

CASE PACKET

CASE CAN BE ACCESSED ONLINE AT: ECCPSU.COM/DELLBOOMI



DELL BOOMI CASE COMPETITION

APRIL 2019

HOSTED BY
ENGINEERING-CONSULTING COLLABORATIVE



OVERVIEW

Founded in 2000, Dell Boomi is a technology company specializing in cloud-based integration, API and Master Data Management. By pioneering native-cloud integration platform as a service (iPaaS) technology, Boomi is revolutionizing how organizations connect their applications and data to work smarter, faster, and better. Their award-winning patented technology is transforming the world of integration by making enterprise-class integration technology accessible and affordable to companies of all sizes. As one of the fastest growing and most successful companies in the cloud industry, Dell Boomi provides unparalleled services for their clients.

After being established in Berwyn, PA by a Penn State alumnus as a configuration-based integration company, Boomi went on to develop the AtomSphere in 2007. This technology makes up the framework of their current Boomi platform and helped launch the company to success. Businesses inherently rely on extracting, transforming and loading information when required – whether it's through customers, business partners or the organization itself. Too often, however, a business' ability to stay ahead of the competition and meet the market's demand is hindered because of disconnected applications, manual processes that could be automated and the speed of these transactions. By connecting applications, synchronizing data and automating business processes, the Boomi platform accelerates the ability to integrate every part of a business.

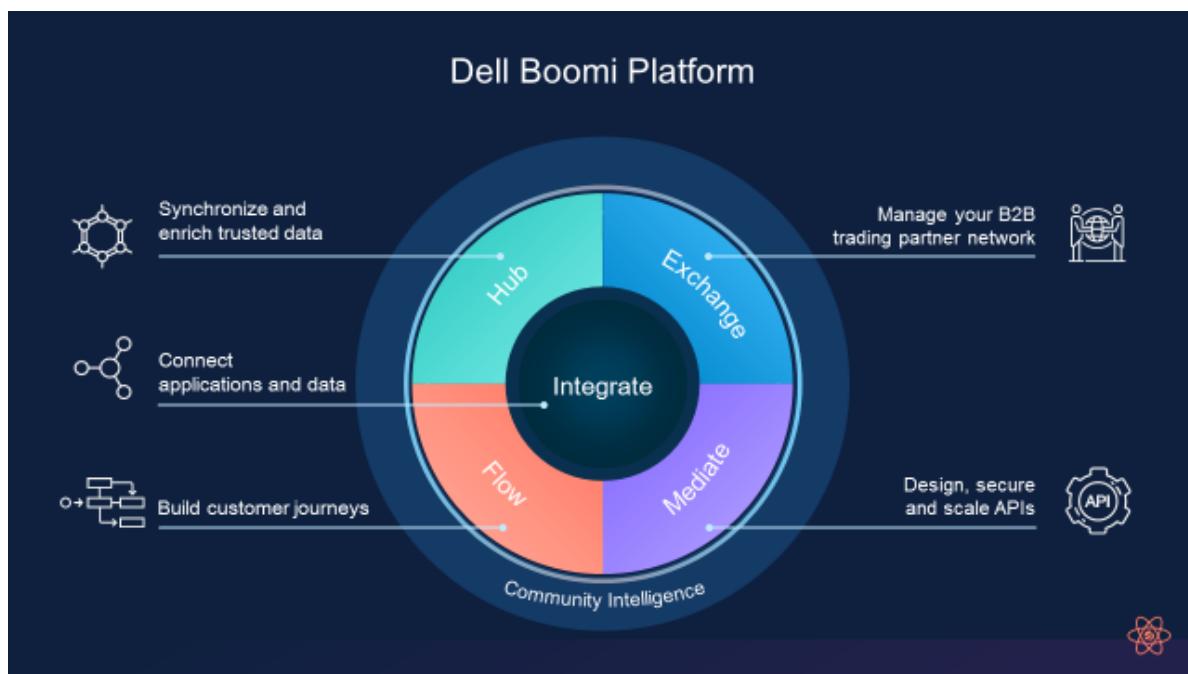
CASE PACKET

Boomi's lightweight runtime engine, the Atom, allows integrations to be deployed wherever needed: in Boomi's Atom Cloud; in a public or private cloud; or on-premises.

- Application and Data Integration.
- B2B/EDI Management.
- API Design and Management.
- Master Data Hub.
- Workflow Automation and App Development.

Moreover, an organization's development can be accelerated utilizing the tools powered by Dell Boomi: **Boomi Suggest**, which anonymously indexes several data maps and functions and automatically produces maps for new integration processes.

Boomi Assure allows customers to initiate automated regression testing. **Boomi Resolve** incorporates the contributions of the Boomi community, knowledge base and support team to automatically recommend resolution for common errors. The low-code Boomi platform connects applications, synchronizes data and automates business processes in order to accelerate the ability to integrate every part of a connected business.



TO LEARN MORE VISIT: WWW.BOOMI.COM

PROBLEM STATEMENT

Rapta Motor Corporation is a Japanese multinational automotive manufacturer headquartered in Tokyo, Japan. As of 2017, Rapta is the world's seventh-largest automotive manufacturer and as of September 2018, it was the fifteenth-largest company in the world by revenue. Rapta is the world's first automobile manufacturer to produce more than 3 million vehicles per year which it has done since 2012, when it also reported the production of its 100-millionth vehicle. In July 2014, Rapta was the third largest listed company in Japan by market capitalization and also by revenue.

In 2018, Rapta built 654,628 vehicles at its North American vehicle assembly plants. Production volume was down slightly from the previous year total of 718,330 vehicles. Rapta's total vehicle production in North America since 1986 has reached nearly 10 million.

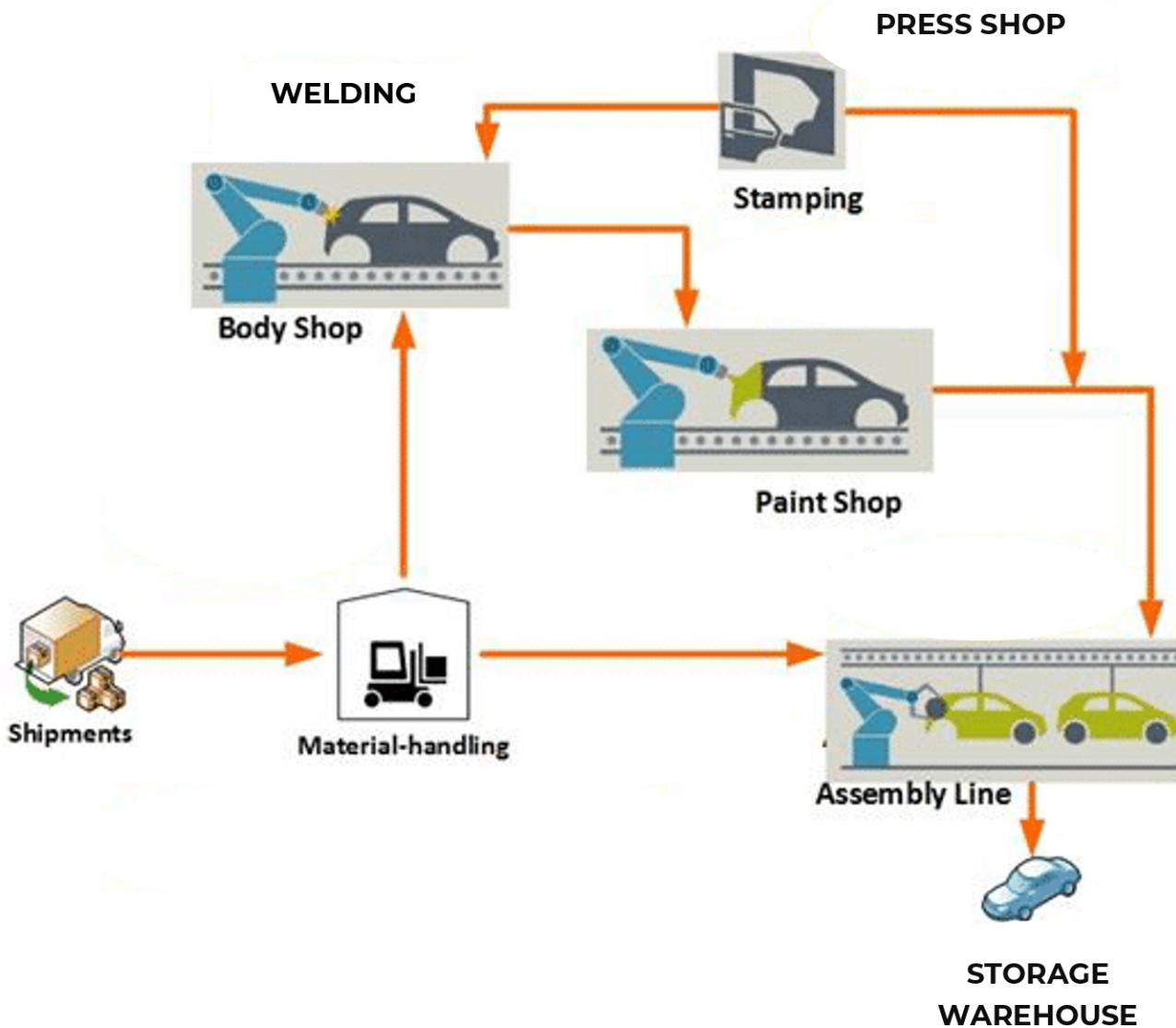
Currently, Rapta is planning to test a new strategy by Dell Boomi consultants in one of its plants with reduced production and efficiency. After the implementation and testing of this reformed technology, if the results exhibit a positive gain to the company for over a year, then Rapta will replicate the same technology at their upcoming plant and eventually at all its other plants. In 2022, Rapta will be adding its 5th manufacturing plant scheduled to open in State College, Pennsylvania.

Rapta produces 5 models in North America including: 1 Premium Sedan, 1 Hybrid Sedan, 2 Mid-level Sedans and 1 SUV. Rapta directly employs more than 17,500 people in the U.S.



KEY FACTS

Assembly Line:



STAMPING

- Workforce: 2100
- # of presses: 520

WELDING

- Workforce: 2100
- # of presses: 520

PAINT

- Workforce: 750

GENERAL BODY ASSEMBLY

- Workforce: 6000
- # of robots: 1800

MATERIAL HANDLING

- Workforce: 200

STORAGE

- Workforce: 100

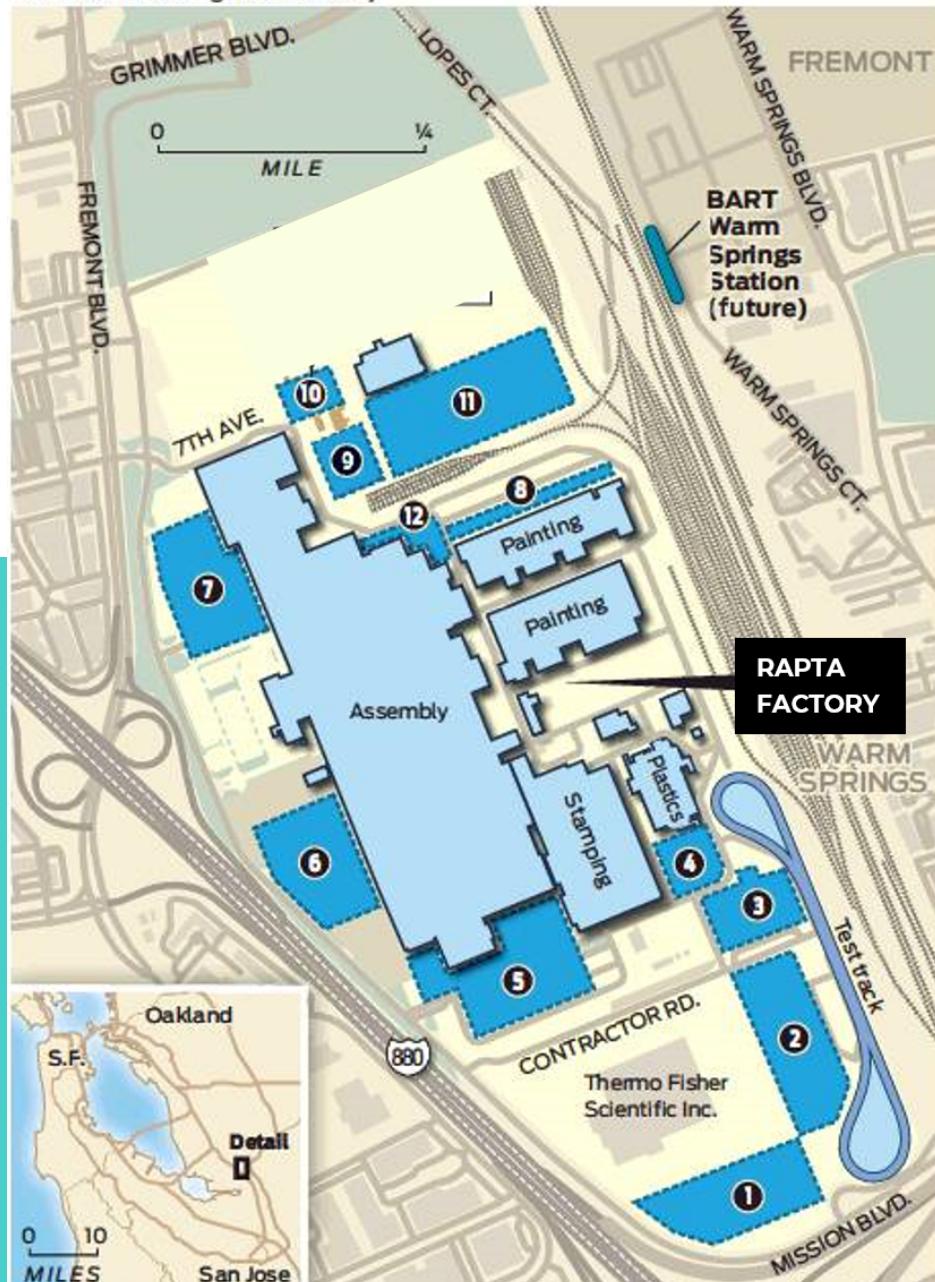
TOTAL EMPLOYEES IN PLANT: 10,100

PLANT LAYOUT

Total possible expansion: 4,600,600 square feet

- | | | | |
|--------------------|--------------------|--------------------|--------------------|
| ① 716,000 sq. feet | ④ 173,200 sq. feet | ⑦ 516,000 sq. feet | ⑩ 148,000 sq. feet |
| ② 640,000 sq. feet | ⑤ 756,000 sq. feet | ⑧ 118,000 sq. feet | ⑪ 914,000 sq. feet |
| ③ 344,000 sq. feet | ⑥ 430,000 sq. feet | ⑨ 123,400 sq. feet | ⑫ 40,000 sq. feet |

Note: Some buildings are multistory



OBJECTIVE 1

OPTIMIZE SUPPLY CHAIN AND INCREASE PRODUCTION

Rapta's production reduced from 718,330 vehicles a year to 654,628 vehicles not due to decreased demand, but because of their inability to meet manufacturing requirements. Rapta believes it is due to its outdated assembly line and machines which are losing efficiency every year. Rapta has asked Dell Boomi consultants to help them optimize their supply chain and help find innovative ways that could increase production.



OBJECTIVE 2

INCREASE PROFITABILITY, OVERCOME CURRENT PROBLEMS AND PREPARE FOR UPCOMING PLANT

Rapta is open to any changes that might occur in their current layout and encourages Dell Boomi to adapt a technology friendly solution. Your solution should assimilate innovative ideas of managing and integrating Rapta's B2B supply chain while exploring Dell Boomi's technology.

Using the key facts outlined above, Rapta is looking for Dell Boomi to come up with a solution that could help increase the company's overall profitability by the end of next year. Rapta's upper management has great pressure from its shareholders to show a successful proposal and strategic plan to overcome the current problems and prepare for the upcoming plant.



OBJECTIVE 3

IoT INTEGRATION

Industry and competition is evolving by the utilization of Internet of Things (IoT) and advanced manufacturing methods, meaning Rapta must keep up to stay in the game. Integrate data from sensor-based IoT systems to capture new operational efficiencies, minimize maintenance costs and downtime, improve field service and strengthen quality control. Reimagine the impossible and thus bring innovation and creative ideas to the table. Demonstrate a sound knowledge of how Dell Boomi is incorporated into your solution.



DELIVERY

You will be representing a team of Dell Boomi consultants that are working with Rapta to solve the outlined problems. Your team is expected to pitch your solution in a creative manner to the judges who will impersonate the upper management at Rapta. The upper management has asked you to deliver your solution in 8 minutes which will be followed by a 3-5 minutes Q&A.

EVALUATION CRITERIA

CONTENT

- Understanding of the case.
- Identifying and prioritizing Rapta's issues and concerns.
- Integrating Dell Boomi into the solution.
- Addressing the project requirements outlined.
- Recommending feasible solution(s).

PRESENTATION DELIVERY

- Caliber of delivery (tell your story!).
- Quality of presentation.
- Demonstration of teamwork.
- Creativity & innovation.
- Q&A (responses to questions).



CASE PACKET

NOTES

