



Product advancement through IoT-enabled device to augment product interoperability and enhance competitiveness

## **SUMMARY**

A leading manufacturer of barbeque and grill equipment needed to revamp its high-end grilling machine in order to remain competitive and enhance its customer satisfaction. The company chose to partner with PCI to automate its products so users can operate the machine remotely. PCI's expertise in IoT has successfully enabled the customer to meet the project timeline and, finally, maximize profit.

#### INTRODUCTION

Internet of Things (IoT) has quickly moved from hype to sizeable investments that are now reporting tangible results. In order to compete, industrial leaders worldwide – including PCI's customers – are seeking to become more agile and responsive to emerging business trends so they can capitalise on domain expertise, boost output and design new products and services by exploiting technological innovations.

### THE CHALLENGE:

A HIGHLY COMPETITIVE MARKET, TECHNOLOGY ADVANCEMENT AND SHORT PROJECT TIMELINE



A highly competitive market



Technology advancement and short project timeline

To create a more collaborative and innovative brand, a renowned manufacturer of the most comprehensive range of BBQ products and services in the industry contacted PCI to co-develop a high-end grilling machine that requires less manual efforts to deliver expected results.



### THE SOLUTION:

# REPLACING ITS TRADITIONAL CONTROL UNIT TO AN IOT-BASED CONTROL UNIT



**Digitalized Control Unit** 



6 months from design to mass production

In order to fully-digitalized its grilling device, the manufacturer must make a transition from a more traditional mechanical control unit to an IoT-based control unit. Hence, the company worked with PCI to develop controller unit so customer will be able to adjust the temperature setting and roast the food conveniently through their phones.



#### THE RESULT:

SHORTER TIME TO MARKET, LOWER TOTAL COST OF OWNERSHIP, ENHANCE ASSET UTILIZATION, AND SATISFIED CUSTOMER



Shorter time to market



Lower total cost of ownership and enhanced asset utilization



Increased customer satisfaction

Due to PCI's flexibility and agility in the project delivery, the company was able to meet the project's adjusted timeline and garner customer satisfaction. The grill manufacturer is now enjoying shortened time to market, lowered total cost of ownership, enhanced asset utilization, and advanced customer loyalty. Consequently, PCI's expertise in IoT and engineering capability have convinced the customer to engage its services for future projects that involve more technological collaboration.

PCI has the capability ranges from embedding radio modules and bridging firmware applications into existing products to complete IoT solutions using global standards, including LoRA, Sigfox, BLE, NB-IoT, CatM1 and Cat1, as well as various sensing modules such as GNSS, accelerometers, gyroscope, magnetometers, hall effect, VOC, and others.

Finally, PCI's prowess in re-engineering an existing product to connect to the cloud or creating a brand-new device allow its customers to design IoT-enabled machines timely, hence ensuring faster return on investments.