



# Exponential Business Expansion with Cloud-based Project Management Application



**Microsoft Partner**  
Gold Application Development  
Gold Collaboration and Content



## Client Profile

---

The client, a New York based architectural, interior design and planning firm provides a complete range of architectural services to global customers.

Innovating on its existing services, the client developed a comprehensive design-through-occupancy project management solution which it offers to its customers. The solution helps their customers to manage project information and to collaborate seamlessly with their consultants, contractors, and suppliers.

The application's product library offers customers comprehensive data on building materials, components and systems.

The intelligent system also tracks user information and offers customers customized digital libraries of the products that they have used and considered.

## The Challenge

---

The client's Project Information Management solution was an intranet based desktop application, not designed for business expansion. Its data storage and retrieval capabilities were limited and the application did not offer financial transaction capabilities. These drawbacks made monetizing the solution challenging and seriously interfered with the growth and expansion plans of the company.

To overcome these disadvantages and offer this application to a larger customer base, the client required a highly scalable web application with which they could offer their customers the following services:

- Exhaustive search capabilities backed by strong databases.
- User-friendly interface to help customers through all aspects of project management.
- Interactivity and communication channels through which customers could access proposals containing text and image files.
- Seamless connectivity and accessibility to all project documents from any web enabled device.

## Trigent Services and Solution

---

Trigent's team of architects and developers, analyzed the existing desktop application and created the architecture for a highly-scalable web application.

- Following an accelerated delivery schedule, the team developed a cloud based load-balanced Model-View-Controller (MVC) architecture with distributed storage/caching techniques. MVC helped to separate internal representations of information from the ways that information is presented to or accepted from the user, simplifying usability and making it really easy for customers to utilize the solution to its full potential.
- The cross platform web application ensured that the application could be accessed on different types of computers and multiple handheld devices.
- The solution included database clusters which meant that multiple servers would share the same storage to support on-demand upscaling and faster data retrieval. This load-balanced multi-server environment offered centralized file management capability.
- The team implemented subscription methodology with integrated payment facilities for secure online transactions.
- The team implemented content caching so users could always experience high performance from the application and the load on the servers is reduced dramatically.
- As an add-on to the services, Trigent's team created comprehensive supporting documents like software requirement document, overall system design and entity relationship diagrams.

### Technology Stack

- Apache HTTP Server 2.2
- HAProxy
- Rackspace Cloud with CDN
- Zend Framework
- MySQL 5.5
- Bootstrap
- Smarty
- jQuery, DT

## Clients Benefits

---

Trigent architected and developed a highly intuitive, scalable and interactive, web-enabled project management platform with which the client could exceed its business vision.

Key benefits include:

- Reduction in effort and time required for financial transactions by automation resulted in simplified payment procedures for existing and new customers.
- Reduction in project maintenance and operational costs resulting from reduction in support and maintenance by providing configurable workflow options for vendors.
- One-stop solution for design-to-construction projects
- Multi device capabilities resulted in high user acceptance.
- The new application empowered the client to expand and grow their business by providing services to multiple vendors over the Internet.