



Harris Miller Miller & Hanson Improves Revenue, Streamlines Operations with About:Time® for Exchange Server

Harris Miller Miller & Hanson Inc. (HMMH) is a Boston-area engineering firm with an international reputation. Since it was founded in 1981, it has become the premier noise and vibration control company in the transportation field. HMMH provides a full range of acoustical environmental services for airports, highways, rail and transit systems, military activities, construction projects, industrial sites, and recreational facilities.

HMMH's highly sophisticated measurement equipment is deployed around the world for days or weeks at a time. HMMH deployment offices are located in Massachusetts, Virginia, and California, requiring efficient extra challenges for deployment. Measurement field trips are of significant duration (days or weeks), require 12-24 pieces of instrumentation each, and may require travel across multiple time zones. Resource contention for both the highly trained engineers using the measuring equipment and the equipment itself resulted in many lost revenue opportunities. About:Time helped insure the right equipment was at the right project with the right engineer, increasing revenue for HMMH and reducing the time for completion of these large projects.

Executive Summary

HMMH embarked on the pilot project with a subset of core engineers using the About:Time for Exchange Server application – and scheduling over 100 equipment resources. Key objectives of the project included:

- Maximize the availability of resources that generate revenue
- Simplify complex scheduling processes
- Streamline the billing cycle

The project was a collaborative - the efforts and insights provided by HMMH ensured that both simplicity of presentation and complexity of design were appropriately measured. At its conclusion, a number of significant outcomes were noted:

- Availability of revenue-generating resources has been dramatically improved, which "... makes the equipment more available for billable hours". HMMH found that the increase in availability of its most commonly used equipment will provide a potential revenue increase of at least 29 percent.
- The billing process has been streamlined, decreasing manpower requirements for data entry and reporting. Receivable days can be shortened, as availability of information ensures that invoicing is timely and well within the defined billing cycle.
- Remote access facilitates improved customer service. On-site project engineers can connect remotely to view the equipment availability, modify equipment schedules, or even determine the most cost-effective shipping timeframe.

As an enterprise-wide rollout of the software occurs at HMMH, the firm anticipates that further cost reduction, operational efficiencies and service improvement benefits will continue to be recognized.

Highlights

Problem - Resource Contention Impacts Revenue

HMMH recognized that contention for resources was a significant problem. Concurrent and overlapping projects often depended upon the same specialized instrumentation. Without a solution that would manage this contention, instruments were overbooked. "In these cases," explained Mr. Rockwell, "our company not only loses revenue, but we often have had to absorb the higher costs of rental equipment".

Efforts to reduce contention and improve equipment availability for revenue activities were complicated by a variety of scheduling considerations, including:

- The need to transport equipment between geographically distant projects, which introduces time zone and travel time issues
- Existing project schedules (resource and activity assignments)
- Time required for maintenance and calibration of equipment
- Project concurrency and overlap



Solution - Maximized Revenue

HMMH experienced some dramatic results. "About:Time ... has improved the accuracy and accessibility of resource scheduling information", said Mr. Rockwell. "This has allowed HMMH to change our internal process for delivering lab equipment to project sites. By reducing the turn around time between projects, we have increased the availability of our equipment for revenue-generating work. For our most commonly used equipment, the increase in availability will provide a potential revenue increase of at least 29 percent.

"For our most commonly used instruments, we hope to eliminate our need for outsourced items."

About:Time for Exchange Server employs powerful algorithms to evaluate resource availability and many other scheduling constraints. The solution optimizes schedules on the fly to avoid contention for resources (people, equipment, locations, and pools of homogenous resources) between projects. Calibration, maintenance and travel activities can all be scheduled in one action. Electronic notifications facilitate communications between departments and electronic calendars are updated in real-time.

Problem - Complex Business Processes

One of the significant drawbacks of a manual approach to scheduling is complexity, and the overhead workflow required to manage that complexity. Users determined the potential timeframe for project activities by visually inspecting open calendars for all requisite equipment resources. Lack of confidence in accuracy of this manual calendar data necessitated manual confirmations from the departments that 'owned' the equipment; this process required verbal communication between multiple individuals, and introduced latency that could span hours, or even days.

Solution - Automated Workflow, Streamlined Business Processes

"There is the ability to create a complex list of equipment to be scheduled and use proactive logic to automatically find a solution. It is automatic – not manual – the user requests that the system 'just go find it' and it resolves the issues - providing the best available options."

Electronic notifications facilitate communications between departments, and electronic calendars are automatically updated in real-time. It was noted that "the best part is that the calendar functions and notifications are integrated into the existing Exchange environment, and incorporates the Outlook client that people use every day".

Using About:Time for Exchange Server solution to coordinate the scheduling of the equipment resources streamlines workflow while ensuring that users remain in control. Preparation activities and post-use calibration times are planned activities – as are travel times between appointments – and they can be all scheduled in one action.

Problem - Billing Process Overhead

A drawback of manual scheduling processes is that they typically do not allow for the easy association of project codes and numbers to all of the relevant project activities for an engagement. The collection, review of information and subsequent data entry required by equipment managers and billing personnel, in order to produce an invoice, is considerable.

Solution - Streamlined Billing Process

Mr. Rockwell related how "the billing process is streamlined from end-of-month through the billing cycle". Comprehensive searching and listing capabilities enable on-line access to appointment details and support filtered views of the information. Appointment specifics and resource utilization information, exposed via About:Time for Exchange Server XML Web Services, facilitate the billing process. The ability to identify a project number and other information on the appointment, sort/list, and automatically generate a report in the format required by HMMH's accounting software, is expected to result in cost savings of multiple person-days per month in the reporting and data-entry aspects of billing. Additionally, receivable days can be shortened, as availability of information ensures that invoicing is timely and well within the defined billing cycle.

Various About:Time for Exchange Server features – such as enterprise-defined data fields – facilitate the easy association of project codes (or other relevant data) to associated appointments and activities when scheduling billable resources.



Opportunity - Improving Access and Collaboration

Mr. Rockwell is a long-time proponent of solutions that allow users to leverage current skill sets and familiar tools. In recent interview with Network World ([Collaborative software ages slowly: Suites of interoperable components will make up future platforms](#)), Mr. Rockwell indicated that it is the technologies used by vendors like eOptimize that deliver collaborative business value. "Contextual collaboration is a pretty broad term but it seems what we want to do is put a product like Exchange at the core and build customized collaborative components off of it that make our users work smarter and better," Rockwell says. 'Contextual' collaboration regards collaboration tools, such as Exchange calendars, not as separate applications but rather components with standard interfaces – eOptimize uses Web services to this end."

In describing the importance of About:Time for Exchange Server's tight integration with Outlook and OWA, Mr. Rockwell relates that, "The most important benefit to HMMH has been the improved accuracy and accessibility of scheduling information. All employees now have access to real-time resource information from just about any location that has access to a browser. This has helped to reduce the difficulties and problems associated with coordinating resources from multiple locations. All of our project managers and lab equipment managers now have up-to-date information on these company resources. Now our project managers can plan their projects more effectively and avoid conflicts that could impact project schedules, thereby ensuring that we meet our clients' deadlines."

Prior to implementing About:Time for Exchange Server, manual scheduling and coordination of resource activities was a challenge. While HMMH made use of Outlook calendars, lack of confidence in the data they collected (latency of manual updates, etc.) meant that on-location engineers and other remote users would perform many scheduling functions on the phone. Automated scheduling combined with real-time updates has increased user confidence, so the company has realized new value from their Microsoft Exchange Server backbone.