

# Oracle Agile PC / PG&C Implementation for Hi-tech Industry

**Dr Klaus Gronwald  
Mahindra Satyam  
Wiesbaden, Germany**

## **Keywords:**

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## **Introduction**

This project was a green field Agile PLM implementation for the world's most admired Consumer Electronics Company headquartered in US. The company was unable to cope with legacy PLM application and was faced with intense competition and very short time-to-market for New Product Introductions. Oracle Agile PLM was picked as the right choice and the project was planned with intention to migrate from the legacy application and deploy Agile in the best possible way (handle the scale of data, users and suit various complex business processes). After initial start, Mahindra Satyam (MSat) was recognized as the primary PLM solution provider with its team strength and expertise. The project was a tremendous success and received appreciation from across the company including top management. This implementation provided a robust platform for a streamlined NPI process and much faster time-to-market to stay ahead of competition.

## **Agile Implementation**

Oracle Agile 9.2.x PC and PG&C was deployed at the customer site. Importantly, the following processes were enabled:

- ✓ **Part Realization** – Single Source of Truth for Items (Parts/Documents ), categorization of subclasses, Attribute definition, Life Cycle Phases of Items, Part Numbering Definition
- ✓ **BOM Realization** – BOM Structuring, Skeleton BOM concept implementation, Localization BOM Concept implementation, Define BOM Rules to meet ERP requirement.
- ✓ **Change Management** – Streamline change processes, define various Change categories, workflows, approvers/observers specific to business needs.
- ✓ **AML Management** – Manufacturer definition, MPN tracking, AML Qualification process, Tracking AML exceptions.
- ✓ **Compliance Management** – Tracking the Compliance from suppliers for MPN's, Compliance Roll up, Declaration definition, Specification definition, Reports.

A robust consulting approach was adopted at the customer site during project execution:

- ✓ The PLM consultants deployed at the customer site exploited the robust communication model among the stakeholders of the project, which was established by Mahindra Satyam and the customer together.
- ✓ Formal requirement gathering sessions, with all stakeholders involved to ensure clarity and absence of conflicts.

- ✓ Involvement of respective business groups early in the analysis phases, to bridge gaps well ahead.
- ✓ Technical Design workshops in war rooms involving all members of the PLM technology team, fostering brainstorming and creativity,
- ✓ Multiple solution approaches discovered by technical design workshops, from which the PLM Tech Team select the best approach based on various metrics and factors
- ✓ Establishment of an integrated solution development environment involving experts from all skills required for the project
- ✓ MSat's consulting advice added value in identifying the bottlenecks or developments needed to the existing systems

The following steps were followed while re-engineering the solution:

1. Identified the As-Is key business processes and defined the Level 1, Level 2 and Level 3 Processes for Part Realization, BOM Realization, Change Management, AML Management and Compliance Management.
2. Identified the key problem area's and/or pain points in the process with the help of key stake holders.
3. Re-Engineered the business processes to meet the industry best practices which align to the key requirements
4. Defined and captured the key processes to be followed in form of process documents before system configuration.
5. Security Modal was re-designed to meet the business requirements.

The below diagram illustrates the Agile setup and its integration with various other upstream and downstream Enterprise Applications.

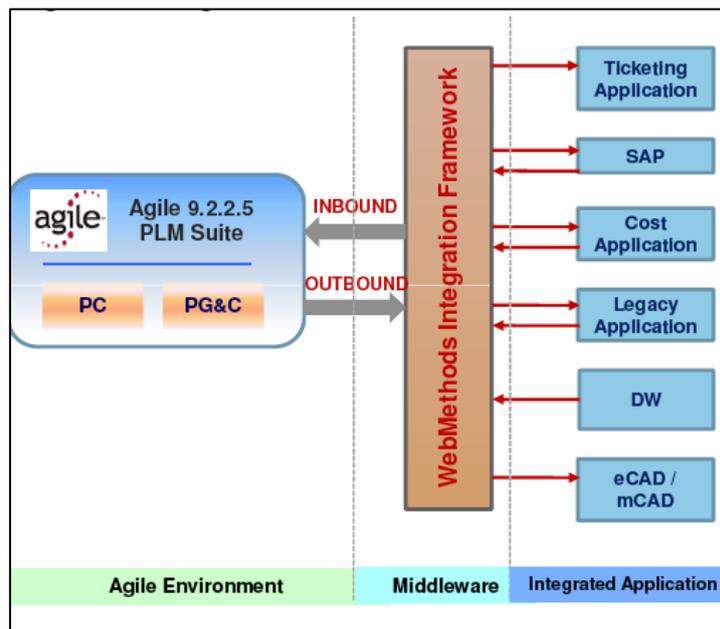


Illustration. 1: Agile Setup

## Methodologies Adopted

### Development Process:

Mahindra Satyam followed a hybrid model for development, which was tailor made by borrowing the best practices from

- Agile methodologies
- RAD
- Extreme Programming models

This hybrid model was able to suit the aggressive project needs.

The initial requirements after the preliminary requirement gathering process is realized as a “Rapid Prototype” which is showcased to the Business team to eradicate any gaps in requirement elicitation.

Every Customization development was subject to thorough Unit testing attributed with detailed Unit Test Reports. Multiple iterations of in-depth Code Review were done:

- Peer reviews @ Offshore
- Reviews conducted by Onsite coordinator with Off-shore team
- Reviews @ Onsite with the entire PLM customization team

Auxiliary deliverables were completed to ensure the highest quality:

- PMD reports (Code standards review Tool)
- Java Docs
- Unit Test Case reports
- Adherence to Development Work breakdown Structure (WBS)
- IT Phase Test Scripts and test results for preflight-IT testing by development team
- Establishment of performance benchmarks

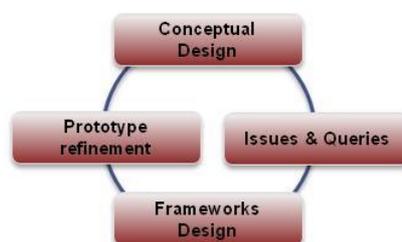
### Project Phases and Methods:

A gated approach was taken for execution and transition to different phases. The below diagrams illustrate the key methods during each phase:

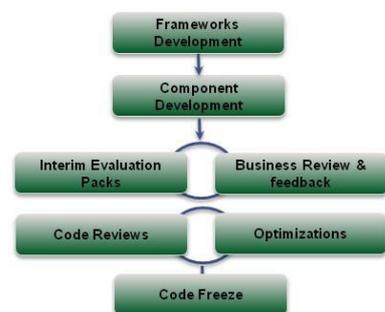
#### Requirements

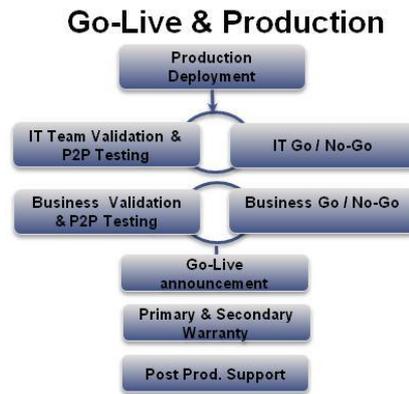


#### Design



#### Development





## Success Story

This was one of the most complex and large scale implementations given the business logic, processes and scale of data and users that had to be supported. Despite the challenges, Agile PLM successfully went live setting example for 'The Best in Class' PLM implementation. Some highlights of this success story are given below:

- 4850 Person Days of effort covering Requirements, Design, Development, Testing and Implementation
- Executed the Project in Onsite-Offshore model
- This was MSAT's first Greenfield PLM Implementation using Agile PLM 9.2.2.5 with Web Service based integration
- Currently MSAT is supporting PLM @ the Customer site, 24x5 with nearly 4000 users spanning across US, Europe and APAC
- Customer is extremely delighted with the Phase I PC and PG&C Implementation.
- We have bagged more projects with the same customer for
  - Agile 9.3 Upgrade
  - PPM Implementation
  - PG&C enhancements
  - CAD integrations with Agile Engineering Collaboration Suite
  - Other custom PLM BI Reports

## Contact address:

**Dr Klaus Gronwald**  
 Mahindra Satyam  
 Borsigstrasse 20  
 65205, Wiesbaden

Phone: +49(0)6122 507 310  
 Fax: +49(0)6122 530 755  
 Email: klaus\_gronwald@mahindrasatyam.com  
 Internet: www.mahindrasatyam.com