



# Case Study

**KOVAIR**

**Embedded Systems solution  
provider increases their  
operational efficiency using  
cloud based Kovair ALM**

## The Customer

The organization with their suite of highly efficient, extremely smart, scientifically and financially viable embedded systems solutions provide services in the FinTech, CleanTech, GovTech and Industrial Electronics

sectors while supporting SaaS, PaaS and on Premise and field Opex Models. Over years, this tech company has helped organizations accelerate their journey towards digitalization.

## Their Challenges

In this organization every project starts from a Project, Product or POC request. Once a request is approved by Project Head and Quality Manager, the project gets initiated. Every project goes through the phases of Project Initiation, Project Planning, Project Monitoring & Controlling and Project Closure. The organization deals with multiple types of Requirements and their corresponding designs followed by development and testing. In absence of a centralized software tool for managing all these different phases, the organization was struggling in various areas as mentioned below.

- **Centralized tool for complete transparency:** With a mix of offline mediums like word and excel for maintaining different artifacts, it was extremely challenging for the organization to track the progress of the projects and manage quality. They needed a centralized repository for accessing the same artifacts without versioning and searching problems.
- **Managing Requirements:** Every project in the organization starts with Product Requirements. Each Product Requirements are broken down

into various other sub-level hardware and software requirements, which again go through various levels of Design and Prototypes. With requirements and specifications maintained in "traditional" office documents, achieving the traceability was difficult and, consequently, inefficient.

- **Central Governance:** Having so many diverse teams and items to work on, the organization felt the need to establish a centralized process governance to reduce multiple redundant and overlapping jobs done by individual teams
- **Collaboration:** The working of projects in this organizations requires the involvement of various stakeholders like Project Managers, Project Leads, Design Engineers, QA Manager, QA Engineer, Author Hardware team and Audit teams. They work on a wide range of artifacts like Requirements, Designs, Coding, Prototyping, Testing and Risk. Every team having their own way to manage the artifacts, it is challenging to establish a proper collaboration mechanism

## The Solution

With the above-mentioned challenges in hand, the organization was looking for a SAAS based ALM & PPM solution which could cater to their problems. After evaluating multiple tools, they decided to select the Kovair ALM.

Kovair ALM, the fully integrated application lifecycle management product from Kovair is a browser-based solution. Kovair ALM along with its proprietary ESB, Kovair Omnibus provides a single platform for PMO success.

## Hosted Solution

The organization was looking for a cost-effective solution over cloud to avoid any infrastructure related investment. Kovair has hosted the entire solution on

Kovair cloud. These are getting accessed by users of the company from different geographical locations.

## Project Initiation & Planning

Kovair PPM is a one stop solution that delivers greater value to the organization by connecting project planning to execution. Using Kovair PPM, organizations can define strategic initiatives to portfolio to projects to their outcomes. It allows to define strategic initiatives, choose the relevant projects for execution, provide deeper insights into development, projects and programs by generating EVMs at all levels, providing valuable inputs to the management, enabling them in making data-oriented decisions.

The organization maintained their pre-project phase in Kovair ALM where every request for a new product, project or POC gets registered. These requests go through multiple level of approvals configured through Kovair's task-based workflow. Once a request gets approved, a project gets created using the standard project template of the organization. (example?)

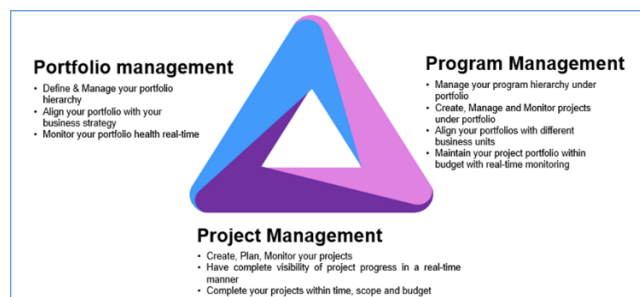


Fig 1

Once a project gets created, project managers can manage all phases of project management in Kovair.

## Requirements & Design Management

Projects in the organization starts with Product Requirements. Each of these product requirements is categorized into multiple sub-requirements, viz.

Using the capability of Task Scheduler, they are doing the planning. Task scheduler of Kovair ALM allows Project Managers to do the planning with precision by providing capabilities mentioned below.

1. Supports creation of plan incrementally
2. Provides Gantt Chart allowing managers to track the critical path for a project
3. Allows to track milestones
4. Considers company and individual leaves of resources
5. Supports creation of tasks for activity owners as and when the plan gets published
6. Provides complete transparency to project managers on project progress
7. Allows project managers to compare planned vs actual in the plan in a real-time manner



Fig 2

With all the above-mentioned capabilities, project managers of the organization now have much better control on the project progress and users also have better visibility to their to do list of tasks.

streamlined into their respective designs viz. Hardware, Firmware, Software and Mechanical Designs.

Kovair ALM allowed the organization to import all Requirements from their existing word documents and establish relationships between these Requirements and their corresponding Designs.

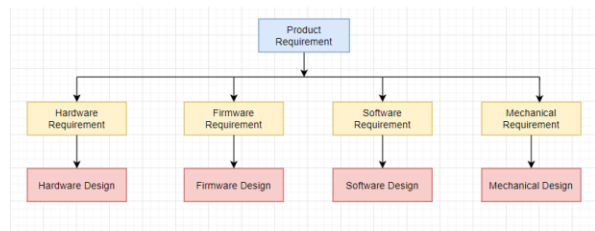


Fig 3

Requirements Management module of Kovair ALM provided them some inherent benefits as mentioned

below. Allows easy capturing of Requirements from documents using Word Import

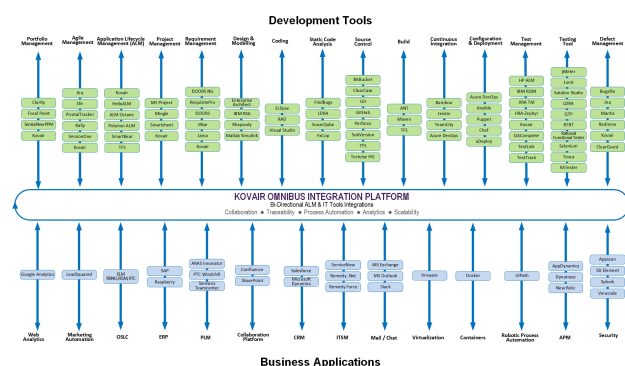
- Facilitates maintaining different types of Requirements through entity management framework
- Supports separate attributes and relations for each type of Requirement
- Allows to enforce centralized governance through automated task-based workflow for tracking a requirement lifecycle from analysis to delivery
- Supports tracking of who, when and what of changes for audit trail
- Supports versioning of Requirements with facilities of comparing and merging versions Custom template

## Development Management through Connectivity with SVN

The organization is using the integration with their source control management tool SVN. Whenever a File is checked in SVN the related changeset and SVN file automatically gets synchronized to Kovair ALM. Once synchronized, these changesets gets linked to the Requirements or Defects against which the code was checked in.

Kovair comes with a SOA architected proprietary ESB platform Kovair Omnibus enabling organizations to setup an integrated ecosystem of tools without replacing the existing tools.

Other than SVN Kovair also provides integration with multiple tools as per the diagram below.



## Test & Defect Management

The organization maintains Test Cases for each type of Requirements. They capture and manage all their System, Unit and Module Test Cases as well as the mechanical inspection data. The organization was earlier managing their test cases in excel files along with the traceability with requirements. This was leading to lot of errors and missing test cases. Test coverage of requirements was also not visible to different stakeholders leaving behind lot of untested requirements. With the implementation of Kovair Integrated Test Management solution, they now have a complete visibility to all the test activities that are

getting performed against the requirements. They can maintain their Test Plans containing both entry and exit criteria. On failure of every test execution a defect gets logged in Kovair. There is a complete visibility to the testing activities along with the end to end traceability from Requirements to Defects.

Some of the inherent capabilities of Test & Defect Management by Kovair ALM are:

- Provides single platform for your testing needs
  - Test Management
  - Test Execution

- Test Automation through integration - with what?
- Task Based Workflow to manage your test activities
- End to end traceability with Requirements and Defects

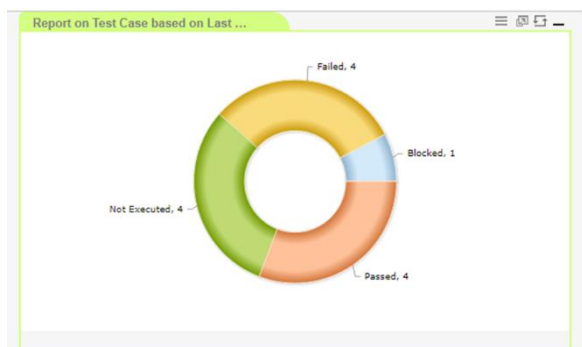


Fig 4

ID	Title	Last Execution Status	Test Case Coverage	Test Module
1106	Login button should be clickable	Failed	Failed - 1 (100.00%)	OCR - Project
1105	Select Supplier modified	Failed	Failed - 1 (100.00%)	OCR - Project
1104	Payment Gateway	Failed	Failed - 2 (66.67%) Passed	OCR - Project
1103	Verify valid account or data	Blocked	Blocked - 1 (33.33%) Failed	OCR - Project
1102	Manager is notified on review creation			OCR - Project

Fig 5

## Reports and Dashboards

Kovair ALM provides built-in graphical and textual reports in Word, Excel, PDF formats and dashboards with real-time drilldown data access. It allows users to configure KPIs as per organizational need and give access to different users based on their roles and responsibilities. Kovair ALM allows users to generate pre-formatted word documents like SRS/SDD/PRD/MRD from the application.

Using all the benefits as mentioned above, the managers and senior management of the organization has got complete visibility to the progress of the Project. This real-time data has also helped the organization in the areas of early detection of errors and improve production quality.

## The Business Benefits Achieved

The organization has acknowledged that they are saving both time, cost and getting better quality with

the implementation of Kovair ALM. Some of the major areas of benefit are listed below.

### Robust Requirements Management

Kovair ALM has given the Project teams what it mostly needed - an improved and uniform process for requirements and test management. It has drastically

simplified the management and tracking of various types of requirements, designs, prototypes, tests and test reports.

### End to End Traceability

With the implementation of Kovair ALM, the organization achieved end to end traceability between

the artifacts from Requirement to Designs to Test to Defect. which was exceedingly hard to achieve

manually. Using this traceability, the project managers get accurate data on coverage of various items and provide real-time status updates on the project proceedings. They are now equipped to provide fast responses to questions like.

- Which test objects are related to which requirements?
- Which change requests are impacting which requirements and test results?
- What are the different Designs that are related to the Requirements?

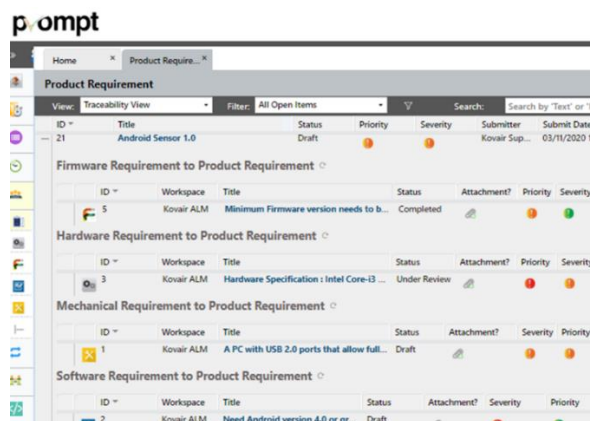
## Enhanced Collaboration

Using the unified platform of Kovair ALM, collaboration between the project teams became easier. Capabilities like Document View is providing users a detailed information about the requirements, tests, designs, etc. while using the Traceability View, users can view the entire chain of linked artifacts that are related to one another and clearly track the coverage and progress of the mission.

## Conclusion

Using Kovair ALM in conjunction with Omnibus, the organization has successfully implemented a fully integrated ALM environment. With this implementation, the organization has seen a substantial growth both in quality and productivity. Stakeholders from different teams have recognized the benefits of Kovair's ALM implementation. Some of the areas where the organization have seen significant benefits are:

- Automation of standard operating procedures and working process enabling controlled project execution
- Significant reduction in Issues improving product quality
- Better release predictability with the help of real-time reports and dashboards



The real-time information from Kovair over a web-based interface along with email notifications, facilitates the acceleration of work processes that has resulted in significant improvement in the communication and collaboration among the different team members.

- Visibility of complete coverage through traceability helping in early detection of gaps & errors

Kovair ALM is an integrated, collaborative, and mouse click-configurable platform that offers holistic capabilities to all phases of Application Lifecycle Management including Project Management, Requirements Management, Development, and Testing & Quality Assurance. Powered by capabilities like end-to-end traceability and real-time reporting using the data from all phases of the lifecycle, Kovair ALM provides a Single Source Truth for all users involved in each of the lifecycle phases.

For more information, visit: [www.kovair.com](http://www.kovair.com)

# About Kovair

Kovair Software is a Silicon Valley software product company specializing in the domain of Integrated software tools and its solutions support global product development and management. Kovair's focus on integrating third-party best-of-breed software tools and other applications with its Omnibus Integration Platform enables creation of high business value proposition in a synchronized tools environment for product development and enhancement of digitalization for enterprises.

Kovair's flagship products the Omnibus Integration Platform, Kovair ALM with its Task based Workflow, Kovair PPM, Kovair DevOps, Data Lake and QuickSync for legacy data migration are highly preferred solutions by some of the major corporations globally.

**Product Portfolio:** Kovair's flagship products [Omnibus Integration Platform](#), [ALM](#), [QuickSync](#) and [Integrated Test Management](#) are highly preferred solutions by some of the major corporations globally.

**Recognitions:** [The SD Times 100](#) has recognized Kovair as one of the top 100 software innovators in the domain of Application Lifecycle Management. Kovair's Innovations in ALM Tools and ALM Integrations are well recognized both in the industry and by analysts at places like [Gartner](#) and [Forrester](#).

**Business Focus:** Application Lifecycle Management Products and Services, Integration Platform

Industry Verticals: IT Consulting and Services, Banking and Financial Services, Telecom, Manufacturing, Networking, Healthcare, Defense and Government.

**Contact:** For more information about product and services contact [sales@kovair.com](mailto:sales@kovair.com). You may follow Kovair updates on [Facebook](#), [LinkedIn](#), [Twitter](#), [Google+](#), [Slideshare](#) and [YouTube](#).

**Important Links:** [Why Kovair](#) | [Management](#) | [Product Updates](#) | [Tool Integrations](#) | [Product Brochure](#) | [Videos](#) | [Datashets](#) | [White Papers](#) | [Case Study](#) | [Technical Documents](#) | [Presentations](#) | [Services](#) | [Blog](#) | [Press Releases](#) | [Events](#) | [Customers](#) | [Partners](#) | [Support](#) | [Contact](#)

## Global Technology Partners



## Memberships & Associations



### US Corporate Office

Kovair Software, Inc.  
2603 Camino Ramon, STE 200,  
San Ramon, CA 94583,  
United States  
Tel: 1.408.262.0200 Extn.1

### India Registered Office

Kovair Software Pvt. Ltd.  
PTI Building, 6th Floor, DP-9,  
Sector V, Salt Lake City,  
Kolkata 700091, India  
Tel: 91-33-4065 7016/17/18/19

### Bangalore Office

Kovair Software Pvt. Ltd.  
Samad House, #402, 4th B cross,  
7th A Main, HRBR Layout, Kalyan  
Nagar, Bangalore 560043, India  
Tel: +91-95350 92589

Email: [sales@kovair.com](mailto:sales@kovair.com)

© Kovair Software, Inc. All Rights Reserved. The Integrated ALM Company.