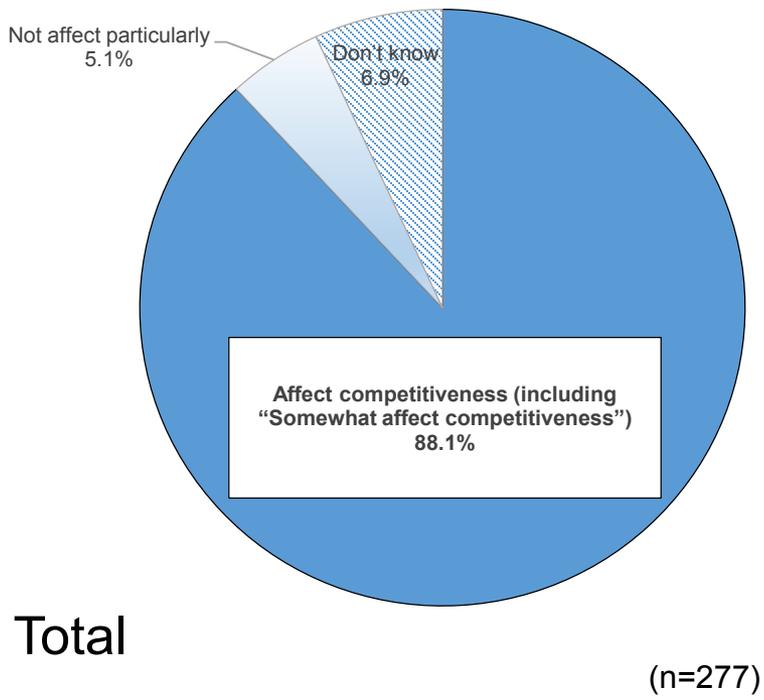
➤ With regard to business environment reforms necessary for strengthening companies' competitiveness, many respondents answered that the outlook of the top 5 items in three years "will somewhat improve" except for "highly-skilled professionals."



4. Use of Next-Generation Technologies, Etc.

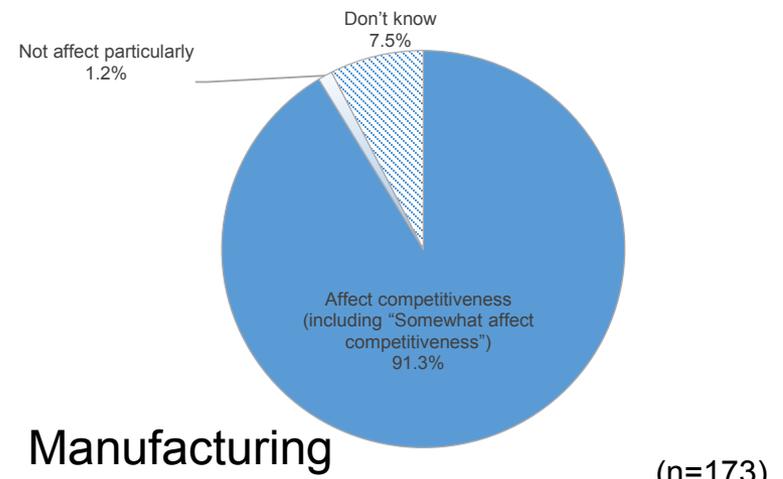
4-1 Understanding of Current Status

➤ Nearly 90% of the respondents believe that use of IoT and big data, etc. will affect their own competitiveness.



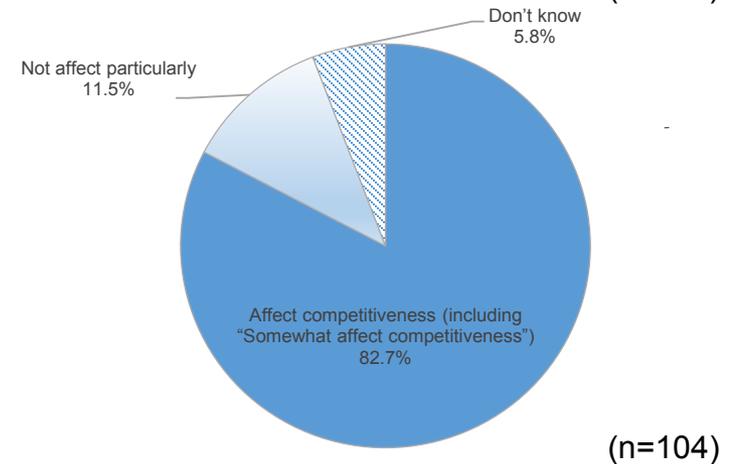
Total

(n=277)



Manufacturing

(n=173)



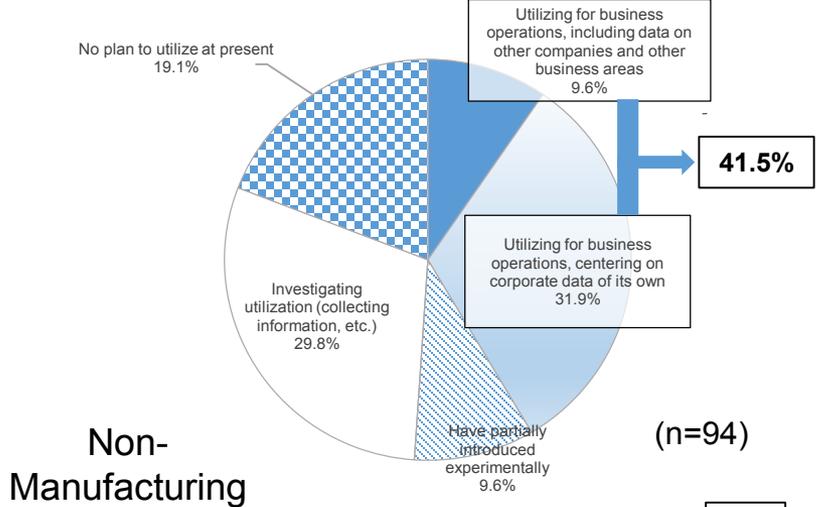
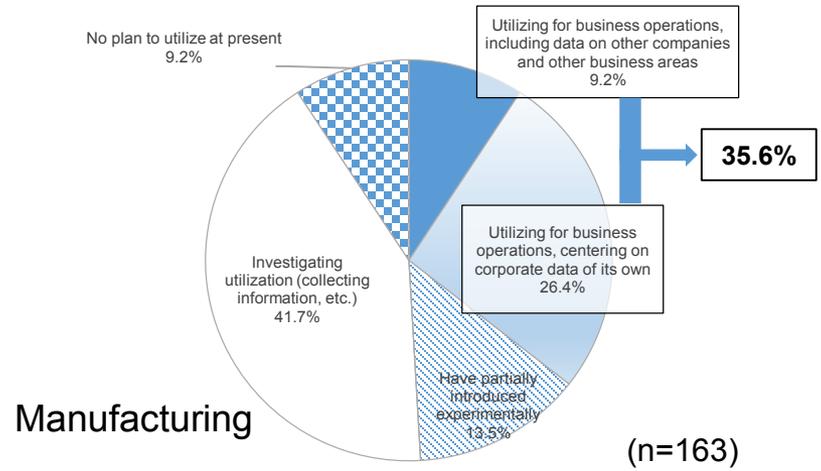
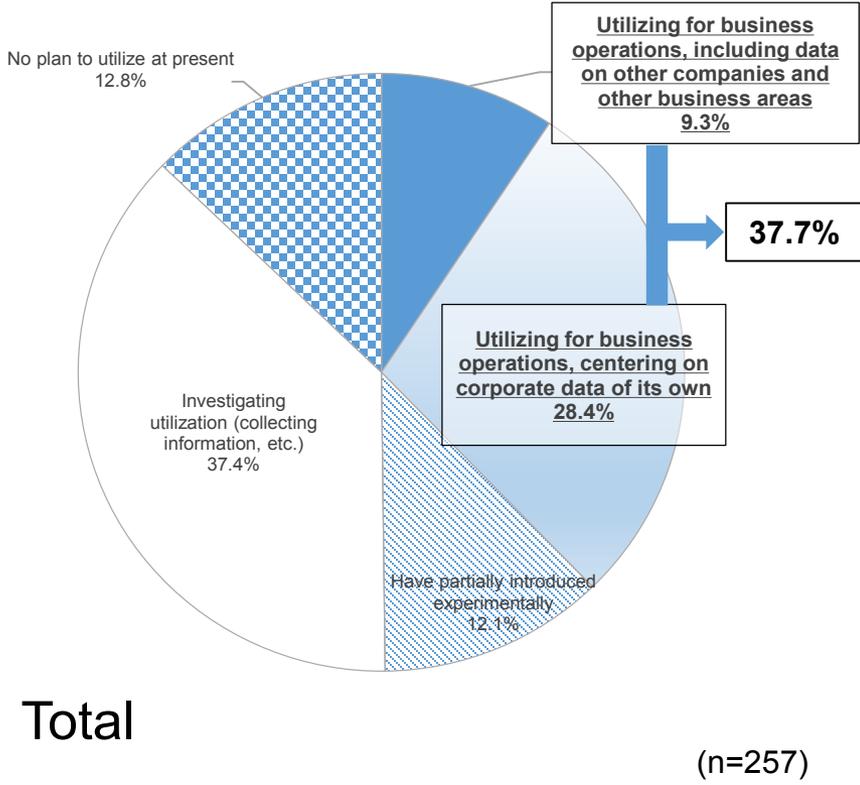
Non-manufacturing

(n=104)

4. Use of Next-Generation Technologies, Etc.

4-2 Current Status of Use of IoT and Big Data

➤ Only approximately 40% of the respondents actually utilize IoT and big data in their business operations. However, the figure increases to nearly 90% when including “have partially introduced experimentally” and “Investigating utilization.”



Note: Responses of “don’t know” have been excluded from the compilation.

4. Use of Next-Generation Technologies, Etc.

4-3 Specific Ways of Use

- Among respondents utilizing IoT and big data, many cited “marketing and customer relationship management,” “product and service development” and “production” as specific application areas.
- Among manufacturing companies, the application areas were “production,” “marketing and customer relationship management” and “product and service development” in a decreasing order. Among non-manufacturing companies, “marketing and customer relationship management” came first, followed by “product and service development” and “sales.”

Total (n=223)		Manufacturing (n=147)		Non-manufacturing (n=66)		
1	Marketing and customer relationship management	58.7%	Production	66.0%	Marketing and customer relationship management	65.8%
2	Product and service development	53.4%	Marketing and customer relationship management	55.1%	Product and service development	53.9%
3	Production	48.4%	Product and service development	53.1%	Sales	40.8%
4	Sales	37.7%	Maintenance and after-sales service	38.1%	Maintenance and after-sales service	34.2%
5	Maintenance and after-sales service	36.8%	Sales	36.1%	Business judgment and decision-making	25.0%
6	Logistics	23.3%	Logistics	28.6%	Production	14.5%
7	Business judgment and decision-making	22.0%	Purchase and procurement	21.1%	Logistics	13.2%
8	Purchase and procurement	17.9%	Business judgment and decision-making	20.4%	Purchase and procurement	11.8%
9	Finance and accounting	10.8%	Finance and accounting	12.2%	Finance and accounting	7.9%

Note 1: This question was for the companies that responded either “utilizing for business operations, including data on other companies and other business areas, “utilizing for business operations, centering on corporate data of its own” or “investigating utilization (collecting information, etc.)” to the preceding question.

Note 2: Multiple answers allowed

4. Use of Next-Generation Technologies, Etc.

4-3-1 Details of Use

Major Use Cases by Manufacturing Companies	Major Use Cases by Non-Manufacturing Companies
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Utilizing for business operations, including data on other companies and other business areas

- | | |
|--|--|
| <ul style="list-style-type: none"> ✓ Maintenance services based on the operation information transmitted from the sold devices [Machinery] ✓ One-to-one marketing through behavioral analysis of customers on the website [Chemicals] ✓ Projection of effectiveness of products in their research [Pharmaceuticals] | <ul style="list-style-type: none"> ✓ Establishment and provision of marketing-related systems, including fee simulation through analyzing big data [Information and communications] ✓ Economic analysis of a high level through utilizing macro data [Banking] |
|--|--|

Utilizing for business operations, centering on corporate data of its own

- | | |
|---|--|
| <ul style="list-style-type: none"> ✓ Sharing of production information and quality information, etc. at a real time by networking production facilities and operation bases, and enhancing operation efficiency, productivity and product quality through accumulating and analyzing a variety of data [Pulp and paper] ✓ Realization of date and time management of production and sales data by incorporating IT technologies [Textile and apparel] | <ul style="list-style-type: none"> ✓ Implementation of CRM based on customer information upon their entry and purchase information obtained from use of POS (point-of-sales) systems [Retail trade] ✓ Planning of existing products and development of new businesses and new products through utilizing the data obtained to date, such as customer attributes and questionnaire results [Real estate] ✓ Control of equipment and support for energy saving through use of HEMS [Construction] |
|---|--|

Have partially introduced experimentally

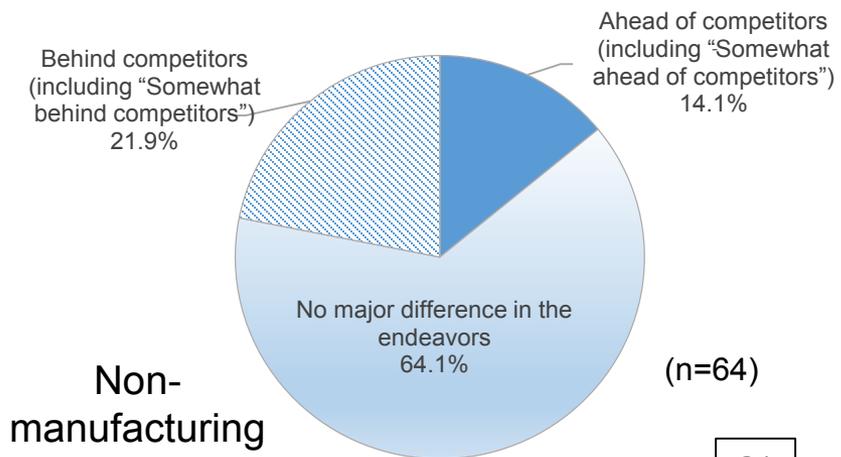
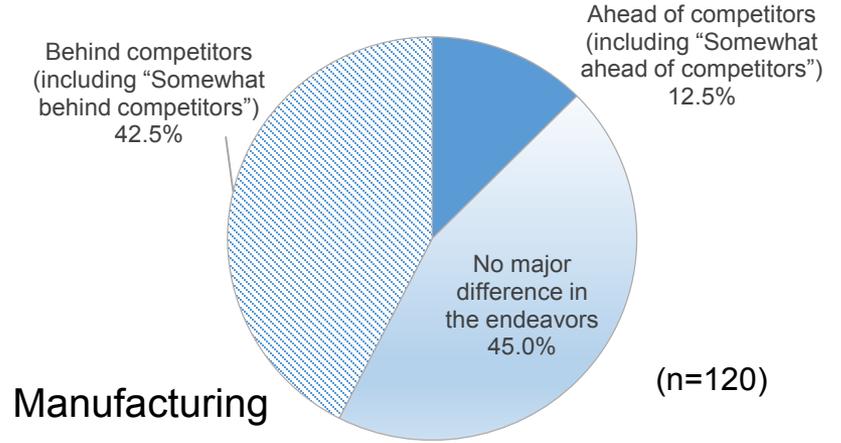
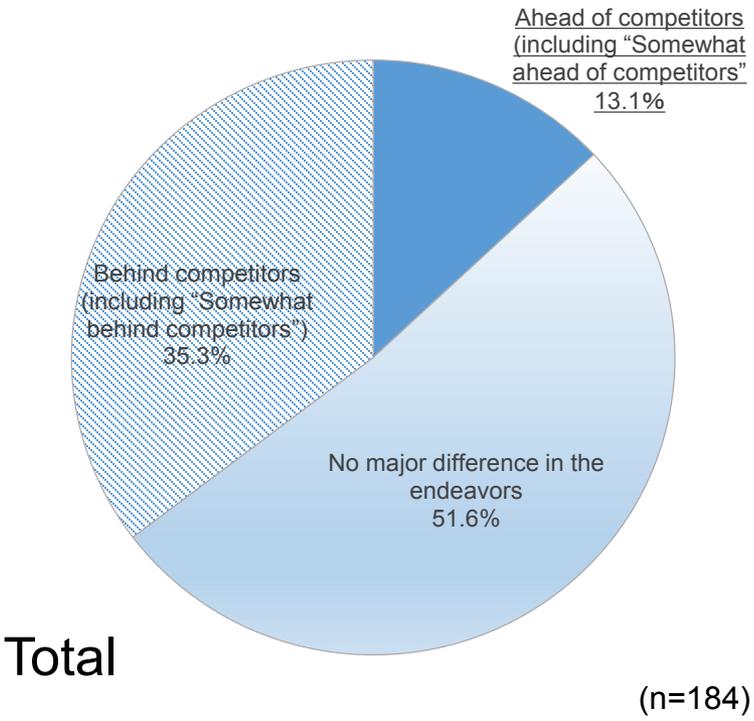
- | | |
|--|--|
| <ul style="list-style-type: none"> ✓ Containment of generation of defectives by detecting abnormality at plants, cost reduction for disposing defectives, enhancement of facility operation rate, environmental preservation, and exclusion of dependency on individual skills [Chemicals] ✓ Monitoring of operation status of products and using the results to judge when to conduct maintenance and how to optimize energy consumption [Fabricated metal products] ✓ Obtainment and analysis of sales data on products sold to end users at stores [Chemicals] | <ul style="list-style-type: none"> ✓ Collect on-board big data of cruising ships to create an environment for sharing information at ships and onshore facilities at a real time by utilizing the marine broadband framework. Intend to create a comprehensive ship operation support network that is useful for supporting entire operations, reducing environmental burdens, conducting economical ship operations, appropriately managing ship operations, and conducting sailor education of a high level, etc. [Marine transportation] ✓ Analysis of signs and causality of troubles [Construction] |
|--|--|

Investigating utilization (collecting information, etc.)

- | | |
|--|--|
| <ul style="list-style-type: none"> ✓ Installing sensors to pressing machines to detect abnormality before they break and prevent stoppage of the production lines in advance [Fabricated metal products] ✓ Collect data from a variety of processes in our plants, and work to optimize production conditions by using the massive data [Textile and apparel] ✓ Cost reduction for management through figures for products, including counting of inventories, shipment confirmation and management of work in progress, as well as for the work for such operations [Transportation equipment] | <ul style="list-style-type: none"> ✓ Proposal of optimal charge menus with analyses of customers' electric power consumption, and preparation of strategic menus based on actual data [Utilities] ✓ Survey and analysis that should help enhance the operational performance [Securities and futures commodity dealing] ✓ Development of new products by utilizing use data of properties for lease [Other financial institutions] ✓ Sales expansion by managing and utilizing detailed data, such as understanding the status of universal joints used at the production lines of a customer's steelworks [Wholesale trade] |
|--|--|

4-4 Comparison with Use Status of Competitors

- With regard to the use status of competitors that respondents identified in 2-1, only approximately 10% of respondents, either manufacturing or non-manufacturing companies, replied that they are “ahead of competitors (including “somewhat ahead of competitors”).”
- A little more than 40% of the manufacturing companies responded that they are behind competitors in the utilization.

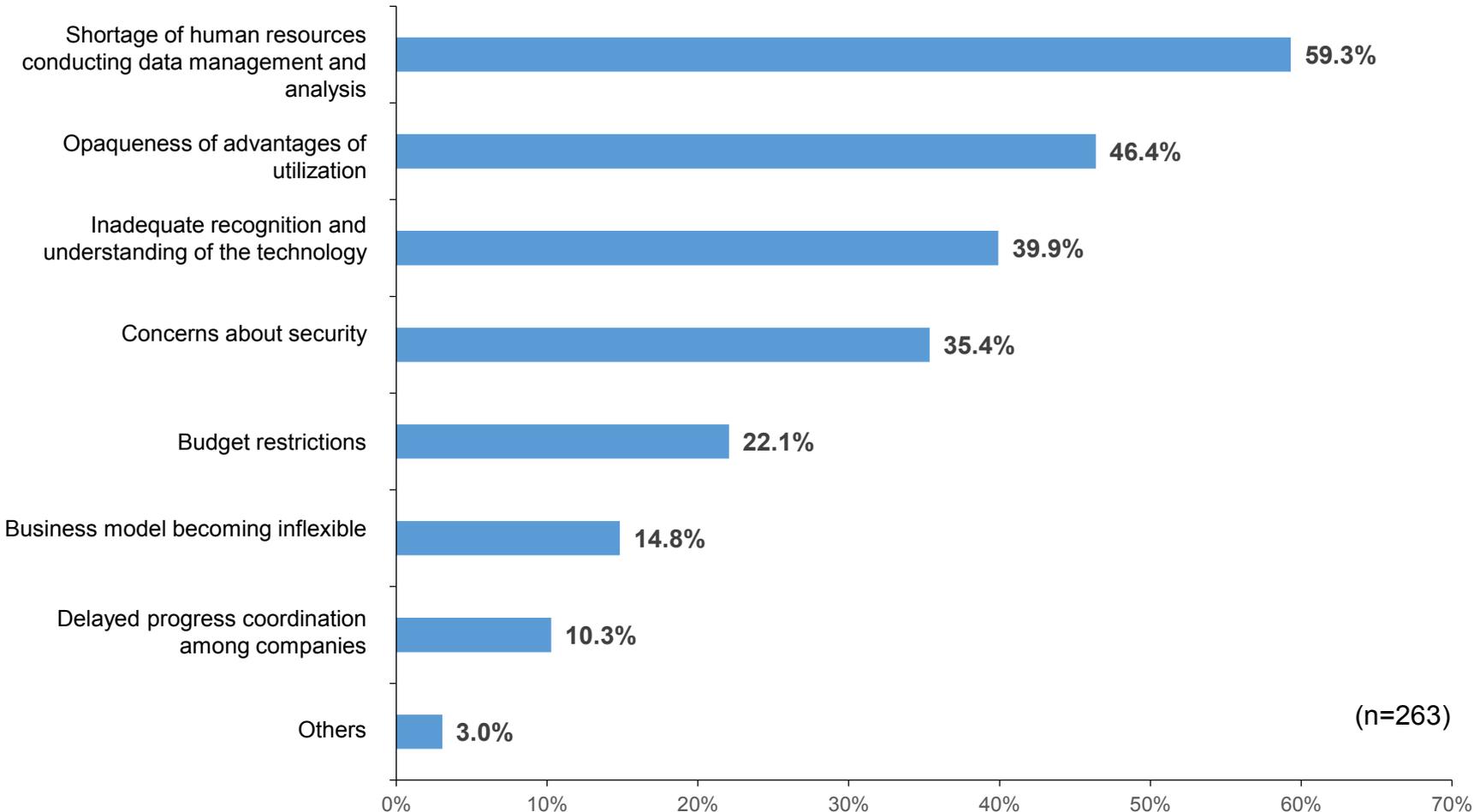


Note: Responses of “don't know” have been excluded from the compilation.

4. Use of Next-Generation Technologies, Etc.

4-5 Recognition of Issues to Address for Increased Use

➤ For utilizing IoT and big data, respondents showed a high degree of recognition of “shortage of human resources conducting data management and analysis,” “opaqueness of advantages of utilization,” “inadequate recognition and understanding of the technology” and “concerns about security” as issues to be tackled.

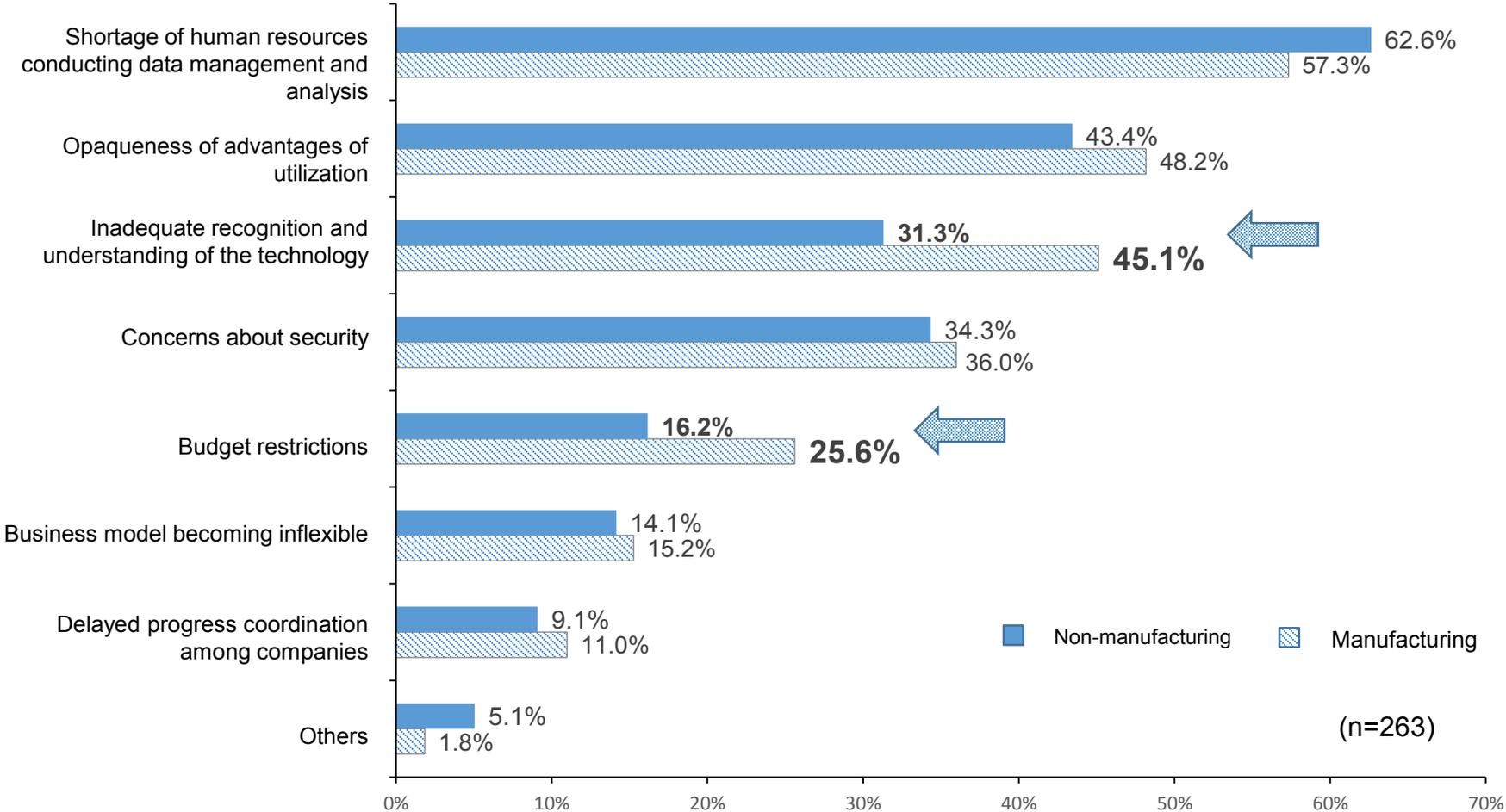


Note: Allowed to select up to three items

4. Use of Next-Generation Technologies, Etc.

4-6 Recognition of Issues to Address for Increased Use (Manufacturing and Non-Manufacturing)

➤ There was no large difference in the order of the issues between manufacturing and non-manufacturing companies. However, as the results show, the ratios of “inadequate recognition and understanding of the technology” and “budget restrictions” were higher by 10 points for manufacturing companies over non-manufacturing companies.

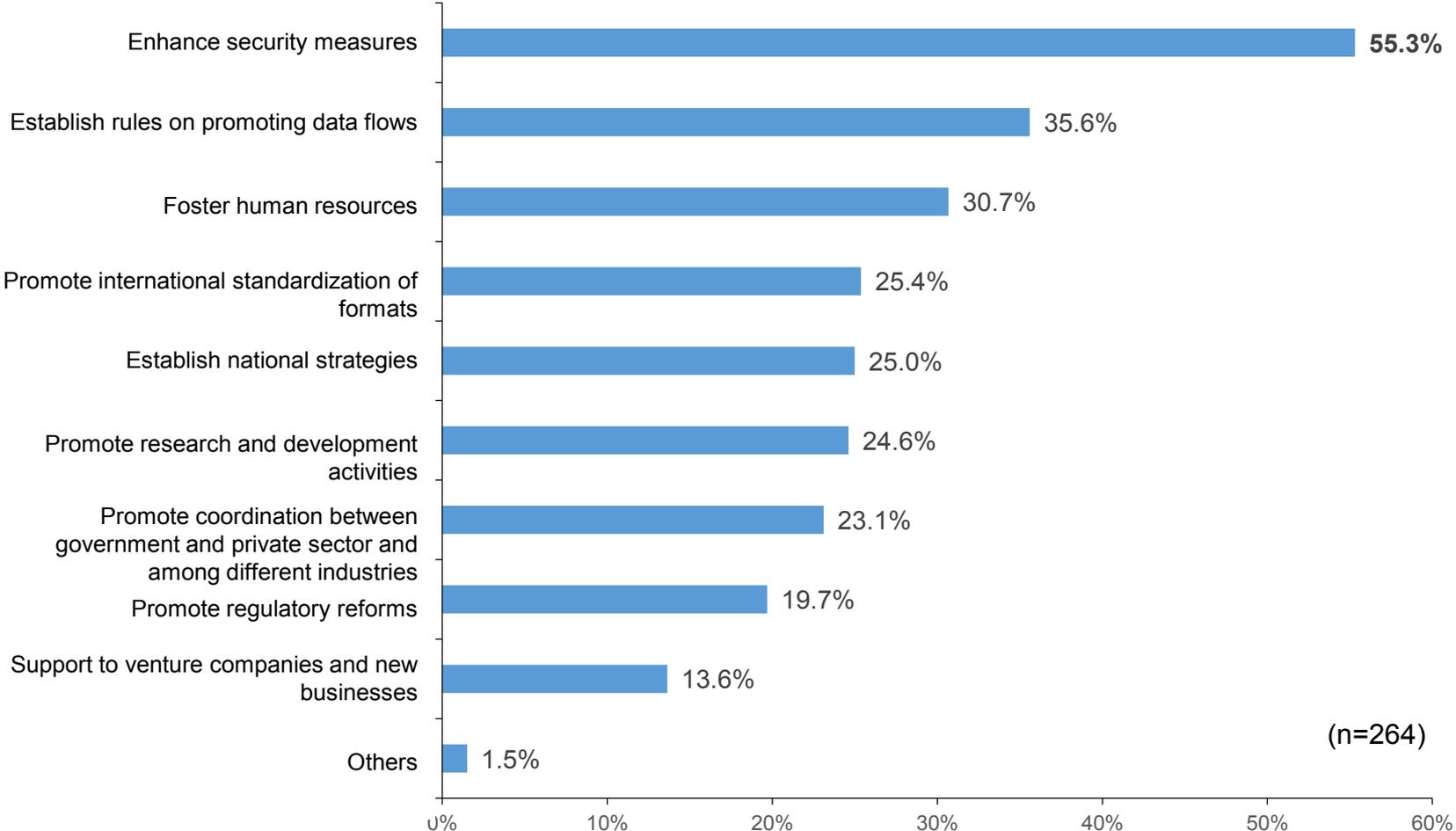


Note: Allowed to select up to three items

4. Use of Next-Generation Technologies, Etc.

4-7 Initiatives the Government is Requested to Take

➤ For the initiatives the government is requested to take so that IoT and big data will be widely used in business and living, the largest number of requests pertained to “enhance security measures,” followed by requests to “establish rules on promoting data flows” and “foster human resources.”

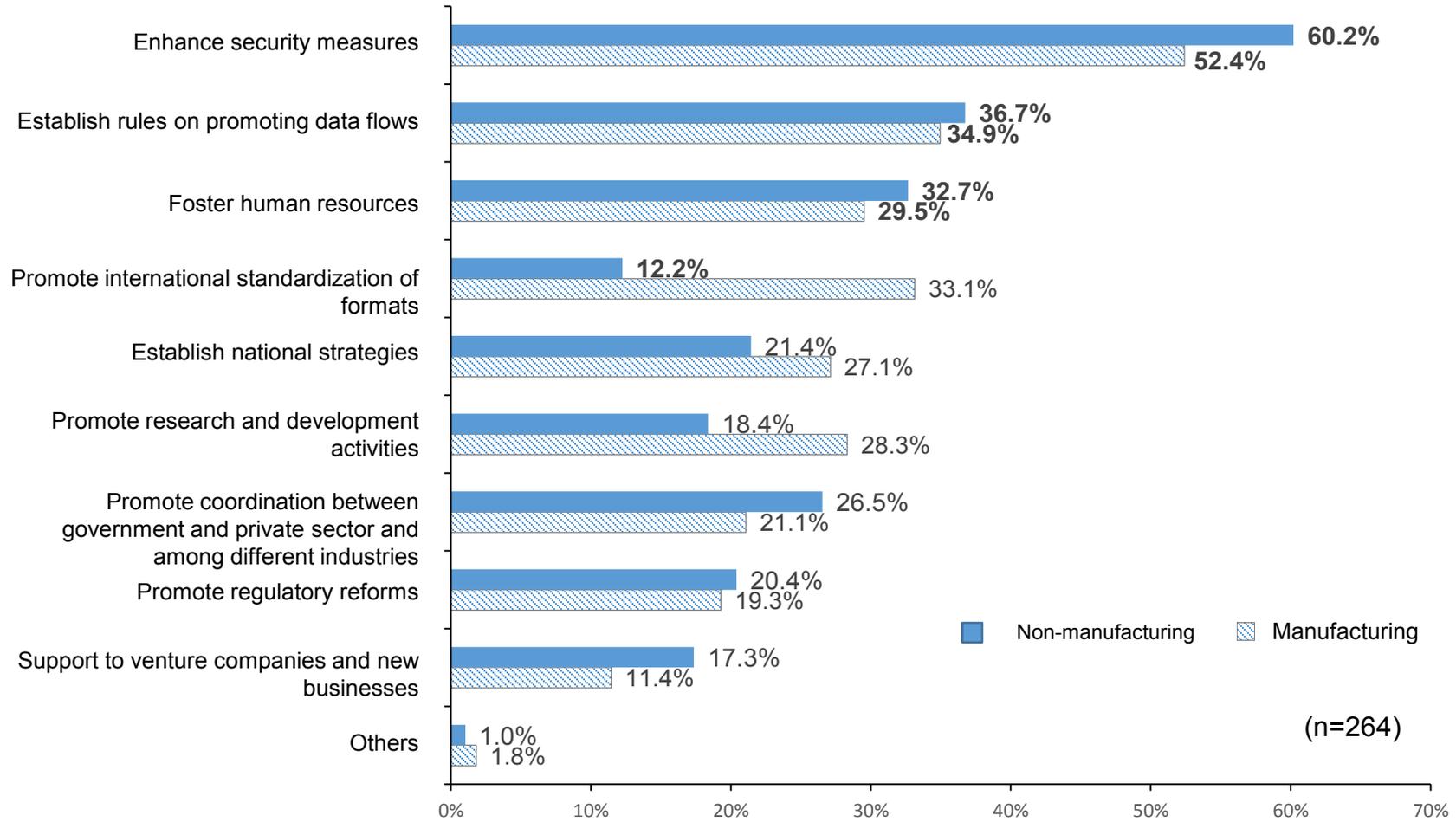


Note: Allowed to select up to three items

4. Use of Next-Generation Technologies, Etc.

4-8 Initiatives the Government is Requested to Take (Manufacturing and Non-Manufacturing)

➤ Many respondents, either manufacturing or non-manufacturing companies, requested for the government’s endeavors to “enhance security measures,” “establish rules on promoting data flows” and “foster human resources.” Among manufacturing companies, many voiced requests for the government to “promote international standardization of formats.”



Note: Allowed to select up to three items