IOWA STATE UNIVERSITY
Office of Economic Development and Industry Relations
College of Engineering

CIRAS

Center for Industrial Research and Service

Iowa Plastics and Rubber Industry:

Strengths, Weaknesses, Opportunities, and Threats (SWOT)

Iowa State University's Center for Industrial Research and Service (CIRAS) explored the business characteristics of the Iowa plastics and rubber manufacturing industry. The results summarized in this report might be used to enhance the profitability and growth of the plastics and rubber industry in Iowa.

To learn more about these findings, consider attending the Plastics & Rubber Manufacturers' Innovation Summit on April 15, 2014, at the Gateway Hotel in Ames, Iowa. Click here to register.

The SWOT analysis was created based on data from the U.S. Department of Labor–Bureau of Labor Statistics, the U.S. Department of Commerce–Bureau of Economic Analysis, the National Science Foundation, industry articles, and a fall 2013 CIRAS survey (NAICS Codes: 326, 325211, 325212) of the Iowa plastics and rubber manufacturing industry, referred to as Iowa plastics in this report. The survey was conducted with a sample size of 201 recipients, and it had a response rate of 34%.

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The Iowa Plastics Industry

- **Iowa GDP: 4.8% of the Manufacturing GDP**
- **Iowa Employment: 4.9% of the Manufacturing Jobs**
- **Iowa Compensation: 4.5% of the Total Manufacturing Compensation**

Strengths

1. Iowa plastics manufacturers are 7% more productive than the U.S. average[1]. See Figure 1.
2. Iowa plastics manufacturers exhibit a culture of improvement[2]. See Figure 2.
3. Nearly 90% of Iowa plastics manufacturers identify the importance of technology toward company goals[2]. See Figure 3.
4. Nearly 45% of Iowa plastics manufacturers have an established market presence in the intermediate parts and component manufacturing market[2].
5. A third of the plastics manufacturers in Iowa are able to compete on features other than price[2]. See Figure 4.

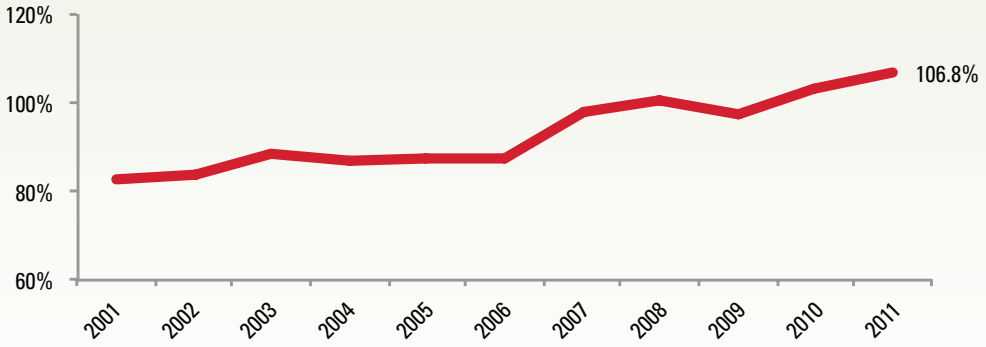

Figure 1. Iowa plastics GDP per job as a percentage of national average.

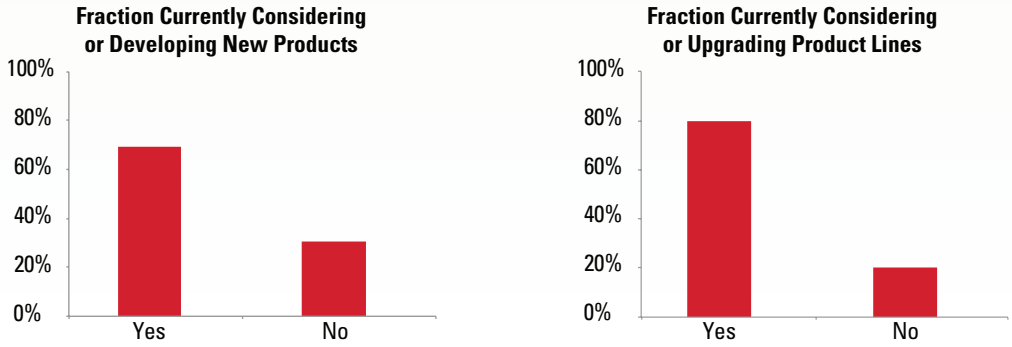

Figure 2. Iowa plastics manufacturers' views on improvement and adaptation.

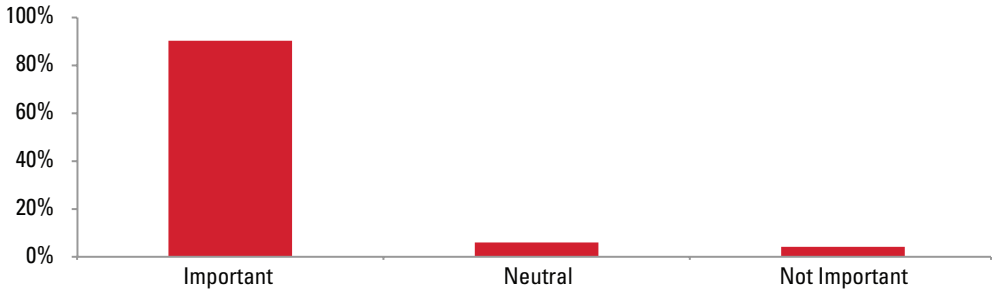

Figure 3. Importance of technology adoption to company goals.

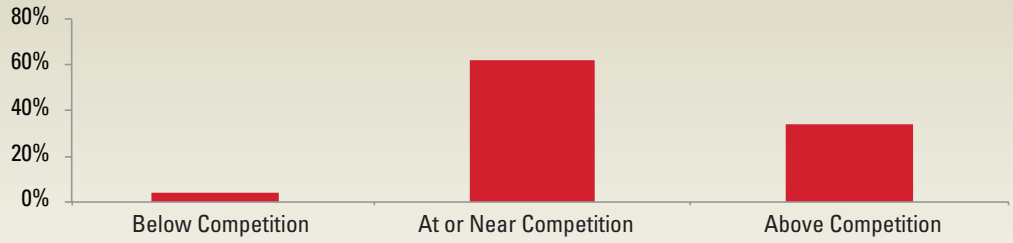

Figure 4. Iowa plastics industry pricing strategy.

Weaknesses

1. There is increased competition for a qualified workforce in Iowa[3, 4, 5].
2. Iowa plastics jobs pay less than the average manufacturing compensation in the state[6].
3. Capital availability is the highest-rated factor influencing the Iowa plastics industry's ability to adopt new technology[2].
4. Lack of marketing capabilities is one of the top factors preventing Iowa plastics manufacturers from developing new or upgrading existing products[2]. See Figure 5.

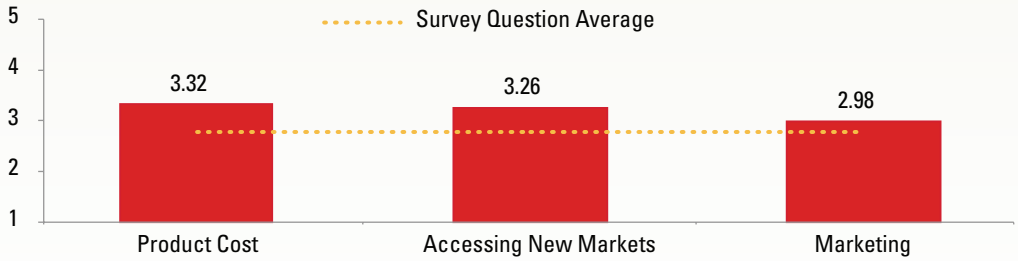

Figure 5. Top factors preventing Iowa plastics manufacturers from developing new or upgrading existing products.

Opportunities

1. Industries that use a lot of plastics and rubber inputs and that are projected to grow include the automotive industry, sectors that supply to the construction industry, and the medical equipment and supplies industry[7].
2. The plastics industry in Iowa could possibly leverage underused research and development tax credits and financial resources available from local, state, and federal sources[8, 9].
3. The competitiveness of the U.S. plastics industry may improve as a result of lower and stable costs resulting from a projected increase in U.S. resin production[10, 11, 12].

Threats

1. Short-term operating costs might increase to comply with environmental regulations[13, 14].
2. Many Iowa and Midwest firms requiring plastics and rubber inputs are in slow-growing industries[7].
3. Small companies may see increased pressure from large competitors, which are growing through mergers and acquisitions[8, 15].
4. Iowa plastics manufacturers supply to the durable goods industries, which are sensitive to business/economic cycles[6].

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FOR MORE INFORMATION

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