Special Feature 1

Management by ROIC 2.0

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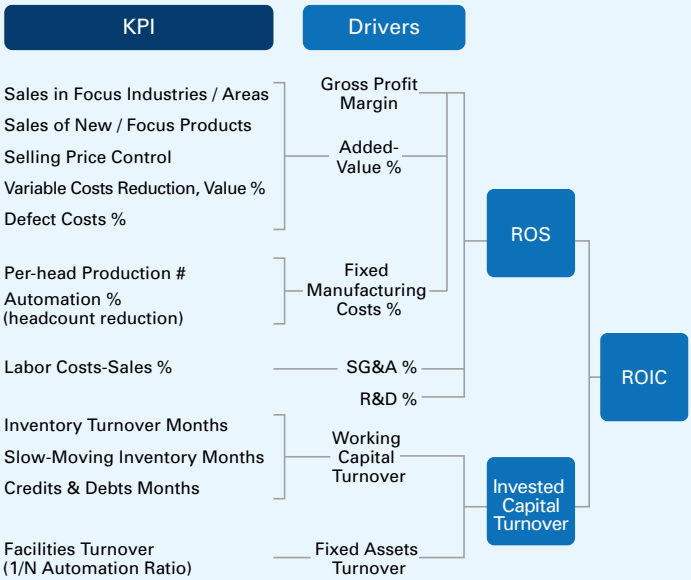
1. Why Management by ROIC 2.0?

At Omron Corporation, Management by ROIC consists of two main components: Down-Top ROIC Tree and Portfolio Management. Return on invested capital is the most important indicator we use to measure progress in our business plan.

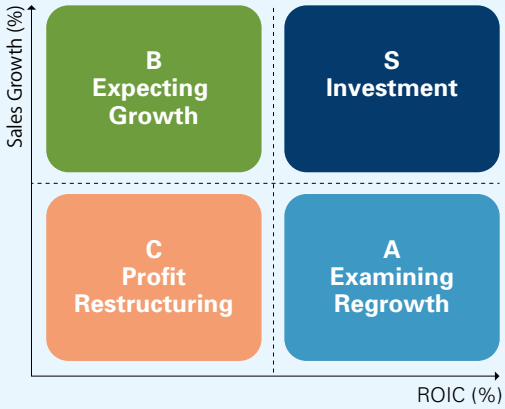
ROIC is an excellent measure for fairly assessing business performance across a number of businesses that have different characteristics. We began Management by ROIC in earnest three years ago, making significant ROIC gains since that time. I am confident that, at this point, every member of management is at least aware of the concept of ROIC and its importance as a performance indicator at Omron.

On the other hand, I am sure there are many who have yet to link ROIC with their own

Down-Top ROIC Tree



Portfolio Management Categories



day-to-day duties. ROIC is a relatively easy concept for those in our strategic, accounting, and finance departments to relate to. For our employees in sales or development, this financial management concept is both unfamiliar and difficult to internalize. Understanding this, we have decided to provide a qualitative interpretation that tells the story of ROIC in more relatable terms. This is *Management by ROIC 2.0*.

The following chart presents the ROIC formula and our own interpretation. The simple logic is this: Add the *Necessary Management Resources (N)* and generate greater levels of *Value to Customers (V)*, while reducing *Loss-Making Management Resources (L)*. Incidentally, we define loss-making resources as those that involve *Muri, Muda, Mura* (waste, unevenness, overburden).

ROIC Reverse Tree Formula and Interpreted Formula

Omron's ROIC Reverse Tree Formula

$$\text{ROIC} = \frac{\text{Net Profit}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Invested Capital (Working Capital + Fixed Assets)}}$$

Interpreted Formula

$$\text{ROIC} \fallingdotseq \frac{\text{Value to Customers (Stakeholders) (V)} \uparrow\uparrow}{\text{Necessary Management Resources (N)} \uparrow \; (\text{Goods, Money, Time}) \; + \; \text{Loss-Making Management Resources (L)} \downarrow \; (\textit{Muri, Muda, Mura}\ \text{(waste, unevenness, overburden)})}$$

2. Case Study

Our Electronic and Mechanical Components Business is a good case study to illustrate ROIC Reverse Tree Management. This is a business that involves significant capital investment in production equipment, which means that production facilities turnover is an important performance indicator.

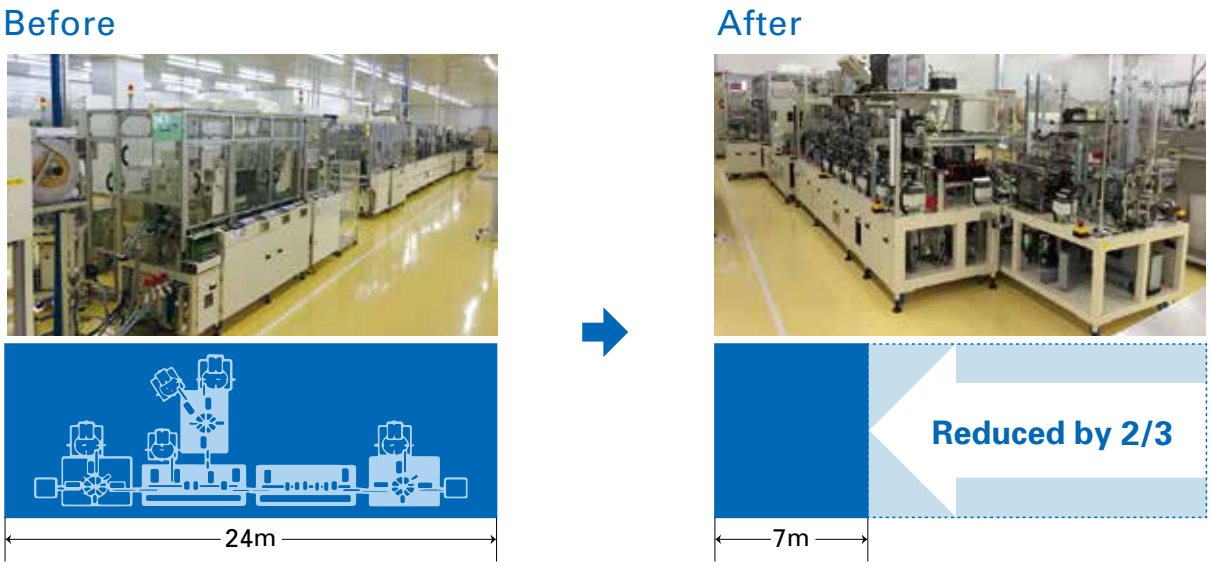
Production volume for relays and other mechanical components varies according to seasonality and demand in the home electronics market. In the past, we have had trouble matching equipment investment with this changing demand, adding equipment too late, thereby decreasing our return on facilities ratios.

This business requires that we minimize wasted investment in equipment, while responding correctly to changes in demand. Accordingly, we have focused on downsizing our production equipment, or in other words, reducing production equipment by a factor of 1/n.

Our first concern was to reduce *Necessary Management Resources (N)*, relay or switch production equipment in this case, to the smallest unit possible to still meet the increase in demand. By downsizing equipment, we limited investment, floor space requirements, and the energy required to run the machinery. Compared to an "all-or-nothing" approach to adding production capacity, we avoided waste in terms of low utilization / turnover. In other words, we successfully reduced our *Loss-Making Resources (L)*. At the same time, we have enough capacity to protect against order opportunity loss when demand rises further. From the perspective of the customer, our adding capacity in minimum units to meet demand increases their order flexibility while reducing excess inventory. This is a definite increase in *Value to Customers (V)*.

This has proven to be a much more efficient approach to investing in capital equipment for the Electronic and Mechanical Components Business. As one example, we have reduced floor space requirements to one-fifth of the space needed just 10 years ago. We are using this 1/n reduction factor in a number of other areas as well, including other types of capital equipment, manufacturing, and energy usage.

1/n Reduction in the Electronic and Mechanical Components Business (Ex. Switch manufacturing line)



3. A New Education Program: The *ROIC Dojo*

In February 2015, we started a new program to spread awareness of Management by ROIC 2.0. This program, called the *ROIC Dojo*, sends *ROIC Ambassadors* to visit Omron employees where they work, encouraging an awareness and proper understanding of how we measure our progress using return on invested capital as an indicator. Through communicating with these Ambassadors front-line workers are able to gain a deeper appreciation of how their day-to-day activities affect delivery of value to the customer.

Honestly speaking, even when we understand the ROIC concept intellectually, we tend to focus our efforts on incremental improvements or the idea of reduction. That is why the *ROIC Dojo* isn't just about one-way communications. It's about getting everyone to use this knowledge to make leaps ahead in our business. Moving forward, we must focus on profitability if we are to make significant ROIC gains. At the same time, we must invest management resources for greater growth. Our employees will play a critical role in our success by taking the initiative to adopt Management by ROIC 2.0 into their own work, delivering higher levels of customer and corporate value.

At the root of the Omron Principles is Our Mission: To Improve Lives and Contribute to a Better Society. Reading back over this mission, I believe that the interpreted formula closely mirrors this ideal. Management by ROIC encourages the potential of our employees (our ultimate management resource), drives us to create inspired solutions for the future (added value for the customer), and inspires us to pursue new challenges. We need the effort of every individual as well as a consolidated commitment as a team. ROIC is the measure that binds us together towards a shared goal. You can expect Omron to continue put the Omron Principles into practice, welcoming new ideas and practices to improve lives and contribute to a better society.

Management by ROIC at Omron Automotive Electronics, Inc.

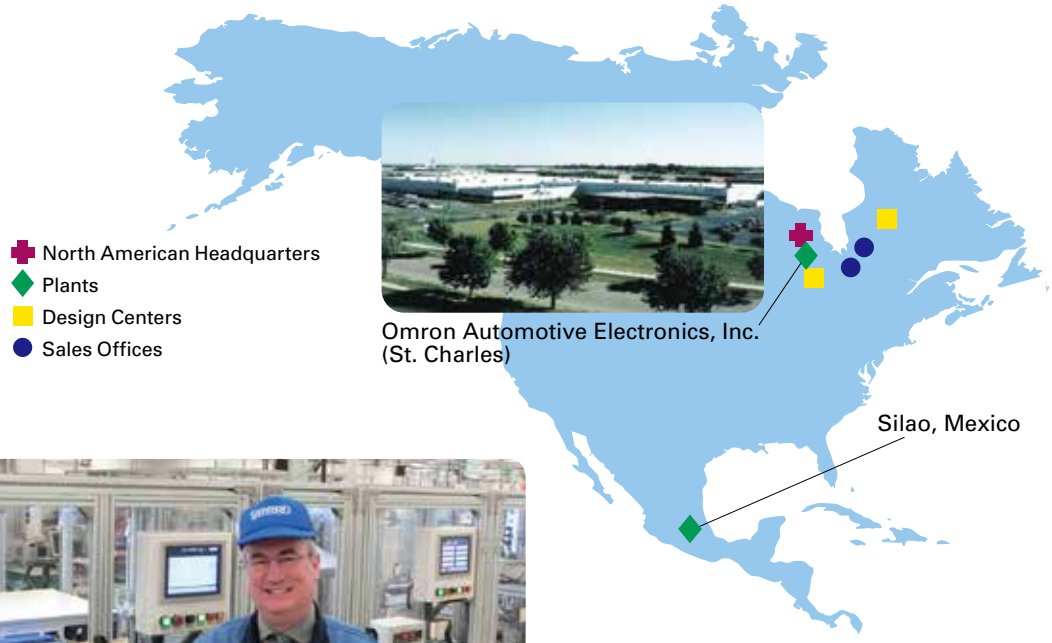
Omron Automotive Electronics, Inc. is one of the major centers of the AEC Business, producing and designing components for major auto manufacturers in the U.S. and the EU.

The automobile components industry demands low-cost, high-quality components from its suppliers. Here, our use of ROIC as a performance indicator is incredibly useful in keeping staff and management focused on operational efficiency. We have set key performance indicators based on Down-Top ROIC Tree linking our measures of performance directly to front-line activity. At the same time, we use portfolio management techniques to make decisions for optimal resource allocation.

Last year, we spent a great deal of time studying whether restructuring our business would allow us to practice ROIC management at a higher level. As a result, we have decided to restructure our processes for more efficient development, production, and logistics. At the same time, we are looking at shifting production ratios between our Chicago plant and our new plant in Mexico (opened in 2012) to maximize our ability to compete in North America. More specifically, we plan on assigning production to each plant according to product type, based on production cost structures and the particular strengths in each location.

The automobile industry will only demand more from its suppliers in the future. Developments in automated driving and fuel efficiency will require high-tech, highly accurate controllers. This presents a unique opportunity for Omron and our core sensing and control technologies. Working closely with our customers in the U.S. and the EU, our AEC Business will be in a position to create value and maximize investment returns through ROIC-based management practices.

Automotive Electronic Components North America



Randy Wara

President
Omron Automotive Electronics, Inc.