



# Ideate Helps HMH Map Their CAD Strategy

## Studies in Success

**Company:** HMH

**Software on Board:** AutoCAD®, AutoCAD® Land Desktop, AutoCAD® Civil 3D

### Company: HMH

Founded in 1976, HMH provides professional services for residential and commercial land development and public infrastructure projects throughout California. The company provides land planning, civil engineering, landscape architecture, land surveying, stormwater compliance and utility design services to public agencies and private development clients.

Company specialties include public transportation and private sub-division projects. HMH headquarters in San Jose provide the interface to communities in Northern California while the Gilroy office serves as a gateway to California's Central Valley.

This multidisciplinary civil engineering firm employs a staff of 45. HMH takes pride in the quality and consistency of its designs, and in the number of clients of long-standing who rely repeatedly on HMH.

### Summary

Two potentially positive and disruptive situations were occurring for HMH at one time. HMH business was growing. The abundance of work caused a good-news/challenging-news scenario. Offices were expanded. More engineers were hired. With a goal of enhancing the interdepartmental communication that is so crucial to the company, HMH created a logical division of work groups: Planning, Landscape, Land Development, Public Works and Survey.

The company remained able to consistently deliver its many projects in a timely manner, but management became alert to one of those by-products of rapid growth, a potential upsurge in internal inefficiencies with no clear way to resolve them.

Through an Ideate Needs Analysis, the company's management discovered key target areas where migration to updated software combined with investment in and focused efforts toward employee training could markedly improve efficiency and communication.

### The Challenge

Many HMH projects involve all teams. Each team needs to communicate changes to all other work groups and note all changes on plans. As an example, one project plan set might require a certain look for the planning and landscape phases, with those plans needing to be re-drawn for the design phase.

What the company began to note was the occurrence of duplicate work and other inefficiencies. Because of heavy work loads, employees were having difficulty fully absorbing and implementing HMH standards. Employees were learning only what was required to complete the current project. They were being re-trained for each

subsequent project at its outset. The company needed a cost- and time-effective way to train staff members while minimizing the loss of valuable productive hours.

HMH knew instinctively that their processes could benefit from expert scrutiny. They suspected they needed to gain a clear understanding of the skill levels of each employee before they could target any specific training. And they needed to achieve all this while they were producing volumes of quality work.

HMH retained Ideate, Inc. to perform a Needs Analysis.

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### The Solution

Ideate conducted a Needs Analysis with HMH in three phases to evaluate the existing processes and make recommendations for improvement.

**“drafting software... upgrade... would dramatically save time on projects, reduce repetitive tasks and improve drafting standards.”**

First, Ideate conducted a group interview with the members of each team to understand their processes, as well as to hear their recommendations for improvement. Second, Ideate conducted an online assessment that included questions on AutoCAD, Land Desktop and Civil 3D to better understand the skill levels of each employee.

The assessment was tailored to each specific team, and measured specific topics that could then be the focus of training. The final phase was to deliver to the management team a report and presentation on the findings of the first two phases.

Ideate provided a report that detailed a flowchart of the processes of each team, and then provided recommendations to help workflow and communication amongst teams and across teams. Ideate also provided matrices of the results of the online assessment detailing each employee and in what areas that employee needed additional training.

HMH knew that they would need to move to AutoCAD Civil 3D but as an intermediary step they decided to first transition everyone from Land Desktop 2002 to Land Desktop 2008, an upgrade

**“‘slow migration’ solution would enable HMH to implement upgrades without undue disruption.”**

HMH acknowledged would save time on projects, reduce repetitive tasks, and improve drafting standards in the interim. Like the problem many firms face, this upgrade involved a number of software versions and would drastically change the program interface for employees.

Ideate Inc. proposed a ‘slow migration’ solution that would enable HMH to implement upgrades without undue disruption.

While Land Desktop had not changed significantly in five versions, AutoCAD, the program on which Land Desktop is built, had received major changes. It would be critical to train all CAD users on the changes and new features. Ideate worked with HMH to develop a training plan for the Update Training.

Using the Ideate San Jose training lab, HMH divided the training into workable increments. In order to properly teach all of the changes, two days would be required for the material. Six two-day classes were spread out over three months. This schedule allowed for teams of eight to slowly migrate to the new program, while not taking too many employees out of production at any one time.

**“...after each class was completed, the employees returned to find the new program on their computers.”**

The scheduling was timed to work with the IT staff so that after each class was completed, the employees returned to find the new program on their computers.

The update courseware was specific to those features that would most benefit HMH, and all employees received manuals with the exercises from the class.

With special attention to the HMH need for consistency of communication, Ideate Inc. worked internally to make sure that even with three

instructors over the six classes, that the same content was taught and that important discussions from one class were passed on to the next class.

To support the training into the future, Ideate also created and handed out Technical Resolutions that detailed the most common support questions from the upgrade and how to properly resolve the issues.

**“The update courseware was specific to those features that would most benefit HMH...”**

## The Result

HMH management was pleased with the consistent quality of the training and the reviews employees gave. They were also pleased that the upgrade was staggered and allowed for all employees to be trained within a short period.

The migration and training have improved employee satisfaction. Employees consistently express that the training was beneficial and that they appreciate the investment in their training. They also express satisfaction with the way the new features help save time, especially the reduction in time lost to file conversions.

Additionally as a result of the Needs Analysis HMH has initiated a program to improve CAD Standards. The belief is that this will enhance communication between the teams and standardize the look of plans leaving the office.

The company has also re-organized its project teams with a resulting improvement in communication from the planning phase to the construction phase. As a consequence, occurrence of duplicate drawings is reduced.

Implementation of the recommendations from the Needs Analysis is ongoing, and results are apparent. According to Dave Wilson, President of HMH, “The Needs Analysis has helped the teams better integrate and coordinate, and the learning opportunities for employees have built momentum, and increased employee satisfaction.”

Zeferino Jimenez, an engineer at HMH, was very impressed with the quality of the teaching and noted that the instructor “really made sure people understood the new product.” Many of the new features from the program were incorporated into the company CAD standards, and passed on to new employees.

HMH successfully migrated to Land Desktop 2008. With the upgrade training and migration underway, the company is free to take pride in the quality and consistency of its designs, and in the number of clients of long-standing who rely repeatedly on HMH.

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## About Ideate, Inc.

Ideate, Inc., a leading U.S. West Coast Autodesk® Value Added Reseller, provides software and hardware, implementation services, training, support, and consulting services for the Architecture, Engineering and Construction (AEC), civil, GIS and multimedia industries. Established in 1992 and headquartered in San Francisco, California, Ideate, Inc. is recognized as an Autodesk® Premier Solutions Provider (PSP) – Building Architecture, Autodesk’s highest level of authorization. Employing top architects and structural, mechanical, and civil engineers, Ideate, Inc. provides its clients with the knowledge and technical resources to make the most productive, efficient use of their software and staff so that they can achieve their optimal competitive advantage.

Ideate, Inc. operates five Autodesk® Authorized Training Centers on the West Coast: San Francisco, CA; Sacramento, CA; San Jose, CA; Portland, OR and Seattle, WA. Ideate’s facilities are acknowledged as Autodesk Authorized Certification Centers, providing globally recognized certification courses for professionals who sell, service and support Autodesk products and solutions. The Ideate pledge of personal commitment to its clients’ successful implementation of Autodesk software has attracted experienced industry professionals of the highest reputation to join the Ideate staff, so that Ideate has become a recognized leader providing superior service and support. For more information about Ideate, Inc. visit [ideateinc.com](http://ideateinc.com).

With a specific focus on Building Information Modeling (BIM), Ideate is also developer of Ideate Explorer for Revit, the simple, powerful tool that helps Revit users explore, quantify and manage the 10,000+ building elements in a Revit building information model. For complete information or to purchase Ideate Explorer for Revit, visit [ideateexplorer.com](http://ideateexplorer.com) or email: [sales@ideateinc.com](mailto:sales@ideateinc.com) or phone toll-free: 888.662.7238.

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