BALDRIGE
Performance Excellence Program

Green Gateway Case Study

manufacturing
service
small business
nonprofit
government

2018

#Baldrige
www.nist.gov/baldrige

Baldrige Performance Excellence Program

National Institute of Standards and Technology (NIST) • United States Department of Commerce

July 2018

To obtain Baldrige Program products and services, contact
Baldrige Performance Excellence Program
Administration Building, Room A600
100 Bureau Drive, Stop 1020
Gaithersburg, MD 20899-1020

Telephone: (301) 975-2036
Fax: (301) 948-3716
E-mail: baldrige@nist.gov
Web: **https://www.nist.gov/baldrige**

The Green Gateway Case Study is a fictitious Baldrige Award application prepared for use in the 2018 Malcolm Baldrige National Quality Award Examiner Preparation Course. The fictitious case study organization is a manufacturer of medium-size gas and diesel-power lawn tractors. The case study illustrates the format and general content of an award application. However, since the case study serves primarily as a tool for training examiners to evaluate organizations against the *2017–2018 Baldrige Excellence Framework* and its Criteria for Performance Excellence, it may not address all Criteria requirements or demonstrate role-model responses in all Criteria areas. Please refer to the Green Gateway Feedback Report to learn how the organization scored and to see its strengths and opportunities for improvement.

This case study is a work of fiction, created and produced for the sole purpose of training regarding the use of the Baldrige Excellence Framework. There is no connection between the fictitious Green Gateway and any other organization, named either Green Gateway or otherwise. Any resemblance to any specific organization is purely coincidental. The names of several national and government organizations are included to promote the realism of the case study as a training tool, but all data and content about them have been fictionalized, as appropriate; all other organizations cited in the case study are fictitious or have been fictionalized.

The Baldrige Program welcomes your comments on this case study and other Baldrige products and services. Please direct your comments to the address above.

NIST, an agency of the U.S. Department of Commerce, manages the Baldrige Program. NIST has a 100-plus-year track record of serving U.S. industry, science, and the public with the mission to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life. NIST carries out its mission in three cooperative programs, including the Baldrige Program. The other two are the NIST laboratories, conducting research that advances the nation's technology infrastructure and is needed by U.S. industry to continually improve products and services; and the Hollings Manufacturing Extension Partnership, a nationwide network of local centers offering technical and business assistance to small manufacturers.

Suggested citation: Baldrige Performance Excellence Program. 2018. *2018 Baldrige Case Study: Green Gateway*. Gaithersburg, MD: U.S. Department of Commerce, National Institute of Standards and Technology. https://www.nist.gov/baldrige.

CONTENTS

2018 ELIGIBILITY CERTIFICATION FORM

1. Your Organization

Official name	Green Gateway (GG)
Other name	
Prior name	*(if changed within the past 5 years)*

Headquarters address:
Southwest Industrial Area
Rte 1804
Kinston, NC 28501

2. Highest-Ranking Official

☒ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.

Name	Jack C. Paul
Job title	Plant Manager
E-mail	jcpaul@greengateway.com
Telephone	252-555-0000
Fax	252-555-0100

Address: ☒ Same as above

3. Eligibility Contact Point

Designate a person who can answer inquiries about your organization. Questions from your organization and requests from the Baldrige Program will be limited to this person and the alternate identified below.

☐ Mr. ☒ Mrs. ☐ Ms. ☐ Dr.

Name	Deb Mafrans
Job title	Assistant Plant Manager
E-mail	dmafrans@greengateway.com
Telephone	252-555-0030
Fax	252-555-0100

Address: ☒ Same as above

Overnight mailing address: ☐ Same as above *(Do not use a P.O. Box number.)*

4. Alternate Eligibility Contact Point

☒ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.

Name	Eric Kimzo
E-mail	ekimzo@greengateway.com
Telephone	252-555-0220
Fax	252-555-0100

5. Application History

a. Has your organization previously submitted an eligibility certification package?

☒ Yes. *Indicate the year(s). Also indicate the organization's name at that time, if different.*

Year(s)	2017
Name(s)	Green Gateway

☐ No

☐ Don't know

b. Has your organization ever received the Malcolm Baldrige National Quality Award®?

☐ Yes.

Did your organization receive the award in 2011 (the year you submitted award-winning application) or earlier?

☐ Yes. *Your organization is eligible to apply for the award.*

☐ No. *If your organization received an award between 2012 and 2016, it is eligible to apply for feedback only. Contact the Baldrige Program at (877) 237-9064, option 3, if you have questions.*

☒ No

c. Has your organization participated in a regional/state/local or sector-specific Baldrige-based award process?

☒ Yes. Years: 2015, 2016

☐ No

d. Is your organization submitting additional materials (i.e., a completed Organizational Profile and two results measures for each of the five Criteria results items) as a means of establishing eligibility?

☒ No. *Proceed to question 6.*

☐ Yes. *In the box below, briefly explain the reason your organization chose this eligibility option. (This information will be shared with the Alliance leadership, without revealing your organization's identity.)*

6. Eligibility Determination

See also Is Your Organization Eligible? *(https://www.nist.gov/baldrige/baldrige-award/your-organization-eligible/).*

a. Is your organization a distinct organization or business unit headquartered in the United States?

☒ Yes ☐ No. *Briefly explain.*

b. Has your organization officially or legally existed for at least one year, or since April 1, 2017?

☒ Yes ☐ No

c. Can your organization respond to all seven Baldrige Criteria categories? Specifically, does your organization have processes and related results for its unique operations, products, and/or services? For example, does it have an independent leadership system to set and deploy its vision, values, strategy, and action plans? Does it have approaches for engaging customers and the workforce, as well as for tracking and using data on the effectiveness of these approaches?

☒ Yes ☐ No

d. If some of your organization's activities are performed outside the United States or its territories and your organization receives a site visit, will you make available sufficient personnel, documentation, and facilities in the United States or its territories to allow a full examination of your worldwide organization?

☒ Yes ☐ No ☐ Not applicable

e. If your organization receives an award, can it make sufficient personnel and documentation available to share its practices at the Quest for Excellence® Conference and at your organization's U.S. facilities?

☒ Yes ☐ No

If you checked "No" for 6a, 6b, 6c, 6d, or 6e, call the Baldrige Program at (877) 237-9064, option 3.

Questions for Subunits Only

f. If your organization is a subunit in education or health care, does your subunit provide direct teaching and instructional service to students or direct health care services to people?

☐ Yes. *Check your eligibility by reading* Is Your Organization Eligible? (https://www.nist.gov/baldrige/baldrige-award/your-organization-eligible). Then proceed to item 6k.

☒ No. *Continue with 6g.*

g. Does your subunit function independently and as a discrete entity, with substantial authority to make key administrative and operational decisions? (It may receive policy direction and oversight from the parent organization.)

☒ Yes. *Continue with 6h.*

☐ No. *Your subunit probably is not eligible to apply for the award. Call the Baldrige Program at (877) 237-9064, option 3.*

h. Does your subunit have a clear definition of "organization" reflected in its literature? Does it function as a business or operational entity, not as activities assembled to write an award application?

☒ Yes. *Continue with 6i.*

☐ No. *Your subunit probably is not eligible to apply for the award. Call the Baldrige Program at (877) 237-9064, option 3.*

i. Is your subunit in manufacturing or service?

☐ Yes. Does it have 500 or fewer employees? Is it separately incorporated and distinct from the parent organization's other subunits? Or was it independent before being acquired by the parent, and does it continue to operate independently under its own identity?

☐ Yes. *Your subunit is eligible in the small business category. Attach relevant portions of a supporting official document (e.g., articles of incorporation) to this form.* ***Proceed to item 6k.***

☒ No. *Continue with 6j.*

j. Is your subunit self-sufficient enough to be examined in all seven categories of the Criteria?

- Does it have its own senior leaders?
- Does it plan and implement its own strategy?
- Does it serve identifiable customers either inside or outside the organization?
- Is it responsible for measuring its performance and managing knowledge and information?
- Does it manage its own workforce?
- Does it manage its own work processes and other aspects of its operations?
- Can it report results related to these areas?

☒ Yes. ***Proceed to 6k (table below)***.

☐ No. *Your organization probably is not eligible to apply for the award. Call the Baldrige Program at (877) 237-9064, option 3.*

k. Does your organization meet one of the following conditions?

1. My organization has won the Baldrige Award (prior to 2013).	Yes ☐	Your organization is eligible.	No ☒	Continue with statement 2.
2. Between 2013 and 2017, my organization applied for the national Baldrige Award, and the total of the process and results band numbers assigned in the feedback report was 8 or higher.	Yes ☐	Your organization is eligible. Year: Total of band scores:	No ☒	Continue with statement 3.
3. Between 2013 and 2017, my organization applied for the national Baldrige Award and received a site visit. *Note: An organization that has participated in the Baldrige Site Visit Experience (BSVE) process is not eligible under this condition. Please do not check that your organization has received a site visit within the past 5 years if referring to the BSVE.*	Yes ☐	Your organization is eligible. Year of site visit:	No ☒	Continue with statement 4.
4. Between 2013 and 2017, my organization received the top award from an award program that is a member of the Alliance for Performance Excellence.	Yes ☐	Your organization is eligible. Award program: Year of top award:	No ☒	Continue with statement 5.
5. More than 25% of my organization's workforce is located outside the organization's home state.	Yes ☐	Your organization is eligible.	No ☒	Continue with statement 6.

6. There is no Alliance for Performance Excellence award program available for my organization.	Yes ☐	Your organization is eligible.	No ☒	Continue with statement 7.
7. In 2016 or 2017, my organization applied for the national Baldrige Award through the alternate method (option 8 below) and the total of the process and results bands assigned in the feedback report was 6 or higher.	Yes ☐	Your organization is eligible.	☒ No, my organization did not apply using this method. ☐ No, my organization applied using this method, but did NOT receive a total of 6 or higher.	Continue with statement 8. Your organization is not eligible. Call 877-237-9064, option 3, if you have questions.
8. My organization will submit additional eligibility screening materials (i.e., a complete Organizational Profile and two results measures for each of the five Criteria results items). The Baldrige Program will use the materials to determine if my organization is eligible to apply for the award this year (as described in the fact sheet at Eligibility FAQs.	Yes ☒	The Baldrige Program will review the materials and contact your ECP after determining your eligibility.	No ☐	Call 877-237-9064, option 3, if you have questions.

7. Award Category

a. Award category *(Check one.)*

Your education or health care organization may use the Business/Nonprofit Criteria and apply in the service, small business, or nonprofit category. However, you probably will find the sector-specific (Education or Health Care) Criteria more appropriate.

For-Profit	Nonprofit
☒ Manufacturing	☐ Nonprofit
☐ Service	☐ Education
☐ Small business (≤ 500 employees)	☐ Health Care
☐ Education	
☐ Health Care	

b. Industrial classifications. In table below, list up to three of the most descriptive NAICS codes for your organization (see NAICS list included at the end of this document). *These are used to identify your organizational functions and to assign applications to examiners.*

3524	3331	3339

8. Organizational Structure

a. For the preceding fiscal year, the organization had

- ☐ up to $1 million
- ☐ $1.1 million–$10 million
- ☐ $10.1 million–$100 million
- ☒ $100.1 million–$500 million
- ☐ $500.1 million–$1 billion
- ☐ more than $1 billion

in

- ☒ sales
- ☐ revenue
- ☐ budget

b. Attach a line-and-box organization chart that includes divisions or unit levels. In each box, include the name of the unit or division and the name of its leader. Do not use shading or color in the boxes.

☒ The chart is attached.

c. The organization is _____ a larger parent or system. *(Check all that apply.)*

☐ not a subunit of (*See item 6 above.*)

- ☐ a subsidiary of
- ☐ controlled by
- ☐ administered by
- ☐ owned by
- ☒ a division of
- ☐ a unit of
- ☐ a school of
- ☐ other _____

Parent organization	Gateway Estates Lawn Equipment Company (Gateway)	Address	8385 Greenway Avenue St. Louis, MO 63166-8385
Total number of paid employees*	2,340		
Highest-ranking official	J. R. Mueller	Job title	CEO
Telephone	314-555-9898		

Paid employees include permanent, part-time, temporary, and telecommuting employees, as well as contract employees **supervised by the organization. Include employees of subunits but not of joint ventures.*

Attach a line-and-box organization chart(s) showing your organization's relationship to the parent's highest management level, including all intervening levels. In each box, include the name of the unit or division and its leader. Do not use shading or color in the boxes.

☒ The chart is attached.

d. Considering the organization chart, briefly describe below how your organization relates to the parent and its other subunits in terms of products, services, and management structure.

The parent, Gateway, provides strategic direction and capital expense approval to GG, as well as oversight, which includes the evaluation of the GG Plant Manager. Gateway provides some global processes that must be maintained, including Gateway's Senior Leadership Team includes nine officers who deliver strategic direction and capital expense approval to all divisions, including ISO 9001 and 14001 certifications.

e. Provide the title and date of an official document (e.g., an annual report, organizational literature, a press release) that clearly defines your organization as a discrete entity.

Title: Gateway Estate Lawn Equipment Co. 2017 Annual Report

Date: December 1, 2017

Attach a copy of relevant portions of the document. If you name a website as documentation, print and attach the relevant pages, providing the name only (not the URL) of the website.

☒ Relevant portions of the document are attached.

f. Briefly describe the major functions your parent or its other subunits provide to your organization, if appropriate. *Examples are strategic planning, business acquisition, research and development, facilities management, data gathering and analysis, human resource services, legal services, finance or accounting, sales/marketing, supply chain management, global expansion, information and knowledge management, education/training programs, information systems and technology services, curriculum and instruction, and academic program coordination/development.*

Invoices, design support, sales/marketing

9. Supplemental Sections

The organization has (a) a single performance system that supports all of its product and/or service lines and (b) products or services that are essentially similar in terms of customers/users, technology, workforce or employee types, and planning.

☒ Yes. *Proceed to item 10.*

☐ *Your organization may need to submit one or more supplemental sections with its application. Call the Baldrige Program at (877) 237-9064, option 3.*

10. Use of Cell Phones, Cordless Phones, and Voice-over-Internet Protocol (VoIP)

Do you authorize Baldrige examiners to use cell phones, cordless phones, and VoIP to discuss your application? *Your answer will not affect your organization's eligibility. Examiners will hold all your information in strict confidence and will discuss your application only with other assigned examiners and with Baldrige Program representatives as needed.*

☒ Yes ☐ No

11. Site Listing

You may attach or continue your site listing on a separate page as long as you include all the information requested here. You may group sites by function or location (city, state), as appropriate. Please include the total for **each column** (sites, employees/faculty/staff, volunteers, and products/services). If different sites are located on the same campus (e.g., medical building and acute care hospital), please indicate that in the "Sites" column. See the ABC HealthCare example below.

Please include a detailed listing showing all *your sites. If your organization receives a site visit, an examiner team will use this information for planning and conducting its visit. Although site visits are not conducted at facilities outside the United States or its territories, these facilities may be contacted by teleconference or videoconference.*

Example (ABC Healthcare)

	Sites (U.S. and Foreign) *List the city and the state or country.*	Workforce* *List the numbers at each site.* *Check one or more.* ☒ **Employees** ☐ **Faculty** ☐ **Staff**	Workforce* **Volunteers (no. or N/A)**	*List the % at each site, or use "N/A" (not applicable).* *Check one.* **% of** ☐ **Sales** ☒ **Revenue** ☐ **Budget**	Relevant Products, Services, and/or Technologies
	ABC Medical Center, Anytown, NY	1,232	147	77%	Admin. offices, inpatient care, ED, imaging services, lab
	ABC Hospital West, West Anytown, NY	255	78	14%	Inpatient services, ED, lab
	ABC Medical Group, Anytown, NY *Located on same campus as ABC Medical Center*	236	N/A	6%	Primary & specialty physician care
	ABC Imaging Center, West Anytown, NY	11	N/A	1%	Imaging services
	ABC Hospice Services, West Anytown, NY *Different location than ABC Hospital West and ABC Imaging Center*	94	89	1%	On- and off-site hospice services
	ABC Urgent Care, West Anytown, NY	8	N/A	1%	Outpatient emergency and urgent care services
Total	6	**1,836**	**314**	**100%**	

**"Workforce" refers to all people actively involved in accomplishing the work of your organization, including paid employees (e.g., permanent, part-time, temporary, and telecommuting employees, as well as contract employees supervised by the organization) and volunteers, as appropriate. The workforce includes team leaders, supervisors, and managers at all levels.*

Your Organization					
		Workforce* *List the numbers at each site.*		*List the % at each site, or use "N/A" (not applicable).*	
	Sites (U.S. and Foreign) *List the city and the state or country.*	*Check one or more.* ☒ **Employees** ☐ **Faculty** ☐ **Staff**	**Volunteers (no. or N/A)**	*Check one.* **% of** ☐ **Sales** ☒ **Revenue** ☐ **Budget**	**Relevant Products, Services, and/or Technologies**
	GG Facility, Kinston, NC	589	N/A	100%	Manufacturer of product. Major technologies include circuit testing, assembly, material analysis, in-process inspection, and final assembly
Total		**589**	**N/A**	**100%**	

**The term workforce refers to all people actively involved in accomplishing the work of an organization. The workforce includes paid employees (e.g., permanent, part-time, temporary, telecommuting, and contract employees supervised by the organization) and volunteers, as appropriate; it also includes team leaders, supervisors, and managers at all levels.*

12. Key Business/Organization Factors

List or briefly describe where necessary the following key business/organization factors (we recommend using bullets). Please be concise, but be as specific as possible. Provide full names of organizations (i.e., do not use acronyms). *The Baldrige Program uses this information to avoid conflicts of interest when assigning examiners to your application. Examiners also use this information in their evaluations.*

a. Main products and/or services and major markets served (local, regional, national, and international)

Medium-size gas and diesel-power lawn tractors. Major markets: North America independent dealers

b. Key competitors (those that constitute 5 percent or more of your competitors)

J.J. Place Inc., Majestic Corp., Mighty Mowers Inc.

c. Key customers/users (those that constitute 5 percent or more of your customers/users)

Dealers: commercial and homeowner

d. Key suppliers/partners (those that constitute 5 percent or more of your suppliers/partners)

Suppliers: Cultivars Engines, Core Tires, Earthmover, Furrows, Diatomaceous Earth
Partners: Hardiness and Edger Community College, Metamorphosis and Potent University, CEVA, NIST MEP

e. Financial auditor

Auditor and Auditor	Fiscal year (e.g., October 1–September 30)
	January 1–December 31

f. Parent organization (if your organization is a subunit).

Gateway Estates Lawn Equipment Company (Gateway)	

13. Nomination to the Board of Examiners

If your organization is eligible to apply for the Baldrige Award in 2018, you may nominate one senior member from your organization to the 2018 Board of Examiners.

Nominees are appointed for one year only. Nominees

- **must not have served previously on the Board of Examiners** and
- must be citizens of the United States, be located in the United States or its territories, and be employees of the applicant organization.

The program limits the number of examiners from any one organization. If your organization already has representatives on the board, nominating an additional person may affect their reappointment.

Board appointments provide a significant opportunity for your organization to learn about the Criteria and the evaluation process. The time commitment is also substantial: examiners commit to a minimum of 110 hours from April to December, including approximately 30–40 hours in April/May to complete self-study, two to three days in May to attend Examiner Preparation, and 90–130 hours from June through August to complete an Independent and Consensus Review. If requested by the program, examiners also participate in a Site Visit Review of approximately nine days. The nominee or the organization must cover travel and housing expenses incurred for Examiner Preparation.

☒ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.

R. J. Meyer	from our organization will serve on the 2018 Board of Examiners.
rjmeyer@greengateway.com	E-mail address

☒ I understand that the nominee or the organization will cover travel and hotel costs associated with participation in Examiner Preparation. I also understand that if my organization is determined to be ineligible to apply for the Baldrige Award in 2018, this examiner nomination will not be considered for the 2018 Board of Examiners.

14. Self-Certification and Signature

I state and attest the following:

(1) I have reviewed the information provided in this eligibility certification package.

(2) To the best of my knowledge,

- this package includes no untrue statement of a material fact, and
- no material fact has been omitted.

(3) Based on the information herein and the current eligibility requirements for the Malcolm Baldrige National Quality Award, my organization is eligible to apply.

(4) I understand that if the information is found not to support eligibility at any time during the 2018 award process, my organization will no longer receive consideration for the award and will receive only a feedback report.

Jack C. Paul	[Jack C. Paul]	2/15/18
Signature of highest-ranking official	Printed name	Date

15. Submission

To be considered for the 2018 award, your complete eligibility certification package *must be received no later than* February 22, 2018, to

Malcolm Baldrige National Quality Award
c/o ASQ—Baldrige Award Administration
600 North Plankinton Avenue
Milwaukee, WI 53203
(414) 298-8789, ext. 7205

Include proof of the mailing date. Send the package via

- a delivery service (e.g., Airborne Express, Federal Express, United Parcel Service, or the United States Postal Service [USPS] Express Mail) that automatically records the mailing date or
- the USPS (other than Express Mail), with a dated receipt from the post office.

16. Fee

Indicate your method of payment for the $400 eligibility certification fee.

☒ Check (enclosed)	☐ Money order (enclosed)	*Make payable to the **Malcolm Baldrige National Quality Award.***
☐ ACH payment	☐ Wire transfer	Checking ABA routing number:075-000-022 Checking account number: 182322730397

Before sending an ACH payment or wire transfer, notify the American Society for Quality (ASQ; [414] 298-8789, ext. 7205, or mbnqa@asq.org). Reference the Baldrige Award with your payment.

☐ Visa ☐ MasterCard ☐ American Express

Card number		Authorized signature	
Expiration date		Printed name	
Card billing address		Today's date	

W-9 Request: If you require an IRS Form W-9 (Request for Taxpayer Identification Number and Certification), contact ASQ at (414) 298-8789, ext. 7205.

2018 Eligibility Certification Form Checklist

Malcolm Baldrige National Quality Award

OMB Control No. 0693-0006
Expiration Date: 06/30/2019

1. Eligibility Certification Form*

- ☒ I have answered all questions completely.
- ☒ I have included a line-and-box organization chart showing all components of the organization and the name of each unit or division and its leader.
- ☒ The highest-ranking official has signed the form.

For Organizations Submitting Additional Eligibility Screening Materials (to meet the alternative eligibility condition no. 8 for question 6k; see the table on page E-4)

- ☐ I have enclosed a complete Organizational Profile.
- ☐ I have enclosed data for two results measures for each of the five Criteria results items.

For Subunits Only

- ☒ I have included a line-and-box organization chart(s) showing the subunit's relationship to the parent's highest management level, including all intervening levels.
- ☒ I have enclosed copies of relevant portions of an official document clearly defining the subunit as a discrete entity.

**Please do not staple the pages of this form.*

2. Fee

- ☒ I have indicated my method of payment for the nonrefundable $400 eligibility certification fee.
- ☒ If paying by check or money order, I have made it payable to the **Malcolm Baldrige National Quality Award** and included it in the eligibility certification package.

3. Submission and Baldrige Examiner Nomination

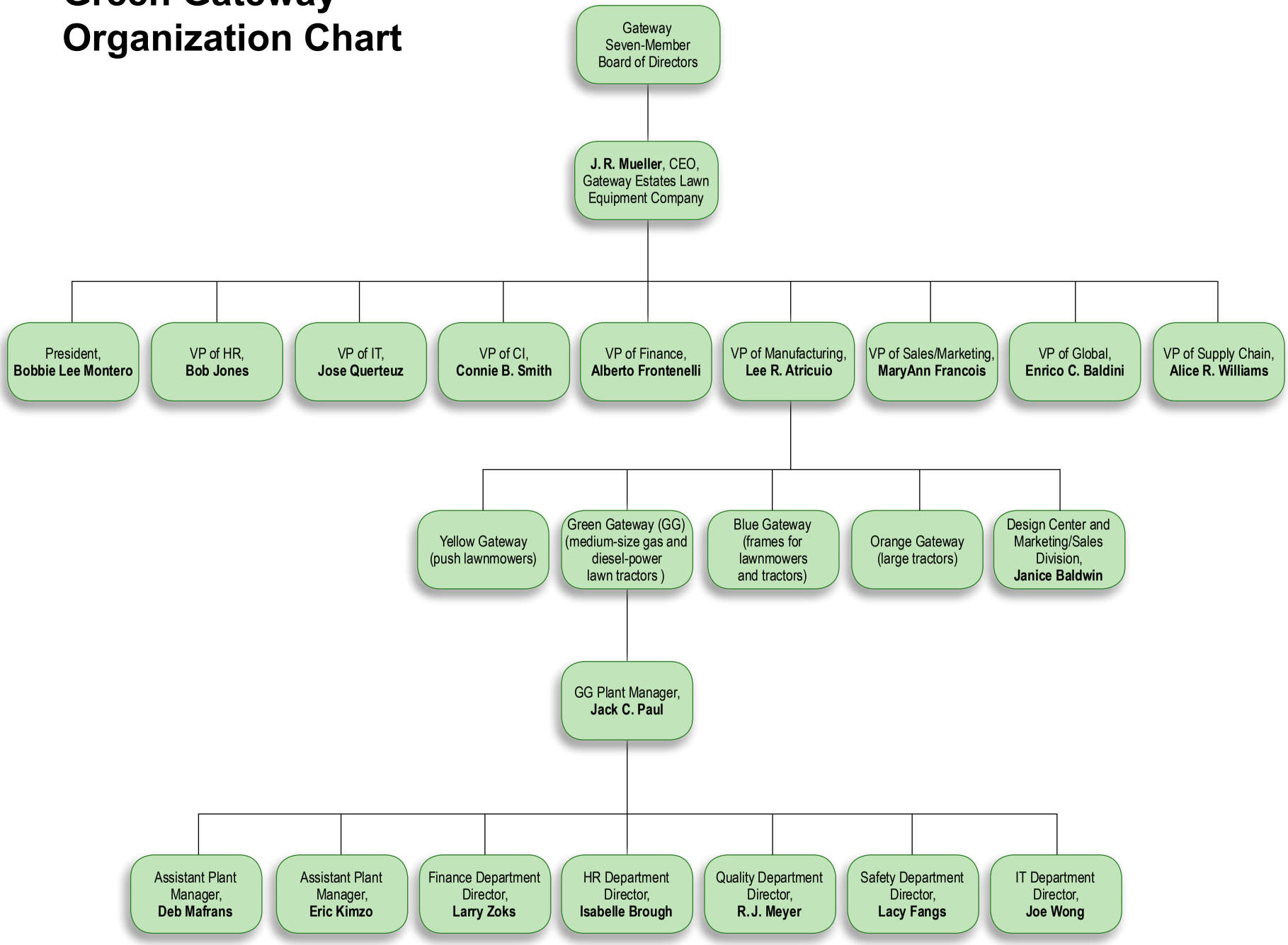
- ☒ I am nominating a senior member of my organization to the 2018 Board of Examiners.
- ☐ I am not nominating a senior member of my organization to the 2018 Board of Examiners.
- ☒ I am sending the complete eligibility certification package to

  Malcolm Baldrige National Quality Award
  c/o ASQ—Baldrige Award Administration
  600 North Plankinton Avenue
  Milwaukee, WI 53203
  (414) 298-8789, ext. 7205

- ☒ I have included proof of the mailing date. (See **Application Form and Content** instructions at https://www.nist.gov/baldrige/application-content-and-format/.)

ORGANIZATION CHART

Green Gateway Organization Chart



PAGE A-1
OF THE
2018 AWARD
APPLICATION FORM

2018 Award Application Form
Malcolm Baldrige National Quality Award

1. Your Organization

Official name	Green Gateway (GG)
Mailing address	Southwest Industrial Area Rte 1804 Kinston, NC 28501

2. Award Category and Criteria Used

a. Award category *(Check one.)*

- ☒ Manufacturing
- ☐ Service
- ☐ Small business. The larger percentage of sales is in *(check one)* ☐ Manufacturing ☐ Service
- ☐ Education
- ☐ Health care
- ☐ Nonprofit

b. Criteria used *(Check one.)*

- ☒ Business/Nonprofit
- ☐ Education
- ☐ Health Care

3. Official Contact Point

Designate a person with in-depth knowledge of the organization, a good understanding of the application, and the authority to answer inquiries and arrange a site visit, if necessary. *Contact between the Baldrige Program and your organization is limited to this individual and the alternate official contact point. If the official contact point changes during the application process, please inform the program.*

☐ Mr. ☒ Mrs. ☐ Ms. ☐ Dr.

Name	Deb Mafrans
Title	Assistant Plant Manager
Mailing address	☒ Same as above
Overnight mailing address	☒ Same as above *(Do not use a P.O. box number.)*
Telephone	252-555-0030
Fax	252-555-0100
E-mail	dmafrans@greengateway.com

4. Alternate Official Contact Point

☒ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.

Name	Eric Kimzo
Telephone	252-555-0220
Fax	252-555-0100
E-mail	ekimzo@greengateway.com

5. Release and Ethics Statements

Release Statement

I understand that this application will be reviewed by members of the Board of Examiners.

If my organization is selected for a site visit, I agree that the organization will

- host the site visit,
- facilitate an open and unbiased examination, and
- pay reasonable costs associated with the site visit (see *Baldrige Award Process Fees* on our website [https://www.nist.gov/baldrige/baldrige-award/award-process-fees]).

If selected to receive an award, my organization will share nonproprietary information on its successful performance excellence strategies with other U.S. organizations.

Ethics Statement and Signature of Highest-Ranking Official

I state and attest that

(1) I have reviewed the information provided by my organization in this award application package.

(2) To the best of my knowledge,

- this package contains no untrue statement of a material fact and
- omits no material fact that I am legally permitted to disclose and that affects my organization's ethical and legal practices. This includes but is not limited to sanctions and ethical breaches.

Jack C. Paul	5/1/18
Signature	Date

☒ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.

Printed name	Jack C. Paul
Job title	Plant Manager
Applicant name	Green Gateway (GG)
Mailing address	☒ Same as above
Telephone	252-555-0000
Email	jcpaul@greengateway.com
Fax	252-555-0100

GLOSSARY OF TERMS AND ABBREVIATIONS

Glossary of Terms and Abbreviations

5S a workplace organization method

5 Whys a technique used in the analyze phase of the Six Sigma methodology

6S sort, stabilize, shine, standardize, sustain, safety (a workplace organization method)

A

A3 structured problem solving and continuous improvement approach

ADA Americans with Disabilities Act

AOS available on-site

AP action plan

AR/AP accounts receivable/accounts payable

ASQ American Society for Quality

ATD/ASTD/APQC Association for Talent Development/American Society for Training and Development/American Productivity and Quality Center

B

BB Black Belt

BFPE Baltimore Fire Protection and Equipment

BOD Board of Directors

BSC balanced scorecard

C

CAP corrective action plan

CC core competency

COGS cost of goods sold

Cpk process capability

CSF critical success factor

CTB change the business

C-TPAT Customs Trade Partnership Against Terrorism

CTQ critical to quality

D

DMAIC define, measure, analyze, improve, control

DOL U.S. Department of Labor

E

EAP Employee Assistance Program

EEOC U.S. Equal Employment Opportunity Commission

EHS environmental health and safety

EOC Emergency Operations Committee

EPA U.S. Environmental Protection Agency

ERP enterprise resource planning

F

FEMA Federal Emergency Management Agency

FLSA Fair Labor Standards Act

FMEA failure mode effects analysis

FMLA Family and Medical Leave Act

G

GAAP generally accepted accounting principles

GATE supplier portal

Gateway Gateway Estates Lawn Equipment Company (parent organization)

GB Green Belt

GED General Equivalency Diploma test (for high school equivalency)

Gemba the place where value is created; in manufacturing, the Gemba is the factory floor

GG Green Gateway

H

HR human resources

I

IA inherent availability

IRS U.S. Internal Revenue Service

ISO International Organization for Standardization

IT information technology

IW *Industry Week*

J

Jidoka one of the two pillars of the Toyota Production System

JIT just in time

JSOX Japan's Financial Instruments and Exchange Law (considered the Japanese version of Sarbanes-Oxley)

K

KAIZEN Japanese word for “continuous improvement”

Kanban a method for managing the creation of products with an emphasis on continual delivery and optimization of the flow of work

KM knowledge management

KPI key performance indicator

KSA knowledge, skills, and abilities

L

LSS Lean Six Sigma

LT long term

M

MBWA management by wandering around

MEP Manufacturing Extension Program

MIR Market Impact Report/Monthly Index Review

MTBF mean time between failures

MTTR mean time to repair

MVV mission, vision, and values

N

NCDENR North Carolina Department of Environment and Natural Resources

NIMS National Incident Management System

NIST National Institute of Standards and Technology

NM nanometer

NPS net promoter score

O

OEE overall equipment effectiveness

OFIs opportunities for improvement

OPEI Outdoor Power Equipment Institute

OSHA Occupational Safety and Health Administration

OT overtime

OTJ on the job

P

PDR plus/delta/results: yearly improvement of process to ensure learning

PES Performance Evaluation System

PMES Performance Measurement System

PMS Performance Management System

Poka-yoke any mechanism in a Lean manufacturing process that helps an equipment operator avoid (yokeru) mistakes (poka)

PPW Performance Projection Worksheet

PTO power take-off

Q

QRM quality risk management

R

RCM reliability-centered maintenance

ROI return on investment

RTB run the business

S

SA strategic advantage

SC strategic challenge

SCM supply-chain management

SHRM Society for Human Resources Management

SIC Standard Industrial Code

SIPOC suppliers, inputs, process, outputs, customers

SLT Senior Leadership Team

SMEs subject-matter expert

SO strategic objective

SOAR strengths, opportunities, aspirations, results

SP Strategic Plan

SPARC sharing, promoting, recognizing creativity

SPP Strategic Planning Process

SQDCPME safety, quality, delivery, cost, people, maintenance, environment

SQL standard language for storing, manipulating, and retrieving data in databases

ST short term

SWOT strengths, weaknesses, opportunities, threats

T

TEEP total effective equipment performance

TGW things gone wrong

TOC Theory of Constraints

V

VOC voice of the customer

VPP Voluntary Protection Program

VSM value stream mapping

ORGANIZATIONAL PROFILE

Organizational Profile

P.1 Organizational Description

Founded in 1987, Gateway Estates Lawn Equipment Company (Gateway), designs, engineers, manufactures, sells, and services a comprehensive line of mowing equipment sold throughout the world. Green Gateway (GG) is one Gateway's four company divisions. GG manufactures medium-size gas and diesel-power lawn tractors in Kinston, NC. Our tractors are widely utilized for commercial lawn maintenance and households with estate acreage. The GG facility began producing tractors in 2004. Since that time, our facility footprint increased from 300,000 to 600,000 square feet, and we have totally reconfigured the tractor assembly process. GG manufactures the product and ships to dealerships, primarily in North America, based on invoices provided by the sales team from Gateway. CEVA, a logistics company, delivers products from the factory floor to our dealer network. These independent dealerships sell our tractors directly to end-users. These dealerships are also the maintenance, service, and repair facilities for customers. Dealers usually handle at least one other product line in addition to GG products. For instance, dealers may sell farm tractors, lawn and garden tractors, or lawn care equipment from other sources.

GG's parent company is publicly traded on the NASDAQ. Four assembly and manufacturing plants, under the Gateway umbrella, are located in St. Louis, MO; Kinston, NC; Camarillo, CA; and Providence, RI. Specialized plants exist in Cartagena, Colombia; Monterey, Mexico; and Auckland, New Zealand, where minor assembly is accomplished. Outside the United States, Gateway commercial sales focus on the top 100 golf courses in the world, primarily located in New Zealand, the Dominican Republic, Mexico, Canada, the United Arab Emirates, South Africa, Australia, Ireland, England, and Scotland. In the United States, Gateway's market focus is in the states in which the sport of golf is popular. The top ten states are California, North Carolina, Florida, New York, Massachusetts, Georgia, Connecticut, Pennsylvania, Rhode Island, and Washington, D.C. These are also the areas where the largest concentration of historic estates and other large lawn and garden areas are found.

P.1a Organizational Environment

P.1a(1) GG provides medium-size gas and diesel-power lawn tractors in three classes: homestead, commercial, and putting green (Figure P.1-1). Some have the options of zero-turn-radius models, standard traction assist, tilt steer, and front and rear power take-offs (PTOs).

P.1a(2) Successful execution of our mission enables us to grow profitably and provide increasing opportunity, rewards, and security for all who are involved in our business while fulfilling the expectations of our stakeholders. The mission, vision, and values (MVV; Figure P.1-2) establish the foundation of GG's culture of excellence and focus the company on delivering the highest levels of medium-size gas and diesel-power lawn tractors and dealer support.

GG has a culture of performance excellence with an integrated SQDCPME Scorecard, which keeps focus on the vital components of a sustainable business: Safety, Quality, Delivery, Cost, Morale (People), Maintenance, and Environment (Figure P.1-3). This focus provides ever-increasing value to customers, while improving organizational effectiveness and providing learning for the workforce and company. GG has identified four core competencies (Figure P.1-4).

P.1a(3) GG's paid workforce consists of approximately 560 full-time employees (called associates), who are organized by department. Figure P.1-5 shows GG's paid workforce profile by segments. There are no organized bargaining units at GG.

GG surveys all segments of the workforce at systematic intervals to determine the levels of associate satisfaction and engagement necessary to achieve our mission. The key elements that engage

Figure P.1-1: Product Offerings

Product Category	% of Business	Delivery Methods
Homestead Mowers: Targeted for Household (customer group) for medium-duty service with a lower price point.	30%	Partnership with CEVA logistics, which delivers products to dealers
Commercial Mowers: Targeted for Commercial (customer group), with a focus on reliability for heavy-duty service; used extensively by commercial and household lawn maintenance.	50%	
Putting Green Mowers: Triplex mowers (riding mowers with three cutting units and three wheels).	20%	

Figure P.1-2: Mission, Vision, and Values

Gateway Mission	Develop unique products the world desires.
GG Mission	Create new value through innovation and a focus on quality, cost, and delivery.
Vision	Be the leading manufacturer of quality lawn tractors, with a low cost of ownership and the best overall value.
Values	*Be Proud *Lead *Think Critically *Respect Others

Figure P.1-3: Integrated SQDCPME Scorecard

Goal: Best in the World							
•Policy deployment •Visual management •Process confirmation •Time and data management •Aligned and capable organization							
Performance Area	Safety	Quality	Delivery	Cost	Morale	Maintenance	Environment
Goals	Zero fatality and serious injury	Zero months in service and cost per unit	Lean material flow and order to delivery	World-class efficiency	Motivated people	100% utilization	Green enterprise
Continuous improvement							

Figure P.1-4: Core Competencies

Green Gateway		
Core Competencies	**How Core Competency Supports Mission**	**Examples**
1. Relationship Building = Build relationships with suppliers, partners, and each other	Ensure thorough understanding of needs by developing relationships with community, suppliers, partners, associates, and customers	Face-to face meetings; voice of the customer (VOC) input into product development, supplier processes, customer feedback and ratings, team-building initiatives
2. Idea Generation = Generate ideas in all we do	Innovation	Sources: Associates, dealers, customers, suppliers, partners. Examples of innovation: twin-touch pedals, 12-volt outlets, brighter headlamps with turn, tilt steering wheels, lit instrument displays, fender handles, mower deck height adjustments, deck-leveling system
3. Guiding Principles = Leverage guiding principles	Systemic focus on quality processes (SQDCPME)	Safety: Low safety incidents. Quality: Best-practice quality metrics and low cost of ownership. Delivery: On-time delivery (Figure 4.1-3)
4. Talent Development = Develop talent	Ensure capability and capacity to develop high-performing products	Best-practice leadership development, career paths, and best place to work
5. Future Core Competency: Value Engineering	Improves or reduces cost	Improves the "**value**" of goods or products and services by using an examination of function. **Value**, as defined, is the ratio of function to cost. **Value** can therefore be increased by either improving the function or reducing the cost.

Figure P.1-5: Workforce Profile

Area					#	%
Salaried/Management:						
Technical Group-Maintenance and Engineering					105	18%
Quality					40	7%
Facilities/EHS					25	4%
Plant Administration					45	8%
Hourly:						
Production					295	50%
Shipping and Receiving					30	5%
Support (Finance, HR, IT)					20	3%
Temp:						
Temporary Workforce					29	5%
Total					589	100%
Gender	**%**	**Status**	**%**	**Ethnicity**		**%**
Male	70%	Full-time	95%	Caucasian		33%
Female	30%	Temporary	5%	African American		62%
				Other		5%
Education					**#**	**%**
High School Diploma or GED Equivalent					356	61%
2-year Degree					49	9%
Bachelor's Degree					58	10%
Post-Graduate Degree					7	1%
Certifications					115	19%
Age	**%**	**Tenure**	**%**	**Category**		**%**
18–31	34%	0–4 years	51%	Plant/Senior Management		2%
32–47	34%	5–9 years	16%	Management		16%
48–66	31%	10–14 years	20%	Associates		64%
67 +	1%	15–19 years	12.6%	Engineers		18%
		20 + years	0.4%			

all associates to achieve our mission are participation in Learning Communities, comprehensive training programs, rewards and recognition, and a focus on SQDCPME.

Individual job descriptions and competency-based orientations are used to communicate position-dependent requirements. Extensive training on personal and environmental safety is required at employment and annually thereafter. Associates complete annual safety training and competency demonstrations as needed for specific job roles.

The workforce composition includes tenured associates, with approximately 33 percent employed for ten years or more. In addition, approximately 5 percent of the workforce is temporary; this percentage has been stable over the last several years. Educational requirements, minimum competencies, and capacity analysis are detailed in the job descriptions.

GG's special health and safety requirements include a safe work environment, protection from injury, and support for a healthy lifestyle. GG utilizes its employee Safety Committee and Risk Management Committee to ensure workplace safety and compliance with Occupational Safety and Health Administration (OSHA) requirements. GG provides annual workplace safety training for all associates. Several departments also require that associates utilize adequate personal protective equipment, obtain specialized safety training and/or certifications, and put additional security measures in place to ensure protection from injury and a safe work environment. GG supports a healthy lifestyle by providing associates with a comprehensive wellness program and requiring that physical requirements be met, according to job descriptions. See Figure P.1-6 for key workforce engagement factors.

P.1a(4) GG's major facility is the Kinston, NC, plant. Key to the efficient delivery of products are several major technological processes, including circuit testing, assembly, material analysis, in-process inspection, and final assembly. Major equipment includes manufacturing equipment, backup power generators, IT servers, test products, logistics equipment, and forklifts.

P.1a(5) GG operates in an intense legal and regulatory environment, complying with and/or exceeding state and national laws, regulations, and standards. In addition, GG pursues voluntary International Organization for Standardization (ISO) certifications in support of its MVV and core competencies.

Figure P.1-6: Key Workforce Engagement Factors

Job Category	Key Requirements	Results
Temporary	Skills Development Training Learning Communities Reward and Recognition SQDCPME	7.3-12 7.3-12 7.3-11 7.1-21 through 7.1-23
Hourly	Reward and Recognition Learning Communities Cross-Training SQDCPME	7.3-11 7.3-12 7.3-3, 7.3-4 7.1-21 through 7.1-23
Salaried	Leadership Training Reward and Recognition Learning Communities SQDCPME	7.3-12 7.3-11 7.3-12 7.1-21 through 7.1-23

GG complies with state and national OSHA requirements and has been recognized with the GREAT! Award in 2015, 2016, and 2017 for the dramatic decline in warehouse incidents as a result of improved forklift training. Gateway also has been recognized in the Environmental Protection Agency's (EPA's) Waste Wise Program with Gold Achievement in 2014 for Recycling in the Workplace and in 2015 for Industrial Materials Recycling. In 2016, GG received the Governor's Environmental Stewardship Award and the National Environmental Excellence Award. In 2009, GG was certified to ISO 9001 and ISO 14001 for its environmental management, and it continues to maintain those certifications (Figure P.1-7).

P.1b Organizational Relationships

P.1b(1) GG's parent, Gateway, became independently traded on the NASDAQ in 2011. There are four operating divisions of Gateway. GG manufactures medium-size gas and diesel power tractors; Yellow Gateway manufactures push lawnmowers; Orange Gateway produces riding lawnmowers; and Blue Gateway produces frames for lawnmowers and tractors. There is also a Design Center and Marketing/Sales Division run by Gateway.

Figure P.1-7: Key Legal and Regulatory Requirement Regulations to Address Risks, Compliance Processes, and Measures

Functions	Key Regulations	Compliance Processes	Measures [7.4a(3)]
Finance: JSOX and GAAP	IRS regulations	Conduct annual financial audit	% compliance with NC Budget and Fiscal Control Act
Health and Safety: OSHA	OSHA standards	Conduct monthly safety inspections; prepare annual OSHA logs	# of OSHA violations reported
Environment	Air quality/air permit	Conduct annual testing	# of EPA violations
Employment	DOL standards (FLSA, FMLA, ADA, EEOC)	Investigate violations reported	# of violations reported
ISO 9001 ISO 14001	ISO standards	Conduct internal audits and annual external audits	% compliance to ISO standards
ISO 31000	ISO standards	Compliant to the requirements with internal audits	Risk management

Gateway maintains a seven-member Board of Directors (BOD) that provides overall governance. Gateway's Senior Leadership Team (SLT) includes nine officers who deliver strategic direction and capital expense approval to all divisions, including GG. The team includes the President, Vice President (VP) of Human Resources (HR), VP of Information Technology (IT), VP of Continuous Improvement, VP of Finance, VP of Sales/Marketing, VP of Global, VP of Manufacturing, and VP of Supply Chain. One of the nine officers, the VP of Manufacturing, provides oversight to GG's Plant Manager. The VP of Manufacturing supervises and evaluates all manufacturing Plant Managers. SQDCPME data are reviewed monthly by the Gateway SLT. All work and support process owners report to their respective Plant Managers.

The GG SLT consists of the Plant Manager, Assistant Plant Managers, and five Department Directors. Members of the SLT have clearly defined roles organized by departments (see organization chart). They guide the day-to-day operations and manage the delivery of products according to standards and internal policies.

To ensure the enhancement of customer satisfaction and provide efficiency of operation, Gateway has identified certain global processes:

- All manufacturing plants will maintain ISO 9001 and ISO 14001 (environmental) certification and comply with state-mandated regulations and laws.
- Plant Managers, hired by the VP of Manufacturing, can deviate from some global requirements, upon approval.

P.1b(2) GG operates in a highly competitive market and with customers who have changing requirements. Figure P.1-8 show our markets, customers, and stakeholders, along with their requirements and expectations for products, support services, and operations. It also outlines any differences in requirements and expectations among these groups. Our key market segments are the industry segments in the Standard Industrial Code (SIC) Industry Group 352: Farm and Garden Machinery and Equipment (3524 Lawn and Garden Tractors and Home Lawn and Garden Equipment). The key requirements for these segments include low cost of operations, meeting industry standards, warranty and quality, ergonomics, and energy efficiency.

P.1b(3) GG maintains effective relationships with key partners and suppliers that support SQDCPME metrics and our vision (see Figure P.1-9 and 6.1c). We leverage their critical roles in helping to deliver on our mission through innovative processes, assurance of product availability, continuous process improvements, and timely communication.

To promote innovation, GG solicits input from key suppliers and partners on new product offerings or improvements/enhancements to current products and/or processes. Key suppliers and partners promote innovation by bringing forward product/process improvement ideas and techniques; innovation is acted on through the Action Plan Team members. New ideas in the pipeline ensure that GG maintains a future focus and increased efficiency in process operations. For example, our community college partner maintains a key role in organizational innovation through the development of new curriculums to sustain our current core competencies and develop future core competencies for workforce education. To enhance competitiveness, GG focuses suppliers, partners, and

Figure P.1-8: Markets, Customers, Stakeholders

	Key Requirements/ Expectations	Differentiators
Key Market Segments		
Medium-size gas and diesel-power lawn tractors (North America)	Low cost of operations, meeting industry standards	Focused on meeting industry standards
Customer Groups		
Dealer: Commercial	Safety, energy efficiency, reliability, quality of cut	Focused on servicing the mower long term
Dealer: Household	Safety, energy efficiency, reliability, comfort/sleek design	Focused on safety around family and green
Stakeholders		
Suppliers	Partnerships, growth	Focused on partnerships
Board of Directors, stockholders, associates	Profitability, growth	Focused on long-term viability
Partners: See chart below	Partnerships, economic growth	Individual requirements for each partner
Dealers	Quality, cost, delivery	Focused on best value proposition

Figure P.1-9: Suppliers and Partners

	Role in Work Systems	Role in Innovation	Supply Chain Requirements	Mechanisms for Communication and Managing Relationships
Key Suppliers				
Cultivars Engines	Engines and engine components	Exceeding Environmental Protection Agency (EPA) requirements (reduction of fuel consumption, emissions)	Cost, delivery, and quality	Master Supplier Agreements, scorecards, supplier conference, supplier portal (GATE), electronic communications, factory inspections, quality audits, on-site reviews
Core Tires	Wheels/tires	Enhancement of durability, delivery on energy requirements	Cost, delivery, and quality	
Earthmover	Raw materials	Focus on environmentally friendly products	Cost, delivery, and quality	
Furrows	Axels, brakes, and transmissions	Gear box solutions	Cost, delivery, and quality	
Diatomaceous Earth	Electronics	Reliability	Cost, delivery, and quality	
Key Partners				
Local community college: Hardiness and Edger	Development of curriculums for workforce education and training	Specialized training, continuing education, skills testing	Qualified associates	Action Plan Team members, Task Force member, GATE
Local university: Metamorphosis and Potent	Educational and recruiting resource	Provides associate degrees in multiple disciplines, joint projects, job fairs	Qualified associates	Action Plan Team members, Task Force member, GATE
CEVA	Packaging and delivery	Provides environmentally friendly packaging	Schedule adherence, timely transport	GATE, Action Plan Team members
NC Manufacturing Extension Program (MEP) Center	Solutions	Enables GG to identify opportunities that will accelerate and strengthen growth and competitiveness in the marketplace	Availability of subject-matter experts	Statement of work, network events, yearly manufacturing conference

stakeholders on SQDCPME, with metrics cascading throughout the plant. We use Lean Six Sigma (LSS) to drive out waste in our key processes and those of key suppliers.

P.2 Organizational Situation

P.2a Competitive Environment

P.2a(1) GG is the third-leading manufacturer of medium-size gas and diesel-power lawn tractors in North America. An estimated 3,815,000 lawn tractors are in operation, with a yearly growth factor of 15%, generating highly profitable revenue. Manufacturing is performing at high levels and focused on continuous improvement.

P.2a(2) Key changes affecting our competitive position are related to our off-shore competition:

- The improving product quality of off-shore competition has adversely impacted the perception by potential customers of our value proposition, making them increasingly less willing to pay a premium for our "made in the USA" product.
- Our recent introductions of new product features have been quickly copied by the competition, resulting in those features being considered standard equipment within a single model year.

Opportunities for innovation are directly related to driving systematic processes to collaborate with our suppliers and partners to develop new ideas (see Figure P.1-9). For example, driverless mowers and hybrid power are future innovations under consideration.

P.2a(3) GG leverages comparative data from inside and outside manufacturing to help senior leaders and associates identify the best path for future investment and growth. Through the Balanced Scorecard (BSC) Process, senior leaders set expectations based on regional, national, and comparative benchmarking data. For supplier selection, the Finance Department analyzes the supply industry's capabilities to understand potential suppliers, their performance and cost from industry data collection and analysis, and benchmarking.

Two limitations of comparative data are timeliness, with data typically lagging by more than a year, and applicable best-in-class data,

Figure P.2-1: Target Market Share and Top Three Competitors

Name	2015 Share	2016 Share	2017 Share	Variance 2015–2017	Market Share Change
J. J. Place Inc.	18.0%	17.8%	17.6%	−0.4%	−2.3%
Majestic Corp.	13.5%	13.2%	12.9%	−0.6%	−4.7%
GG	6.9%	7.1%	7.5%	+0.6%	+8.0%
Mighty Mowers Inc. (off-shore competitor)	4.9%	5.6%	6.5%	+1.6%	+32%

Figure P.2-2: Comparative Data Sources

Type	Within Industry	Outside Industry
Product/ Process	• OPEI participation • Supplier/partner feedback • Sister divisions (Blue, Yellow, Orange) • Dealer/customer surveys	• Baldrige recipients/ASQ • *Industry Week* • Benchmarks • Car Production System • Car Manufacturing System
Workforce	• Gateway • OSHA-VPP • ASTD/APQC • Surveys	• SHRM • OSHA/Bureau of Labor • Insurance providers
Leadership	• Dealer/customer feedback • Associate Satisfaction Survey	• State and local communities feedback
Governance	• Gateway • BNA	• State and local communities feedback
Financial/ Market	• Gateway • Financial auditor	• Auditor and Auditor • Financial organizations
Supplier	• Industry data	

due to differences in methods, standards for data collection, and concern for proprietary information. The availability of competitive data is limited due to being either a subunit of a large publicly traded corporation, whose results are not segmented by the parent's reports, or a privately held company that typically does not share information.

P.2b Strategic Context

GG's key strategic advantages (SAs) and strategic challenges (SCs) are addressed through our strategic objectives (SOs; Figure 2.1-3).

P.2c Performance Improvement System

Our GG Performance Improvement System is dynamic and an inherent component in our fully integrated ISO Management System. The overall process improvement methodology used is DMAIC (define, measure, analyze, improve, control). The data-driven improvement cycle is used to improve, optimize, and stabilize processes, while rooting out and eliminating the causes of defects. Using DMAIC, we identify, monitor, and control variation. DMAIC is not only a core improvement tool used to improve processes but also a common language and approach to understand problems. In addition, Lean thinking is used to remove waste from processes by using the toolbox of Lean techniques and theory of constraints to successively remove the obstacles to flow.

Figure P.2-4: Performance Improvement System Key Elements

Program	Six Sigma	Lean Thinking	Theory of Constraints
Theory	Reduce variation.	Remove waste.	Manage constraints.
Application Guidelines	• Define. • Measure. • Analyze. • Improve. • Control.	1. Identify value. 2. Identify value stream. 3. Flow. 4. Pull. 5. Perfection.	1. Identify constraint. 2. Exploit constraint. 3. Subordinate processes. 4. Elevate constraint. 5. Repeat cycle.
Focus	Problem-focused	Flow-focused	Systems constraints

Figure P.2-5: Additional Tools

- Production modeled after Car Production System: Lean (7 wastes + 1), 5S, A3/PDSA, Kaizen (5-Whys)
- Performance measurement aligned with Car Manufacturing System: SQDCPME
- Maintenance modeled after Total Productive Maintenance: OEE, RCM, FMEA
- External guidance documents: ISO 31000, ISO 26000
- External certification audits: ISO 9001, ISO 14001
- Voluntary external validation: Periodic submission of national Baldrige applications
- Corrective actions: Supplier/partner and customer/dealer feedback and opportunities for improvement (OFIs)
- Plus/delta and results (PDR): Yearly process improvement methodology to ensure learning

Learning is shared throughout the company with the SharePoint Knowledge Management Portal, master index, Learning Communities, Six Sigma teams, Lean leaders, and Production Flow Process Teams. Knowledge is shared at the individual and department levels through systematic, outcome-driven meetings. Corrective action plans (CAPs) also assist management in systematically addressing issues.

Developing innovative solutions is an essential part of GG's MVV. The key elements of our performance improvement system continually reinforce systematic processes; key elements include the BSC, SQDCPME, and key performance indicators (KPIs), which are required for the company to be successful.

Figure P.2-3: Key Strategic Challenges and Advantages

	Business	Operations	Societal Responsibilities	Workforce
Strategic Challenges				
SC1—Technical Associate Retention	X	X		X
SC2—Off-shore Competition	X	X		
SC3—Cybersecurity	X	X	X	
Strategic Advantages				
SA1—Brand Awareness/Reputation (Gateway/dealers)	X	X	X	X
SA2—Strategic Partnerships (suppliers, education systems, partners, and dealers)	X	X		
SA3—SQDCPME	X	X	X	X

RESPONSES ADDRESSING ALL CRITERIA ITEMS

Category 1: Leadership

1.1 Senior Leadership

1.1a Vision and Values

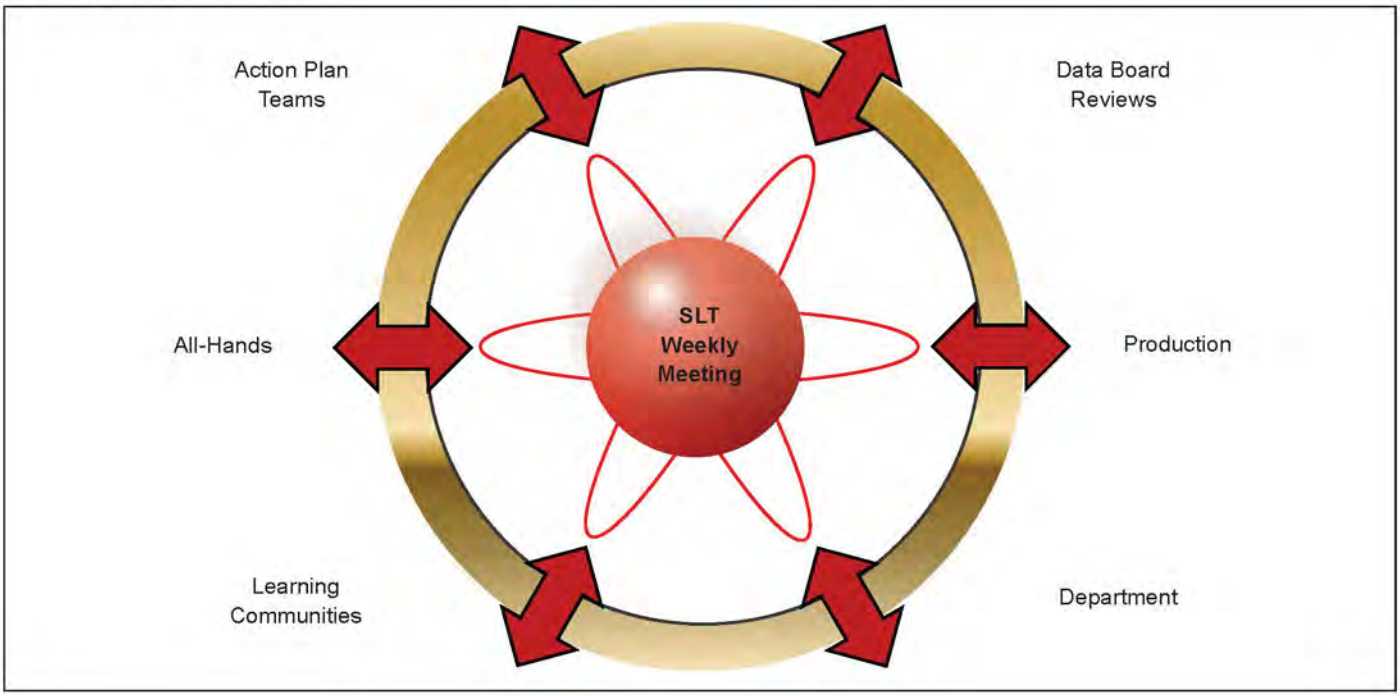
1.1a(1) The SLT sets our MVV in step 1.1 of the Strategic Planning Process (SPP; Figure 2.1-1). During this process, SLT members assess the strengths and gaps in our capabilities, demonstrated in our work systems and SQDCPME, in addition to our shared vision of the future and market conditions. If the MVV needs to be updated or changed, key stakeholders are involved through key communication mechanisms. Deployment of the MVV is through the verbal and written connections SLT members always make when (1) setting or reviewing meeting agendas to connect what we are doing to why it is important (see meeting structure [Figure 1.1-1], (2) conducting strategic planning, (2) reviewing progress of action plans (APs) and data with teams, and (4) conducting performance reviews and reward/recognition activities. The SLT also deploys the MVV through implementation of Master Supplier Agreements; use of the ISO format for policies and procedures, and connection of the MVV in "Purpose"; and transparent annual reports that incorporate, reflect, and report on progress in achieving our MVV principles and goals.

SLT members' personal actions reflecting a commitment to our values include (1) modeling use of the problem solving methodology (Think Critically) in meetings and when collaborating on teams with associates, suppliers, partners, and stakeholders working toward common goals; (2) demonstrating the Coaching Kata during all meetings (Lead), as appropriate; (3) leading with integrity and building trust in all human interactions (Respect Others); and (4) recognizing associates, suppliers, partners, and stakeholders for exemplifying our values (Be Proud). Our values have been improved multiple times, with the most recent 2016 addition of "Respect Others" based on building our future core competency (CC): "Value Engineering."

1.1a(2) SLT members' actions demonstrate their commitment to legal and ethical behavior and promote an environment that requires it through systematic approaches, including

- Monitoring transparent and ethical behavior in all transactions through their scheduled (daily, weekly, monthly, quarterly) and on-the-spot (2017 cycle of improvement learning) audits and reviews;
- Complying with applicable laws (see 7.4a[3]);
- Participating in and requiring annual ethics training with legal refreshers (improved in 2015 to include legal);
- Monitoring compliance of internal and external audits (see 7.4a[2]), and use of the ethics hotline (added to the scorecard in 2016);
- Managing oversight of purchasing and finances with weekly meetings;
- Reviewing the completion of background checks and drug testing prior to signing off on every hire;
- Ensuring that licensure and certification requirements are maintained when required (added to the Training Matrix in 2014); and
- Overseeing the Compliance and Ethics Process.

Figure 1.1-1: SLT Meeting Structure



1.1b Communication

The SLT uses the Communication System (Figure 1.1-2) to ensure systematic two-way communication and to engage all associates and stakeholders; face-to-face and electronic communication methods are shown in Figure 1.1-2. Annually, stakeholders, customers, partners, and suppliers evaluate communication effectiveness on a communication survey (Figures 7.4-1, 7.4-2, and 7.4-4). This cycle of improvement resulted in the addition of text messaging in 2016, based on key learnings from the survey and key learnings in emergency management for hurricane preparedness. The SLT communicates key decisions and needs for organizational change through the meeting structure, which—through the use of quality tools (e.g., Venn diagram, Fishbone, Brainstorming, and Affinity Diagram)—ensures associate engagement, support of the change, and two-way communication. However, there are times when senior leaders must decide and announce changes. This is accomplished during Learning Communities meetings, all-hands meetings, face-to-face interactions, or small groups, as appropriate. The SLT motivates the workforce through one-on-one conferences and small-group breakfast/lunch events as they connect associates' work to the MVV, solicit their ideas, and recognize their contributions. The agenda for these discussions focuses on workforce members' high performance as evidenced by cascading metrics; participation in and achievement of APs; new ideas submitted or worked on, and the risk that was involved; and processes to delight customers. With yearly cycles of process reviews, GG used its learning in communication tools to include all-hands meetings twice a year (2016) and weekly Learning Communities (2017); to change the Leadership System from a top-down to an integrated approach (2014) and included suppliers (2016); and to add the Innovation Award (2016) and Lean Project (2017) award. Additional multi-year examples are available on-site.

Figure 1.1-2: Communication System

Communication Methods			
Methods	Frequency	1-way/2-way	Audience
All-hands meetings	Bi-annually	1-way	A
Data Board reviews (Shifts)	Daily	2-way	A
Learning Communities' meetings	Weekly	2-way	A, P
Customer surveys	Annually	1-way	C
Departmental meetings	Monthly	2-way	A
Emails, text messages, tweets	As needed	2-way	A, S
DMAIC project reviews	Monthly	2-way	A, C, S, P
Associate scorecards	Monthly	2-way	A
Ethics hotline	As needed	1-way	A
Production meetings	Daily	2-way	A, C, S, P
Internal surveys	Annually	1-way	A
Internet	Daily	1-way	A, C, S, P
Scorecard reviews	Monthly	2-way	A, C, S, P
Orientation	As needed	2-way	A
KAIZEN, VSM, 5S, Gemba, TOC	As needed	2-way	A, C, S, P
Supplier corrective action letter	As needed	1-way	S
Supplier visits	Scheduled	2-way	A, S
Electronic displays	Daily	1-way	A, C, S, P
White Boards	As needed	2-way	A

Key: A = Associates, C = Customers, S = Suppliers, P = Partners

Figure 1.1-3: Associate Awards Recognized by the SLT

Award Name	Frequency Awarded	Individual/Team
Innovation Award	At time of occurrence	Individual/team
Action Plan Award	At time of occurrence	Team
Community Service Excellence Award	Annually	Team
Teamwork Excellence Award	Annually	Team
Values Awards	At time of occurrence	Team
Lean Project of the Year	Annually	Individual/team
DMAIC Project of the Year	Annually	Individual/team

1.1c Mission and Organizational Performance

1.1c(1) Senior leaders create an environment that is successful now and in the future by providing leadership through participation in key processes: strategic planning and action planning, communication, reward and recognition, knowledge sharing, learning processes, and continuous improvement methods. Senior leaders create an environment for achieving the mission and agility through systematic review and analysis of metrics at all levels of the organization, focusing on improvements and innovation, prioritizing projects, and systematically sharing best practices. Agility and capacity for rapid change with reduced cycle times are accomplished through a cross-trained workforce, workforce empowerment to solve problems in Learning Communities, and the use of real-time data to make rapid decisions focused on SQDCPME. All learnings are deployed to associates through the communication methods—but mainly through the systematic weekly meeting and process of the Learning Communities.

Senior leaders create an environment for organizational learning, workforce learning, innovation, and risk by ensuring that learning is part of our daily work. GG's emphasis on Lean thinking ensures that each individual associate is empowered to find problems in their own way of working, solve them, make improvements, and share them during daily or weekly meetings. Based on the yearly cycle of improvement review of both this process and the Leadership System, a 2016 learning was to develop leaders to act as teachers of thinking skills. Therefore, the SLT develops people who challenge the current state and continually improve it (Kaizen). They do this by (1) demonstrating respect for people (associates,

partners, customers, stakeholders) by allocating time and resources to ensure learning through training, collaboration on projects, and best-practice sharing; (2) allowing teams to own their own improvements and recognizing their successes and risks; (3) participating in weekly Gemba walks and hands-on improvement experiments that build relationships based on trust, coaching, and Lean thinking; and (4) deploying this learning, successes and failures, and risks taken during daily/weekly Learning Communities meetings. Further deployment of learning is shared through the Communication System; for example, by solving problems at the source through the use of Lean tools, DMAIC, and TOC; sharing knowledge through existing structures discussed in 4.2; and reinforcing the application of new ideas and risk taking to achieve breakthrough results. Workforce learning is further discussed in 5.2 and innovation in 6.1.

Senior leaders actively participate in succession planning through the analysis of critical positions and planning for the transfer of knowledge. They coach and mentor target associates to ensure succession readiness, and annually they assess alignment of job descriptions to values and core competencies. To ensure preparedness of the leadership team, SLT members cross train in all senior leader positions and their direct-report positions. This ensures multiple choices and perspectives to ensure a sustainable organization through the development of multiple competencies (2016 improvement).

Senior leaders develop future organizational leaders by facilitating leadership courses; annually reviewing and updating the scope and sequence of the leadership curriculum for relevancy; evaluating results of leadership development through the level 3 Kirkpatrick assessment; and mentoring, coaching, and teaching. The SLT mentors future leaders to teach others and demonstrate that they understand Lean thinking. Senior leaders engage in quarterly candid conversations with future leaders on how much time they spend teaching others; strengths and weaknesses on performance reviews; and individual, department, and organization results, including customer engagement.

1.1c(2) Senior leaders focus the organization on action through performance management, results-based decision making, and cascading scorecards. Metrics cascade from short- and long-range financial forecasts, goals, and SOs across the entire organization, through the individual success factors built into annual performance evaluations. Each senior leader and associate has goals and metrics that align to the Strategic Plan (SP) and knows exactly what must be accomplished to achieve our objectives, customer requirements, and budgets. Senior leaders review metrics posted in departments with associates during Gemba walks, review scorecard progress and financials at stand-up meetings, address less-than-ideal SQDCPME measures during Learning Communities meetings, approve DMAIC projects based on data presented and risk assessment, and monitor control of an improved process based on trending data.

Senior leaders maintain metrics through daily and weekly operating reviews and cascade them weekly on posted departmental scorecards. Through the systematic use of SQDCPME, the SLT sets departmental expectations based on analysis of results to ensure a focus on creating and balancing value for customers and other stakeholders. SLT members demonstrate personal accountability as shown through leadership activities (see 1.1a[2]) and the Communication System and methods (Figures 1.1-2 and 1.1-3).

1.2 Governance and Societal Responsibilities

1.2a Organizational Governance

1.2a(1) Gateway maintains a seven-member BOD that provides overall governance. Gateway's SLT (see P.1b[1]) includes nine officers who deliver strategic direction and capital expense approval to all divisions, including GG. One of the nine officers, the VP of Manufacturing, provides oversight to GG's Plant Manager, who supervises, evaluates, and monitors accountability through the SQDCPME results. Accountability for the SLT's actions and strategic plans is accomplished through (1) individual achievement of leadership goals based on their performance evaluation and measurement on yearly surveys; (2) achievement of assigned SOs; (3) financial performance of GG; (4) goal achievement based on the monthly Market Impact Report/Monthly Index Review (MIR) report; and (5) success as a coach/mentor in building a learning organization (2016 addition from cycle of learning) as evidenced on the yearly survey. Data are available on-site.

Fiscal accountability is ensured by the SLT through a variety of mechanisms. Quarterly financial statements are prepared by the Finance Department, reviewed by the SLT, and approved by the Plant Manager. External financial audits are conducted annually by an independent certified public accounting firm. These financial audits also include a review of internal financial controls and tests of noncompliance with certain provisions of laws, regulations, contracts, and grant agreements. Fiscal accountability is ensured through reviewing monthly financial reports and quarterly audits by internal auditors. The Plant Manager is fiscally accountable to the corporate leadership, which allocates the yearly budget. The Plant Manager and the SLT set departmental budgets and manage revenue, capital expenses, and procurement.

Transparency in operations and selection of and disclosure of policies for GG's SLT (Plant Manager, two Assistant Plant Managers, five Department Directors) are ensured through strict adherence to completion of required annual ethics training; accountability to Gateway's seven-member BOD for financial and organizational performance; and transparency, reporting of various audit results, and yearly evaluation for policy adherence of BOD members and their disclosure policies.

Independence in internal and external audits is achieved by the SLT's ensuring a wide range of annual site audits. Types of audits based on process outputs include quality, safety, training process, ISO, energy, environmental, and 6S housekeeping

audits. Based on a cycle of improvement, voluntary audits were added for ISO 26000 guidance on Social Responsibility in 2016, and SA 800 Standard of Social Accountability International was added in 2017.

SLT ensures protection of stakeholder interests through key customer listening processes; extensive use of continuous improvement projects; consideration of customer feedback; and evaluation of performance, as indicated by various metrics. For example, analysis of Homestead customer surveys, feedback, and complaints trended to show that owners needed to turn the lawn mower in tight places. We applied our Six Sigma methodology with a cross-functional team, worked with the corporate design engineers and suppliers, and patented the zero-turn mower (Idea Generation). Stockholder interests are also routinely voiced and considered through the monthly meetings, surveys, and the annual meeting at the corporate level. Partners' interests are a key input into the collaboration related to setting common goals. Suppliers' interests are considered during the contract process, during site visits, and in development of APs.

Succession planning for GG involves selected associates assuming the roles of SLT members from time to time, coaching by SLT members, cross training of senior leaders and directors, and participation in leadership development programs, as discussed in 5.2b(3). Based on learning from the yearly improvement cycle, risk analysis of key leadership positions was implemented in 2016, with further refinements to include potential retirees in 2017.

1.2a(2) The corporate VP of Manufacturing evaluates GG's Plant Manager, who, in turn, evaluates his/her direct reports. Performance evaluations determine executive compensation raises for the upcoming year based on achievement of goals. Performance evaluations are used to determine annual merit increases using the pay-for-performance policy, which defines levels of performance that correlate with percentage increases in pay based on achieved measures. GG sets measurable performance goals annually as part of the Performance Evaluation Process. (Data available on-site.)

1.2b Legal and Ethical Behavior

1.2b(1) Senior leaders anticipate public concerns, address adverse impacts, and prepare for concerns proactively with our services through a variety of methods. Senior leaders take a proactive approach to anticipate, prepare for, and address impact on society by integrating the ISO 14001 standards into our culture and management systems. As part of these standards, a team of associates routinely monitors and evaluates the products we use and sell for potential hazards and impacts using the job safety analysis forms and standard operating procedures. For example, mowers are checked during the Refueling Process to ensure that they are free from spills, potential fire hazards, and causes of chemical burns on eyes or skin. The annual Auditing Process of all ISO standards is improved yearly based on learning from cycles of review.

Figure 1.2-1: Risk Management Matrix

Area	Main Risk	Impact / Risk Evaluation
Natural Disaster	• Strong Winds/Tornado	8
	• Flood	5
	• Earthquake	4
	• Snow/Ice	3
Fire/Explosion	• Occurrence of Fire-Facility (Hot Work, Other)	9
	• Occurrence of Fire-Equipment (Solder Wave, Generator, etc.)	6
	• Occurrence of Explosion	3
Health/Safety	• Pandemic Illness	7
	• Individual Injury	4
	• Toxic Chemical/Hazardous Material/Spill	4
Regulatory	• Proper Permits/Contracts	4
	• Hazardous Materials Handling	3
	• Labor Laws	3
Associates	• Labor Dispute	3
	• Harassment/Discrimination	3
	• Violence	4
Technology	• IT Programs/Learning Communities Errors and Breakage	5
	• NM Equipment Operate as Planned	5
Operation	• Lack of Parts/Materials	6
	• Equipment Not Maintained/Spare Parts Not Available	7
	• Big Quality Escape	5
	• Nonrepairable Parts	5

Key: Primary risks noted in red.

Figure 1.2-2: Risk Committee Examples of Preventive Measures on Checklist

Area	Preventive Measures	Freq.	Who	Date Checked
Documents	• Emergency Evacuation Procedure	Yearly	EHS	10/21/17
	• Hot Work Procedure	Yearly	EHS	10/21/17
Training	• Fire Drills	Yearly	EHS	6/26/17
	• First Responder	Yearly	EHS	10/21/17
Equipment	• Test Fire System	Yearly	EHS	7/30/17

This resulted in the addition of 10% more trained auditors in 2017 who calibrated their questioning strategies to find more nonconformances.

In addition, the Risk Management Committee anticipates public concerns with current and future products and operations. The purpose of risk management is to identify potential problems before they occur so that risk-handling activities may be planned and invoked as needed. The GG Risk Management Process (see 6.1d) is a continuous, forward-looking process that addresses issues, both internal and external, that could endanger business continuance or achievement of critical objectives. Risk items that cannot be eliminated or mitigated

to an acceptable level have contingency APs. The GG Risk Management Matrix and sample of ratings are shown in Figure 1.2-1. If risks are identified, controls are put in place to mitigate the risk. For example, the introduction of the airless paint sprayer showed high risk for eye injuries from particles, paint, and spray, along with potential paint injected into the skin. Trainings were developed, standard work and operating procedures developed, audits conducted, and the equipment was inspected after each use. This brought the risk to an acceptable level.

To prepare for adverse societal impacts through the conservation of natural resources, senior leaders promote environmental sustainability through the establishment of environmental and energy programs that are monitored and measured using the BSC KPIs. We voluntarily participate in the EPA Clean Energy and Renewable Energy Programs and have been recognized for improvements (2013, 2014, 2015, 2016, 2017 awards available on-site) in water and electric efficiency, reduction of waste, and increased recycling, which also has reduced landfill methane (see Figures 7.1-16–7.1-18).

To ensure that supply-chain management does not experience potential adverse impacts, senior leaders have established processes to identify ways to expedite and monitor supplier on-time delivery. For example, in 2015, GG managed an area of risk that involved the East Coast port closure. Steps were immediately put in place to ensure that production was not negatively impacted.

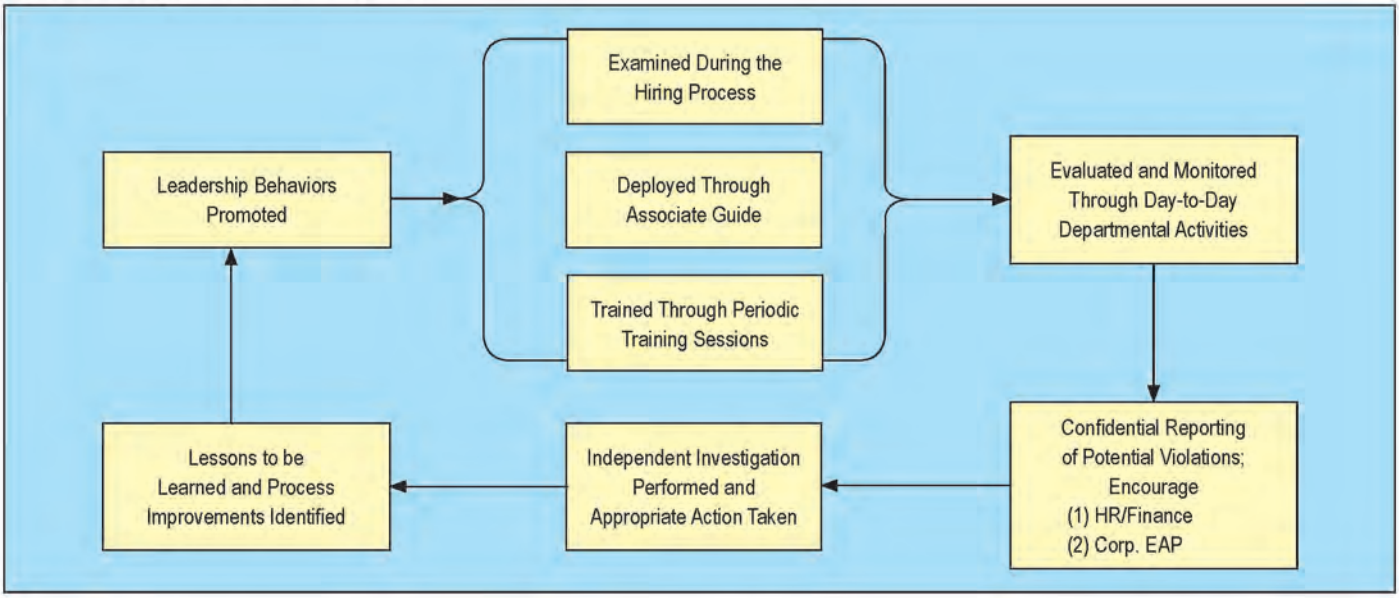
The Risk Committee has established a checklist of preventive measures and review frequency. Figure P.1-7 shows the key compliance processes, measures, and goals for meeting and surpassing regulatory and legal requirements and addressing risks associated with service or operations; the goal is 100% compliance.

1.2b(2) The SLT promotes and ensures ethical behavior in all interactions by routinely communicating expected ethical behavior during meetings and as standing items on agendas and performance reviews with direct reports. SLT members take corrective action guided by the Ethics Policy if a violation occurs. The Code of Conduct is designed to provide an official statement of how the company will conduct its business. The code obligates all company personnel to abide by the company's tradition of honest, ethical, and lawful behavior, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships. The Code of Conduct, which is designed to help ensure that the company and all company personnel comply with all applicable laws and regulations, places oversight responsibility at the SLT level and creates a standard process for the implementation of its requirements.

The code applies to all GG personnel. Copies of the code are available on our website, and SLT members review the code with new associates during onboarding and sign all associate agreements; a signed copy is returned to them. A 2017 cycle of improvement was to do this electronically. All associates read the code each year; must re-certify that they conduct themselves in compliance with the code and applicable laws; and report any known violation of the code or any law by any director, officer, or associate of GG. To ensure plant-wide deployment and reinforcement of appropriate behavior, a 2016 cycle of improvement established safety, legal, and ethics as standing items on all plant-wide agendas.

Key processes for enabling and monitoring ethical behavior are indicated below and deployed through the Code of Conduct. Senior leaders monitor and respond to a violation or breach of ethical behavior with corrective actions guided by the Ethics Policy, which contains the Code of Conduct,

Figure 1.2-3: Legal Compliance and Ethics



including and up to termination of employment depending on the severity of the violation. Since the policy began and has gone through multiple cycles of improvement, there have been no reported violations of the Ethics Policy. Partners, suppliers, and key stakeholders are monitored through the contract process, and ethical breaches would result in contract termination. There have been no contract breaches due to unethical behavior in the last 15 years.

1.2c Societal Responsibilities

1.2c(1) Senior leaders consider societal well-being and benefit as part of our strategy in incorporating the practice of ISO 26000 Guidance on Social Responsibility, SA8000 standard of Social Accountability International, and daily operations. Senior leaders also identify strategies, or initiatives, to meet SOs aimed at societal well-being, as shown in the environmental section of the BSC. This includes continued work toward the Energy Star Program aimed at saving energy in the plant. Baseline energy performance was established in 2012, and improvements have been measured yearly. We are members of the EPA's network of Energy Star partners nationwide and benchmark energy practices against leading organizations to generate new ideas for improvement.

Senior leaders contribute to societal well-being through our economic systems by working with the business community, partnering with our local community college, and offering partnership training programs to associates. In addition, senior leaders support the local high school through offering internships, presenting at career fairs, hosting class tours, and presenting at afterschool clubs to improve the technological thinking of students and future job placement at GG. Such support ensures job-ready skills for community workers.

Senior leaders also contribute to social well-being through emergency preparedness. Using the four phases of emergency management, SLT members collaborate with county emergency management, the school system, city government, and citizen groups to ensure integration of a county-wide emergency management plan.

Our Environmental System contributes to societal well-being through improving and sustaining the environment through policies like recycling, waste to the landfill, and hazardous material replacement and reduction.

1.2c(2) Our key community is our county of operation in Kinston. Areas of yearly support are determined during the SPP. Senior leaders leverage relationship building, a CC, by collaborating in emergency management, helping those in need, and focusing on skill development for youth and millennials. Senior leaders, with associates, build relationships by sponsoring the Relay for Life, the Boy Scouts, Meals-on-Wheels, Red Cross blood drives, and a variety of skill-building clubs (e.g., engineering, Six Sigma) and are visible at high school and community college activities related to science fairs, math competitions, and the Entrepreneurship in Engineering Club. Community support is evaluated for improvements yearly and resulted in a 2017 focus on helping hurricane victims and the Red Cross.

Figure 1.2-4: The Four Phases of Emergency Management

Mitigation Preventing future emergencies or minimizing their effects	GG collaborates on any activities that prevent an emergency, reduce the chance of an emergency happening, or reduce the damaging effects of unavoidable emergencies. Mitigation activities take place **before** and **after** emergencies.
Preparedness Preparing to handle an emergency	GG collaborates on plans or preparations made to save lives and to help response and rescue operations. We stock food and water in our warehouse. Preparedness activities take place **before** an emergency occurs.
Response Responding safely to an emergency	GG offers emergency shelter from a tornado or severe weather. Response activities take place **during** an emergency.
Recovery Recovering from an emergency	GG offers financial assistance to help pay for the repairs and associate labor to work on projects. Recovery activities take place **after** an emergency.

Category 2: Strategy

2.1 Strategy Development

2.1a Strategy Development Process

2.1a(1) Figure 2.1-1 shows the key process steps in GG's Strategic Planning Process (SPP).

Yearly, SP Team members participate in a strategic and action planning retreat to develop short- (one-year) and long-term (three–five year) SOs, with corollary lag measures. SP Team members prioritize change initiatives, identified as APs, by using the nine-square prioritization tool to reach a group decision. They address transformational change by integrating SOs and corollary (initiatives) APs within departmental projects, deployed through Learning Communities, to ensure integrated work along the value stream. The SP Team ensures agility and flexibility by using our systematic decision-making process, which ensures our capacity for rapid change: (1) gather the data and information needed to make the decision, (2) analyze for red flags, (3) look for research and learning, (4) complete a Stakeholder Analysis to decide who needs to be involved in making the decision, (5) decide on the success criteria to assess the decision and learn from blind spots, and (6) deploy the change. Deployment is ensured through our Leadership and Communication Systems—for decisions, change, and strategy (see Figures 1.1-1 and 1.1-2). Accountability is ensured with systematic progress reviews by SO champions and AP owners. A cycle of improvement included the 2016 plant-wide training in the 13 core principles of Lean Decision Making.

2.1a(2) The SP Team systematically analyzes innovative work product/process changes based on four indicators: (1) manufacturing capability and capacity, (2) potential success within three years, (3) workforce capability and capacity, and (4) profit margin. Using business intelligence and predictive analytics processes, the SP Team assesses the likelihood and impact risk for key strategic opportunities, gathered from the SOAR analysis (Figure 2.1-2), and decides the pace of the

Figure 2.1-1: Strategic Planning Process

	Timeline	Parties
Strategic Planning		
1.1 Affirm MVV and CCs.	Dec.	SP Team: SLT, Directors, Representatives from each Learning Community, Gateway BOD Rep., Dealer Rep., Supplier Rep., Partner Rep., Key Associate Award Recipients (current year)
1.2 Review and analyze (1) key data (leadership and governance results, customer feedback, workforce feedback, operational results) and (2) environmental scan (demographic trends, economic and financial environment, constituent needs, innovation metrics).	Dec.	
1.3 Conduct a SOAR analysis.	Dec.	
1.4 Identify strategic advantages and challenges, and new CCs.	Dec.	
1.5 Affirm, modify, or add goals and SOs.	Dec.	
1.6 Develop new SOs to address strategic challenges and leverage strategic advantages and CCs, and to address transformational change and organizational agility.	Dec.	
1.7 Prioritize objectives; set metrics based on industry benchmarks and comparisons; and assign SLT champions.	Dec.–Jan.	
1.8 Identify SO corollary APs, AP owners, Action Plan Teams, flywheels, priorities, and leading measures.	Jan.–Feb.	
1.9 Prepare annual budget and income and expense projections, and approve capacity analysis to assess our ability to execute on strategy. Plan HR training calendar and identify training to be added to the yearly matrix.	Mar.–Apr.	SLT
1.10 Approve Strategic Plan.	Jun.	SLT
Action Planning		
2.1 Champions meet with Action Plan Teams; implementation begins.	Jun.–Jul.	Directors
2.2 Roll-up AP tactics and add training to the matrix.	Jun.–Jul.	Directors
2.3 Update the status of APs and measures monthly on network file.	Jun.–Jul.	Directors
2.4 Review APs and metrics monthly; make adjustments as needed.	Jun.–Jul.	Directors
2.5 Modify APs, if needed.	Jun.–Jul.	Directors
Step 3		
3.1 Evaluate prior year SP and APs, and makes modifications to the following-year SPP.	Jul.–Nov.	SLT

Figure 2.1-2: SOAR Analysis

Strengths	Key Strategic Opportunities	Aspirations	Results
Trust: Partners, Suppliers, Dealers	Strengthen cybersecurity	Outdo the competition for household and commercial customers	SQDCPME
Innovative	Build associate thinking around battery-operated and self-driving mowers	Best Place to Work	Zero ISO nonconformances
Committed Associates to Continually Improve Using SQDCPME	Continue advancing LSS and ISO in both household and commercial products	100% associates using LSS and understanding ISO nonconformances	Highly satisfied and engaged workforce

prospective innovations. This analysis and risk assessment of product or process innovation performance clarifies strategic opportunities that are used to define potential SOs aligned to our goals.

2.1a(3) During step 1.2 of the SPP, subject-matter experts (SMEs) present data and analysis based on statistical analysis (descriptive, inferential, and predictive) using the following process steps: (1) Conduct a comprehensive analysis of mission-based results, CC success, and blind spots occurring; (2) segment the market for current and prospective products to identify strategy focused on high-volume potential and financial return; (3) complete a SOAR (Strengths, Opportunities, Aspirations, and Results) analysis on all departments to identify potential changes in the environment that culminate in our strategic challenges and advantages; (4) analyze key success factors for reliable delivery, reduced cost–Lean operations, strategic use of associates, and responses to customer needs and wants; and (5) evaluate the VSM/department strategy execution success of SQDCPME.

The SLT evaluates the ability to execute on the SP during the approval phase of the resources (both financial and human) in step 1.9 of the SPP. AP owners conduct formal and informal evaluation and analysis of key metrics at quarterly intervals throughout the year as an early warning system for GG. This ensures that the SLT keeps the SP on track and that it delivers consistent and predictable results.

2.1a(4) GG uses run the business (RTB) and change the business (CTB) to organize the respective work processes in a clear and concise way. Since product design, sales, and marketing are Gateway's responsibility, GG is primarily focused internally. To decide which key processes are accomplished by whom, the SLT uses a weighted analysis based on three scored components: (1) CC alignment, (2) CTB measures, and (3) RTB measures. Yearly, the SLT reviews the weighted analysis to decide/confirm the best fit of either internal or external suppliers/partners for accomplishing our key work processes. Based on strategy considerations and innovation as described above, the SLT determines future core competencies and work systems to achieve long-term strategy, and it initiates a corollary AP. The SP Team uses critical thinking by analyzing and synthesizing key data and information to make decisions concerning which work systems accomplish SOs and map each SO to SQDCPME.

2.1b Strategic Objectives

2.1b(1) See Figure 2.1-3 for a subset of SOs and goals. The full table is available on-site (AOS).

2.1b(2) GG allocates strategic business resources (financial and HR) to SOs that balance short-term business performance to sustain improvement toward its long-term objectives. SOs contain one of two objectives: (1) CTB is to achieve the vision, and (2) RTB is to achieve our current strategy—the daily management system that translates the SOs into the work that must be accomplished to fulfill our mission. See Figure 4.1-3 for RTB BSC measures.

GG uses the Catchball Process, based on a 2016 cycle of improvement, to deploy SOs from top leadership to the factory floor and "value-add" to the SP based on data analysis and expertise. The Catchball Process clarifies objectives and is used to check for understanding throughout GG. Catchball ensures alignment between activities and objectives. For example, Learning Communities Teams decided that **total productive maintenance**, process improvements, and success through people were critical to quality (CTQ). Catchball ensures continuous communication to develop clear KPIs with all involved stakeholder groups, including associates, suppliers, partners, and customers.

Figure 2.1-4 shows Strategic Policy Deployment, which is a critical element that requires continuous communication to develop clear KPIs with all involved stakeholder groups, including associates, suppliers, partners, and customers.

2.2 Strategy Implementation

2.2a(1),(2) APs are developed using the steps outlined in 2.1–2.4. APs are shown in Figure 2.1-3. During the SPP step 1.8, the SP Team identifies AP(s) for each SO; assigns an owner and leading measures; balances new, developing, or sustained APs using the flywheel momentum; prioritizes APs using the quality tool-light voting; and uses the Stakeholder Analysis to ensure a diverse Action Plan Team, including suppliers and partners, as appropriate.

Figure 2.1-3: Strategic Objectives

Anchor	Goal	SO/CSF	Figure	KPI Goal	Action Plans ST/LT	CC	SC/SA	Stakeholders
Safety	*RTB: Zero safety incidents*	CSF: Improve recordable injury frequency	7.3-1	0.4	ST: Ensure daily focus on Unit Safety Huddles	1, 2, 3, 4	SA3	A, G
	CTB: Safest place to work	SO: Enhance content/scope of Safety System	7.1-23	100%	LT: Add home issues to weekly Safety Binder	1, 2, 3, 4	SC1	A, G
Quality	*RTB: Low scrap*	CSF: Improve first-time quality %	7.1-7	98.0%	ST: Address top Pareto and low-hanging issues	2, 3	SA3	A, D, S, G
	CTB: 1st time through quality	SO: Improve Supplier Quality Index	7.1-24	98.5%	LT: Provide Quality Dept. resources to assist	1, 2, 3, F	SA2, SC3	A, D, S, G
Cost	*RTB: Low cost of ownership*	CSF: Reduce warranty cost $/Unit	7.2-1	$75.00	ST: Determine and address failure modes	2, 3	SA3	A, D, G
	CTB: Best value proposition	SO: Support concept of self-driving units	7.5-9	Support Project	LT: Engage with Design Center (Gateway)	1, 2, F	SA1, SA2, SC2	A, D, G
Delivery	*RTB: 100% on-time delivery*	CSF: Improve on-time delivery to dealers	7.1-1	99.70%	ST: Determine and address failure modes	1, 2, 3	SA3	A, D, G
	CTB: Trust in delivery	SO: Engage with dealers to resolve complaints	7.2-3a,b	80%	LT: Facilitate focus group (dealers)	1, 2, 3, F	SA1, SA2, SC2, SC3	A, D, G
People	*RTB: Learning for all*	CSF: Improve Competency Rate	7.3-3	80%	ST: Identify and fill cross-training gaps	1, 2, 3, 4	SA3	A, G
	CTB: Best place to work	SO: Enhance associate engagement	7.3-11	84%	LT: Facilitate listening/ Paraphrasing training	1, 2, 3, 4	SA2, SC1	A, G
Maintenance	*RTB: Less defects*	CSF: Improve overall equipment effectiveness %	7.1-13	86%	ST: Determine and address failure modes	3, 4, F	SA3	A, D, G
	CTB: Prevention at its best	SO: Support implementation of Operator/Repair	7.4-9	60% [Adjust Task]	LT: Identify and eliminate barriers	3, 4, F	SC1	A, D, G
Environment	*RTB: Zero waste to the landfill*	CSF: Increase % of solid waste stream recycled	7.1-16	98.50%	ST: Investigate new recycling opportunities	2, 3	SA3	A, D, G
	CTB: Stewardship	SO: Test market battery propulsion in 2018	7.5-9	Support Project	LT: Engage with Marketing/ Sales Division (Gateway)	1, 2, F	SA1, SA2, SC2	A, D, G

Key: S = Suppliers/Partners; D = Dealers; G = Gateway (Parent); A = Associates; F = Future

Figure 2.1-4: Strategic Policy Deployment

↓	1. Goals, Objectives, KPIs, System CSFs (1 day)	↑ Closed-loop communication (ongoing)
	Data Collection, Problem Solving, "Catchball" Negotiations, Process Mapping (2 days to 1+ weeks*)	
	2. Objectives, Metrics, Process CSFs (1–2 days)	
	Root Cause Analysis, Problem Solving, "Catchball" Negotiations, Project Planning (2 days to 1+ weeks*)	
	3. Objectives, Metrics, Projects/Activities/Tasks (2–3 days)	
	Rapid Improvement Events, Project Planning and Management, Metrics Integration (2 days to 1+ weeks*)	
	4. Deploy, Measure, Manage, Integrate (1–2 days, then ongoing)	

*Depending on complexity and availability of resources

SO champions schedule a preliminary meeting with AP owners and team members to review the AP Process and reporting rhythm. All Action Plan Teams use a standardized Action Plan Reporting Tool, which contains information on deliverables, lead metrics, resources required (human and financial), training needed, and monthly updates. Action Plan Teams meet (minimum) monthly to complete their AP deliverables, review progress, and monitor metrics. Monthly, AP owners meet with their SO champion to provide a progress update and remove barriers. Quarterly, champions review AP scorecards in SLT meetings. AP owners provide the SLT with evidence of Lean methodologies, DMAIC, or TOC for any APs in the yellow or

red. When teams achieve APs, owners monitor metrics through the end of the year; then they put the metrics in a review scorecard to ensure sustainability. Based on the criticality of the AP, the SLT may require a weekly, monthly, quarterly, or yearly review for sustainment.

2.2a(3) Action Plan Teams submit a resource packet, which requests financial support for AP deliverables, training, and HR capability and capacity needs. Each team member delineates the amount of time, skills needed, and activities that he/she would contribute. AP owners submit all resource requests to the SLT for approval to ensure capability and capacity to implement; requests include the financial commitment. Using the priority ranking, flywheel momentum, business intelligence, and predictive analytics processes, the SLT assesses the financial viability risk for APs and decides "go" or "no go" on the action.

2.2a(4) The HR Manager develops a training calendar in SPP step 1.9 based on SOs and APs. Utilizing the Training Matrix Process (see 5.1a[1]), HR associates develop the scope and sequence, timing, and cost of the Training Matrix to address impacts such as cross-training (capacity) or new KSAs (capability), as well as certifications and work instruction updates. The training calendar is developed using five steps: **Step 1**: Inventory critical and required training; **Step 2**: Create a learning strategy of who needs what; **Step 3**: Create the content strategy of how the training will be delivered and the cost; **Step 4**: Set goals and measure return on investment (ROI); and **Step 5**: Yearly, use PDR to review for improvements, adjust, and begin again.

2.2a(5) The SLT uses leading measures to track achievement and effectiveness of APs because they are predictive and influence meeting the SO lag measures. GG views AP metrics as cause/effect: daily, weekly, and monthly leading measures affect achievement of the yearly lag measures and ensure success. SLT members ensure alignment due to systematic monitoring of processes and line of sight from APs to SOs to organizational goals using cascading scorecards.

2.2a(6) GG uses comparative and/or competitive data, when available, to calculate a predictive future performance value. AP leads work with the Quality Department to complete a step-by-step Performance Projection Worksheet (PPW) to forecast linear projections. AP leads address gaps in performance by adding deliverable tactics in the AP or through the application of Lean methodologies, DMAIC, or TOC on the process. The PPW also addresses benchmarking processes and performance metrics to industry bests and best practices from outside the sector. The Quality Department identifies best-practice manufacturers in the industry or where similar processes exist and provides the comparisons for the Action Plan Team. This information allows the team to integrate plans on how to adapt or implement a best practice as a step in the AP and measure the effect on performance.

2.2b Action Plan Modification

The SP Team prioritizes the SOs and APs to enable the SLT to put an AP on immediate hold to rapidly execute a new plan. Since the SLT frequently reviews APs and metrics, members are able to implement modified APs immediately after completing the Risk Management Process. The AP Process has been through multiple cycles of improvement using PDR. Learning resulted in changes: 2015 linking AP owners to SO champions, 2016 using an electronic AP form (paperless), and 2017 addressing AP gaps using TOC, if applicable.

3.1 Voice of the Customer

3.1a Customer Listening

3.1a(1) GG listens and interacts with customers using the multiple two-way communication mechanisms listed in Figure 1.1-2. We observe dealers to obtain actionable information during Action Plan Team meetings. For example, an AP owner working on a self-driving mower obtained information on new technology. Figure 3.1-1 shows how listening methods vary by market segments and customer groups (see additional listening methods in Figure 1.1-2).

Dealers and end-users use the GATE portal to communicate customer issues, complaints, concerns, and accolades concerning our products. The SLT uses GATE information to obtain, investigate, and answer dealer complaints related to quality problems.

Listening methods vary across the customer life cycle (see Figure 3.1-2).

The dealer feedback focus is on the quality of products, customer support, and transactions. For example, listening and learning from our dealers have resulted in hydraulic lever indicator and tire quality improvements, among others.

3.1a(2) Gateway uses the product blueprint and national account processes to listen to former and potential customers, as well as customers of competitors.

3.1b Determination of Customer Satisfaction and Engagement

3.1b(1) GG determines dealer satisfaction and engagement primarily through the integration of information gained from Dealer Councils, Dealer Roundtables, the dealer hotline, and surveys. Methods differ among dealers, end-users, and market segments (see Figure 3.1-1). Dissatisfaction is measured primarily through hotline calls. Senior leaders have one-on-one relationships with dealers who represent major accounts. All results flow into the GG Data Warehouse, which is used to capture information and enables analysis, as discussed in 4.1a(3).

This robust analysis makes the data actionable for use in our AP Process and performance improvement methodology to exceed customers' expectations and secure long-term engagement. For example, the net promoter score (NPS), a summative measure of customer engagement, provides information on "How likely is it that you would recommend Gateway to a friend or colleague?"

3.1b(2) GG obtains information on customer satisfaction relative to satisfaction with competitors and other organizations providing similar products and services through the use of third-party surveys. Industry benchmarks are obtained from participation in the Outdoor Power Equipment Institute (OPEI), supplier/partner feedback, sister divisions (Blue, Yellow, Orange), Baldrige Award recipients/ASQ, and journals such as *Industry Week* for continuous learning.

Figure 3.1-2: Customer Life Cycle

Life Cycle Stage	Listening Method
Pre-purchase	Dealer input into GATE secure portal
Purchase	Contact Management System (e.g., dealer hotline and Dealer Council)
90-Day	Q Survey
Through Warranty Period	Warranty database
After Warranty Period	Dealer Roundtables

Figure 3.1-1: Listening Methods

Key Market Segments	
Medium-size gas and diesel-power lawn tractors (North America)	Gateway provides information from an analysis and synthesis of conferences, conventions, research, data, and comparisons of competitive information.
Medium-size gas and diesel-power lawn tractors (International)	Gateway provides information from an analysis and synthesis of conferences, conventions, research, data, and comparisons of competitive information.
Customer Groups	
Dealers	Survey satisfaction data, complaints, Dealer Council input, and product quality feedback are aggregated and analyzed monthly, quarterly, and annually by the Quality Department to determine the most important requirements for improving current customer satisfaction. These requirements are continually validated and prioritized through the Dealer Councils. The Quality Department also identifies competitive product differentiators through its analysis of competitors' equipment. Regional Sales Managers or National Account Managers handle customer issues with deliveries and day-to-day orders, while senior leaders handle large accounts. Response time is 24 hours.
Primary Customer (End-user)	Dealers, surveys, and end-users provide complaint data. Product quality feedback is aggregated and analyzed monthly, quarterly, and annually. This information is provided to GG via the secure supplier portal GATE. Dealers/customers also can handle the customer complaints of end-users with a response time of 24 hours.

3.2 Customer Engagement

3.2a Product Offerings and Customer Support

3.2a(1) The determination of GG's product offerings is the responsibility of corporate marketing led by Gateway's VP of Sales/Marketing.

GG determines customer requirements for product offerings by following the blueprint provided by corporate, which includes voice-of-the-customer (VOC) and market data, as well as information that is selected using customer needs and requirements to ensure effective use.

Gateway identifies and GG adapts product offerings to enter new markets using the Product Offerings Process. GG sends an official notice to suppliers involved with a new product offering, who have been vetted thought the Supplier Selection Process (see category 6), about when a meeting will be held to introduce the product offerings kick-off package. At this meeting, GG reviews its expectations for the upcoming product offerings. Once the meeting has been held, the kick-off package is sent out via email to all potential suppliers.

The potential product offerings supplier receives the kick-off package and forwards it to related departments. After it has been sent out via email, the product offerings supplier will then store it on the GATE portal, where it is visible for reference. The product offerings supplier will go through the kick-off package and separately store the start-up plans on the network. All product offerings suppliers will be notified by email when the start-up plan has been posted and whenever there is an update.

The product offerings contact is responsible for all documentation required by GG. The product offerings contact is responsible for receiving documentation and distributing it to the required department for completion of appropriate forms.

When all trials have been run and all product offerings documentation has complied with form, fit, and function, the product offerings supplier will receive a product-offerings-to-mass-production transfer letter. The product offerings supplier will sign off for the completion of product offerings trials and then forward all documentation to the Production Control Unit and the Production Quality Unit for sign-off and the start-up of mass production. When the letter has been signed by both units, the product offerings supplier will send it back to the product offerings purchasing buyer, stating that GG is ready for mass production. The purchasing buyer creates a Specification Analysis Form for Product Offerings Reports as required by Gateway.

3.2a(2) GG's goal of customer support is to make our organization easy to do business with and responsive to customers' needs and expectations. This is accomplished through a variety of key listening methods and processes, as shown in Figure 3.1-1. These methods enable our customers to seek information and support, and conduct business, and enable us to determine customer key support requirements. We deploy customer key support requirements to all people and processes involved in customer support through training, audits, KPIs, and meetings. Information is deployed throughout our learning community for continuous improvement (Figure 3.2-1; Voice of the Customer Chart). GG builds and manages organizational knowledge in order to improve customer results (see Figures 7.2-3 through 7.2-5, which show improving results from 2013 to 2017).

Our key means of customer support include (1) face-to-face interactions, (2) telephone conversations, (3) email, (4) identified designated contacts, (5) Dealer Roundtables, (6) the dealer hotline, and (7) Dealer Councils. The end-user customer can use the 24/7 emergency contact numbers (dealer hotline) or any of the multiple communication methods (see Figures 1.1-2 and 3.1-1). Quarterly letters are mailed to the customer to update contact numbers.

3.2a(3) Our parent corporation, Gateway, determines our customer groups and market segments based on our capacity and capability to produce to OPEI specifications.

3.2b Customer Relationships

3.2b(1) We manage dealer interactions through our Contact Management System and dealer tours. Each year, we sponsor Dealer Roundtables to highlight actions being taken at Gateway corporate and at the GG plant level to ensure that the dealers are satisfied with not only the products themselves but also with the organization's responsiveness. The top 20 Gateway dealers (identified by corporate) represent not only major corporate accounts but also small independent customers. During roundtables, senior leaders and associates hear dealers' feedback, as well as that of the corporate customer-support organizations in both design and service engineering. In addition to the roundtables, monthly calls are conducted via WebEx so that all Dealer Managers can call in and discuss problems they are seeing.

We use the product blueprint and national account processes to listen to former and potential customers, as well as customers of competitors who can provide specific feedback on the benefits or drawbacks of using our products. The Q Survey is a web-based survey platform that integrates with a third-party, sellingabcz.com, to poll current customers, potential customers, and customers of our competition. Representative surveys also may elicit information about lost sales or overall customer satisfaction.

Our Regional Sales Managers understand which potential customers in their areas are working with competitors. Periodically, our Sales Managers will call on these customers to see if they remain satisfied with the quality and support that they have been receiving from our competition. When appropriate, we will have a conversation to ascertain whether there is anything we can do to win new or repeat business. We manage customer interaction through sellingabcz.com. This allows us to align our Sales and Service Teams around business objectives, with real-time coaching and one-on-one feedback.

While it is sometimes difficult to procure information regarding the satisfaction of our competition's customers, we make it a point to benchmark our competitors and comparable organizations on a regular basis. We use the opportunity to glean best practices and compare capability of service processes. The Contact Management System, which has revolutionized the way we process hotline calls, was designed as a result of gaining understanding about this methodology as a best practice.

3.2b(2) Regional Sales Managers or National Account Managers handle customer issues with deliveries and day-to-day orders; dealer/customers also can handle the customer complaints of end-users, while senior leaders handle large accounts. We manage our customer complaints regarding product quality through GATE. The dealers work daily with customer locations to resolve technical issues. If there is an end-user issue that the dealer cannot resolve using its own knowledge or the information stored in its GATE portal, it can contact GG through the Contact Management System to receive support and direction. This system has a repository of customer issues organized by serial number so that we can analyze the root cause of the problem and implement corrective actions. We use this information to make improvements with our processes for customer support.

Overall warranty data for GG's products have improved through 2013. Warranty is measured as the percentage of overall sales dollars for units sold within the last 16 months. Warranty data are analyzed monthly, with parts and systems identified to drive improvement, based on a close relationship with the dealer/customers telling us "what went wrong." Monthly WebEx calls occur between corporate and GG's design engineers, and among supplier quality, manufacturing quality, and customer service personnel to identify LSS improvement projects and to update root cause analysis and APs to drive improvement for those identified systems.

Figure 3.2-1: Voice of the Customer Chart

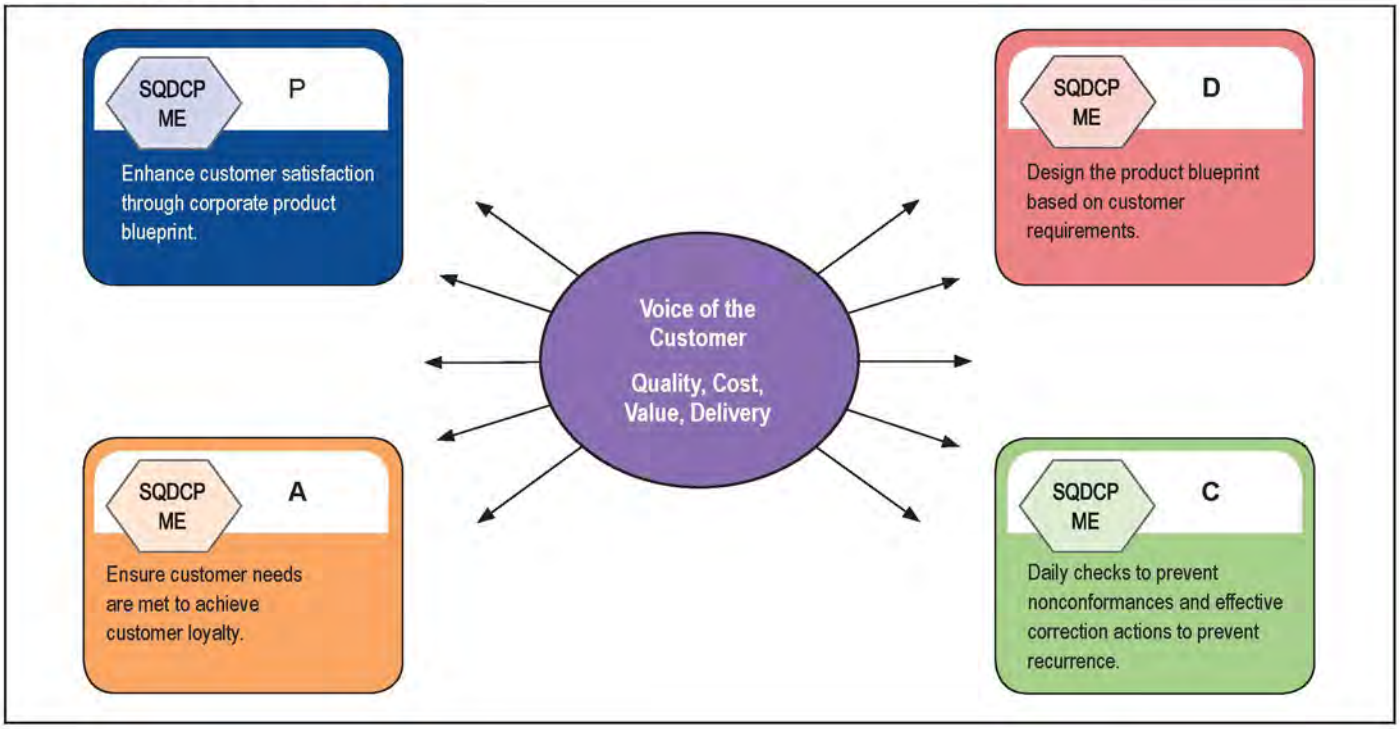
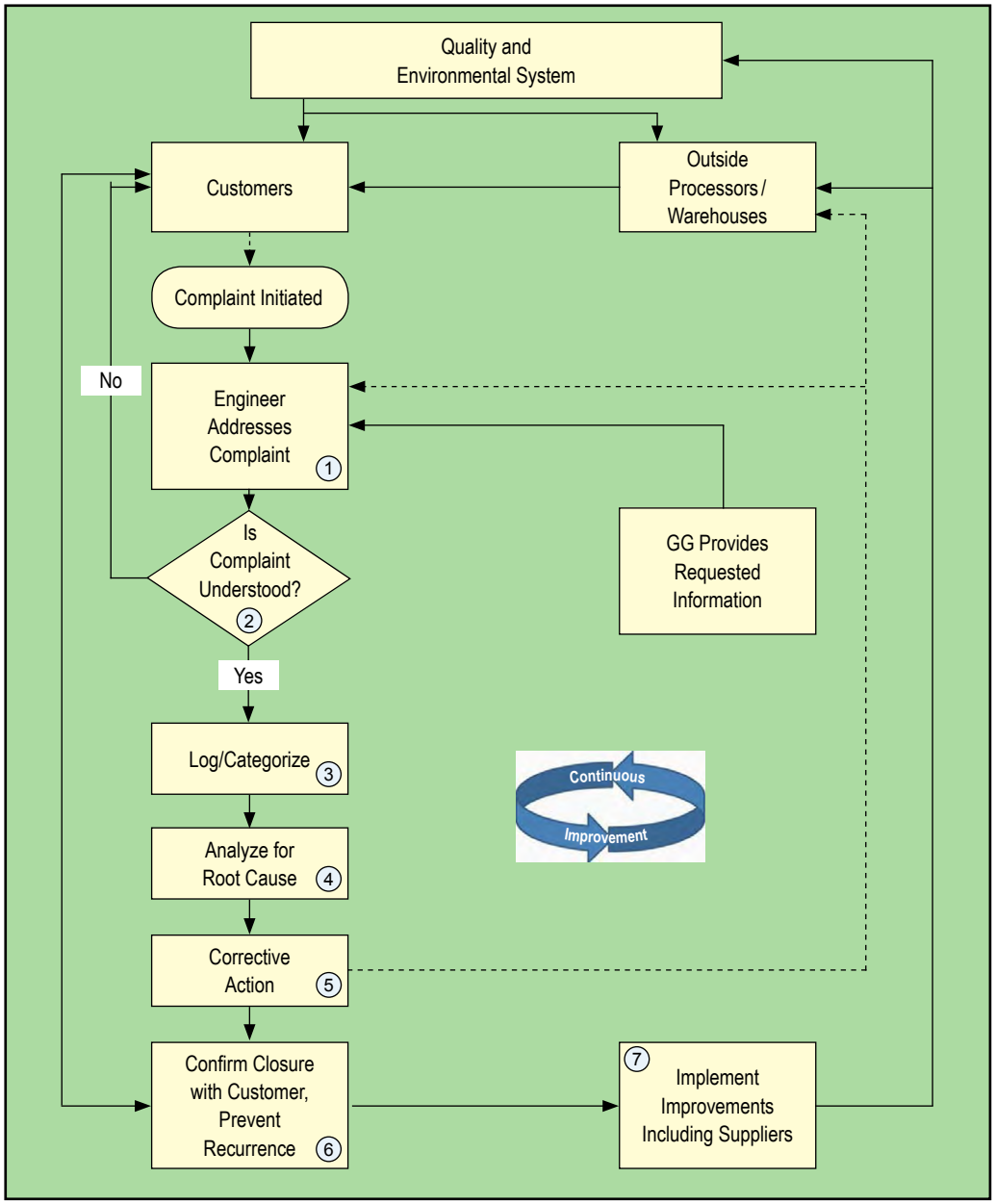


Figure 3.2-2: Customer Complaint Management System



4.1 Measurement, Analysis, and Improvement of Organizational Performance

4.1a Performance Measurement

4.1a(1) Data and information for tracking daily operations and overall organizational performance, including progress on achieving SOs and APs, are selected, collected, aligned, and integrated according to the Performance Measurement System (PMES) shown in Figure 4.1-1. The system provides integration with the SPP (Figure 2.1-1) and the Performance Improvement System (see Figure P.2-4). The basic decisions for measurement selection are shown in Figure 4.1-2. The

Figure 4.1-1: Performance Measurement System

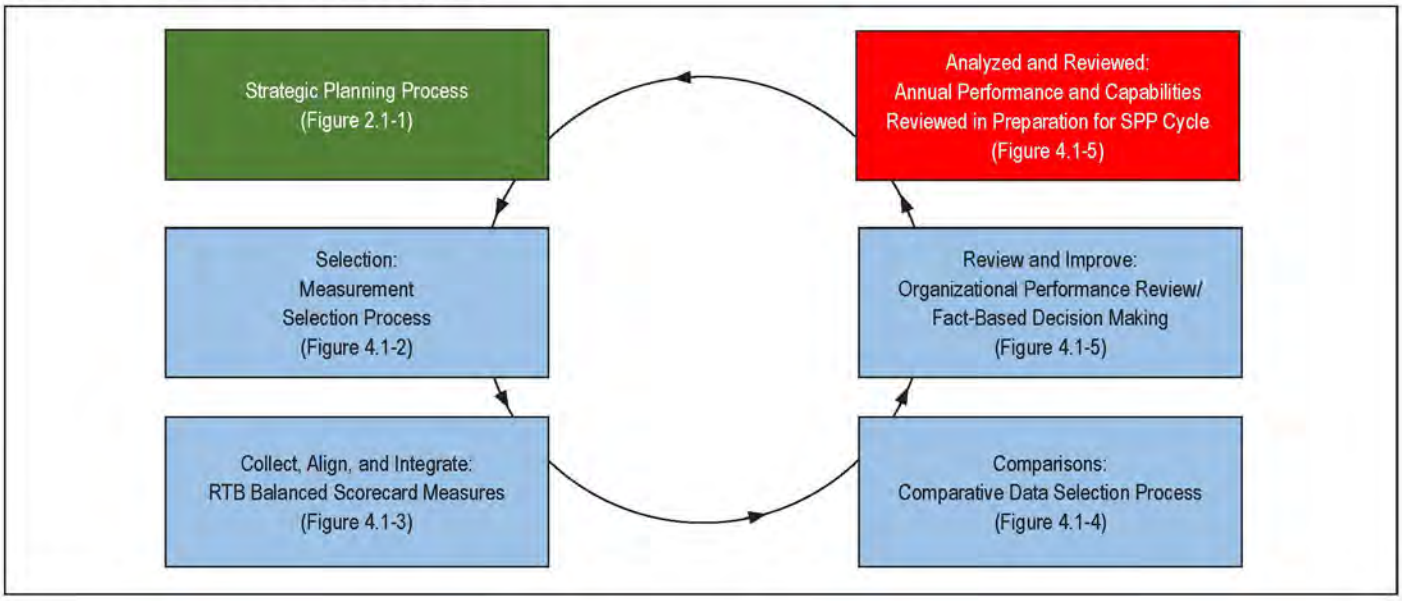
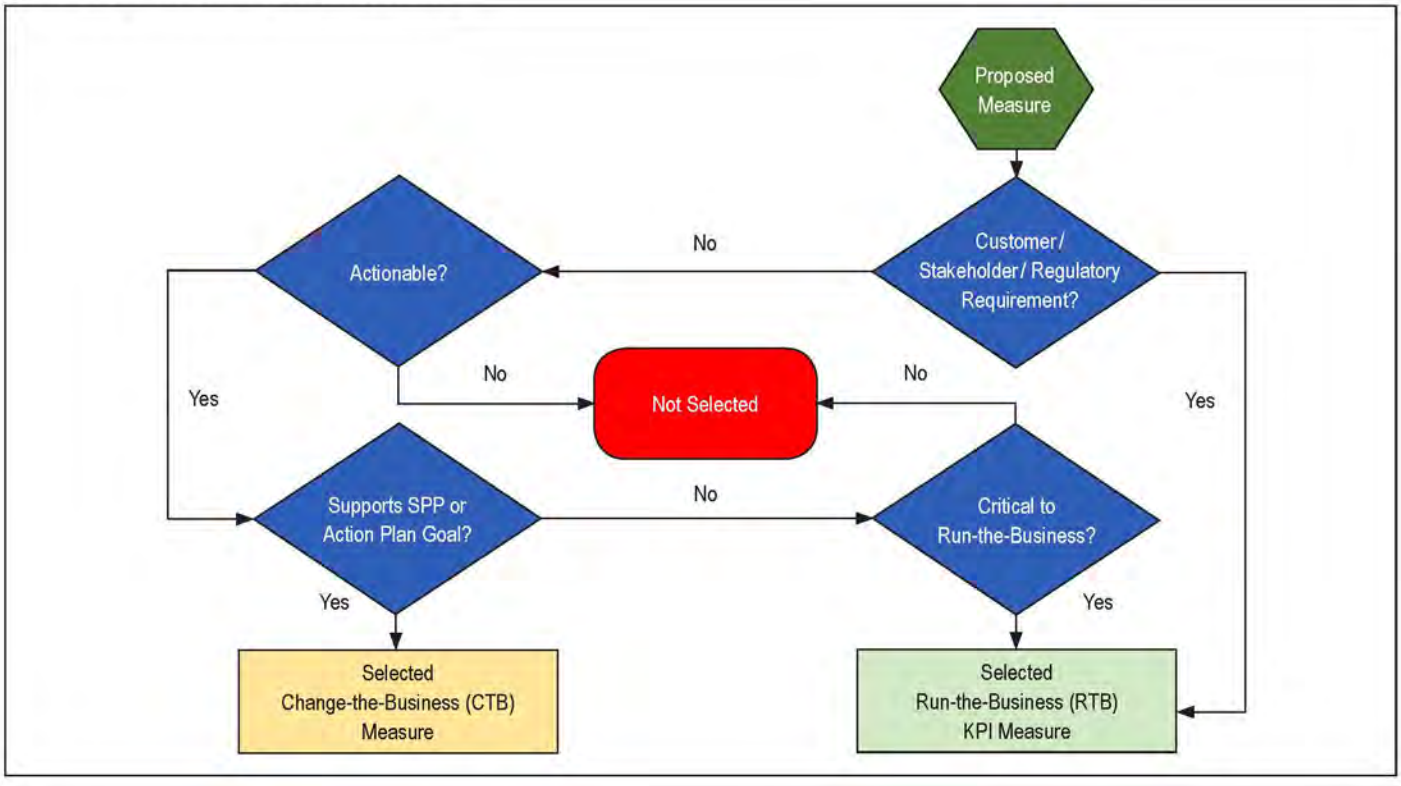


Figure 4.1-2: Measurement Selection Process



key organizational performance measures are given in the Balanced Scorecard Measures (Figure 4.1-3), which are segmented by SQDCPME, with result reference and frequency of review.

4.1a(2) We select comparative data and information to support fact-based decision making (see Figure 4.1-4) to ensure the actionability and cost-effectiveness of potential solutions to address organizational and departmental needs.

4.1a(3) VOC and market data and information are selected using customer needs and requirements determined in 3.2a(1) to ensure effective use. The VOC data and information are integrated through the SPP and Work Process Management Process, with opportunities for improvement through the Performance Improvement System. A cycle of improvement in 2015 was modifying the VOC Process to include weekly reporting to all departments.

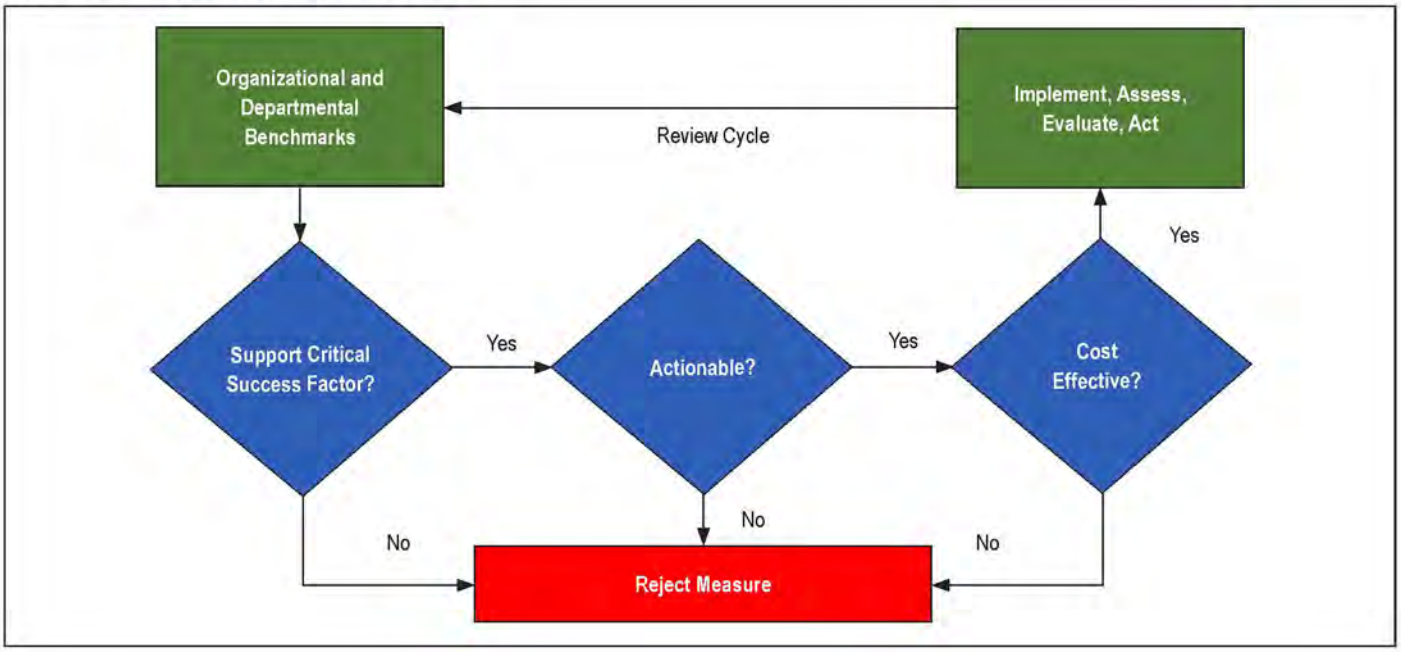
The Quality Department analyzes complaints for monthly trends to seek out opportunities for improvement. Department associates also monitor social media data and information to provide positive feedback to other associates and dealers or to address a concern. Information is deployed through the "Meeting Structures" (see Figures 1.1-1 and 4.2-3).

4.1a(4) GG's continual focus on process measures ensures that the PMES can respond to rapid or unexpected organizational or external changes. Decisions to modify or create an AP can be made and implemented during the weekly SLT meeting, monthly scorecard or dashboard reviews, or daily Data Board reviews. Agility is enhanced by some reviews that include all key stakeholders (see Figure 1.1-2).

Figure 4.1-3: Balanced Scorecard Measures (RTB = Green, CTB = Gold)

SQDCPME	Measures	Figure	Frequency
Safety	Days Away from Work Rate	7.3-2	MO
	OSHA Recordable Rate	7.3-1	MO
	Maintain OSHA-VPP (Internal and External Findings)	7.1-21	4x/YR
	Enhance Content/Scope of Safety System (Project)	7.1-23	4x/YR
Quality	First-Time Quality % by Product	7.1-7	MO
	Things Gone Wrong/100 Units	7.1-9	4x/YR
	Maintain ISO 9001 (Internal and External Findings)	7.1-21	4x/YR
	Improve Supplier Quality Index (Project)	7.1-24	4x/YR
Delivery	SCM Delivery (Days)	7.1-26	MO
	Production to Schedule	7.1-4	MO
	On-Time Delivery to Dealers	7.1-1	MO
	Engage with Dealers to Resolve Complaints (Project)	7.2-3a,b	4x/YR
Cost	Finished Inventory (Days)	7.1-6	MO
	Warranty Cost $/Unit	7.2-1	MO
	Net Profit	7.5-7	MO
	Support Concept of Self-Driving Units (Project)	7.5-9	4x/YR
People	Turnover Rate	7.3-9	MO
	Absence Rate	7.3-10	MO
	Competency Rate	7.3-3	4x/YR
	Enhance Associate Engagement (Soft Skill Training)	7.3-11	4x/YR
Maintenance	RCM Inherent Availability %	7.1-15	MO
	OEE %	7.1-13	MO
	Total Effective Equipment Performance (TEEP) %	7.1-14	MO
	Support Implementation of Operator/Repair	7.4-9	4x/YR
Environment	% of Solid Waste Stream Recycled	7.1-16	4x/YR
	Waste #/Unit	7.1-17	4x/YR
	Maintain ISO 14001 (Internal and External Findings)	7.1-21	4x/YR
	Support Test Market of Battery Propulsion	7.5-9	4x/YR

Figure 4.1-4: Comparative Data Selection Process



4.1b Performance Analysis and Review

We review our performance and capabilities according to the deploying and integrating methods shown in Figure 4.1-5. Operational (tactical) data are described as "Run-the-Business" and strategic data as "Change-the-Business."

4.1c Performance Improvement

4.1c(1) Analytical data from a variety of sources are obtained as input for future performance projections. These sources include market analysis (comparative and competitive), environmental scans of the political climate, anticipated regulatory

Figure 4.1-5: Examples: Organizational Performance Review/Fact-Based Decision Making

	Daily What (Who)	Weekly What (Who)	Monthly What (Who)	Quarterly What (Who)	Annual, Biannual What (Who)
RTB Performance Data	Shift change-over (SLT, D)	SQDCPME (SLT, D)	Weekly data plus:	Monthly data plus:	Associate satisfaction (VPM, A)
			RTB scorecard (VPM, A)	All-hands meetings (A)	
	Productivity (SLT, D)	Cost (financial) status (SLT, D)	Financial status (VPM, A)	Supplier management review meetings (SLT)	Customer/ supplier satisfaction (VPM, A)
	Revenues (SLT, D)				
	Unit Safety Huddles (A)	AP status (SLT, D)	Customer/supplier satisfaction (VPM, A)	VP Manufacturing meeting (VPM, SLT)	Associate and customer satisfaction focus groups (A)
CTB Performance Data	Monitor initiative milestones (SLT)	Initiatives status review (SLT)	Weekly data plus:	Monthly data plus:	Department and consolidated SWOT (A)
			CTB scorecard (VPM, A)	CTB initiatives roll-up status and timelines (VPM, SLT, D)	
		Initiative resource limitations (SLT)			Stakeholder satisfaction (VPM, A)
Analysis	Variances (e.g. daily activity vs. planned)	Gap analysis	Budget to actual	Same as monthly plus:	Statistical
		Trending	Statistical/Comparative	Value stream analysis	Gap analysis
		Variances	AP evaluation	Rapid improvement events (innovation)	Regression
	Trending	Results from KM	Gap plan evaluation		Results from KM
Decisions Made/Used	Operational	Reinforce APs and behaviors	Modify APs	Same as monthly plus:	Strategic direction
	Development		Charter new teams	New growth strategies	Recognition
	Service recovery	Staffing	Resource allocation	Opportunities for innovation	Opportunities for innovation
	Safety/regulatory	Recognition	Recognition		

(Who): VPM = VP Manufacturing; SLT = Senior Leadership Team; D = Director; A = All

changes or requirements, historical trends of GG and Gateway key measures, and any anticipated new core competencies. This information is fed into the SPP and design concepts of key work processes (see 6.1a[2]) to project future performance. The integration of the SPP and key work processes ensures alignment with key APs. If a review of these projections reveals a discrepancy, then the issue is addressed by one of the following methods: adjust AP scope, create a new AP, provide a corrective action report, or initiate a LSS project.

4.1c(2) Continuous improvement and opportunities for innovation from performance reviews are accomplished using the variety of methods described in Figure 4.1-5; see the row titled "Decisions Made/Used." These priorities and opportunities are deployed by the methods described in Figure 4.2-3 (Examples of Knowledge Management Mechanisms).

4.2 Information and Knowledge Management

4.2a Data and Information

4.2a(1) GG verifies and ensures the quality of organizational data and information to ensure their accuracy and validity, integrity, reliability, and currency according to the methods given in Figure 4.2-1.

4.2a(2) GG ensures the availability of organizational data and information in a user-friendly format and timely manner to various users according to Figure 4.2-2. The IT systems are ensured to be user-friendly through focus groups for new system introductions and annual surveys to all users for existing systems.

4.2b Organizational Knowledge

4.2b(1) GG builds and manages organizational knowledge according to Figure 4.2-3. The mechanisms represent how knowledge management (KM) input is collected and transferred, and the evaluation measures are used to blend and correlate data.

4.2b(2) We share best practices in our organization according to the deployment and integration methods described in Figure 4.2-3. See the row titled "Rapid Identifying and Sharing of Best Practices."

4.2b(3) We embed learning in the way our organization operates by the deployment and integration methods described in Figure 4.2-3. See column titled "Embed Learning."

Figure 4.2-1: Quality of Organizational Data and Information

Data Property	Data	Information
Accuracy and Validity	• Drop-down menus • Required fields • Standard reports • Testing and validation	• Compliance audits • Process expert evaluation • Dealer satisfaction • Customer satisfaction
Integrity	• Password protected • Actual vs. expected results range checking • Computer protocols	• Auditing and rules • Shred unneeded customer data • Automated alerts
Reliability	• Database backups • Redundancy on critical systems	• Response time • Disaster recovery plan • External audits
Currency	• High-speed lines • Remote access • Wireless network	• Ease of access • Tablet and smart phone applications supported

Figure 4.2-2: Data and Information Availability

Users	How Do We Determine Requirements?	Type of Data/Information	Availability
Associates	Scorecards	Performance Scorecards	Intranet Access
	Regulatory Compliance	HR/Payroll/Benefits	Email/Mobile Devices
		OSHA-VPP	
	Measures of Engagement	Associate Survey Results	Associate Self-Serve
		Job Opportunity Postings	Training Calendar
Suppliers and Partners	Contract Performance	Electronic Data Interchange	Limited Intranet Access
		Advanced Shipping Notice	
	Supplier Surveys	New Product Innovations	Remote Access
	Dealer Surveys	Supplied Component Part Specifications	Email/Mobile Devices
	Conventions		
Customers	Satisfaction Surveys, Post-Purchase Surveys	Product-Line Attributes and Options	Website/Email
	Quality Indicators		Product Brochures
	Competitive Analysis	Service Bulletins	Dealer Network
	Market Awareness Measures	Spare Parts	Online Service Manuals
		New Product Innovations	

Figure 4.2-3: Examples of Knowledge Management Mechanisms

Knowledge Useable by/for	How Knowledge is Collected	Transfer Mechanisms	Embed Learning	Evaluation Measures
Associates	MBWA observation data	Orientation	Cross training	Regulatory compliance
	Satisfaction surveys	Department meetings	Performance reviews	Measures of engagement
	Policies and procedures	Unit Safety Huddles	Updated procedures	Customer satisfaction
Dealers/ Customers	VOC listening posts	Meeting structure	Satisfaction metrics	Regulatory compliance
	Industry conferences	Email/social media	Product reviews	Customer satisfaction
	Monitoring social media	All-hands meetings	Performance reviews	Customer engagement
Suppliers and Partners	Contract reviews	Contract reviews	Contract requirements	Contract performance evaluation
	Performance reviews	Email/phone calls	Product specifications	
	Technology discussions	Technology transfers	Satisfaction reviews	Satisfaction metrics
Stakeholders/ Gateway	Parent company guidance	SLT meetings	AP status	Market assessments
	Strategic planning	VP Manufacturing meetings	Strategic opportunities	Product assessments
	Benchmarking	Meeting structure	Emerging CCs	Process assessments
Rapid Identifying and Sharing of Best Practices	Organizational needs by strategic planning and Leadership System	Learning Communities and LSS projects	Share Learning Communities and LSS outcomes	Effectiveness of changes to systems and processes
		Communication methods	Incorporate/update system procedures	Adoption of best practices ROI
	Customer needs by work processes	Learning Communities and LSS projects	Share Learning Communities and LSS outcomes	
		Continuous improvement	Deploy work process procedure changes	Efficiency and effectiveness of work processes
Strategic Planning	Environmental scan	CTB scorecard reviews	Diverse participation in Action Plan Teams	Product offerings aligned with customer requirements
	Synthesis of external data	RTB scorecard reviews		
	Synthesis of internal data	Consolidated SWOT	¼ Year status updates	
	VOC listening posts	Initiative APs	AP status	Long-term viability

Category 5: Workforce

5.1 Workforce Environment

5.1a Workforce Capability and Capacity

5.1a(1) GG builds an effective and supportive work environment using the Performance Evaluation System (PES): performance evaluation; learning and development; reward and recognition; benefits; and focus on individual/team metrics. Through this system, SLT members assess associate capability and capacity when setting organizational direction, provide a positive associate climate that contributes to our high-performance environment, ensure associate and leader development when performing to plans, and manage and improve performance. The PES is deployed using a variety of two-way communication methods.

Within PES, SLT members assess associate skills, competencies, and certifications using the yearly Training Matrix Process, which produces a comprehensive GG Training Matrix: (1) Department Directors and associates identify critical skills needed for jobs, competency levels (novice, proficient, accomplished, master), certifications for licensure, and yearly training needs based on a review of associates' performance evaluations, career aspirations, and job descriptions. This information is documented on the Training Matrix. Each associate is individually listed in his/her department's Training Matrix. (2) Directors also document opportunities for cross training, based on past performance and competency levels. (3) Directors submit the matrix to HR as an input into the plant-wide training calendar, which also contains identified training needs from the strategic initiatives and APs. (4) SLT members approve the yearly training calendar's financial and associate time commitment.

Directors validate associate capacity yearly during the PES by matching time studies to job descriptions and work flow. After SLT members approve changes in capacity, job descriptions are revised by HR associates, the Work Assessment–Job Profile is initiated, training is added to the associate's matrix, and the associate is audited by the HR Department to ensure that critical skills are demonstrated. The Work Assessment–Job Profile is conducted by Hardiness and Edger Community College job profilers who have been trained and authorized by industrial/organizational psychologists. The profiling procedures are designed to systematically develop accurate profiles through a task analysis that is used to select the tasks most important to a job. In addition, a skills analysis is used to identify the on-the-job behaviors associated with the skills under consideration and to identify the skill levels necessary for entry and effective performance on the job (i.e., cut or passing scores).

Manpower planning is GG's yearly process of creating an efficient process using the correct staffing levels based on key work and support process metrics. Manpower planning,

Figure 5.1-1: Training Matrix

Job	Order entry	Metals	Pigments	Distribution partners	Industrial	Electronics	International orders	Drop ship	Order types	Sales orders	Consignment orders	Samples	Stock transfer	Taking Orders via	Phone, fax, email	Web POs
Criticality		3	2	4	1	2	2	3		1	2	1	2		1	1
Occurrence		5	5	5	5	5	5	3		5	4	4	4		5	4
Operator																
Employee 1		2	1	1	3	1	2	1		3	2	3	3		3	3
Employee 2		3	2	1	3	2	2	2		3	3	3	3		3	3
Employee 3		1	1	3	3	1	3	0		3	0	3	1		3	2
Employee 4		1	3	1	3	3	2	3		3	0	3	3		3	0
Employee 5		0	0	0	1	0	0	0		2	0	1	0		2	0
Employee 6		0	0	0	1	0	0	0		2	0	1	0		2	0
% to mastery		39%	39%	33%	78%	39%	50%	33%		89%	28%	78%	56%		89%	44%
At-risk score		38.6	25.7	60	6.4	25.7	20	27		5.6	28.8	5.1	14.4		5.6	9

Key: 0 not trained, not familiar. 1 familiar. 2 trained and can fill in. 3 local master.

conducted by HR associates, encompasses different elements of staffing levels that include an overtime plan, manpower actuals, manpower work process evaluations, and manpower efficiency control.

The PES process has seen several revisions; for example, in 2015 revisions included the addition of Work Assessment–Job Profile, in 2016 the inclusion of manpower efficiency control, and in 2017 the addition of the "accomplished" level.

5.1a(2) The HR Department and directors collaborate to recruit, hire, place, and retain workforce members. The Hiring Process includes the following steps:

1.1 An approved position requisition is received by HR.
1.2 HR associates review current résumés and/or applications received from advertising vacancies online or in print media and maintaining accurate records of sourcing and results. They forward résumés to the Department Director and selected members of the department for their review.
1.3 A recruitment agency and classified advertisements may be utilized depending on the current status of résumés/the application pool.
1.4 Potential candidates are selected by the Department Director.
1.5 HR staff administers the Work Assessment–Job Profile to potential candidates.
1.6 Qualified applicants who achieve required assessment levels for the position are scheduled for interviews by HR associates.
1.7 The hiring director, selected members of the department, and HR representative conduct interviews and select the final candidate.
1.8 The final candidate is screened with behavioral-based questions to ensure a fit with our culture and to verify qualifications.
1.9 Upon obtaining successful screening results of the final candidate, HR associates make a job offer to the applicant. The offer is contingent on successful drug-screening results.
1.10 Upon acceptance of the job offer, GG determines a start date, and new-hire orientation is scheduled.
1.11 The associate is placed in the position with an assigned mentor and scheduled for 30-, 60-, and 90-day reviews.
1.12 Associates are retained through GG's meeting their satisfaction and engagement requirements.

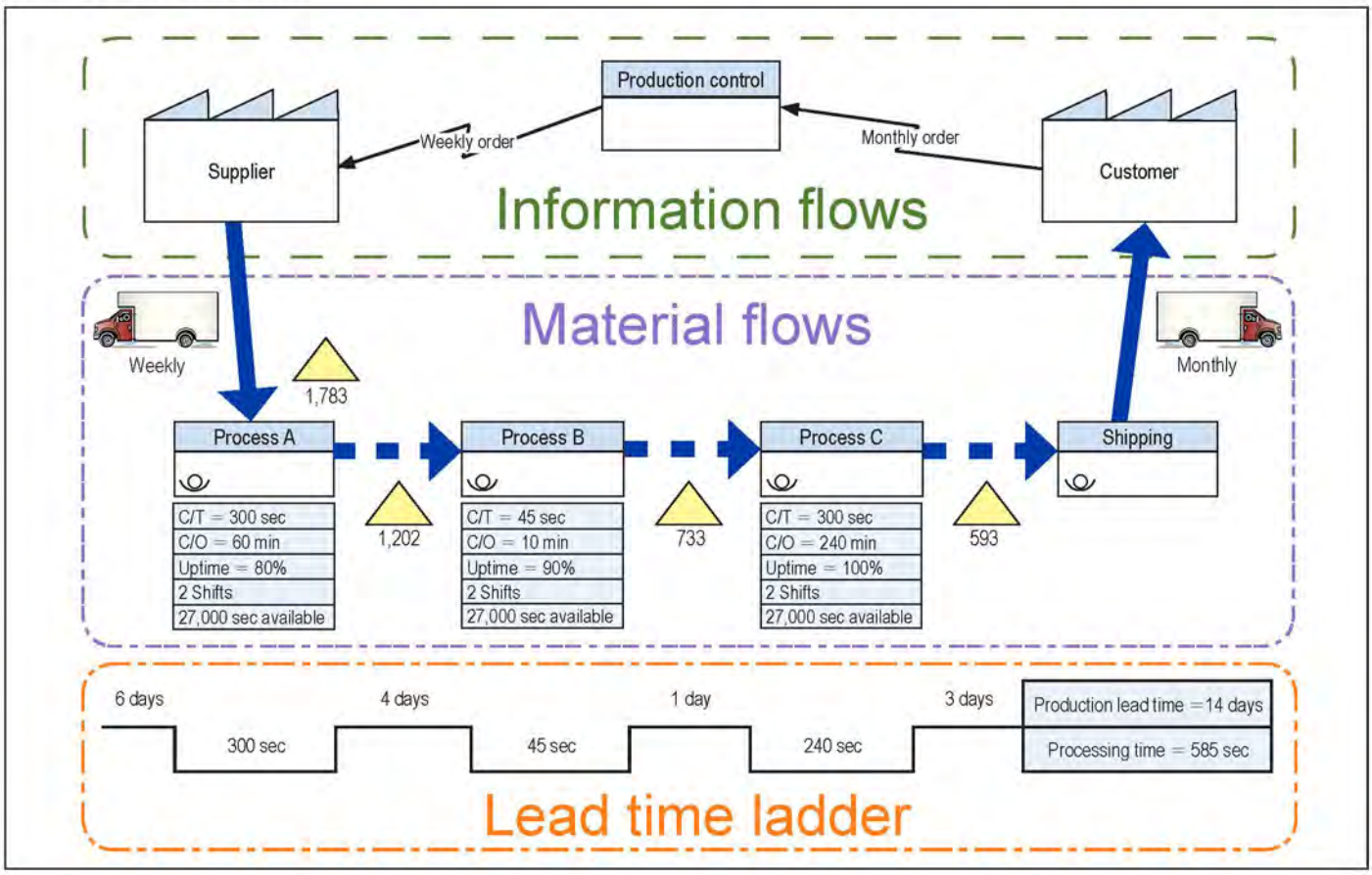
GG views diversity as something more than a moral imperative or a business necessity—we see it as a business opportunity. Our Diversity Strategy includes a variety of approaches. SLT members network with community connections (e.g., churches, cultural institutions, colleges, the Urban League, and the National Council of La Raza) to leverage minority recruitment agencies. HR associates solicit referrals from other GG associates since they will have peers in the industry or know qualified candidates who may be looking for work. HR leverages the Federal U.S. Equal Employment Opportunity Commission (EEOC) guidelines to ensure our hiring practice is neutral to age, race, gender, and minority factors. The GG Diversity Committee helps implement policy and comes up with new ideas on how to attract more diverse candidates to GG. If a recruitment agency is being used, HR associates make the job more compelling to the agency by emphasizing diversity-sensitive details (e.g., color, gender, generation, education, skill characteristics, and language) that attract a more diverse candidate pool when describing what makes GG a good place to work. Improvements for these diversity approaches have been through several revisions: revisions include in 2015 the participation of GG directors on key community church boards, the 2016 formation of the Diversity Committee, and the 2017 addition of the 90-day review for new associates.

5.1a(3) The workforce is prepared for changing capability and capacity needs through systematic assessment of associate KSAs to engage in the work and manpower planning to accomplish our work and support processes. GG manages workforce career paths, leadership development, and succession planning to prepare for changes in organizational structure and work systems, and builds concepts of change leadership and adapting to change with training, coaching, and practice. GG also systematically manages increasing staffing levels (1) with cross training to prepare for and manage any periods of workforce growth and (2) with the temporary workforce to ensure continuity, prevent workforce reductions, and minimize the impact of such reductions. A 2016 cycle of learning began the associate implementation of yearly capability and capacity analysis where associates break down their work into key segments of time spent and the required KSA. Validated by directors, this analysis ensures preparation to fill positions for varying demand levels because of associate ability to fill a one-up or one-down position in the value stream.

GG prepares for and manages periods of workforce growth by projecting operations for three months in advance and creating the three-month staffing plan. We also utilize recruitment agencies to assist in periods of growth. GG manages the workforce and its needs to ensure continuity and prevent workforce reductions by providing cross training and development for key work processes. On the Training Matrix, the Department Director notes "Primary" or "Secondary" associate responsibility; there must be at least two primary associates or one primary and one secondary associate for each job function. The impact of workforce reductions is minimized by the use of a temporary workforce. GG acknowledges that a portion of its employment requirements may be met through the employment of a temporary workforce. Workforce reductions are prevented by maintaining a contingent workforce to account for capacity changes, reducing the temporary workforce, and requesting non-paid time.

Recent improvements for change management approaches include 2015 revisions for the training on change leadership, the 2016 publication of change leadership concepts and

Figure 5.1-2: Lead Time Ladder



practices, and the 2017 addition of succession planning for critical positions eligible for retirement.

5.1a(4) The GG workforce is organized and managed by value streams (relationship building CC) that accomplish key work and support processes as measured on SQDCPME (guiding principles CC). Employee performance is also managed using the PES and the Training Matrix. Associates exceed performance expectations by applying LSS tools and improvements, which are validated during routine audits and daily, weekly, and monthly meetings to share ideas, spread best practices, and resolve issues based on data analysis. All KPIs are aligned to SQDCPME to reinforce a customer, operational, and/or performance focus. KPIs are discussed during these meetings and improved in Learning Communities.

5.1b Workforce Climate

5.1b(1) GG ensures workplace health by providing health assessments, flu vaccinations, health screenings, coaching for wellness, and Wellness Committee activities. GG ensures workplace security through automated security devices for doors and gates that require unique codes or GG-issued entry badges, security monitoring systems, surveillance systems, and promptly removed access for terminated associates. Electronic accessibility to the GG network is provided by IT staff members, who assign each employee a unique login, with password changes required quarterly. In addition, associates who need remote access to GG servers and files are provided access by the IT Department. The GG facility also has only one point of common public access to ensure workplace security. GG ensures workplace accessibility by ensuring that the facility is handicapped-accessible by meeting the International ISO Accessibility Standards, added in the 2016 cycle of improvement.

Performance measures and improvement goals for workplace environmental factors are compliant with the OSHA 18001 Standard for Occupational Health and Safety. Results are indicated in Figure 5.1-3, with additional results available on-site.

Figure 5.1-3: Performance Measures for Workplace Environmental Factors

Factor	Performance Measure (See 7.3a[2])	Goals
Overall		
Health	% of associates who agree that GG ensures workplace health and safety	90%
Security	% of buildings with engineered access methods	100%
	% of buildings with one common entry point	100%
	% of staffed buildings with security system monitoring	100%
Accessibility	% of buildings handicapped accessible	100%

5.1b(2) The diverse GG workforce is supported via services, benefits, and policies that are tailored to workforce groups and even cover family members; information on how to tailor services and benefits to various workforce segments (see Figure P.1-5) is often obtained through employee input from the Wellness Committee. For example, policies tailored to the workforce segment of plant/senior management include a car allowance benefit, travel insurance, additional life insurance, and long-term disability insurance. Vacation accruals are tailored to the management segment based on tenure, insurance benefits apply to those with a status of full-time, and a safety shoe reimbursement is tailored to associates. The GG workforce is supported through services that include a reimbursable fitness center for associates and their guests (added from a 2017 cycle of improvement), the Employee Assistance Program (EAP), and the ability to participate in rewards for health. The GG workforce is also supported through benefits such as 401k plans; flexible spending accounts; medical, dental, vision, and life insurance programs; and supplemental insurance programs. The GG workforce is supported through a variety of policies that cover cell phone use and allowances that are tailored to meet different needs; uniforms provided and laundered (2015 cycle of improvement), if requested; tuition reimbursement; overtime (OT)/compensatory time; retirement recognition and gifts; and lockers.

Employee services, benefits, and policies are communicated to associates through the *Employee Handbook*, department meetings, and the intranet.

5.2 Workforce Engagement

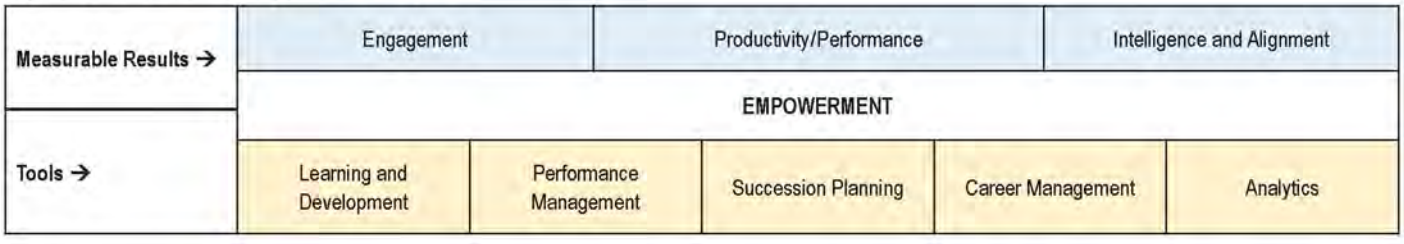
5.2a Workforce Engagement and Performance

5.2a(1) GG fosters an organizational culture characterized by open communication through the SLT, which builds trust through frank, two-way communication during Gemba walks, participation on teams, and methods shown in Figure 1.1-2. In addition, Learning Communities and teams formed around continuous improvement activities ensure that communication and collaboration benefit from the diverse ideas, cultures, and thinking of associates as they brainstorm solutions to identified problems, decide on a workable solution, implement the action, and evaluate the results. Furthermore, team formation is conducted through a Stakeholder Analysis Process in order to form diverse representation for beneficial sharing. The Stakeholder Analysis Process begins with (1) identifying those involved in the process or whose interests may be affected; (2) rating involvement within the project, within the organization, or with influencers; (3) documenting their needs; (4) assessing stakeholder interest and influence; (5) managing their expectations; and (6) gaining their support for the project. This process benefits diverse thinking and ideas as evidenced by our cross-functional problem-solving models (LSS, Whiteboards, and "5 Whys," etc.), innovation projects, quality tools, idea generation, and value-stream mapping.

GG fosters an organization of high-performance work and engagement through the Annual Review Process, with its individual metrics and personalized growth plans; monitoring of the Training Matrix; contributions to Learning Communities; and focus on SQDCPME. GG provides systematic opportunities to empower and therefore engage associates. All associates participate in training to ensure that they have all of the tools needed to learn and grow, make their own decisions, be leaders, and contribute to the success of the plant. In addition, they have the continuous improvement team structures to connect with others throughout GG. Empowerment is the KPI for the health and wellness of our associate strategy, which includes learning and development, performance management, succession planning, and career management. The Employee Empowerment Questionnaire, developed by a third-party supplier, is a valid tool for measuring empowerment, with 14 questionnaire items created as observable indicators of empowerment. For example, 99% of our associates responded strongly to "I have a lot of control over how I do my job," indicating empowerment in the respondent. Additional data are available on-site. 2017 improvements are the addition of the value "Respect Others" and the corollary personalized growth opportunities, and the development of a future CC of value engineering, which empowers associates to address their own minor maintenance issues on the line.

5.2a(2),(3) GG determines the key drivers of workforce engagement for different associate department segments through the analytics of key formal and informal data. Data come from surveys (satisfaction and engagement), training effectiveness results, increased productivity, turnover, achievement of performance metrics (individual and department), and career opportunities. For example, the Associate Survey is segmented by department each year to obtain actionable information. Based on a 2015 improvement, an additional informal method used to assess engagement includes yearly

Figure 5.2-1: Associate Empowerment Model



focus groups, with a standard set of key questions used throughout the workforce segments. Responses are analyzed and correlated with survey results to validate findings. Workforce engagement is also assessed and improved in the areas of safety and productivity, and it is measured by absenteeism rates, workforce retention, training hours, exit interviews, and the number of days gone without a lost time claim. Measures are shown in category 7.

5.2a(4) The PES supports high performance and workforce engagement by (1) establishing goals for associates linked to the SQDCPME, (2) managing and improving performance through training and development, (3) rewarding associates as discussed in 1.1b, and (4) demonstrating competence in our organizational values.

GG redesigned its performance management processes in 2016 to better align with learning and development, encouraging more active and meaningful discussions between associates and directors about career development needs and interests. Adding a correlation of GG's strategic goals and objectives on the Training Matrix helps associates align their personalized growth goals to GG's objectives and see the connection between their day-to-day efforts and our overall success.

High performers are eligible for the maximum pay-for-performance merit increase, based on performance in four areas: (1) achievement of annual goals, (2) demonstration of core values, (3) innovation and intelligent risk taking, and (4) demonstration of a customer and business focus through the achievement of APs and continuous improvement activities.

A 2017 improvement, automating the Performance Management System (PMS) via technology, enables directors to have more meaningful—and more frequent—discussions with their direct reports; before 2017, performance management was only an annual event. Integrated with learning and development, training can be assigned on the matrix to address skill gaps identified during the review process, helping an associate to improve his or her performance or acquire skills needed to support new business initiatives or career aspirations.

5.2b Workforce and Leader Development

5.2b(1) The Learning and Development System supports GG's needs and the personal development of workforce members, managers, and leaders by providing the structure to assess the training needs of the workforce, provide learning opportunities, and improve the effectiveness of training. See Figure 5.2-2.

To create an environment of workforce learning, senior leaders participate in and provide funding for associate off-site and in-house workforce training. Senior leaders have approved career paths for system engineers. Individual training matrices and a Training and Development Plan are deployed and used throughout the plant.

Individual employee training needs are identified during the yearly performance review and throughout the year, if needed. Some training is self-identified, while other training is identified by directors. Associates' tuition is paid through the Internal Training Program. Each department has a training budget so that the training needs of associates can be individualized and differentiated. Several associate segments (see Figure P.1-5) are also required to meet certification requirements and frequently participate in outside training (e.g., public safety). GG provides a Tuition Reimbursement Program for qualified educational expenses.

The Learning and Development System addresses GG's core competencies by including performance improvement training annually in the training program; supports the achievement of short- and long-term SOs and APs by reviewing them at department meetings and incorporating them into the individual performance goals for associates; supports performance improvement through the focus on individual goals aligned to SQD; prepares for organizational change by identifying cross training on the matrix; and supports innovation by recognizing involvement in new ideas and taking risks. The Learning and Development System supports ethics and ethical business practices by incorporating an annual acknowledgement of the ethics policy by associates and requiring yearly training updates.

The Learning and Development System improves customer focus in several ways. First, it is a core element of the training program. Second, customer focus is discussed at all meetings where best practices, new ideas, and opportunities for improvement are shared. Third, training is designed to focus on SQDCPME, innovation, and LSS. The Learning and Development System ensures the transfer of knowledge from departing or retiring workforce members through succession planning, use of career ladders, and cross training—either within or across departments. To ensure process dependency versus person dependency, GG uses ISO guidelines for work instructions, training guides, and SIPOC-mapped processes; they are all updated and improved yearly or in response to our change management procedure. The Learning and Development System ensures the reinforcement of new knowledge and skills on the job through mentoring, audits, retraining, and coaching. A 2015 improvement resulted in the addition of the Leave Behind, a formal process that documents what an associate assuming a new role would need to know to be successful based on information provided by the departing associate.

5.2b(2) The effectiveness of the Learning and Development System is evaluated through the use of the Kirkpatrick evaluation system. The efficiency of the Learning and

Development System is evaluated through improvements in cycle time to train and then design new materials; a decrease in the amount of time to effectively train on a subject area; and evaluations and improvements in trainer presentations and delivery of content. ROI in training is calculated as achievement of SQDCPME metrics in which P is aligned to workforce engagement. Based on an analysis of results, improvements in curriculum are made or new materials are developed for the subsequent trainings.

5.2b(3) Career progression is managed for associates through certification processes using work keys, career ladders, and formal career paths. Formal career path programs outline education and experience requirements to advance to the next level. Career development for the GG workforce is planned through the PMS and the setting of individualized goals to help advance employee careers and develop associates for future roles. Succession planning for management and leadership positions is a systematic process that begins with a risk assessment of critical positions and potential retirements. A development plan for identified associates for promotion is generated with opportunities to shadow, receive formalized training, and participate in position-related tasks. Based on the 2016 cycle of improvement, a risk assessment with a mathematical calculation was added.

Figure 5.2-2: Talent Management Cycle

Exit Process → • Task/Duty/Resource Reallocation • Position Transition Plans • Exit Interview	**Hiring Strategies →** • Competency-based Recruiting and Hiring Process	**Employee Onboarding** • New Leader and Employee Onboarding
↑	TALENT MANAGEMENT CYCLE	↓
Leadership and Employee Development • Leadership and Employee Development Programs • Core, Technical, and Functional Competencies Development • Action Learning Coaching and Individual Development Plans	**← Succession Planning Management** • Talent Gap Analysis • Identification of High Potential and Key Talent • Integrated Development Plans	**← Performance/ Career Management** • Individual Goal Planning • Monitoring • Developing • Evaluating • Rewarding

6.1 Work Processes

6.1a Product and Process Design

6.1a(1) GG determines key product and work process requirements by placing emphasis on product attributes (developed from feedback gained from dealers listening to the VOC [see Figure 4.2-3] and the blueprint provided by corporate that includes market data that leads to customer satisfaction and preference). We use the Kano model, a 2015 improvement, as a framework to categorize and prioritize the different performance features of our products based on VOC. We map this input in a CTQ tree, a 2016 improvement, to provide clarity and structure for developing quantifiable process specifications. Design quality is the downstream driver of quality, which includes concept-to-customer times, time for design, development, production, and delivery of new mowers. We focus on continuous improvement and corrective action as far upstream as possible for the greatest savings and collaborate with the Corporate Design Team on every innovation and new model.

6.1a(2) Our key work processes (Figure 6.1-2) are created from SIPOCs (available on-site), so that all stakeholders understand our core processes and their requirements. Figure 6.1-1 shows a SIPOC example.

6.1a(3) GG uses DMADV/DMAIC as a structured process for developing products and work processes to ensure that customer needs are met. We incorporate Lean tools and methods for the particular product being developed and delivered. **Step 1: Define:** Identify new work processes based on cross-functional team recommendations. The diversity of team members ensures a working knowledge of the product and processes throughout the plant. The Quality Department keeps the DMADV/DMAIC process on track, evaluates progress on each tollgate, and makes midcourse corrections based on emerging technology; goals; and clear measures of quality, quantity, cost, and time. **Step 2: Measure:** Analyze multiple product/process indicators including VOC requirements and indicators related to complaints. **Step 3: Analyze:** The Quality Department confirms which changes and goals will provide the optimal benefit for the product/process (culture of performance excellence). Assessment of risk is analyzed from competitive, salability, and value analyses. **Step 4: Improve:** The DMAIC Team defines a set of activities used by associates for meeting process quality goals. This includes establishing process capability in meeting customer needs and agility in reducing cycle time. **Step 5: Control:** The Quality Department transfers all aspects of production to operations after identifying controls needed, designing a feedback loop, optimizing associate control, and scheduling audit plans to ensure continuous improvement. The use of DMAIC resulted in the addition of the paint flush box, which enables us to rapidly switch colors and customize paint colors according to customers changing requirements.

6.1b Process Management and Improvement

6.1b(1) Quality control processes are used to evaluate performance to goals. The Quality Department evaluates performance during operations and compares it to goals to verify that control is being maintained. Performance is evaluated during and after operations, with information provided on electronic displays located throughout the plant, during Learning Communities meetings, during production meetings, and to the SLT daily. Measures or indicators to control and improve work processes are shown in Figure 6.1-2. This resulted in speed and part accuracy in the kanban system and increased throughput.

6.1b(2) Key support processes are managed as a part of business strategy. To deliver operational excellence and change the business, key work and support processes are identified and reaffirmed annually during the SPP when goals, SOs, and

Figure 6.1-1: SIPOC Example

Process Name	Supplier of Inputs	Inputs	Process Steps	Outputs	Recipient of Outputs	Measures	Review Frequency	S	Q	C	D	P	M	E
Production Planning	Production	Receipt of Parts	Inventory	Parts Available	Fabrication	Supplier Mgmt.	Daily		X	X	X			
		Parts Available	Fabrication	WIP-F	Paint	Plan vs. Actual	Daily		X			X	X	
		WIP-F	Paint	WIP-P	Assembly	Plan vs. Actual	Daily	X	X			X	X	X
		WIP-P	Assembly	Complete	Verification	Plan vs. Actual	Daily		X			X	X	
		All above	Verification	Available to Ship	Shipping	Defect Ratio	Daily		X	X	X	X		
	Customer	From Parent	Customer Orders	Approved Orders	Scheduling Queue	Demand	Continuous				X			
		Scheduling Queue	Capacity	Constraints	Firm Orders	OEE & Workforce	Monthly		X			X	X	
		Firm Orders	Master Scheduling	Daily Plan	All Units		Monthly				X	X		
		Revised Promise	Adjustments	Revised Plan	All Units		As Required							
	Trial Group	Receipt of Parts	Inventory	Parts Available	Fabrication	Supplier Mgmt.	As Required		X	X	X			
		Trial Schedule	Provide Line-Time	Daily Plan	All Units	Plan vs. Actual	As Required		X		X	X	X	

Figure 6.1-2: Key Processes, and Measures or Indicators to Control and Improve Them

	Method for Determining Key Work Process Requirements	Key Requirements that Work Process Must Meet	Measures or Indicators to Control and Improve Work Processes
Key Work Process			
Shipping	Cycle counts, scanning system	Accurate quantity	Shipping = delivery time
Receiving/Inventory Integrity	Daily cycle counting	Right parts in the right place, accurate quantity, inventory at min/max targets, correct part number	Kanban readiness
Production Scheduling	Production Manager plans monthly schedule	Meet customer schedule, daily labor requirements by area, accurate production schedule	Capacity metric = completion rate
Product Quality	Overall quality operating system: ISO audits throughout the year	Quality of part, meet customer expectations of product	Daily audits on defects, dealer hotline
Fabrication/Paint	Production Manager plans monthly schedule with daily review, quality processes above	Meet customer schedule, quality, cost, delivery	Downtime, rejects, scrap, parts produced
Assembly	Production Manager plans monthly schedule with daily review, quality processes above	Meet customer schedule, quality, cost, delivery	Completion rate, units produced
Key Support Process			
Maintenance	Review of the value stream	Reliable process to produce product	Meet customer demand, scheduled, predictive, breakdown maintenance
Supplier Quality	Defect occurrence audits	Quality, cost, delivery	Rejects
Quality Improvements	Control nonconforming product, corrective action, Kaizen, VSM, LSS	Quality, cost, delivery	• Efficiency = assembly, fabrication • Effectiveness = assembly, fabrication • Reduction of cycle time = constraints in assembly, fabrication
HR/Training	Recertification, onboarding	Training completion, audits	% Cross trained = novice, proficient, accomplished, master
IT	Manage implementation of new and existing equipment, new models	Work order completion	Equipment downtime, response time
Safety	Job hazard audits	Ensuring a safe environment	OSHA reportable, lost work days
Finance	Strategic planning	Balanced budget	Department expenses planned vs. actual

APs are reviewed and the measures that track progress are identified. For each measure or set of measures, key work processes are identified as those that achieve those measures. Key work processes add value to the customer or end-user, and support processes support key processes. Champions and targets are set for both key work and support processes during the SPP. Measures or indicators to control and improve support processes are shown in Figure 6.1-2. Day-to-day operation of support processes ensures that they meet key requirements (see Figure 6.1-3). HR monitors daily use of cross-trained associates who move up or down the value stream to different positions according to their training matrix.

Figure 6.1-3: Operation of Support Processes

Support Processes	Key Requirements
Supplier Quality	To improve customer satisfaction through proactive team activities driven by analyzing and interpreting data, then reacting efficiently, effectively, and ethically to achieve our MVV by utilizing experiences and continuous education
Maintenance	To provide technical service to ensure that the value stream is operational, with minimal unscheduled downtime
Safety	To support plant activities through departments, with the continual goal to develop unique products the world desires while providing a safe and environmentally sound workplace
HR/Training	To administer personnel policies, procedures, wages, benefits, recruiting, training, safety, and environmental policies in accordance with federal and state laws. Also, to provide services to all associates and maintain a harmonious work place for all through a team effort
Finance	To safeguard company assets and to be a business compass by providing timely and accurate financial information to the SLT, which contributes to sound business decisions and leads to continuous business growth
Quality Improvements	To support daily plant activities and provide information and data analysis, along with improvement tasks and implementation, to help achieve GG's SQDCPME targets
IT	To support all technologies used plant-wide with minimal rework

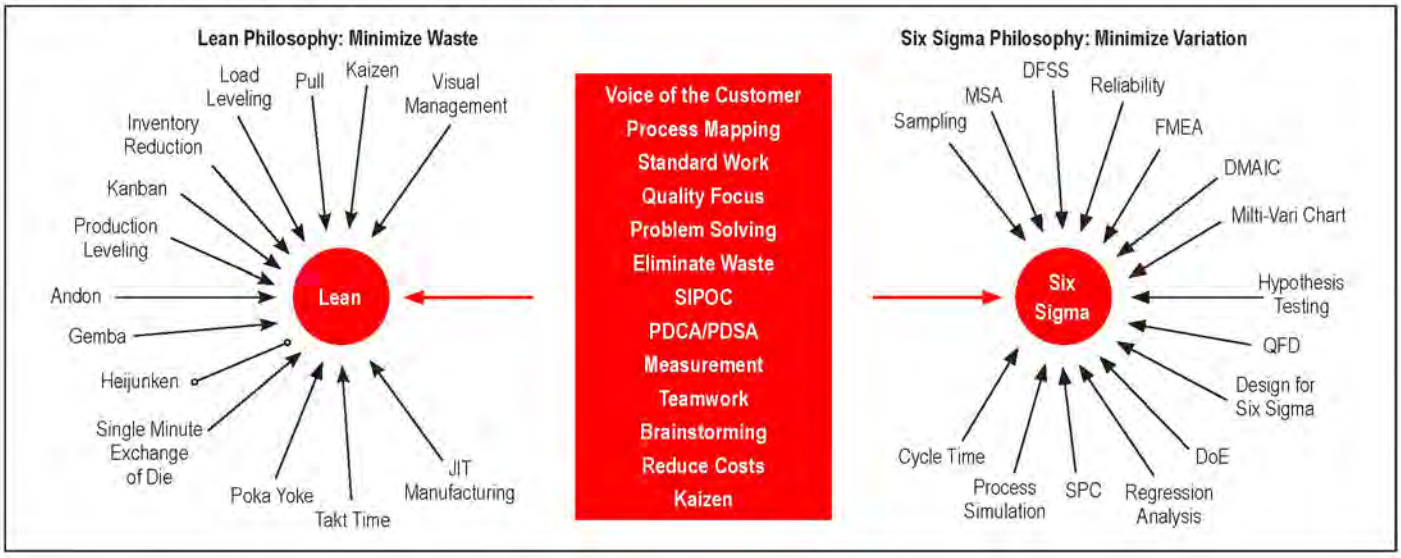
6.1b(3) To ensure that our processes are effective and efficient, key work and support processes are mapped using SIPOC. The SIPOC starts with the definition of the process and the corollary key process steps. The suppliers of each input and the customers of each output are identified. This ensures the connection of processes and the ability to Gemba the value stream. To generate efficiencies, the process is broken down into its constituent sub-processes, activities, and tasks/steps to pinpoint potential improvements. This includes identifying performance measures to monitor the effectiveness of the process and track the impact of improvements, which are monitored at all levels of the organization during regularly scheduled production and Learning Communities meetings. For example, one of the Learning Communities mapped a key work process in fabrication and simplified the work instruction, which decreased errors made by new associates.

KPIs are our primary CTQ metrics captured in SQDCPME metrics. Data are also shown on electronic displays at each work process on the manufacturing floor. Process improvements begin with two-way associate collaboration and communication on white boards at each line during daily meetings. To drive out waste, variability is reduced using Lean tools (e.g., standard work, visual management), adherence to ISO standards, and both scheduled and spot audits. For example, poka-yoke principles applied at a work station (cell) prevent blade decks from being assembled incorrectly. A bar code on the part provides information about the operating resistance. A simple test by the associate checks the actual resistance so the part can move down the conveyor; otherwise it does not pass through the toll gate. This improves quality.

Figure 6.1-4 gives an overview of the tools used to improve products and processes. GG performs product audits at appropriate stages of production and delivery to verify conformity to all specified requirements. Dock audits, a 2016 improvement, are conducted at defined frequencies. This includes a visual inspection and packaging and labeling verification. When improvements are identified, counter measures are applied, and the issue is entered into the GATE database for analysis by the Quality Department and shared at production and Learning Communities meetings. GG uses Six Sigma to reduce process variation and enhance process control, and uses Lean to drive out waste, promote work standardization, and increase flow. TOC for bottlenecks, an improvement in 2015, is applied, as appropriate.

The SLT and process owners monitor the work and support processes to ensure their effectiveness and efficiency and to share results during production meetings and with Learning Communities. Stored in GATE, these results and approach ensure deployment of the information throughout the plant. GG uses line-of-site visual management to organize the working area in a way that people (even outsiders) can tell whether things are going well or are amiss without the help of an expert. One of the biggest visual control innovations is the "big room." This is a very large room in which many visual management tools are displayed and maintained for each scorecard of SQDCPME. These tools include the status of each item and can be reviewed by any of the associates, suppliers, partners, or customers when they visit the plant or through GATE access. Any deviation from the schedule or performance targets is immediately visible, and root cause analysis is discussed in Learning Communities meetings. This system enables fast and accurate decision making, increases productivity, reduces defects and mistakes, helps GG meet deadlines, facilitates communication, improves safety, lowers costs, and generally gives associates more control over their environment, thus leading to the future CC of line associates as first-in for a needed repair (value engineering).

Figure 6.1-4: Tools Used to Improve Products and Processes



6.1c Supply-Chain Management

GG views suppliers as partners in pursuit of mutual goals, rather than as adversaries in a win-lose battle over price. The basis for building our supplier relationship is cooperation, collaboration, and trust. Purchasing at GG requires associates skilled and committed to working with our dealers and suppliers in a collaborative problem-solving environment, facilitating quality and continuous improvement. After a vetting and analysis of needed data requirements, we exchange data with suppliers via the electronic GATE portal, which provides electronic access to email, best practices, and two-way communication, as well as HR, technical, financial, quality, schedule, and customer satisfaction data (see 3.1a[1]).

Suppliers (Figure P.1-9) are selected using the Supplier Selection Process (Figure 6.1-5).

Supplier assessment comprises three separate but interrelated assessments, undertaken by the cross-functional team that hosts face-to-face pre- and post-conferences to share results. These assessments ensure conformance to quality and performance standards and establish a baseline for the improvement process. A yearly visit to the supplier site is required by the Plant Manager and cross-functional team or by a third party who will certify the quality system as acceptable.

The Plant Manager, in collaboration with the team, evaluates supplier quality, delivery, and service. The Plant Manager updates supplier scorecards on conformance to customer requirements, process capability (Cpk), percentage of nonconforming products shipped, cycle times of key processes, customer satisfaction, and the identified and measured cost of poor quality. The Plant Manager also conducts supplier meetings that gauge supplier performance against the MVV and established goals. The addition of Cpk and cycle time measures was a 2015 improvement. Scorecard results are shared monthly with each supplier and with associates during Learning Communities meetings. Metrics not at or above targets result in the collaborative development of APs, which must show a monthly improvement. From initial supplier agreements to contract renegotiations, the Plant Manager consistently communicates with suppliers. To mitigate risk, it is critical that supplier scorecard information is shared with stakeholders throughout the organization whose work is impacted by supplier performance. By aligning supplier scorecard metrics to goals and SOs, improving the evaluation processes, and communicating performance with both suppliers and stakeholders, GG's Plant Manager has greatly improved supplier efficiency over the last three years.

6.1d Innovation Management

GG's quality risk management (QRM) process supports a scientific and practical approach to decisions related to identifying which innovations are worth pursuing. Our QRM is a systematic process for the assessment, control, communication, and review of risks for innovation and change. Aligned to ISO 31000 Guidance on Risk Management, it provides documented, transparent, and reproducible methods to accomplish steps of the process based on current knowledge about assessing the probability, severity, and, sometimes, detectability of the risk. Figure 6.1-6 shows how the QRM considers elements at a level of detail commensurate with the specific risk.

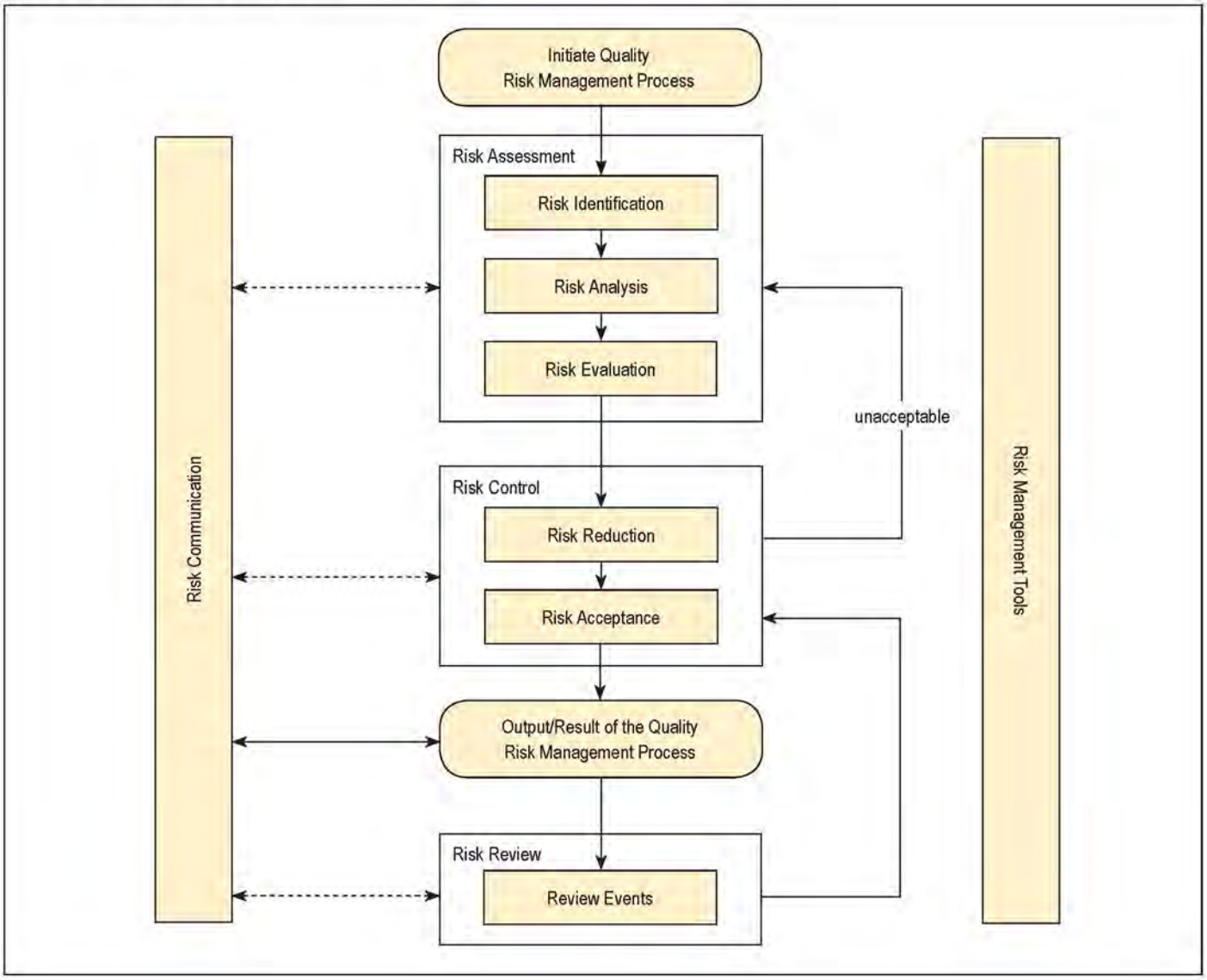
Decision tollgates are not shown in Figure 6.1-6 because decisions can occur at any point in the process. QRM activities are undertaken by cross-functional teams. The output of a risk assessment is either a quantitative estimate of risk or a qualitative description of a range of risk. The SLT communicates the information about risk and risk management between the decision makers and other stakeholders in 1:1 meetings. The output/result of the QRM process shared during these meetings concerns the probability, severity, acceptability, detectability, or other aspects of risks associated with the innovation. For example, vetted through this process was the 2015 strategic opportunity, preventive maintenance, which was added to our cascading metrics system as the M in SQDCPME. Risk was also assessed before the addition of our welding robots.

Senior leaders create an environment for innovation through Kaizen events, VSM, action planning, innovation projects, and DMAIC projects where associates identify opportunities for improvement and generate solutions. Senior leaders create an environment for intelligent risk taking by integrating corollary

Figure 6.1-5: Supplier Selection Process

Step 1—*Define*	The Finance Department documents the past, current, and anticipated purchase activity across our work processes to achieve purchasing leverage and a proactive approach to managing the sourcing process by analyzing data.
Step 2—*Measure*	A Finance Department-established cross-functional team, with representatives from both the customer and GG (e.g., representing various company functions—technical, purchasing, quality, and financial), validates sourcing needs.
Step 3—*Analyze*	The cross-functional team analyzes the supply industry's capabilities to understand potential suppliers, their performance and cost from industry data collection, and analysis and benchmarking.
Step 4—*Improve*	The cross-functional team develops a sourcing strategy by optimizing the total cost of ownership and integration of our MVV.
Step 5—*Control*	The SLT approves the supplier. The Finance Department develops the terms and conditions of agreement with specific key performance indicators by which supplier performance can be measured and monitored. Control is applied to supplier relations in evaluating supplier performance and selecting the vital few suppliers capable of optimizing performance based on clearly defined quality goals, data collection and evaluation of the performance of the suppliers, and corrective action where required.

Figure 6.1-6: Quality Risk Management



skills in training and development, recognizing efforts through reward and recognition, and evaluating development on the performance evaluations. Senior leaders evaluate and prioritize all strategic initiatives using predefined criteria, as previously discussed. For example, one Kaizen event focused on improving overall flow through shipping and packaging. Primary problems included inefficiently placed tools and packaging suppliers, bottlenecks on the track for products, and potential product damage during packaging operations (see Figure 6.1-7 for an example of results).

Figure 6.1-7: Quality Risk Management Results

Activity	Results
Created a pan and skirt cart to help reduce time spent walking for supplies	Saved approximately 5 minutes per hour per associate or $8,000 in labor per year
Organized the area	Improved general efficiency
Flow: Painted yellow no-go spaces on the line to ensure units are adequately spaced. Worked with detail/repair process so that quality control will be the check off for patching instead of a supervisor. Worked with the detail/repair process to standardize the spacing of the units	Increased track speed from 2:10 to 1:45 minutes per revolution, allowing associates to keep up with the normal production rate. Reduced bottlenecks and minimized rushed and idle periods by bringing one unit over at a time rather than multiple units. Saved an estimated 20 minutes per shift spent adjusting units, or $2,640 per year in labor. Reduced defects and repair work formerly associated with units ramming or falling against each other by creating conveyor spacing zones.

6.2 Operational Effectiveness

6.2a Process Efficiency and Effectiveness

GG controls the overall cost of operations through the integration of the Car Production System into the DMAIC methodology. Figure 6.2-1 depicts the tier structure of DMAIC.

6.2b Management of Information Systems

6.2b(1) Information protection processes and procedures include security policies (that address purpose, scope, roles, responsibilities, management commitment, and coordination among organizational entities), processes, and procedures that are used to manage the protection of information systems and assets. The process steps follow: (1) baseline configuration of IT/industrial control systems is created and maintained to incorporate appropriate security principles (e.g., concept of least functionality); (2) a system development life cycle to manage systems is implemented; (3) configuration change control processes are in place; (4) backups of information are conducted, maintained, and tested periodically; (5) policy and regulations regarding the physical operating environment for organizational assets are met; (6) protection processes are continuously improved; (7) the effectiveness of protection technologies is shared with appropriate parties; (8) response plans (Incident Response and Business Continuity) and recovery plans (Incident Recovery and Disaster Recovery) are in place, managed, and tested; (9) cybersecurity is included in HR practices (e.g., personnel screening); and (10) a Vulnerability Management Plan is developed and implemented.

6.2b(2) Security, confidentiality, and appropriate access of our information system are managed consistent with the organization's risk strategy to protect the confidentiality, integrity, and availability of information. Improvements have resulted in automating patch deployments, encrypting information, investing in data loss prevention software, and regularly updating antispyware on all computers.

The Information Security Management System is compliant with the ISO/IEC 27001 Standard for Information Security Management. Data at rest and in transit are protected. Assets are formally managed throughout removal, transfers, and disposition. Adequate capacity to ensure availability is maintained. Protections against data leaks are implemented. Integrity checking mechanisms are used to verify hardware, software, firmware, and information integrity. The development and testing environment(s) are separate from the production environment. The process follows:

Define: Our Risk Manager identifies and manages assets: personnel, devices, systems, and facilities that enable GG to achieve business relative to our SOs and risk strategy. The Risk Manager inventories physical devices and systems within the organization, as well as software platforms and applications. Resources (e.g., hardware, devices, data, time, and software) are prioritized based on their classification, criticality, and business value. Cybersecurity roles and responsibilities (new improvement in 2017) for the entire workforce and third-party stakeholders (e.g., suppliers, customers, and

Figure 6.2-1: DMAIC

DMAIC	Process Steps
Define	GG uses VSM to visualize each key work and support process from incoming goods to finished product, including the data for each subprocess. Directors and associates identify Kaizen events that address opportunities to improve the cycle time, productivity, and other efficiency and effectiveness factors in the work process. The entire flow is analyzed, and root causes are determined using the fishbone. Feedback loops are built into the process to ensure communication with associates at all levels of the process. This provides insights to associates for problems reported.
Measure	Key performance indicators are set or validated from the VSM. Every day, directors and associates review data to identify opportunities to prevent defects, service errors, and rework by setting maintenance and process audit schedules. All data feed electronically and directly from the process into a scorecard.
Analyze	Poka-yoke is reviewed for each step to create a sustainable process. Directors measure the VSM and provide just-in-time (JIT) reports to the Plant Manager. The use of Jidoka and the immediate identification of process constraints minimize warranty costs and productivity because they ensure first-time-through quality. Constraints are immediately communicated and escalated for process improvements through our meeting structure (Figure 1.1-1) to ensure systematic communication and problem solving, as shown in the Communication System (Figure 1.1-2). Visual management tools are used so that every layer of GG understands the process data. Feedback on solutions is provided, and everything is entered into the GATE database for further analysis.
Improve	The Plant Manager and directors set specific targets during weekly production meetings. Learning Communities Teams solve issues and measure improvements. They achieve improvements using Lean tools and TOC to eliminate waste, inconsistencies, and bottle necks. The extensive use of data and the Lean manufacturing system minimizes the costs of inspections, tests, and audits due to the emphasis on JJidoka and JIT.
Control	Processes are sustained with a Poka-yoke design (mistake proofing) and the continual follow-up of the VSM. The Quality Department conducts random checks or audits to check if the process is followed properly. All data are contained on scorecards with the wraparound of systematic review to ensure process optimization and to balance the needs for cost control with the needs of customers.

Figure 6.2-2: Risk Management

partners) are established. Resilience requirements to support delivery of critical services are established for all operating states (e.g., under duress/attack, during recovery, and during normal operations).

Measure: Risk Assessment: GG measures the cybersecurity risk for operations (including mission, functions, image, or reputation), organizational assets, and individuals. Cyber threat intelligence and vulnerability information are received from information-sharing forums and sources. Threats, both internal and external, are identified, measured, and documented. Risk responses are identified and prioritized. This process identified SQL injection attacks as specific targets for our kind of server; attackers use malicious code to get the server to divulge information it normally wouldn't.

Analyze: Risk Management Strategy: Analysis is conducted to ensure adequate response and support recovery activities. GG's priorities, constraints, risk tolerances, and assumptions are analyzed and used to support operational risk decisions. Risk-management processes are established, managed, and agreed to by customers and stakeholders. GG's determination of risk tolerance is informed by its role in critical infrastructure and sector-specific risk analysis. Therefore, GG is now protected against cross-site scripting.

Improve: The seven-step Cybersecurity Process (Figure 6.2-3) illustrates how GG uses the National Institute of Standards and Technology's (NIST's) *Framework for Improving Critical Infrastructure Cybersecurity* (CSF). These steps will be repeated to continuously improve our cybersecurity.

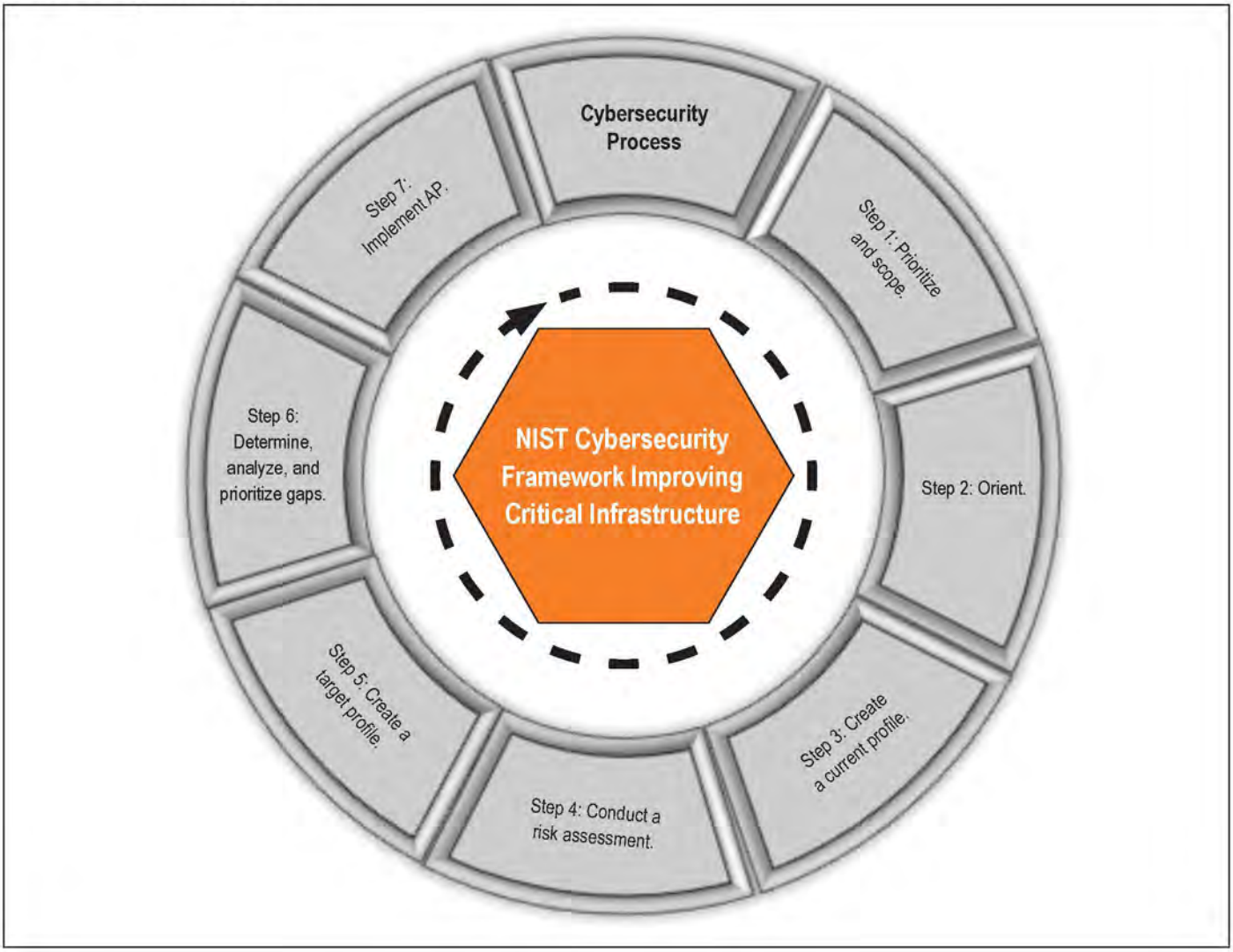
Improve Supply-Chain Risk Management: The Risk Management Committee identifies, prioritizes, and assesses suppliers of critical information systems, components, and services using the NIST CSF. Suppliers are required by contract to implement appropriate measures designed to meet the objectives in the Cyber Supply–Chain Risk Management Plan (2017 improvement). Suppliers are monitored to confirm that they have satisfied their obligations as required. Reviews of audits, summaries of test results, or other equivalent evaluations of suppliers/providers are conducted. Response and recovery planning and testing are conducted with suppliers/providers.

Control: Identity Management and Access Control: Access to physical assets and associated facilities is limited to authorized users, processes, and devices, and is managed consistent with the assessed risk of unauthorized access. Associates and partners are provided cybersecurity awareness education and are adequately trained to perform their information security-related duties and responsibilities consistent with related policies, procedures, and agreements.

6.2c Safety and Emergency Preparedness

6.2c(1) GG is committed to providing a workplace that is safe, healthy, and injury-free for all associates, as evidenced by our Safety and Health Management System. All new associates receive safety orientation and OSHA training, which covers emergency plans, accident prevention, ergonomics, chemical handling, material safety data sheets, personal protective equipment, and machine safety. OSHA guidelines are followed at all times and reinforced through the Job Hazard Analysis Process, drug testing, training, newsletters, meetings, and electronic monitors. GG meets all Customs Trade Partnership against Terrorism (C-TPAT) requirements. GG also uses electronic security monitoring, guards, and no-outsider access without clearance. Any outside visitor must complete safety training prior to entering the plant.

Figure 6.2-3: Cybersecurity Process



The Quality Department conducts daily internal audits/ inspections to ensure that safety standards are being followed. The Quality Department also handles immediate recall of products for safety concerns (see Figure 6.2-4).

The Quality Department communicates findings to the VSM Manager and deploys findings through our meeting structure (Figure 1.1-1). If there are findings, whether internal or external, a Safety Team is immediately dispatched to determine root cause and implement corrective actions to prevent future accidents. In addition, safety is on all associates' scorecards.

The Quality Department conducts regularly scheduled and unscheduled emergency drills. To ensure recovery, all accidents require investigations led by the associate supervising work process areas. Minor accidents require the completion of the Report of Accident Form. Accidents resulting in losses greater than $500 in materials and labor require an investigation and formal report based on the "5 Whys" procedure. The Director and an associate lead the investigation and present the report to the SLT.

6.2c(2) GG ensures that the organization is prepared for disasters or emergencies through the development of a comprehensive Disaster and Emergency Plan, which is compliant with the ISO 22301 Standard for Business Continuity Management. The most likely potential disasters or emergencies include winter weather events or emergencies associated with large-scale events. GG's Disaster and Emergency Plan considers

Figure 6.2-4: Recall Process

Prepare and distribute the notice of recall. → Verify the effectiveness of the recall. → Control the recalled products. → Decide what to do with the recalled products. → Fix the cause of the recall if the problem occurred at GG.

prevention through preplanning, documentation, training, and practicing work instructions related to chemical handling and storage, first aid, radiation safety, emergency communication and evacuation, fire response, hot work, high winds emergency response, electrical safety, personal protective equipment, and scissor lift vehicles.

GG's Disaster and Emergency Plan considers continuity of operations through the following:

- Implementing procedures based on National Incident Management System (NIMS) processes
- Providing staff members with training and ongoing communication during Learning Communities in step-by-step guidance for emergency situations
- Ensuring the emergency availability of information systems, as discussed in 6.2b(1)

GG's Disaster and Emergency Preparedness System considers recovery by following the deactivation procedures in the Emergency Operations Plan in accordance with NIMS. Also, Finance Department staff members distribute standardized forms for associates to record time and equipment usage for large-scale events in case a Federal Emergency Management Agency (FEMA) disaster is declared to facilitate FEMA reimbursements, if eligible.

GG uses its Disaster and Emergency Plan as a guide to rely on the workforce, suppliers, and partners by building strong relationships, collaborating on plan development, training continually and evaluating its effectiveness, drilling and repeating, and integrating best practices in the Disaster and Emergency Plan. For example, we learned from Hurricane Katrina that the best form of communication is by text messaging or tweets. Therefore, all associates, suppliers, and partners practice emergency messaging yearly, a 2016 improvement.

7.1 Product and Process Results

7.1a Customer-Focused Product and Service Results

As described in P.1b(2) and detailed in Figure P.1-8, our customer groups are the commercial and household dealers. Dealer order due dates are tracked to ensure adherences to on-time delivery, as shown in Figure 7.1-1 (RTB BSC–Delivery). The relative size by volume of the dealer groups over time illustrates a continual growth in all segments in Figure 7.1-2. First-to-market product innovations are tallied by focus (key product differentiators) in Figure 7.1-3. These innovations are a means to address the key changes affecting our competitive position given in P.2a(2).

Our key work processes are given in Key Processes, and Measures or Indicators to Control and Improve Them (Figure 6.1-2). The value-stream is segmented into fabrication, paint, and assembly, with their relative production-to-schedule performance given in Figure 7.1-4 (RTB BSC–Delivery). Our product offering is segmented into three types of units: homestead, commercial, and putting greens, with relative production volume given in Figure 7.1-5. The effectiveness of our production to schedule, supply chain, maintenance

Figure 7.1-3: First-to-Market Product Innovations

Focus	2013	2014	2015	2016	2017
Safety	5	4	3	2	1
Reliability		3		4	
Energy Efficiency			3	2	2
Quality of Cut	3		2		2
Comfort	1				1
Sleek Design		4		3	

Figure 7.1-4: Production to Schedule

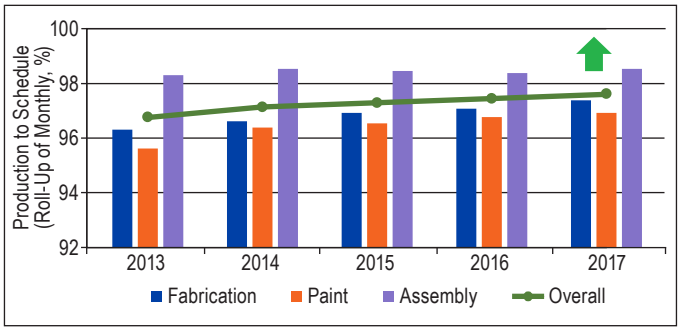


Figure 7.1-1: On-Time Delivery to Dealers

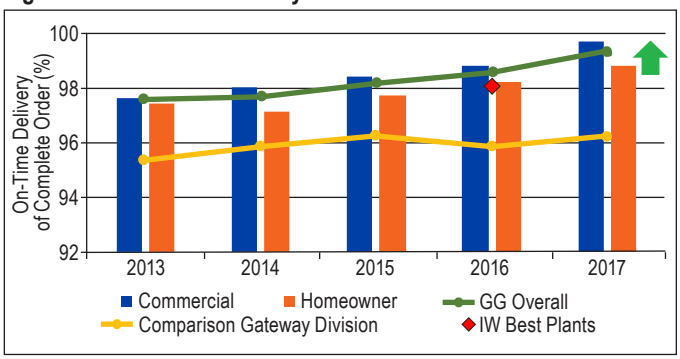


Figure 7.1-5: Produced Units

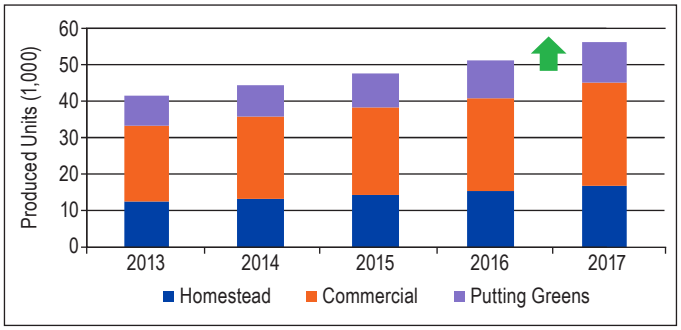


Figure 7.1-2: Increase in Dealers Over Time

# of Dealers	Markets	2013	2014	2015	2016	2017
Large (>250 annual units)	Commercial	23	24	25	25	26
	Homeowner	17	18	19	20	23
Medium (100–250)	Commercial	47	49	51	54	58
	Homeowner	25	27	29	30	32
Small (<100)	Commercial	20	22	26	31	37
	Homeowner	34	38	41	44	49
Grand Total	**Combined**	**166**	**178**	**191**	**204**	**225**

(reliability), and quality has allowed us by design to reduce our finished inventory days (thereby favorably reducing cost), as shown in Figure 7.1-6 (RTB BSC–Cost).

Product quality is segmented by type of unit in Figure 7.1-7 (RTB BSC–Quality), and segmented by value stream in Figure 7.1-8. Things Gone Wrong (TGW) per 100 units is a measure of issues reaching the customer (RTB BSC–Quality; Figure 7.1-9). The effectiveness of quality methods is indicated by a steady favorable reduction in corrective actions in Figure 7.1-10, and a transition from a reactive to more of a proactive nature of the corrective actions, illustrating an increasingly more mature system, is shown in Figure 7.1-11.

Figure 7.1-6: Finished Inventory (Days)

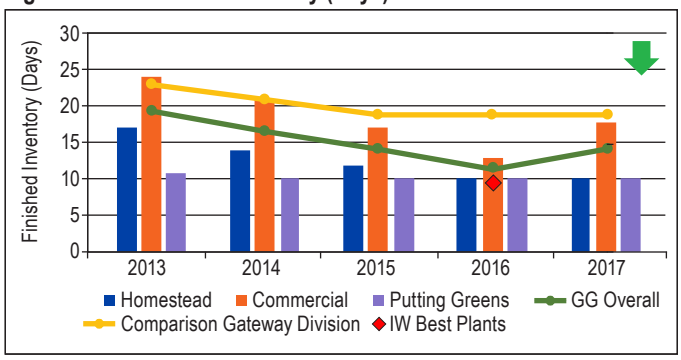


Figure 7.1-7: First-Time Quality by Product

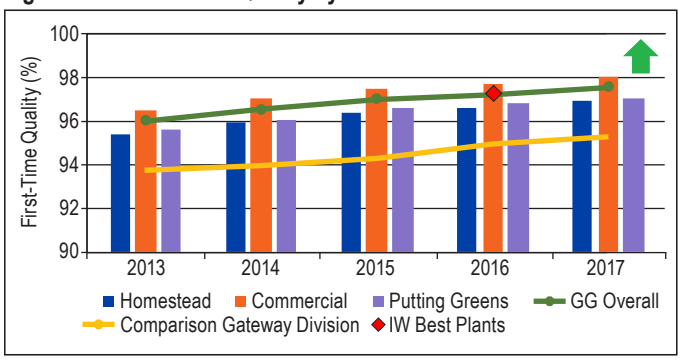


Figure 7.1-8: First-Time Quality by Value Stream

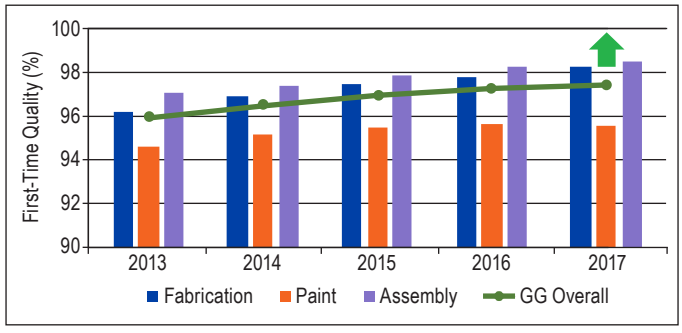


Figure 7.1-9: TGW per 100 Units

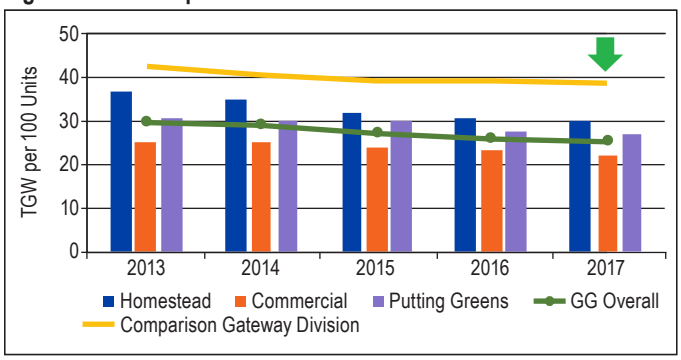


Figure 7.1-10: Quality: Corrective Actions by Type

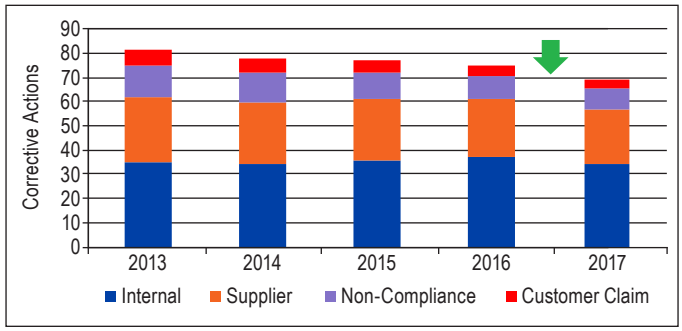
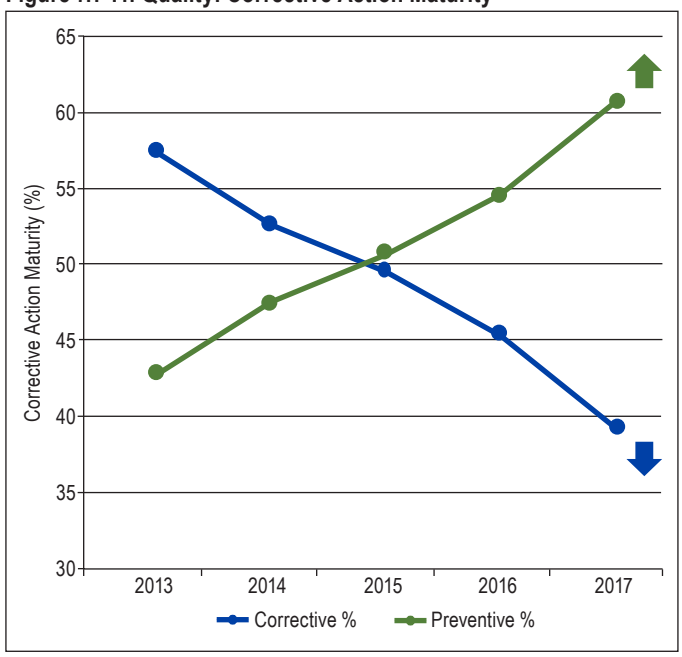


Figure 7.1-11: Quality: Corrective Action Maturity



7.1b Work Process Effectiveness Results

7.1b(1) Our RCM approach is progressively moving toward more of a predictive rather than a reactive (run to failure) outcome, as illustrated in Figure 7.1-12, which corresponds with our strategic move towards transitioning to an operator-repair style of operation (see Figures 7.4-8 and 7.4-9). Measures of maintenance effectiveness are provided in Figures 7.1-13, 7.1-14a, b, and 7.1-15 (RTB BSC–Maintenance). Overall

Figure 7.1-12: Maintenance Strategy Maturity

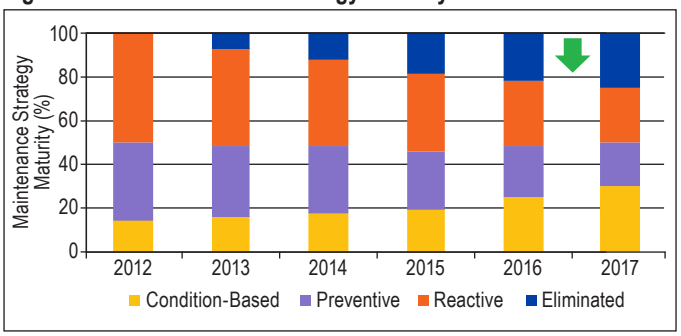


Figure 7.1-13: Overall Equipment Effectiveness

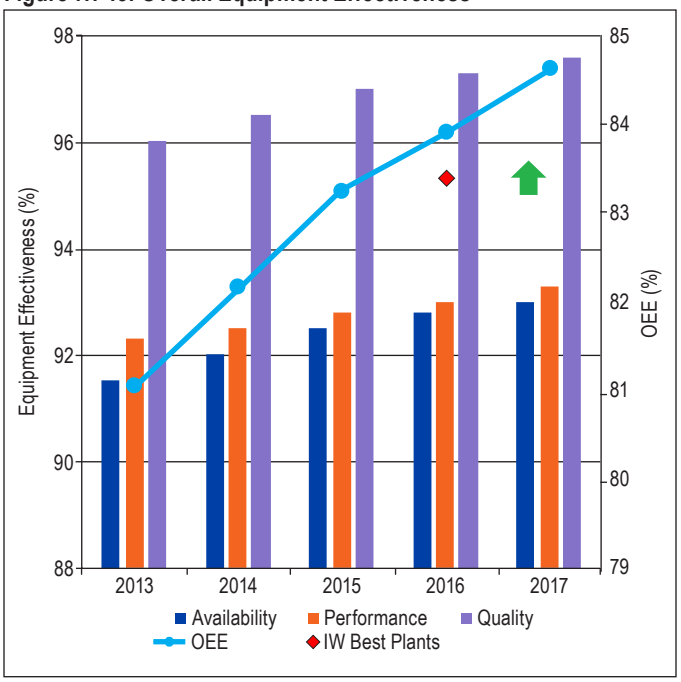


Figure 7.1-14a: Total Effective Equipment Performance

OEE Components	Key Elements
Availability Losses [= run time/planned production time]	Setup and Adjustment (time)
	Breakdowns (time)
Performance Losses [= (ideal cycle time × total count)/run time]	Reduced Speed
	Small Stops
Quality Losses [= good count/total count]	Production Rejects
	Startup Rejects

Figure 7.1-14b: Total Effective Equipment Performance

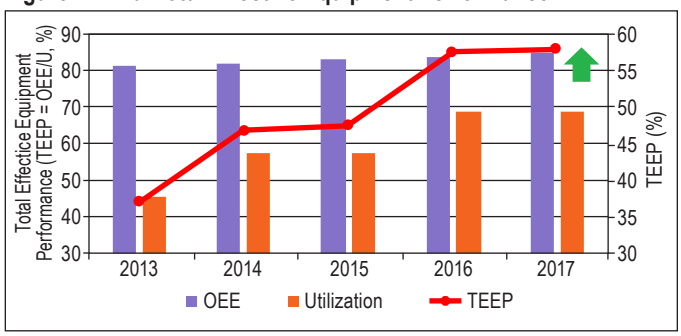
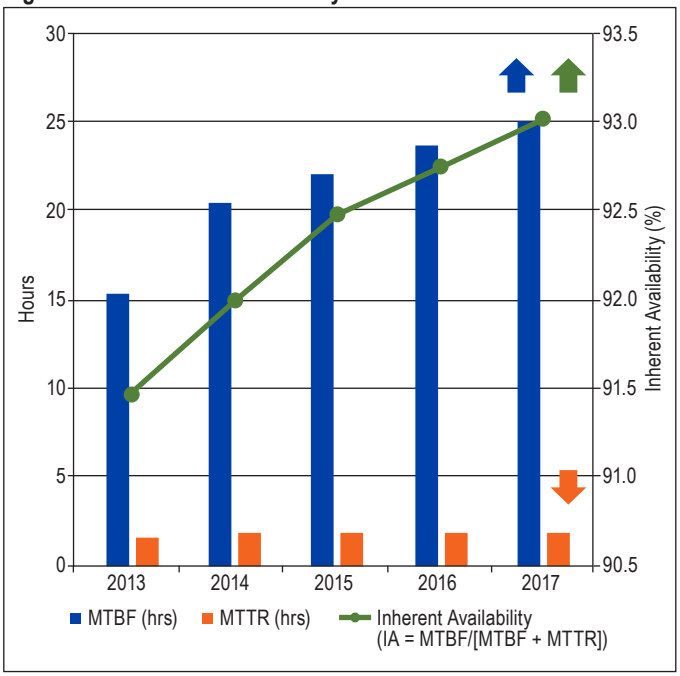


Figure 7.1-15: Inherent Availability



equipment effectiveness (OEE) is relative to production scheduled time; whereas total effective equipment performance (TEEP) is relative to calendar hours (all), which show potential (future) capacity. Inherent availability is a measure of risk or priority, with Mean Time Between Failures (MTBF) being the average of how frequently does a failure occur, and Mean Time to Repair (MTTR) being the average of how long does it take to fix the failure.

We demonstrate our CC of relationship building and being a good citizen by recycling what is economically and technically feasible, as shown in Figures 7.1-16, 7.1-17, and 7.1-18. Additionally, our emerging CC of value engineering is evident in the Learning Communities and LSS project ROI, as well as successful completion of our cybersecurity process in 2017, as shown in Figures 7.1-19 and 7.1-20, respectively. The successful implementation of the Cybersecurity System following the Baldrige Cybersecurity Excellence Builder guidelines is demonstrating favorable performance as we address our SC3 and cybersecurity SO.

Figure 7.1-16: Percentage of Solid Waste Stream Recycled

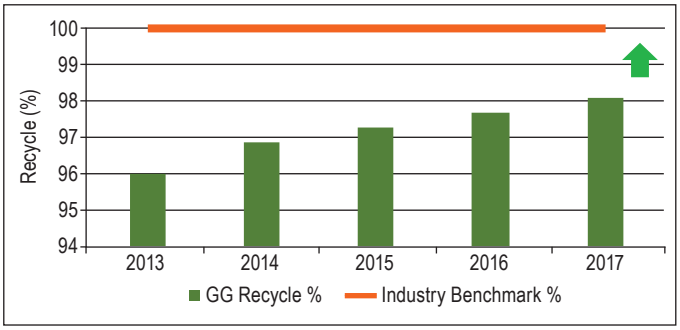


Figure 7.1-17: Waste Pounds Per Unit

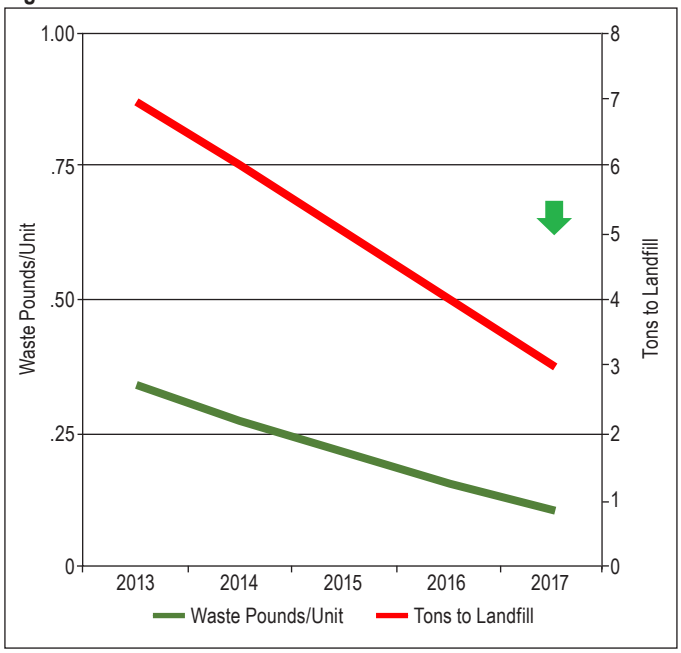


Figure 7.1-18: Key Recycling Trends (Tons)

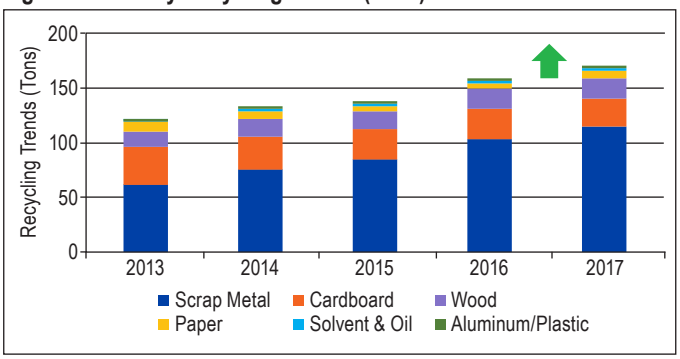


Figure 7.1-19: Learning Communities and LSS Projects ROI

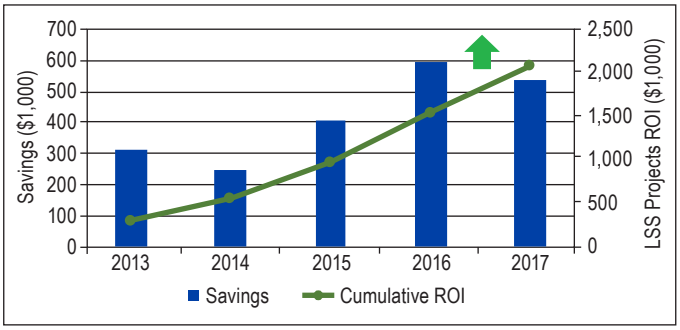


Figure 7.1-20: Cybersecurity

Cybersecurity	Completion Measure	2015	2016	2017
Practices	Determine Risk Behaviors	85%	95%	100%
Process	Map Processes	80%	90%	100%
Management	Document System	60%	80%	100%
Technical	Stakeholder Communication	50%	75%	100%
Performance	Number of cyber attacks detected	13	17	21
	Number of cyber intrusions	3	1	0

7.1b(2) Our systematic focus on quality processes (SQDCPME) allows us to demonstrate our CC of guiding principles, as shown by the number of major findings on our certification audits, our associate participation in emergency preparedness activities, and the performance of the leading measures in our Safety System in Figures 7.1-21, 7.1-22, and 7.1-23, respectively.

Figure 7.1-21: Certification Audit (Adverse) Findings

Certification Audits	Majors	2013				2014				2015				2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
ISO 9001	External		0		0		0		0		0		0		0		0		0		0
	Internal	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ISO 14001	External	0		0		0		0		0		0		0		0		0		0	
	Internal	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OSHA VPP	External			0												0					
	Internal	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0

Figure 7.1-22: Associate Participation

Preparedness	Methods	# of Associates Participating																			
		2013				2014				2015				2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Evacuation	Drills	All		All		All		All		All		All		All		All		All		All	
Shelter-In-Place	Drills		All		All		All		All		All		All		All		All		All		All
Integrated Contingency	Training		42				42				42				42				42		
Incident Command	Training		42				42				42				42				42		
Selected Contingencies	Exercises		42				42				42				42				42		
County Emergency Management	Meetings	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Internal EMS Squad	Meetings	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Internal Fire Brigade	Training			16				16				16				16				16	
Internal Confined Space	Training			16				16				16				16				16	

Figure 7.1-23: Safety System

	Leading	2013	2014	2015	2016	2017
Job Hazard Analysis (A)	% Complete	85%	90%	95%	100%	100%
Safety Conversations (M)	% Actual	97%	98%	99%	99%	99%
Safety Binder (W)	% Participation	96%	97%	98%	98%	98%
Housekeeping-6S (M)	% Actual	97%	98%	99%	99%	99%
Safety Moment (D)	% Participation	100%	100%	100%	100%	100%
Pre-Work Huddle (D)	% Participation	100%	100%	100%	100%	100%

Frequency Key: (D) = Daily, (W) = Weekly, (M) = Monthly, (A) = Annual

7.1c Supply-Chain Management

Supply-chain management is a key to our success, with the respective supplier/partner performance for quality and on-time delivery shown in Figures 7.1-24 and 7.1-25. Their favorable overall performance has allowed us to take the intelligent risk of reducing the SCM inventory (days), resulting in a favorable reduction in cost, as illustrated in Figure 7.1-26. The increase for 2017 was purposeful to support a step increase in production, as shown in Figure 7.1-5. Additionally, the support of Gateway and supplier/partner interfaces is demonstrated by System Availability, as shown in Figure 7.1-27.

Figure 7.1-24: Supplier Quality Index

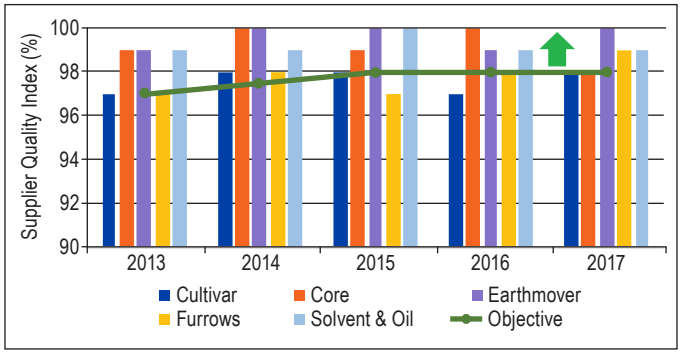


Figure 7.1-25: Supplier On-Time Delivery

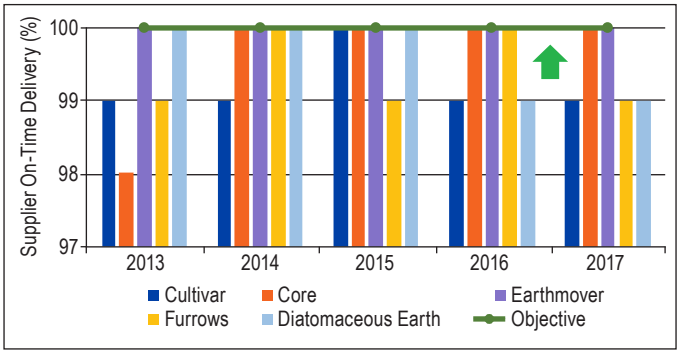


Figure 7.1-26: SCM Inventory (Days)

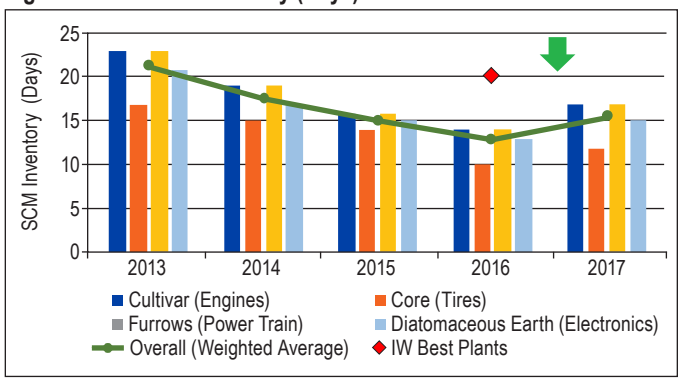
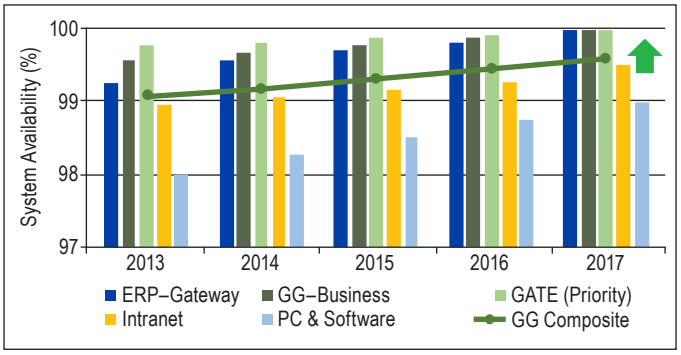


Figure 7.1-27: System Availability



7.2 Customer Results

7.2a Customer-Focused Results

7.2a(1) GGs current levels and trends in key measures or indicators of customer satisfaction and dissatisfaction are shown below. Results for Warranty Cost per Unit (Figure 7.2.1 [RTB BSC–Cost]) show a steady level of GG maintaining cost levels relative to the comparison Gateway division. Overall warranty data for GG's products have remained stable since 2013. Warranty cost includes the period until 18 months after purchase. As complaints/concerns have slowly declined, there has been a marked increase in compliments shared (Figure 7.2-2); these comments are shared throughout our organization through the meeting structure.

Figure 7.2-1: Warranty Cost per Unit

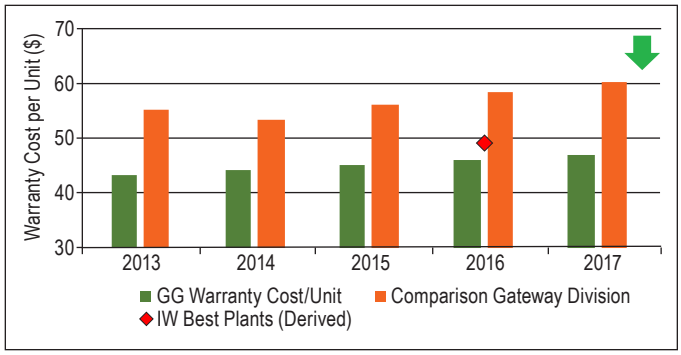
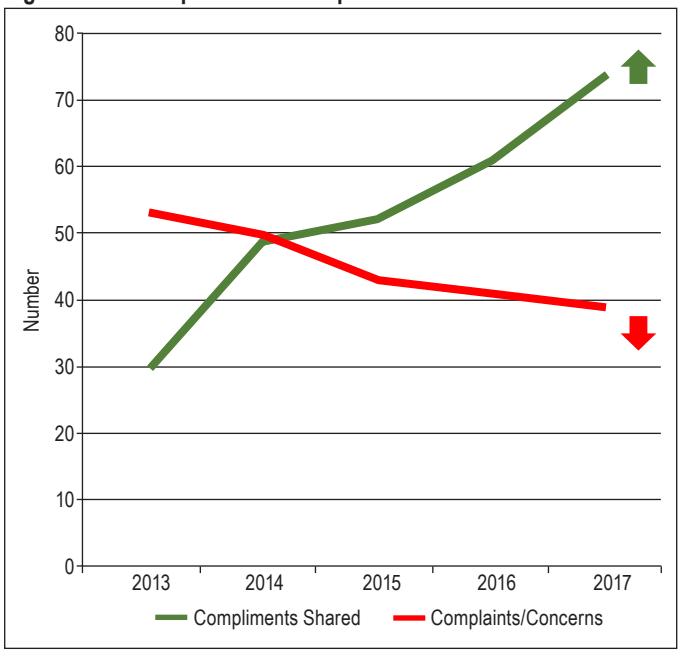


Figure 7.2-2: Complaints vs. Compliments



GG shows how it builds and manages organizational knowledge in Figures 7.2-3 through 7.2-5. Overall complaints resolved satisfactorily for GG's products have improved since 2013 (Figure 7.2-3a,b). GG's goal of customer support is to make our organization easy to do business with and responsive to customers' needs and expectations; results for this goal have improved from 2013 to 2017 (Figures 7.2-4 and 7.2-5). These charts illustrate the measures for how knowledge management (KM) input is collected and transferred, and how evaluation measures blend and correlate actionable data.

Figure 7.2-3a: Complaint Resolved Satisfactorily

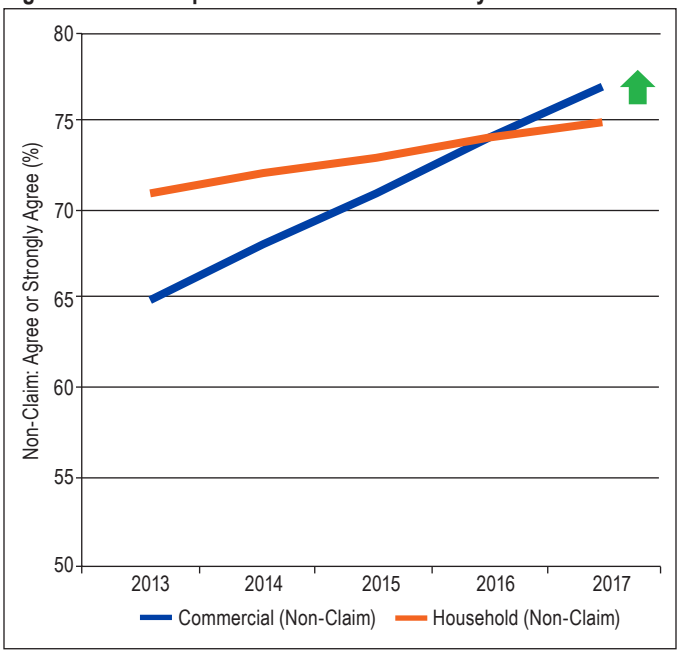


Figure 7.2-3b: Complaint Resolved Satisfactorily

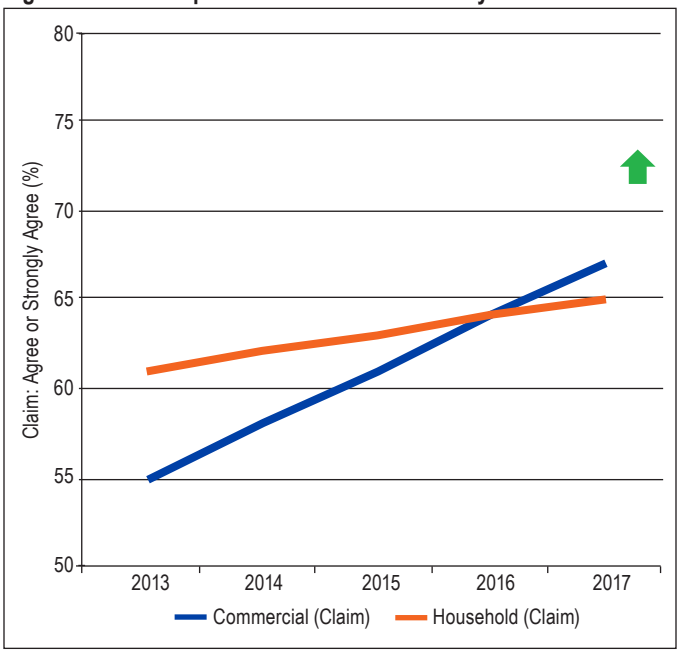


Figure 7.2-4: Commercial Customer Expectations Met

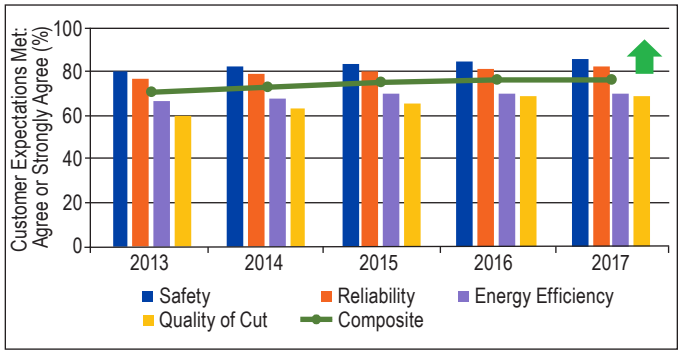
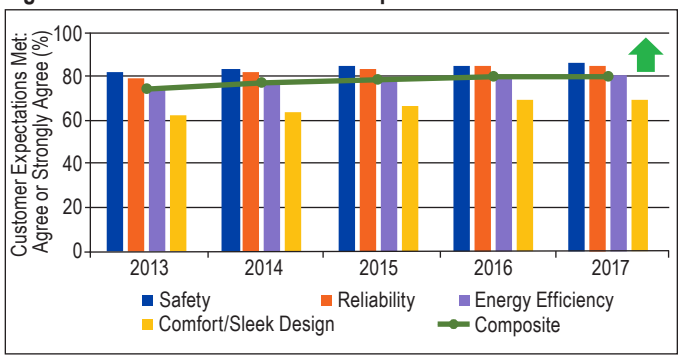


Figure 7.2-5: Household Customer Expectations Met



7.2a(2) The types of buying decisions for commercial and household market customers segmented by "repeat customer," "referred by end-user," and "new customer" are shown in Figures 7.2-6 and 7.2-7. Customer advocacy for our product is evident in the "referred by end-user" segment and is the key driver for our household customers. Customer loyalty for our

Figure 7.2-6: Commercial Customer Types

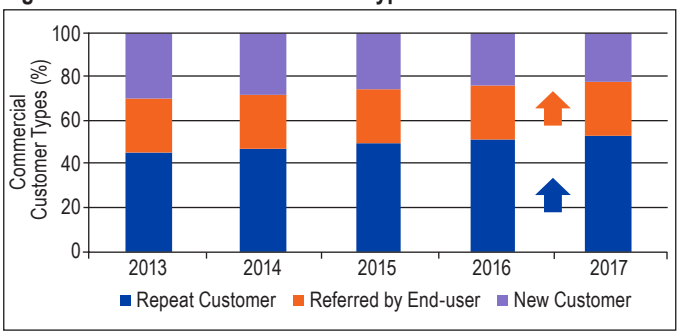
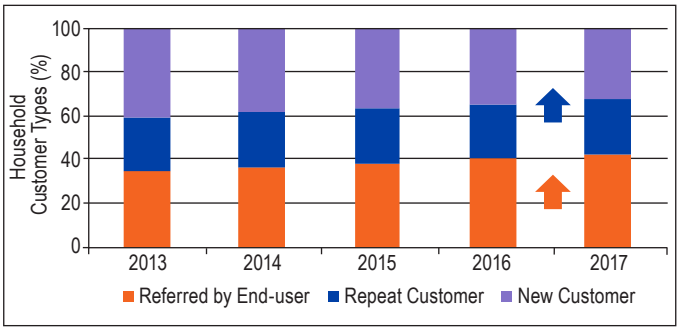
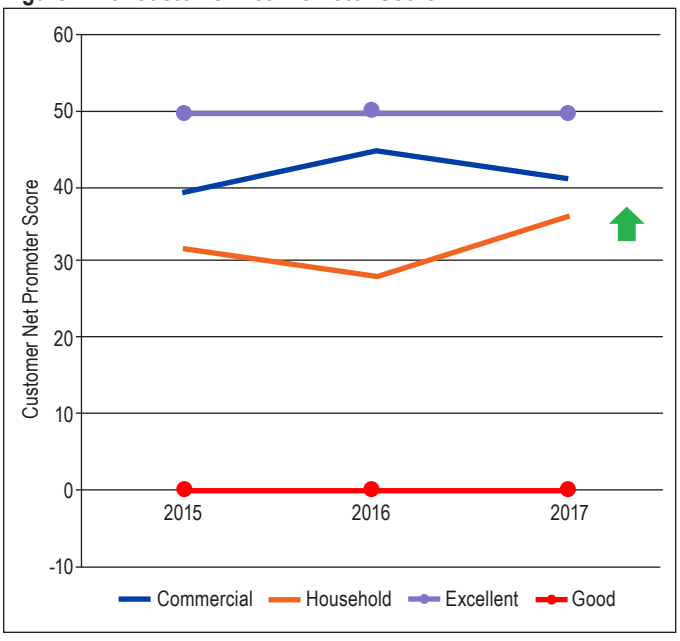


Figure 7.2-7: Household Customer Types



product is evident in the "repeat customer" segment and is the key driver for our commercial customers. "Referred" and "repeat" customer types combined currently represent more than 70% of buying decisions for all customers! Additionally, see Increase in Dealers Over Time (Figure 7.1-2) segmented by size of dealers and markets. Starting in 2015, we requested that our dealers issue a new post-purchase survey using the NPS approach to get another means to determine brand loyalty. Figure 7.2-8 shows the customer NPS; see 7.3a(3) for information on the NPS.

Figure 7.2-8: Customer Net Promotor Score



7.3 Workforce Results

7.3a Workforce-Focused Results

7.3a(1) A key to success at GG is ensuring that the right people with the right knowledge and skills are in the right job at the right time. Reviewing, analyzing, and evaluating workforce capability and capacity is an ongoing effort. Enhancing our capacity requirements is associated with increasing the productivity of the current workforce through management and process improvements.

GG maintains an active focus on workplace health and safety. OSHA Recordable Rate (Figure 7.3-1; RTB BSC–Safety) reports the OSHA metric and provides comparisons against our industry and parent, Gateway. GG engages associates during Learning Communities and other meetings in identifying potential hazards in the workplace. Our culture is focused on employee communication of potential hazardous issues. Figure 7.3-2 (RTB BSC–Safety) reports the "Days Away Case Rate," an OSHA metric, and provides comparisons against our industry and Gateway.

We carefully plan the type and level of associates we add to our workforce to optimize both capabilities and capacity. As shown in Figure 7.3-3 (RTB BSC–People), we place a higher emphasis on increasing our levels of cross-trained associates to ensure sustainability. After cross training, associates' relative maturity is monitored over time to ensure that we're making progress, as shown in Figure 7.3-4.

GG effectively manages our manpower capacity in order to meet business needs and minimize reductions in the workforce. Figures 7.3-5 through 7.3-7 shows these results.

Figure 7.3-1: OSHA Recordable Rate

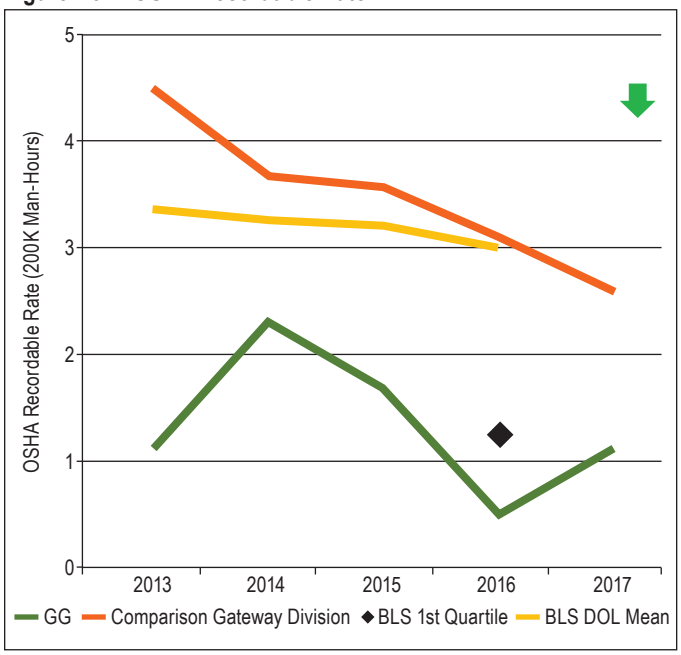


Figure 7.3-2: Days Away from Work Rate

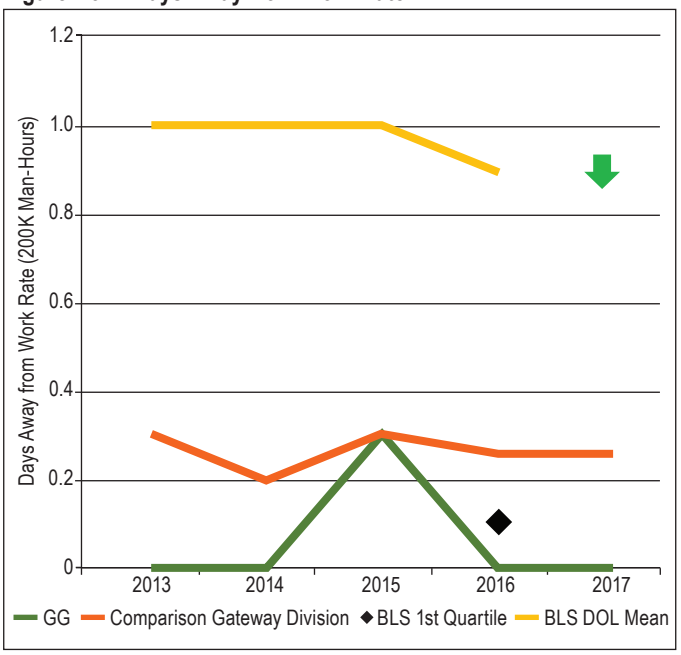


Figure 7.3-3: Competency Rate

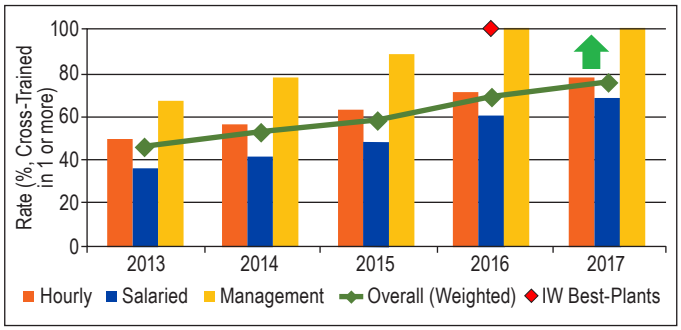


Figure 7.3-4: Cross-Training Maturity Across Processes

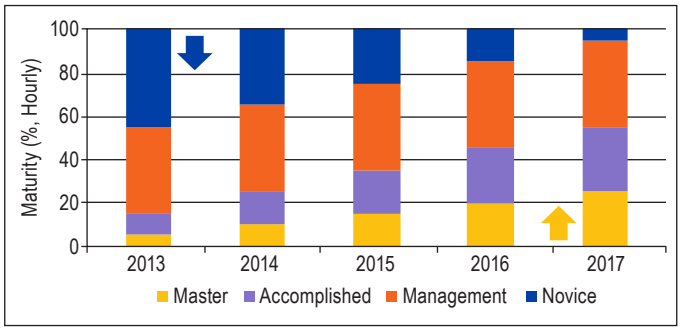


Figure 7.3-5: Turnover Fill

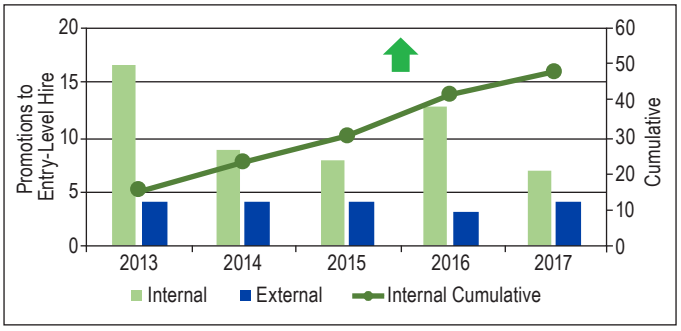


Figure 7.3-6: Capacity: Workforce Needs Calculator

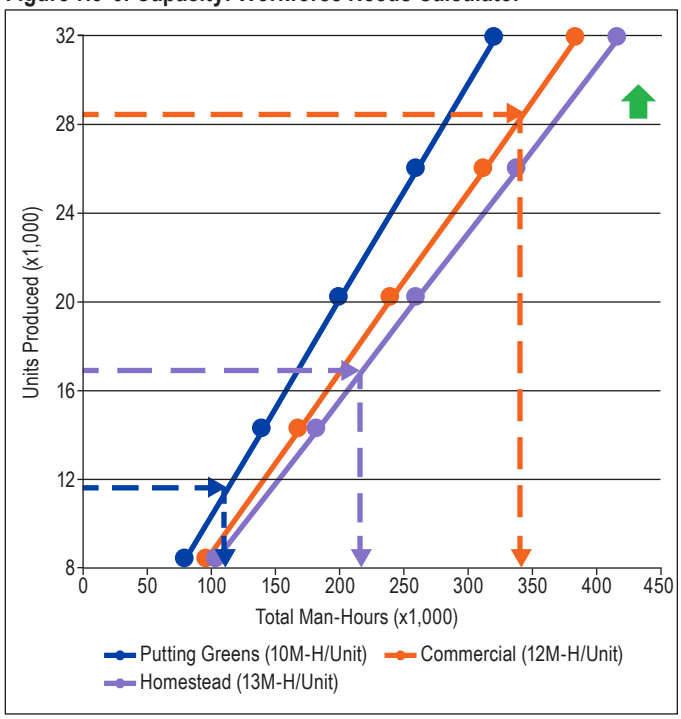
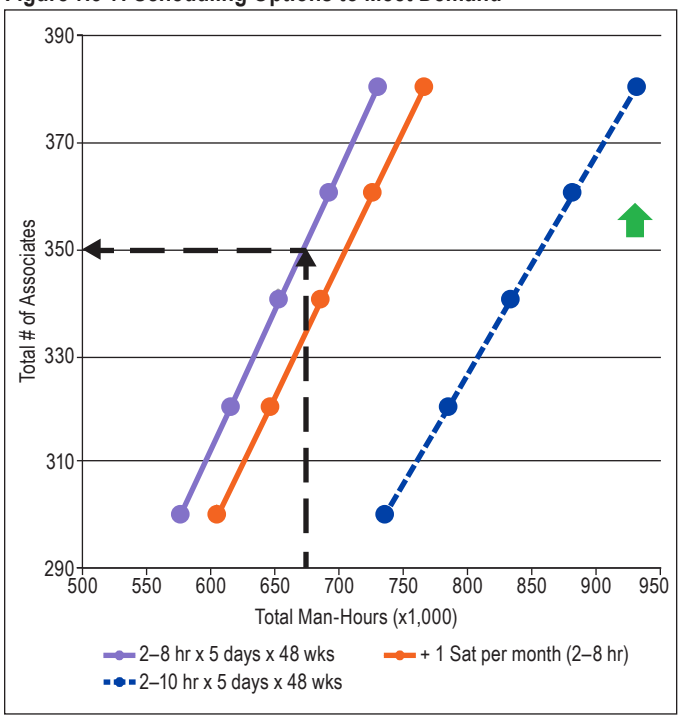


Figure 7.3-7: Scheduling Options to Meet Demand



7.3a(2) GG provides a work environment that is safe, healthy, and productive. Figure 7.3-8 shows top-decile (against IW Best Plants comparison data) satisfaction with health, safety, security, accessibility, and benefits.

Figure 7.3-9 (RTB BSC–People) outlines the turnover rate, which show a stable workforce. Figure 7.3-10 (RTB BSC–People) shows a favorable trend in associate and salaried absenteeism.

7.3a(3) At GG, we believe that associates who are engaged with their work perform more productively and effectively. Therefore, we review key drivers to engagement. Figure 7.3-11 shows GG's increasing engagement survey results over three

Figure 7.3-8: Workforce Climate

	2015				2016				2017			
Environmental Factors	H	S	M	O	H	S	M	O	H	S	M	O
Workplace Health (satisfaction)	85%	100%	100%	90%	87%	100%	100%	92%	89%	100%	100%	93%
Workplace Safety (satisfaction)	85%	100%	100%	90%	87%	100%	100%	92%	89%	100%	100%	93%
Workplace Security (engineered)	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*
Workplace Accessibility (engineered)	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*
Services and Benefits (satisfaction)	85%	90%	95%	87%	86%	91%	96%	88%	87%	92%	97%	89%
Overall Satisfaction by Segment	85%	97%	98%	89%	87%	97%	99%	90%	88%	97%	99%	92%

Associate Segment Key: H = Hourly, S = Salaried, M = Management, O = Overall

Figure 7.3-9: Turnover Rate

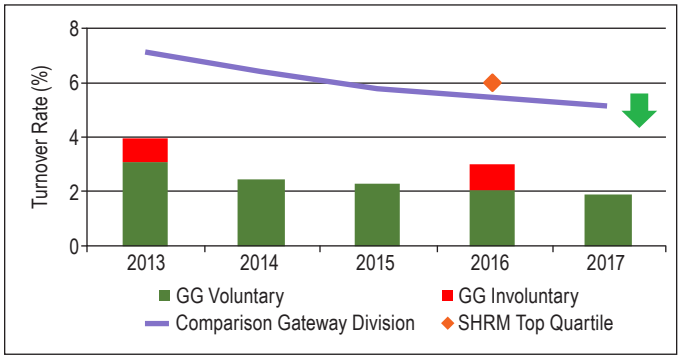


Figure 7.3-10: Absence Rate

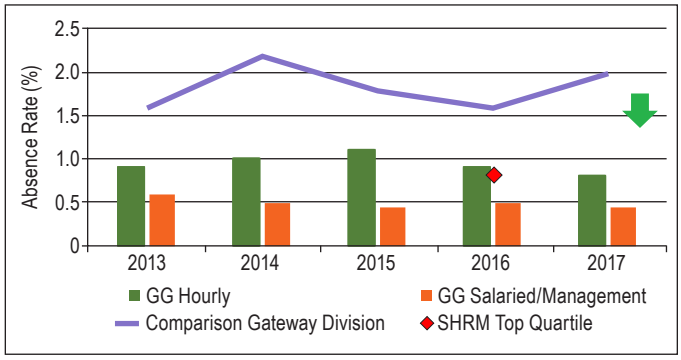


Figure 7.3-11: Associate Engagement

	2015				2016				2017			
Key Drivers	H	S	M	O	H	S	M	O	H	S	M	O
Individual and Organizational Learning	83%	86%	89%	84%	84%	87%	90%	85%	85%	88%	91%	86%
Trust in each Other	72%	85%	92%	77%	74%	87%	92%	79%	77%	89%	93%	81%
Reward and Recognition	74%	81%	92%	77%	75%	83%	92%	78%	76%	84%	93%	79%
Decision Making at Lowest Level (Empowerment)	77%	83%	88%	79%	79%	86%	89%	82%	81%	87%	91%	83%
Communication	71%	79%	90%	74%	73%	81%	92%	76%	75%	83%	93%	78%
Overall by Segment	75%	83%	90%	78%	77%	85%	91%	80%	79%	86%	92%	82%
Net Promotor Score (Organization)	44	55	57	48	48	49	62	49	46	56	59	50

Associate Segment Key: H = Hourly, S = Salaried, M = Management, O = Overall

years. Additionally, in the bottom row of data is the NPS, which was a new instrument in 2015 for both associates and customers (see Figure 7.2-8). According to the NPS vendor, the thresholds to evaluate the NPS are Good ≥ 0, Excellent ≥ 50, and World-Class ≥ 75.

7.3a(4) GG makes a considerable investment in continuous workforce and leader development and training. Figure 7.3-12 shows GG's average hours of quantifiable learning, which exceeds national benchmarks.

GG invests in the future through leadership development, shown in Figure 7.3-12 through associate training (hourly, salaried, and management) and Figure 7.3-13 through degree completion. Over the last five years, there have been four leadership position openings, with three of those (75%) having been filled by internal candidates whom we prepared for these roles. Our strategy is to develop our talent and promote from within.

GG launched LSS techniques and tools as a strategic part of our journey toward performance excellence. We have continued to expand and improve our LSS capabilities and participation throughout the organization. Our dedication to continuous improvement has resulted in a growing cadre of Green Belts and Black Belts who lead our improvement efforts. As shown in Figure 7.3-14, GG significantly surpasses the benchmark indicated. The effectiveness of this training is shown in Figure 7.1-19 (Learning Communities and LSS Projects ROI), with a cumulative savings (ROI) over the last five years of more than $2,000,000.

Figure 7.3-13: Degree Completion

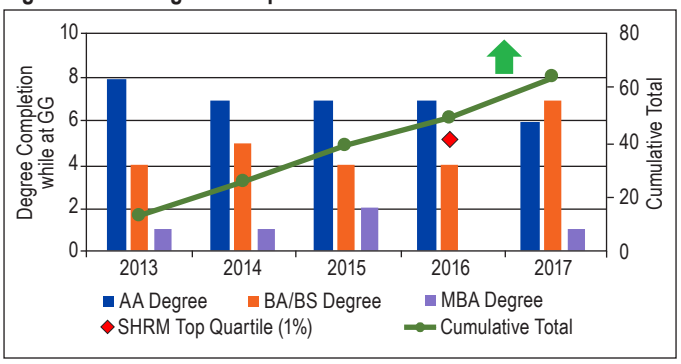


Figure 7.3-12: Training Hours Per Associate

	2015				2016				2017			
Training Emphasis	H	S	M	O	H	S	M	O	H	S	M	O
Safety/Environmental	8	8	4	7.8	10	8	4	9.1	12	8	4	10.4
Organizational	8	8	8	8.0	8	8	8	8.0	8	8	8	8.0
Social Skills	4	8	12	5.6	4	8	12	5.6	4	8	12	5.6
Technical (to support Initiatives)	2	32	12	11.5	2	40	18	14.2	4	40	24	15.8
Leadership Development	0.5	24	24	8.7	1	32	30	11.8	1.5	32	36	12.4
Overall by Segment	22.5	80	60	41.6	25	96	72	48.7	29.5	96	84	52.2
ATD/ASTD Benchmark (Average)				33.5				33.5				33.5
APQC Benchmark (Top Quartile)				40				40				40

Associate Segment Key: H = Hourly, S = Salaried, M = Management, O = Overall

Figure 7.3-14: Lean Six-Sigma Belts Trained

	2013	2014	2015	2016	2017
Green Belts (GB) Trained (total)	8	9	10	11	12
GB as % of Salaried	3.81%	4.29%	4.76%	5.24%	5.71%
Green Belt Benchmark	3%	3%	3%	3%	3%
Black Belts (BB) Trained (total)	3	3	4	4	5
BB as % of Salaried	1.43%	1.43%	1.90%	1.90%	2.38%
Black Belt Benchmark	1–2%	1–2%	1–2%	1–2%	1–2%

GG now has 1.9x more Green Belts and 1.2x more Black Belts trained than "organization focused on effective process improvements," according to expert Forrest Breyfogle III (2012).

7.4 Leadership and Governance Outcomes

7.4a Leadership, Governance, and Societal Responsibility Results

7.4a(1) GG's senior leaders apply a robust Communication System (Figure 1.1-2) to communicate with associates about the vision and values, SOs and APs, company direction, and/or concerns and other topics. We continually improve our approach to ensure workforce engagement. Figure 7.4-1 shows a positive trend in employee responses to the deploying of the vision and values, two-way communication, and creation of a focus on action. Additional measures are available on-site (AOS).

7.4a(2) GG's finances are carefully audited every year, both by internal and external auditors. Figure 7.4-2 reports governance and fiscal accountability. Governance accountability results show high performance. In fiscal accountability, GG has had approximately the same number of these audits each year with no findings. Additional measures AOS.

7.4a(3) GG's Governance System requires absolute compliance with the multitude of regulations under which we operate. Any critical regulatory actions against us could literally shut down our business. Figure 7.4-3 details GG's strict level of compliance to our key laws and regulations. Our dedication to continuous improvement has resulted in GG consistently exceeding regulatory requirements. As a result of our improvement efforts, from 2013 to 2017, GG has achieved 100% compliance in audit findings. Additional measures AOS.

7.4a(4) As discussed in category 1, ethical behavior is a component of our training program and our culture. Figure 7.4-4 displays the survey results and violations data that we use to evaluate the degree of ethical behavior in the organization. Survey results are at top decile, and we have maintained zero violations for five years. Additional measures AOS.

Figure 7.4-1: Perception of Leadership

Leadership	Measure	2013	2014	2015	2016	2017
Deploy Vision and Values	Associate Survey	90%	91%	92%	93%	94%
	Dealer Survey	84%	85%	86%	86%	86%
Encourage Two-Way Communication	Associate Survey	79%	81%	83%	83%	83%
	Dealer Survey	73%	74%	75%	76%	77%
Create a Focus on Action	Associate Survey	71%	73%	74%	75%	76%
	Dealer Survey	67%	68%	69%	70%	71%

Figure 7.4-2: Governance and Fiscal Accountability

Governance	Measure	2013	2014	2015	2016	2017
Governance Accountability	Associate Survey	90%	91%	92%	93%	94%
	VP Manufacturing Survey	84%	85%	86%	87%	88%
Fiscal Accountability	External Findings	0	0	0	0	0
	Internal Findings	0	0	0	0	0

Figure 7.4-3: Law and Regulation

	Measure	2013	2014	2015	2016	2017
Finance (JSOX and GAAP)	% Compliance	100%	100%	100%	100%	100%
Health and Safety (OSHA)	# of Violations	0	0	0	0	0
Environment (EPA)	# of Violations	0	0	0	0	0
Employment (DOL)	# of Violations	0	0	0	0	0
Certification (ISO 9001)	% Compliance	100%	100%	100%	100%	100%
Certification (ISO 14001)	% Compliance	100%	100%	100%	100%	100%
Compliant to (ISO 31000)	% Internal Compliance	100%	100%	100%	100%	100%

Figure 7.4-4: Ethics

	Measure	2013	2014	2015	2016	2017
Stakeholder Trust in SLT and Governance	Associate Survey	89%	90%	91%	92%	93%
	VP Manufacturing Survey	83%	84%	85%	86%	87%
Breaches of Ethical Behavior	Internal Violations	0	0	0	0	0
	Dealer Violations	0	0	0	0	0

7.4a(5) As a part of our societal responsibility, GG is committed to educating our youth through outreach events and providing experiential learning to college students. GG is also passionate about emergency preparedness—not just for our plant but also for our entire community. Figure 7.4-5 displays the involvement commitment that we have sustained since 2013. Additional measures AOS.

GG and our associates support local communities through support and education, as shown in Figure 7.4-6. While not shown in Figure 7.4-6, our leaders and associates also commit time as well as dollars to our communities; details are AOS. Figure 7.4-6 indicates the heavy involvement our leaders and associates have with our communities, including emergency management with the school system, city government, and

Figure 7.4-5: Societal Measures

	Measure	2013	2014	2015	2016	2017
Partnering with Education in County	HS Outreach Events	2	2	2	2	2
	College Students (#)	13	13	13	11	12
Disaster and Emergency Preparedness in County	Subject-Matter Experts	2	2	2	2	2
	Area Drill Participation	3	3	3	3	3

Figure 7.4-6: Support of Key Communities

	Measure	2013	2014	2015	2016	2017
Supporting County Emergency Management Planning	School Systems (TAL)	2	2	2	2	2
	City Government (TAL)	1	1	1	1	1
	Citizen Groups (TAL)	2	2	2	2	2
Helping Those in Need	Relay for Life (TIM)	15	15	15	15	15
	Meals On Wheels (TRE)	$2,000	$2,000	$2,500	$2,500	$3,000
	Red Cross Blood Drive Host	2	2	2	2	2
Focusing on Skills Development	Clubs-Engineering/LSS (TAL)	1	1	1	1	1
	Activities at HS (TAL)	2	2	2	2	2
	Activities at College (TAL)	2	2	2	2	2

Measure Key: (TAL) = Talent, (TIM) = Time, (TRE) = Treasure

citizen groups; participation in key community events; and high school and community college education. The results of the efforts by GG leadership and associates demonstrate our commitment to our values: *Be Proud *Lead *Think Critically, and *Respect Others.

7.4b Strategy Implementation

From the beginning of the GG journey toward performance excellence, our focus has been on performance and continuous improvement in all aspects of our strategy. Through workforce engagement, strong relationships, rigorous processes, challenging metrics and systematic review, analysis, and improvement, we have obtained results that place us as a high-performing company. Utilizing our SPP and AP Process, we carefully gather, analyze, and evaluate data to assess performance and make mid-course corrections (agility), as needed. Figure 7.4-7 details positive trends and levels of those plans. Examples of current APs are given in Figure 2.1-3, along with the associated change-the-business (CTB) SOs. See also, Overall Equipment Effectiveness (Figure 7.1-13), Learning Communities and LSS Projects ROI (Figure 7.1-19), Lean Six-Sigma Belts Trained (Figure 7.3-14), Gross Margin (Figure 7.5-3), and New Markets (Figure 7.5-9).

Figures 7.4-8 and 7.4-9 illustrate the multiyear tactical activity to enhance the existing core competency of talent development in preparation for an anticipated future core competency of value engineering, by improving the function or reducing the cost of our value creation processes. Additionally, this tactical activity helps address our SC1-technical associate retention by making the tasks more meaningful for the operator/repair and allowing our dedicated maintenance associates to focus more attention on constraints rather than routine activities.

Figure 7.4-7: Achievement of Organizational Strategy and Action Plans

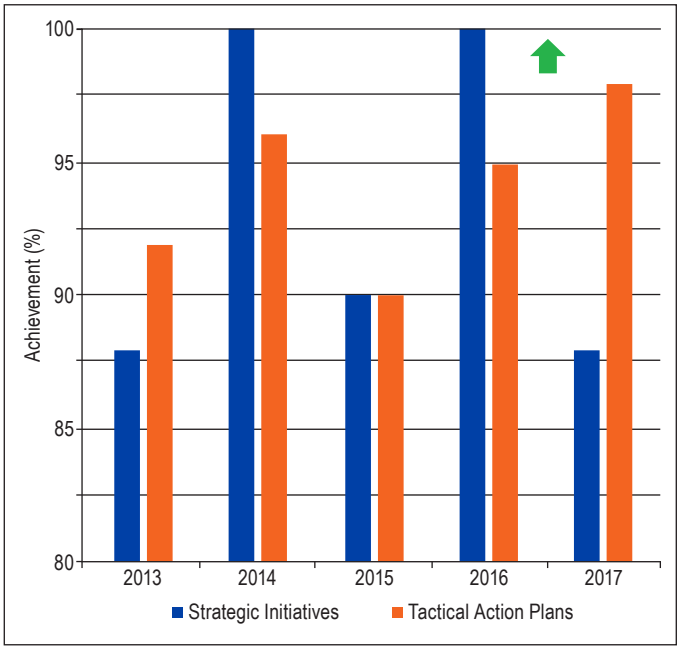


Figure 7.4-8: Operator/Repair Concept Preparation

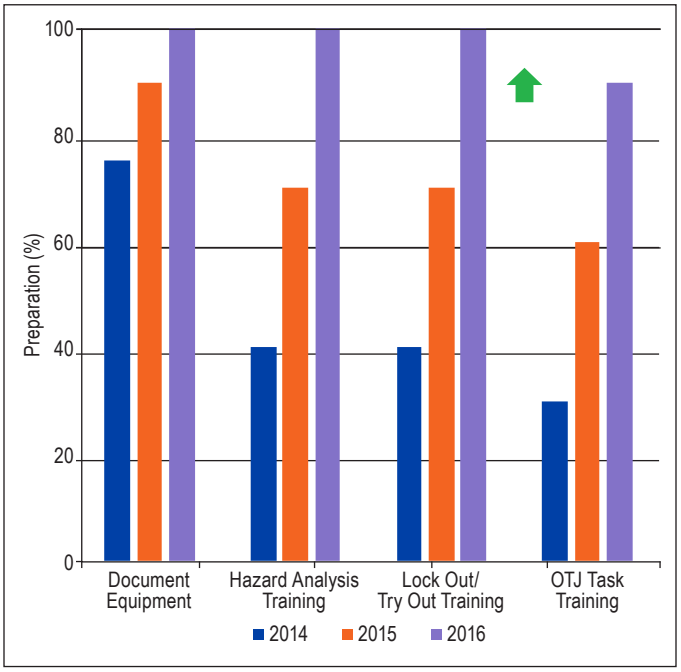
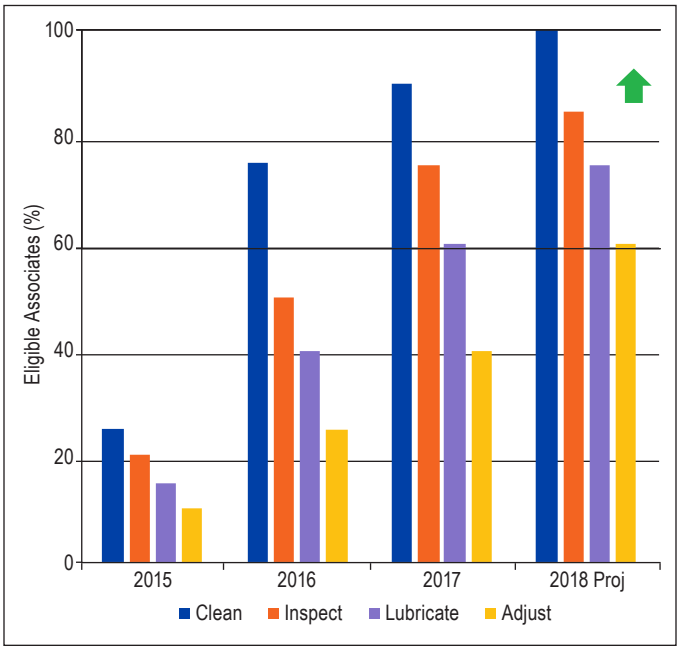


Figure 7.4-9: Operator/Repair Task Implementation



7.5 Financial and Market Results

7.5a Financial and Market Results

7.5a(1) Gateway provides product design, marketing, and sales; GG's value stream is fabrication, paint, and assembly. The direct materials used represent about 75% of our cost of goods sold (COGS), as shown in Figure 7.5.1.

Accordingly, supply-chain management (SCM) of purchased products and services is key to our success, along with reducing internal losses in the value stream by continuous improvement and breakthrough innovation. To incentivize GG and achieve proper objective alignment, the parent company created a model (Figure 7.5-2) based on an inverse relationship of "direct materials used % of COGS" to derive the "gross margin" used in establishing the dealer invoice price.

The derived gross margin over the last five years has increased two percentage points (from 23% to 25%), as shown in Figure 7.5-3, which represents an overall indication (profitability) of the effectiveness of our strategic direction, initiatives, and action plans! The future focus is on sustaining these gains, while continually addressing the diminishing return nature of opportunities.

The favorable trend in growth of gross revenue and margin is shown in Figure 7.5-4, with the respective produced units (volume) given in Figure 7.1-5. The revenue per associate has reached an impressive $625,000 level (Figure 7.5-5).

Figure 7.5-1: Cost of Goods Sold

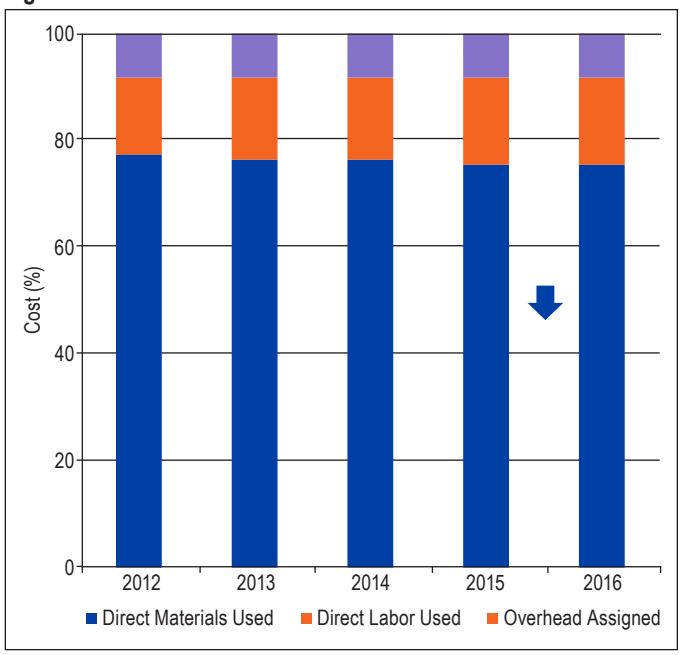


Figure 7.5-2: Model Used to Establish Dealer Invoice Price

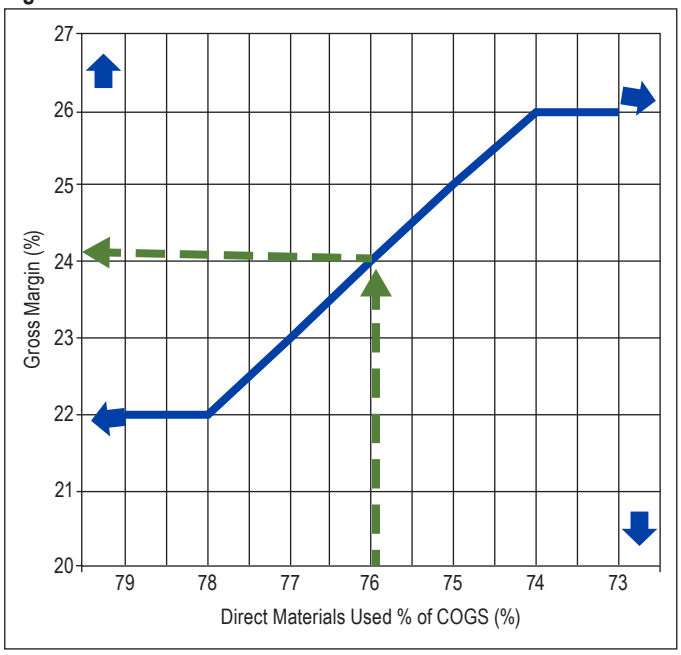
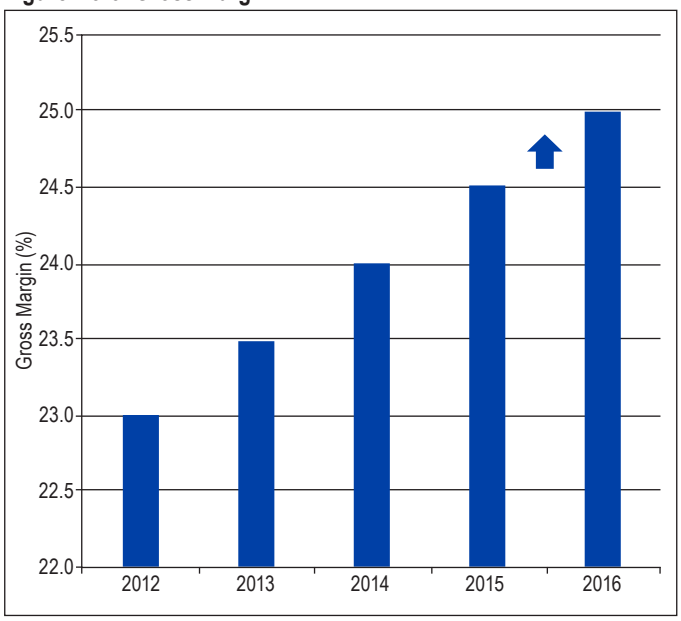


Figure 7.5-3: Gross Margin



GG illustrates stable performance in managing accounts receivable and payable in Figure 7.5-6, with the respective account terms being a directive from the parent company. Increases in derived gross margin and volume have resulted in a favorable trend in net profit, as shown in Figure 7.5-7 (RTB BSC–Cost).

Figure 7.5-4: Gross Revenue and Margin

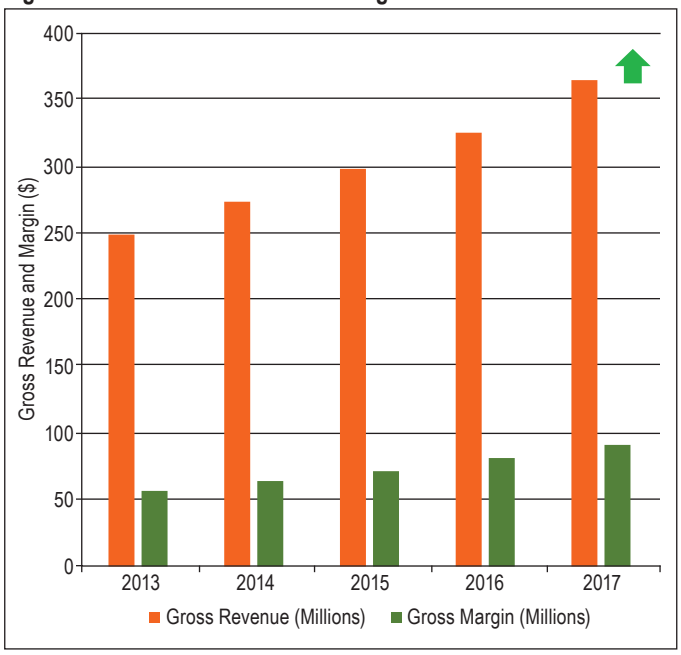


Figure 7.5-5: Total Revenue Per Associate

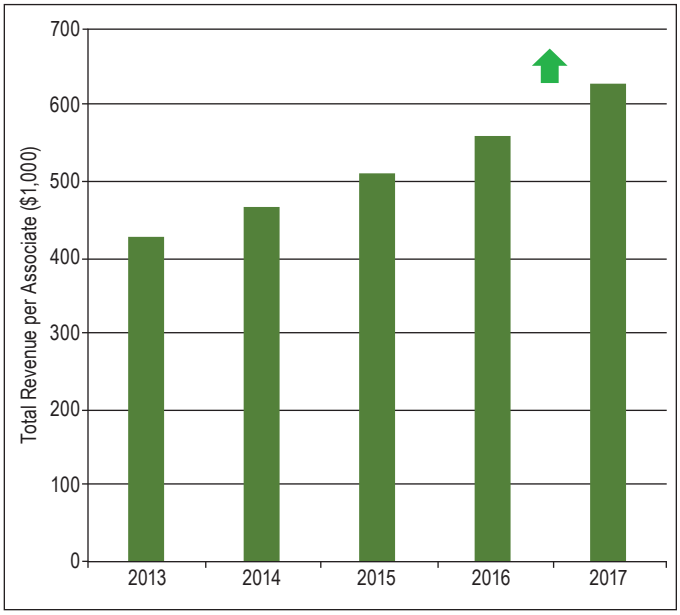


Figure 7.5-6: Accounts Receivable and Payable

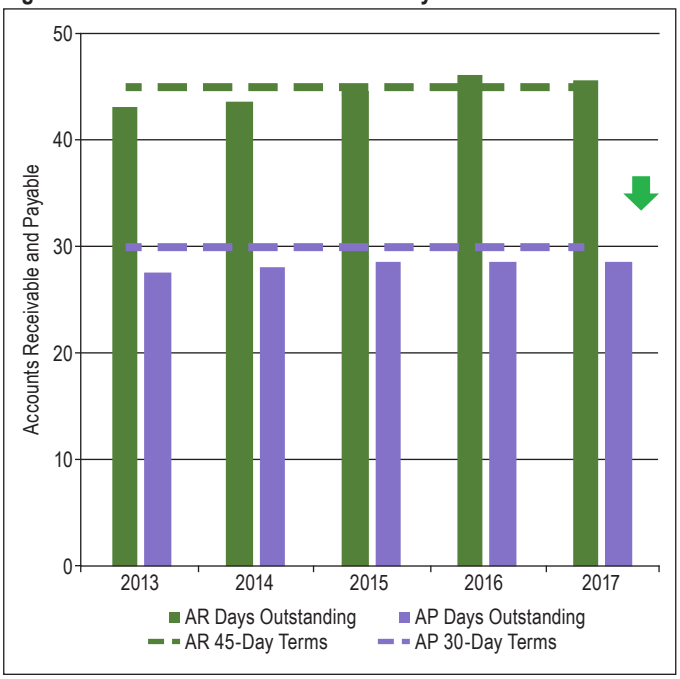
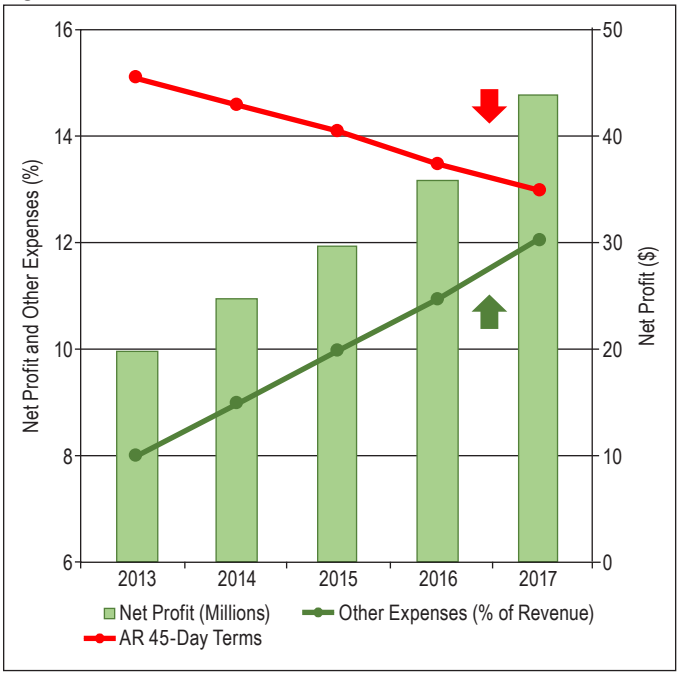
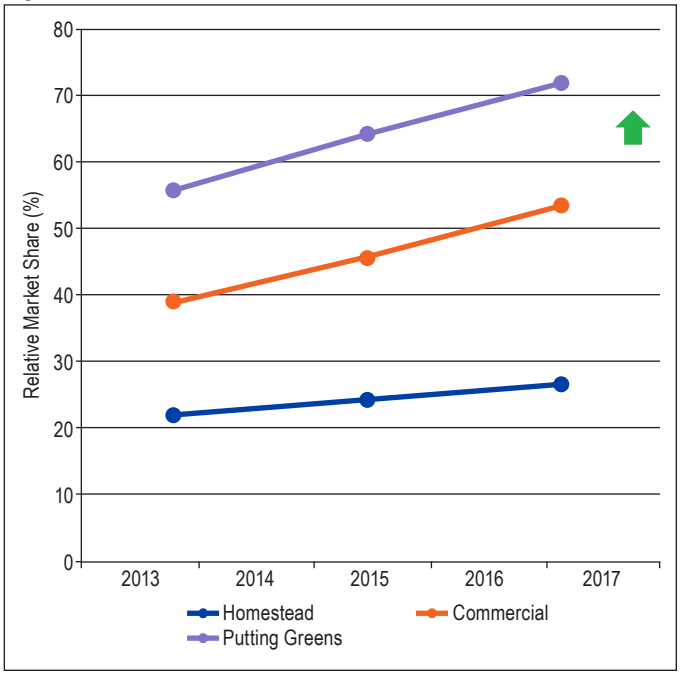


Figure 7.5-7: Net Profit



7.5a(2) Sales and marketing (loading) are a function of the parent company, with our responsibility being to determine our available capacity and capability to support continued growth in demand. For example, based on our TEEP, shown in Figures 7.1-14a, b, we are only at about a 50% utilization (of time) based on a calendar year. The relative market share is segmented by our three product offerings and shows our strategic growth in putting greens and commercial, which are higher-priced (value-add) offerings; whereas, homestead is a lower-priced (commodity-type) offering impacted by off-shore competition (Figure 7.5-8).

Figure 7.5-8: Relative Market Share



Design and thus new markets (entered), as shown in Figure 7.5-9, are a function of the parent company, with our responsibility to be an engaged participant in the project management and manufacturing processes to ensure a successful launch.

Figure 7.5-9: New Markets

	Completion Measure	2015	2016	2017	Projected 2018
Self-Driving Units	Determine Risks Involved		80%	100%	
	Concept Units			50%	100%
	Market Decision				TBD
Battery Propulsion	Determine Risks Involved	60%	100%		
	Concept Units		50%	100%	
	Market Decision			100%	
	Test Market				100%

The ratio of the Baldrige Program's benefits for the U.S. economy to its costs is estimated at **820 to 1**.

99 Baldrige Award winners serve as national role models.

2010–2014 award applicants represent **537,871 jobs**, 2,520 work sites, over $80 billion in revenue/budgets, and more than 436 million customers served.

364 Baldrige examiners volunteered roughly **$5.5 million** in services in 2014.

State Baldrige-based examiners volunteered around **$30 million** in services in 2014.

Baldrige Performance Excellence Program

Created by Congress in 1987, the Baldrige Program (http://www.nist.gov/baldrige) is managed by the National Institute of Standards and Technology (NIST), an agency of the U.S. Department of Commerce. The program helps organizations improve their performance and succeed in the competitive global marketplace. It is the only public-private partnership and Presidential award program dedicated to improving U.S. organizations. The program administers the Presidential Malcolm Baldrige National Quality Award.

In collaboration with the greater Baldrige community, we provide organizations with

- a systems approach to achieving organizational excellence;
- organizational self-assessment tools;
- analysis of organizational strengths and opportunities for improvement by a team of trained experts; and
- educational presentations, conferences, and workshops on proven best management practices and on using the Baldrige Excellence Framework to improve.

Foundation for the Malcolm Baldrige National Quality Award

The mission of the Baldrige Foundation is to ensure the long-term financial growth and viability of the Baldrige Performance Excellence Program and to support organizational performance excellence in the United States and throughout the world. To learn more about the Baldrige Foundation, see http://www.baldrigepe.org/foundation.

Alliance for Performance Excellence

The Alliance (http://www.baldrigepe.org/alliance) is a national network of Baldrige-based organizations with a mission to grow performance excellence in support of a thriving Baldrige community. Alliance members contribute more than $30 million per year in tools, resources, and expertise to assist organizations on their journey to excellence. Alliance member programs also serve as a feeder system for the national Baldrige Award.

American Society for Quality

The American Society for Quality (ASQ; http://www.asq.org/) assists in administering the award program under contract to NIST. ASQ's vision is to make quality a global priority, an organizational imperative, and a personal ethic and, in the process, to become the community for all who seek quality concepts, technology, or tools to improve themselves and their world.

For more information:
www.nist.gov/baldrige | 301.975.2036 | baldrige@nist.gov

NIST
National Institute of Standards and Technology
U.S. Department of Commerce