



GLOBAL FOUNDRIES | CASE STUDY

## GLOBALFOUNDRIES enhances its value-add and sees real process improvements in Manufacturing, Human Resources, Procurement and Sales

"Enterprise Performance Management and Reporting services is a key differentiator for enabling the organization's strategic vision. As the demand for business intelligence, analytics, data mining and value added reporting is increasing across the enterprise, it is important to have an effective enabler. It is easier and more effective to choose KMS. The greatest advantages are the quality of the deliverables, its clarity, and the robustness of the software."

*Mr. Srinivasan Rangaswamy, Deputy Director  
GLOBALFOUNDRIES, Singapore*

GLOBALFOUNDRIES entered the foundry industry in early 2009 with a simple but ambitious goal to become the world's first truly global foundry. In a short span of time, they have achieved this milestone with manufacturing operations spanning three continents for flexible and secure supply. Furthermore, they are charting a bold new course to completely reshape the landscape of the foundry industry through a collaborative approach to both technology development and customer engagement.

With more than 150 customers, including Microsoft, Infineon and ST Microelectronics and over 10,000 employees in 12 locations, they are one of the two wafer fabricators in the world that can fully design, develop and manufacture in-house and deliver to customers on a large

scale. With manufacturing centers in Germany, the United States and now, with the integration of Chartered Semiconductor, in Singapore, GLOBALFOUNDRIES has achieved an enviable position in the industry, and by being located near all of the centers of global semiconductor activity it is able to service their customers with timely and reliable supply of product.

In order to fully take advantage of the trend to outsource manufacturing by semiconductor companies, GLOBALFOUNDRIES needs to have timely and accurate Business Intelligence that informs strategic decisions. In an industry where delays in delivering the right product to market has ramifications that can take years to overcome, GLOBALFOUNDRIES has chosen to partner with KMS to help gain advantages in business intelligence.

### CHALLENGE

The business that GLOBALFOUNDRIES operates in has a relatively small number of customers, but their requirements for slightly varying products are huge. To be specific, there are different complexities of circuits and connections that would need to be placed on the wafers. So not only must variation be factored in when developing a new product, but the need to replicate on a mass scale, quickly and without defects is vital. The process of designing and fabricating a new line of wafers is such that once committed to a decision it is hard to turn back, and the cost of delays, or developing a product that doesn't resonate with customers can be costly both in terms of reputation and market share. Therefore the Business Intelligence solution would need to be able to provide information on developments in technology, pricing for materials and market analysis that is accurate, up to date, and it would need to be delivered quickly on a variety of platforms.

### SOLUTION OVERVIEW

#### GLOBALFOUNDRIES

GLOBALFOUNDRIES is headquartered in Silicon Valley and with over 2.5 billion USD in revenue it is one of the leaders in the industry. It manufactures both 200mm and 300mm wafers which are used in a wide variety of both communications and consumer electronics, and it is distinguished by its ability to produce specialized products on a mass scale.

**INDUSTRY:** Semiconductor Manufacturing

**FUNCTION:** Technology Development, Design,  
Testing and Manufacturing

#### GEOGRAPHY

Asia-Pacific, linking Singapore with regional sales and support offices in Taiwan and Japan

#### SOLUTION

GLOBALFOUNDRIES implemented a BI solution from KMS. They chose QlikView\* to make analytics more readily available to various departments in the organization as well as provide a clear and coherent layer of presentation for management and their strategic decision making process. By using Scorecards and Dashboards, vital information is made easier to access over a variety of platforms, which has also helped inform decisions in both sales and procurement.

#### DATA SOURCE SYSTEMS

Application: SAP R3, ORACLE R12, Peoplesoft 9.1, SI View  
Database: ORACLE 10G

*\*QlikView is from QlikTech Inc.*



## EVALUATION

GLOBALFOUNDRIES had certain requirements that had to be satisfied before a solutions provider was selected. In order of importance they were: a graphical representation of information, the information had to be comprehensive and the consultants would have to be able to develop to GLOBALFOUNDRIES stringent needs quickly. Looking at other solutions offered by SAP, Microsoft and Oracle, it was evident that the product quality, exemplary service and overall value proposition offered by KMS was the ideal match for GLOBALFOUNDRIES.

To be considered a partner of GLOBALFOUNDRIES the consultants would have to be responsive, and the system that they would implement had to be easy to learn and manipulate. Because of the fast-moving industry that GLOBALFOUNDRIES operates in, it would have to have real-time updates and be able to work on both PCs as well as mobile devices and be deployed to satisfaction in a very short time period.

## APPLICATIONS AND DEPLOYMENT

GLOBALFOUNDRIES chose QlikView for its powerful capabilities to consolidate information from a variety of business units and across formats. The quality of the deliverables, the clarity of information presented and the robustness of the software have won praise amongst the over 1000 employees of GLOBALFOUNDRIES who are currently using QlikView. Dashboards were developed for every business division, led by a team of four consultants from KMS and 15 champions from GLOBALFOUNDRIES. The first application was fully deployed within two months of starting, and over 20 applications have been added in the past two years of service.

Working with KMS has inspired GLOBALFOUNDRIES to seek new uses in its future plans for both expanding into new markets as well as a program of product segmentation. Nothing is confirmed yet, but it is clear that working with KMS has been a rewarding experience. The high level of knowledge the KMS consultants possessed about the product, their focus on customer satisfaction as well as their



willingness to work over weekends to satisfy expectations certainly resonated with the client. Ultimately though, it is the delivered product that counts and the response throughout the organization has been very positive towards KMS.

## CONCLUSION

KMS has contributed to the additional value-add of GLOBALFOUNDRIES because it gets the strategic decision makers the information that they need faster with an ease of both usage and comprehension. The added information that is now readily available is being used throughout the organization; from Manufacturing, Procurement, to Sales and HR. These powerful analytical tools help GLOBALFOUNDRIES to find out where they can add value and the overall business benefits from being able to work with data gathered over the past nine years and then projecting three years into the future. KMS has helped GLOBALFOUNDRIES make management decisions throughout the enterprise, and this has not only helped them continue to find additional business value-add and be more efficient, but it has contributed to keep them amongst the leaders in their industry.

## ABOUT KMS

Knowledge Management Solutions (KMS) provides consulting and implementation services for developing decision support and knowledge management decisions. KMS was founded by professionals with nearly 20 years experience in Data Warehousing and Business Intelligence solutions using advanced in-memory technologies across a broad spectrum of vertical industry segments.

Headquartered in Singapore, we have a regional presence with our offices in Malaysia, Thailand and Hong Kong.

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