

Next Generation Manufacturing Study

Manufacturing must continue to transform in order to remain competitive. Support systems must change as well to help organizations become world-class manufacturers. The *Next Generation Manufacturing Study* will provide a framework for understanding Next Generation Manufacturing (NGM) by identifying competitive performances and best management practices for achieving world-class status in the 21st Century.

Please complete this Study questionnaire to the best of your ability by March 15, 2009. You may participate either *anonymously* or *confidentially* (explanations below) based on the type of Study incentive you wish to receive.

You may complete the Study at this online site or download a [PDF](#) of this page and mail back your completed Study to NGMS, P.O. Box 4330, Dublin, OH 43016. If you need to share the Study with staff prior to completing online, download and print out a [PDF](#) and share copies.

Study Incentives:

NGM Performance Report — Confidential participation: To receive a customized NGM Performance Report that compares your responses to all Study respondents in the state, Study respondents across the nation, and Study respondents across the nation similar to your organization (e.g., annual revenues, number of employees), please complete the online questionnaire and then be sure to include contact information at the bottom of this page. Your responses will remain confidential — only the organizations conducting the Study for your state will have access to your specific responses. Data will be disseminated only in aggregate form; no company-specific responses will be released.

NGM Data Report — Anonymous participation: Please complete this questionnaire and then provide contact information at a separate website that will be presented to you once you submit your questionnaire. Although your identify may be known via promotional links to this Study site, no information will be connected to your responses. The Data Report includes statistics on all Study questions. Your responses will remain anonymous — no one will have access to your specific responses

Please read:

- If you wish to maintain a copy of your responses, print out a copy of the questionnaire prior to submitting.
- You must complete this questionnaire in one online session.
 - We estimate it will take approximately 30 minutes to complete.
 - If you exit the questionnaire site prior to submitting your responses, your responses will be lost.
 - If you require help from others in your firm to complete the Study, we suggest you download a PDF version, share the Study with staff, and then return and complete.
- When you have completed the questionnaire, click Submit at the bottom of this form.

Profile

1. Which of the following describes your organization?

(Please answer the remainder of the survey based on your selection below.)

1-1 Company

2 Division/unit of a larger company

2. Please indicate the state in which your organization is located?

(i.e., the state in which you would like your responses grouped)

_____ 66

3. Please indicate the primary product manufactured:

_____ 2

4. In which county is your organization located?

_____ 3

5. How many years has your organization been in operation?

_____ 4

6. What are your approximate annual revenues?

\$ _____ 5

7. How many full-time employees (and equivalents)?

_____ 6

8. What is the age of your organization's chief executive?

7-1 < 30

2 31-40

3 41-50

4 51-60

5 >60

9. Do you anticipate a planned succession of leadership in the next five years?

8-1 Yes

2 Maybe

3 No

Customer-Focused Innovation

Develop, make, and market new products and services that meet customers' needs at a pace faster than the competition

10. Rate the importance of customer-focused innovation to your organization's success over the next five years: (check one)

9-1 1=Not important

2 2

3 3

4 4

5 5=Highly important

11. Rate your organization's progress toward world-class customer-focused innovation: (check one)

10-1 1=No progress

2 2

3 3

4 4

5 5=World-class

_____ Input Measures _____

12. What percentage of your workforce is dedicated to new-product development/R&D? (check one)

- 11-1 <1% 2 1-5% 3 6-10% 4 >10%

13. What percentage of sales is invested into new-product development/R&D? (check one)

- 12-1 <1% 2 1-5% 3 6-10% 4 >10%

14. What best describes your measurement system for reviewing return from custom-focused innovation? (check one)

- 13-1 No measurement system per se or reviews
2 Ad hoc monitoring of basic measures and ad hoc reviews
3 Company-specific metrics monitored regularly by operations staff
4 Regular monitoring and review of company-specific metrics by CEO and senior staff
5 Regular monitoring and review of company-specific metrics by CEO and senior staff and transparency and clarity throughout the organization

Output Measures

15. How many new products as a percentage of total SKUs are launched annually (count only new SKUs, not a product iteration or line extension)? (check one)

- 14-1 <5% 2 5-10% 3 11-20% 4 >20%

16. Approximately what percentage of annual sales are derived from products introduced in the past three years? (check one)

- 15-1 <5% 2 5-25% 3 26-50% 4 >50%

17. What is your organization's best practice for innovation? (briefly describe)

16

Engaged People/Human-Capital Acquisition, Development and Retention

Secure a competitive performance advantage by having superior systems in place to recruit, hire, develop, and retain talent

18. Rate the importance of human-capital acquisition, development and retention to your organization's success over the next five years: (check one)

- 17-1 1=Not important 2 2 3 3 4 4 5 5=Highly important

19. Rate your organization's progress toward world-class human-capital acquisition, development and retention: (check one)

18-1 1=No progress 2 2 3 3 4 4 5 5=World-class

Input Measures

20. What percentage of employees regularly participate in empowered work teams (i.e., make decisions without supervisor approval)? (check one)

19-1 <25% 2 25-50% 3 51-75% 4 76-90% 5 >90%

21. How many formal training hours are devoted annually to each employee? (check one)

20-1 8 or fewer 2 9-20 3 21-40 4 >40

22. What percentage of employees are dedicated to assessing and upgrading your organization's talent pool?

21-1 <1% 2 1-5% 3 6-10% 4 >10%

23. What best describes your measurement system for reviewing return from human-capital acquisition, development and retention? (check one)

- 22-1 No measurement system per se or reviews
2 Ad hoc monitoring of basic measures and ad hoc reviews
3 Company-specific metrics monitored regularly by operations staff
4 Regular monitoring and review of company-specific metrics by CEO and senior staff
5 Regular monitoring and review of company-specific metrics by CEO and senior staff and transparency and clarity throughout the organization

Output Measures

24. What is your value-added per employee ([sales – cost of materials] ÷ number of employees)? (check one)

23-1 < \$75,000 2 \$75,000-\$125,000 3 \$125,001-\$175,000 4 > \$175,000

25. What is your organization's annual labor turnover rate (number of voluntary and involuntary separations ÷ typical staffing level)? (check one)

24-1 0% 2 0.1-1% 3 1.1-5% 4 5.1-10% 5 >10%

26. What is your organization's best practice for human-capital development? (briefly describe)

25

Superior Processes/Improvement Focus

Record annual productivity and quality gains that exceed the competition through a companywide commitment to continuous improvement

27. Rate the importance of process improvement to your organization's success over the next five years: (check one)

26-1 1=Not important 2 2 3 3 4 4 5 5=Highly important

28. Rate your organization's progress toward world-class processes and process improvement: (check one)

27-1 1=No progress 2 2 3 3 4 4 5 5=World-class

Input Measures

29. What percentage of your workforce has been fully engaged in your organization's specific improvement method/approach? (check one)

28-1 <26% 2 26-50% 3 51-75% 4 76-99% 5 100%

30. What is your organization's investment in capital equipment as a percentage of sales (three-year average)? (check one)

29-1 <1% 2 1-5% 3 6-10% 4 >10%

31. What best describes your measurement system for reviewing return from process improvements? (check one)

- 30-1 No measurement system per se or reviews
2 Ad hoc monitoring of basic measures and ad hoc reviews
3 Company-specific metrics monitored regularly by operations staff
4 Regular monitoring and review of company-specific metrics by CEO and senior staff
5 Regular monitoring and review of company-specific metrics by CEO and senior staff and transparency and clarity throughout the organization

Output Measures

32. What percentage of deliveries reach customers in perfect order (on time, high quality, to all customer specifications)? (check one)

31-1 <80% 2 80-90% 3 91-95% 4 96-98% 5 >98%

33. Describe your customers' satisfaction with your overall performance?

- 32-1 Threatens to pull business because we don't match the competition
2 Indifferent to buying our product or competitors
3 Preference for our products by virtue of price, quality, and delivery performance
4 Strong loyalty to our products due to ongoing trust in our organization's people and capabilities

34. By what percentage has productivity (i.e., value add) improved over the past three years (current year figure vs. three-years ago)? (check one)

- 33-1 <25% 2 26-50 3 51-75% 4 76-99% 5 >100%

35. What is your organization's best practice for process improvement? (briefly describe)

34

Supply-Chain Management & Collaboration

Develop and manage supply chains and partnerships that provide flexibility, response time, and delivery performance that exceeds the competition

36. Rate the importance of supply-chain management and collaboration to your organization's success over the next five years: (check one)

- 35-1 1=Not important 2 2 3 3 4 4 5 5=Highly important

37. Rate your organization's progress toward world-class supply-chain management and collaboration: (check one)

- 36-1 1=No progress 2 2 3 3 4 4 5 5=World-class

Input Measures

38. What percentage of your workforce is dedicated to supply-chain and partner development, management, and collaboration? (check one)

- 37-1 <1% 2 1-5% 3 6-10% 4 >10%

39. What is your organization's investment in information technologies (hardware and software) as a percentage of sales (three-year average)? (check one)

- 38-1 <1% 2 1-5% 3 6-10% 4 >10%

40. What best describes your measurement system for reviewing return from supply-chain management and collaboration? (check one)

- 39-1 No measurement system per se or reviews
2 Ad hoc monitoring of basic measures and ad hoc reviews
3 Company-specific metrics monitored regularly by operations staff
4 Regular monitoring and review of company-specific metrics by CEO and senior staff
5 Regular monitoring and review of company-specific metrics by CEO and senior staff and transparency and clarity throughout the organization

Output Measures

41. What best describes your end-to-end supply chain's ability to respond to unexpected customer demand for existing products? (check one)

- 67-1 Major delays communicating demand signal throughout chain and most suppliers struggle to efficiently meet demand
— standard delivery times dramatically exceeded and/or excessive inventory
2 Minor delays in communicating demand signal throughout chain and some suppliers struggle to efficiently meet demand
— standard delivery time exceeded and/or too much inventory
3 Efficient communication of demand signal throughout chain with most suppliers efficiently satisfying demand
— standard delivery times nearly met and right-sized inventories
4 Real-time communication of demand signal and entire supply chain flexible to demand spikes
— standard delivery times consistently met and just-in-time inventories

42. By approximately what percentage has total value of inventory throughout the supply chain for your primary product (furthest supplier to end customer) been reduced over the last three years? (check one)

- 40-1 <10% 2 10-25% 3 26-50% 4 >50%

43. How is your supply chain a competitive advantage in terms of flexibility and speed to the marketplace? (check one)

- 41-1 Suppliers regularly measured on cost, quality, and delivery performance
2 Suppliers regularly measured on cost, quality, and delivery performance as well as total acquisition cost
3 Suppliers regularly measured on cost, quality, and delivery performance as well as total acquisition cost and “soft” qualities (e.g., trust, flexibility)
4 Strategic suppliers and customers are active participants in our operations, continuous improvement, and product development efforts
5 Strategic suppliers and customers are active participants in our operations, continuous improvement, and product development efforts and participate fully in strategic planning and identifying and responding to new markets

44. What is your organization's best practice for supply-chain management and collaboration? (briefly describe)

42

Green/Sustainability

Design and implement waste and energy-use reductions at a level that provides superior cost performance and recognizable customer value

45. Rate the importance of Green/Sustainability to your organization's success over the next five years: (check one)

43-1 1=Not important 2 2 3 3 4 4 5 5=Highly important

46. Rate your organization's progress toward world-class Green/Sustainability: (check one)

44-1 1=No progress 2 2 3 3 4 4 5 5=World-class

Input Measures

47. What percentage of your workforce is dedicated to reducing energy, material, or emissions in your operations? (check one)

45-1 <1% 2 1-5% 3 6-10% 4 >10%

48. What percentage of the workforce is dedicated to Green products (product and packaging impact, green products and markets)? (check one)

46-1 <1% 2 1-5% 3 6-10% 4 >10%

49. What best describes your measurement system for reviewing return from Green/Sustainability efforts? (check one)

- 47-1 No measurement system per se or reviews
- 2 Ad hoc monitoring of basic measures and ad hoc reviews
- 3 Company-specific metrics monitored regularly by operations staff
- 4 Regular monitoring and review of company-specific metrics by CEO and senior staff
- 5 Regular monitoring and review of company-specific metrics by CEO and senior staff and transparency and clarity throughout the organization

Output Measures

50. What is your annual reduction in energy per unit of product output? (check one)

48-1 <10% 2 10-25% 3 26-50% 4 >50%

51. What is your annual reduction in usage of non-recycled material per unit of product output?

(check one)

- 49-1 <10% 2 10-25% 3 26-50% 4 >50%

52. What percentage of your products (by sales volume) are completely recyclable/reusable? (check one)

- 50-1 <50% 2 51-75% 3 76-89% 4 90-99% 5 100%

53. What is your organization's best practice for going Green?

(briefly describe)

51

Global Engagement

Secure business advantages by having people, partnerships, and systems in place capable of engaging global markets and talents better than the competition

54. Rate the importance of global engagement to your organization's success over the next five years: (check one)

- 52-1 1=Not important 2 2 3 3 4 4 5 5=Highly important

55. Rate your organization's progress toward becoming a world-class global player: (check one)

- 53-1 1=No progress 2 2 3 3 4 4 5 5=World-class

Input Measures

56. What percentage of your total direct workforce is located overseas and/or located domestically and responsible for global business activities?

(check one)

- 54-1 0% 2 1-25% 3 26-50% 4 >50%

57. What best describes your measurement system for reviewing return from global engagement? (check one)

- 55-1 No measurement system per se or reviews
2 Ad hoc monitoring of basic measures and ad hoc reviews
3 Company-specific metrics monitored regularly by operations staff
4 Regular monitoring and review of company-specific metrics by CEO and senior staff
5 Regular monitoring and review of company-specific metrics by CEO and senior staff and transparency and clarity throughout the organization

58. By what percentage has dollar volume of sales outside the United States changed over the past three years? (check one)

- 56-1 <25% 2 26-50% 3 51-100% 4 >100%

59. In how many countries outside of the United States does your organization operate or partner in production facilities? (check one)

- 57-1 0 2 1-5 3 6-10 4 >10

60. In how many countries outside of the United States does your organization have sales and/or distribution facilities? (check one)

- 58-1 0 2 1-5 3 6-10 4 >10

61. What is your organization's best practice for attaining global engagement? (briefly describe)

GOING FORWARD

62. To what extent does the region in your state have the support services, peer groups, training opportunities and resources available to support the following? (check one for each area)

Customer-focused innovation

- 60-1 1=No support 2 2 3 3 4 4 5 5=Full support

Engaged people/Human-capital acquisition, development and retention

- 61-1 1=No support 2 2 3 3 4 4 5 5=Full support

Superior processes/Improvement focus

- 62-1 1=No support 2 2 3 3 4 4 5 5=Full support

Supply-chain management and collaboration

- 63-1 1=No support 2 2 3 3 4 4 5 5=Full support

Green/Sustainability

- 64-1 1=No support 2 2 3 3 4 4 5 5=Full support

Global engagement

- 65-1 1=No support 2 2 3 3 4 4 5 5=Full support

63. If you want a customized NGM Performance Report that compares your responses to all Study respondents as well as to Study respondents similar to your organization, please complete all the information below. (Note: If you want your responses to remain anonymous, provide contact information after submitting this survey, and you will receive a non-customized Data Report of Study statistics.)

Name _____
Title _____
Company _____
Address _____
City, State, ZIP _____
Email _____

SUBMIT