



## Microsoft Business Solutions Customer Solution Case Study



## Software Developer Secures and Increases Federal Funding, Grows Business

### Overview

**Country or Region:** United States

**Industry:** Hi-Tech Manufacturing

### Customer Profile

Design Science, based in Long Beach, California, develops and sells software used by educators, scientists, and publishing professionals to communicate on the Web and in print.

### Business Situation

The company was under deadline to comply with federal accounting standards in order to secure federal funding, without which it soon would not be able to extend its research programs into new areas.

### Solution

Design Science implemented and integrated Microsoft® Business Solutions Small Business Financials software with [Project Cost by Olympic Systems](#) to meet federal financial reporting requirements.

### Benefits

- ROI of more than 1,600 percent by securing grant funding
- More economical resource utilization and planning
- Efficient financial management and more sound business decision making

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Donna Hamlin, Office Manager, Design Science

Design Science, a developer of mathematical software for scientists, publishers, and educators, was about to receive a grant from the U.S. National Science Foundation for developing educational software. The grant was important to the company's ability to extend its research into new areas. However, Design Science could not satisfy stringent federal financial reporting requirements for project cost accounting, and the funding was at risk. Under deadline, Design Science integrated Microsoft® Business Solutions Small Business Financials software with [Project Cost by Olympic Systems](#). The company passed an audit with flying colors and secured the grant. More than that, it is now in a position to receive additional federal grants to conduct research. In addition, Design Science uses its integrated business management solution for more economical resource utilization and sound decision making.



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## Situation

Founded in 1986, Design Science develops software used by educators, scientists, and publishing professionals to communicate effectively on the Web and in print. The company is headquartered in Long Beach, California, and also has an office in St. Paul, Minnesota. Its software titles include MathType, Equation Editor, WebEQ, MathFlow, MathPlayer, and TeXaide. Software products from Design Science facilitate such tasks as creating mathematical notations in documents and Web pages or building interactive, online courses with mathematical and scientific content. Design Science sells its products through its Web site and an international distributor network, and also licenses them to original equipment manufacturers (OEMs). Since 1991, Design Science's Equation Editor has been a component of the Microsoft® Office System, a line of servers, programs, services and solutions.

Design Science receives funding for its research and innovative software development in the form of grants from the U.S. National Science Foundation (NSF). For Design Science, NSF grants make it possible to perform research and extend the company's technology into application areas that it could not fund with its own resources. Funding through U.S. government grants is dependent on recipients' fulfillment of financial reporting requirements defined in Federal Acquisition Regulation (FAR). Grantees must implement project cost accounting to track precisely both the direct and indirect costs of any work. Before fully committing to a grant, the NSF conducts audits of grant recipients' accounting records and systems in order to verify that research organizations have the wherewithal to report accurately and reliably on their use of government funds.

When Design Science won its first NSF grant of U.S.\$400,000 for the development of mathematics teaching software, the news was both good and bad. “We were overjoyed to receive notification of the grant,” says Donna Hamlin, Office Manager at Design Science. “However, at the time, neither did we fully understand the extent of the NSF reporting requirements nor did we have a way to satisfy them.”

The NSF had provided Design Science with information about the required financial reporting and management practices. An NSF audit was pending, and Design Science knew that, given its current financial reporting capabilities, it could not meet the NSF's grant reporting requirements. A failed audit meant a loss of funding that was vital for the company's research and was, therefore, unacceptable. Time was of the essence in finding a solution to help Design Science implement the detailed, project cost accounting it needed to meet NSF standards.

In addition, Design Science wanted to improve the way it planned and used developers and other resources. Executives and financial managers at the company did not have a dependable way to assess actual resource usage. For that reason, financial and operational planning and resource utilization at Design Science were not always as effective and economical as would have been preferable.

## Solution

Design Science looked to business management technology to assist in meeting its urgent needs. Earlier the company had made a change from A4 on Macintosh computers to implement Microsoft Business Solutions Small Business Financials on standard PCs for more efficient and streamlined financial management. Microsoft Small Business Financials software is a financial management solution tailored for

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the needs of smaller businesses that have outgrown more basic accounting applications. On its own, Design Science had implemented a previous version of the solution, called Microsoft Small Business Manager. The company also deployed Microsoft Business Solutions for Reporting–FRx® software.

#### **Engaging with a Microsoft Partner**

When Design Science went on a search for the business and technological competence to help it address its financial management needs, it soon found Bond Consulting Services, a Microsoft Certified Business Solutions Partner located not far from the company’s offices in Long Beach. Expert consultants from Bond Consulting realized that Design Science was not fully using the capabilities of Microsoft Small Business Financials. If financial managers and executives at Design Science were to better understand and more completely use the solution, the company would already be close to accomplishing its goals for financial management and reporting. The only additional component Design Science would then require would be a software tool that could facilitate the detailed project accounting that Design Science needed to satisfy NSF requirements.

#### **Identifying the Most Effective Project Cost Accounting Solution**

Within a few days, Bond Consulting contacted three different project accounting software vendors and scheduled them to give demonstrations of their products to Design Science management. Very quickly, [Project Cost by Olympic Systems](#) became the preferred choice because of its ease of use, proven effectiveness in similar application environments, and ability to integrate smoothly with Microsoft Small Business Financials. Important to Design Science, Project Cost clearly had the ability to satisfy the NSF’s stringent reporting requirements.

Olympic Systems, located in Seattle, is a Microsoft Gold Certified Partner. [Project Cost](#), the Olympic Systems product, is an extension to Microsoft Small Business Financials and Microsoft Business Solutions–Great Plains® software, and has been designed to deliver extensive, detailed project cost accounting capabilities. [Project Cost](#) makes it easy to assign project costs to all transactions and enables project-based inquiries and reporting. Olympic Systems sells its product through the network of Microsoft Certified Business Solutions Partners.

Once Design Science had decided for [Project Cost](#), it took Bond Consulting, Olympic Systems, and team members from Design Science only a week to install the product, integrate it with Microsoft Small Business Financials, and begin testing. Two weeks later, the new solution was fully implemented and available for financial managers at Design Science. Bond Consulting also assisted Design Science in optimizing financial reports to meet NSF requirements.

#### **Integrating Microsoft and Third-Party Technologies**

Today, Design Science uses the General Ledger, Inventory Management, Sales Order Processing, Accounts Receivable, and Accounts Payable modules of Microsoft Small Business Financials, integrated with [Project Cost by Olympic Systems](#). The combination of Microsoft Small Business Financials and Microsoft FRx, along with Olympic Systems Project Cost, satisfies all financial and NSF-related reporting needs. Design Science uses Microsoft Windows Server™ 2003 operating system. As its business database, the company uses Microsoft SQL Server™ 2000. Microsoft Exchange Server 2003 facilitates corporate e-mail communications. To accomplish everyday business tasks, Design Science uses the Microsoft Office System programs, such as Microsoft Office Excel® 2003 spreadsheet software, Microsoft Office

Outlook® 2003 messaging and collaboration client, and Microsoft Office Word.

## Benefits

By implementing an integrated solution based on Microsoft technology, Design Science accomplished its goal of fulfilling NSF requirements to obtain important grants. In addition, the company increased the economy and effectiveness of its financial management, business planning, and resource utilization.

### **ROI of More than 1,600 Percent by Securing Grant Funding**

The streamlined solution integrating Microsoft Small Business Financials and Olympic Systems Project Cost required an expenditure of approximately U.S.\$25,000 for software and consulting services. This investment quickly generated a substantial return, producing an ROI of 1,600 percent in a very short time frame: Design Science could provide the reporting and visibility into project costs that the NSF demanded, and, consequently, the company passed its NSF audit. The NSF grant of U.S.\$400,000 allowed Design Science to further extend its research and development into areas that it otherwise might not be able to focus on until much later.

However, Design Science's involvement with the NSF does not stop with the initial grant. Now that the company has the financial reporting and management processes in place that qualify it as a recipient of grants, the NSF is offering additional funding. Design Science will again work with Bond Consulting to ensure that all the requirements of new grants can be met.

Says Hamlin, "We have seen a complete turnaround—from federal funding about to be eliminated, to securing it, and even receiving additional grants."

### **More Economical Resource Utilization and Planning**

Executives and financial managers at Design Science strive to use the company's software developer and other resources wisely and produce optimal results from the company's projects, processes, and skills. In the past, however, with limited tracking capabilities, managers were not always able to assess actual resource utilization and forecast resource needs accurately, and could not structure projects and project costs effectively.

Today, when Design Science managers conduct resource planning, they can use resource allocation reports that summarize more than 2,000 distinct time records every month. With Microsoft FRx integrated with Microsoft Small Business Financials and Olympic Systems [Project Cost](#), producing comprehensive reports that represent business information in a meaningful way is painless.

"Not only do we understand better how we use our resources," says Hamlin, "but we can allocate them more effectively, get better results, and be a more successful business."

### **Efficient Financial Management and More Sound Business Decision Making**

Bond Consulting assisted financial managers in understanding and using the capabilities of Microsoft Small Business Financials in the most productive manner. Design Science team members especially appreciate the SmartList feature, which allows them to create queries, quickly locate information, and export it to Word or Excel 2003 for further analysis or use in reports. The SmartList capability helps to substantiate business decisions at a highly granular level of detail.

In addition, integration between Microsoft Small Business Financials and Excel makes

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For more information about Bond Consulting Services, call (562) 988-3451 or visit the Web site at [www.bondconsultingservices.com](http://www.bondconsultingservices.com)

For more information about Olympic Systems, call (206) 547-5777 or visit the Web site at [www.projectcost.net](http://www.projectcost.net)

budgeting easier and more reliable. The solution's sophisticated reporting functions further promote sound decision making, giving Design Science a desirable level of control over the financial health of its business.

"Instead of technology, we are focusing on growing our business with compelling software solutions that enable scientists, educators, and publishers to communicate," says Hamlin.

The integration of Microsoft Small Business Financials with Project Cost by Olympic Systems is so seamless that executives and financial managers at Design Science are not always aware that they are using technologies from different providers. As Design Science directs its growth, the company is planning an upgrade to Microsoft Business Solutions–Great Plains Standard, a higher-end business management solution. When that change takes place, software integration can continue to produce its benefits: Microsoft Great Plains can integrate with Olympic Systems Project Cost and Microsoft Office applications just as smoothly as Microsoft Small Business Financials does now.

## Microsoft Business Solutions

Microsoft Business Solutions offer integrated business applications and services that allow small and midsize organizations and divisions of large enterprises to connect employees, customers, and suppliers for improved efficiency. The financial management, customer relationship management, supply chain management, and analytics applications work with other Microsoft software, including the Microsoft Office System and the Windows® operating system, to streamline processes across an entire organization. This gives businesses insight to respond rapidly, plan strategically, and execute quickly. Microsoft Business Solutions are delivered through a worldwide network of channel partners that provide specialized services and local support tailored to a company's needs.

For more information about Microsoft Business Solutions, visit: [www.microsoft.com/businesssolutions](http://www.microsoft.com/businesssolutions)

### Software and Services

- Microsoft Windows Server System™
  - Microsoft Windows Server 2003
  - Microsoft SQL Server 2000
  - Microsoft Exchange Server 2003
- Microsoft Office System
  - Microsoft Office Excel 2003
  - Microsoft Office Outlook 2003
  - Microsoft Office Word 2003
- Solutions
  - Microsoft Business Solutions Small Business Financials
  - Microsoft Business Solutions for Reporting–FRx

### Partner Solutions

- Project Cost by Olympic Systems

### Hardware

- Dell Server Pentium IV

### Partners

- Bond Consulting Services
- Olympic Systems

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