

Custom Needs & Common Cause

Outsourcing CRM Software Services at NYU Wagner

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Last year, the Robert F. Wagner Graduate School of Public Service IT department reviewed its web services, with a particular focus on the needs of Wagner's research centers, institutes, programs, and initiatives. These units tend to function more like entrepreneurial nonprofits than traditional administrative units, and consequently, their use of technology often differs from departments providing core, student-centric University services. Many Wagner centers have specialized partnerships with new and emerging nonprofits that use the most recent "anything/anywhere" Web services currently available.

Bridging the technological and cultural divide between operating within a major university with a complex set of systems and protocols, and working with new nonprofits, is challenging for Wagner's small IT shop. Composed of two full-time staff members, part-time consultants, and part-time students, Wagner IT provides desktop support, database management, and Web services to the Wagner community. The department relies on Information Technology Services (ITS) for most services and systems, and enhances the value of *wagner.nyu.edu* by customizing local applications and integrating third-party services.

Recently, staff from the Wagner centers and programs expressed a general need to more effectively manage contacts and unit-specific projects. With an overabundance of Excel and Access files, often managed by temporary workers, the data files supported a common cause, but had few common naming conventions, and no connection to our online operations. There was a clear need for a reorganization of the data, ideally within a customer relationship management (CRM) system that would be fully integrated with our website.

Although the Offices of University Development and Alumni Relations offer Wagner offices their comprehensive database service, the University provides no general CRM capable of supporting Wagner's varied research centers, institutes, and, programs. Wagner staff sought solutions to meet several needs:

- Coordinate communications with the School's external audiences
- Streamline workflow for Wagner-centric business processes
- Manage unique, division-specific projects and 48,000 contact records
- Integrate select data from NYU and third-party systems

Our initial review of CRM systems quickly evolved into a search for an enterprise platform offering more than what we currently required, knowing that our needs will change as Wagner grows. Beyond integration with *wagner.nyu.edu*, we sought a service offering "point-and-click" installations, as well as a robust development environment for customizing future services. In addition to using many of ITS' ever-expanding services, Wagner staff members use an array of fee-based, free, and local applications:

- ApplyYourself.com for admissions
- Google's Picasa Photo Gallery for news and events
- OnlineCourseEvaluations.com for academic reviews
- A student directory for private networking
- Facebook and YouTube accounts for marketing purposes

Given the mosaic of interfaces and login pages our staff is required to navigate, we were reluctant to add one more application to the software mix, but we were attracted to the potential of an online platform of services that would include

a new CRM system. Our plan was to leverage an outside resource, and to structure the implementation so that we would be well positioned to adopt new services offered by ITS in the future.

Our Search for Software

The most useful resource for reviewing and comparing software products was the Gartner Reports, available through Bobst Library's electronic database service. "What's Hot in CRM Applications 2008"¹ and "Predicts 2008: SaaS Gathers Momentum and Impact"² were of particular value. We knew that what might be deemed the "next big thing" can sometimes be the worst possible choice for an institution dealing with a maze of legacy systems. Early on, however, we were drawn to vendors offering Software as a Service (SaaS).³

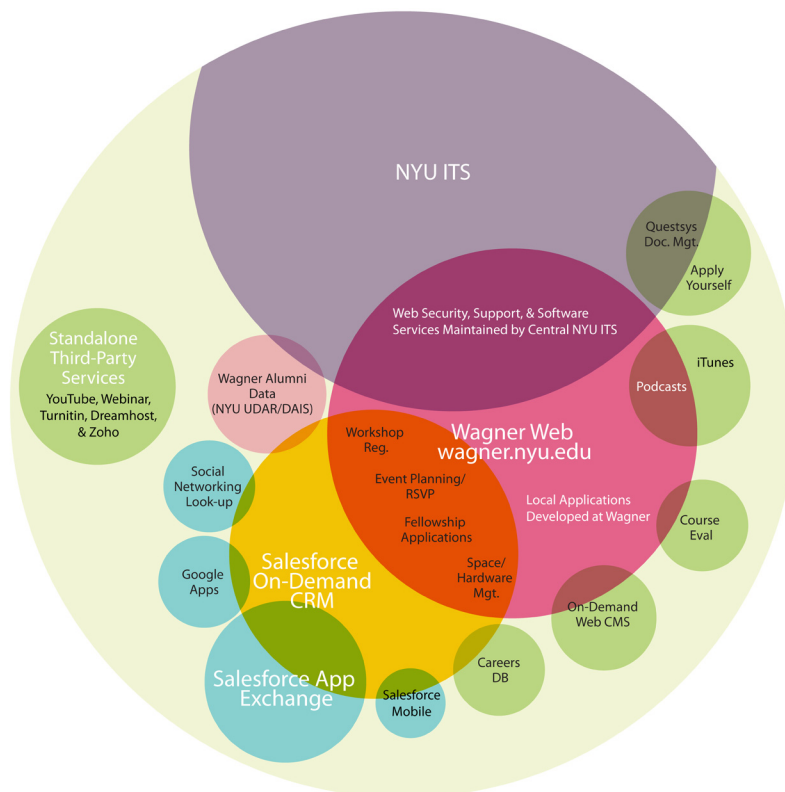
SaaS is a software deployment model under which an application is licensed to customers for use as a service on demand. Typically, the application is managed remotely by the vendor and supported through frequent seamless updates. As such, SaaS can limit customers' capital expenditures, a boon to small entities with limited budgets in a rapidly changing technology landscape. The most recent survey on SaaS from Gartner, in which "more than one-third of respondents" planned to "transition from on-premises to SaaS,"⁴ supported earlier reports noting the trend toward the on-demand software model. Salesforce, Oracle on Demand, Netsuite, and Microsoft Dynamics were among the SaaS products we examined.

After a lengthy review process, which included conversations with ITS, ITS Technology Security Services (TSS), colleagues at conferences, and multiple software vendors and their clients, we selected Salesforce as the lead product in the industry. We were attracted to Salesforce in part due to its strong relationship to the nonprofit sector and its innovative technology platform. Additional positive features included the following:

- The Salesforce Foundation offers nonprofits ten free user licenses, making the software accessible to many organizations in the Tri-State area, including such key Wagner partners as Idealist.org, an interactive resource exchange for the nonprofit community
- The Salesforce Software as a Service provides quarterly updates for the CRM system, a great boon to small nonprofits lacking large, in-house IT departments

- Salesforce offers access for enhancing its core product to software vendors who provide free applications for nonprofits, most notably CRM Fusion's Demand Tools and PeopleImport
- Over 800 vendors offer commercial products on the Salesforce Application Exchange to enhance the value of the service
- Entrepreneurial nonprofits have leveraged the power of Salesforce to build their business model, including the micro-loan site Kiva.org
- Central and local IT departments at peer universities have begun to use Salesforce, including Northeastern University, the University of Southern California, and Columbia University

Selecting the appropriate consultant can be almost as important as selecting the right product. One



A sampling of NYU and third-party services and resources related to Salesforce.com and wagner.nyu.edu.

1 Thompson, E., Maoz, M., Collins, K. What's "Hot" in CRM Applications in 2008. Gartner Reports, March 2008.

2 Pring, B., Bona, A., Holincheck, J., Cantara, M., Natis, Y. Predicts 2008: SaaS Gathers Momentum and Impact. Gartner Reports, January 2008.

3 en.wikipedia.org/wiki/SaaS

4 Mertz, S., Eschinger, C., Pang, C., Dharmasthira, Y. User Survey Analysis: Software as a Service, Enterprise Application Markets, Worldwide, 2008. Gartner Reports, October 2008, 3.

of our key requirements was finding a company willing to offer 100 percent on-site presence during the implementation. Instead of hiring a large team of consultants that might swoop in and out quickly, we integrated a consultant experienced with Salesforce into our in-house team. This consultant conducted extensive interviews and configured the system while our lead developer worked with the Salesforce programming language to customize functionality beyond the standard features.

Custom vs. Common Needs

To balance the custom and common needs of the School, we organized the project by focusing on a single research center and one operational division — the Research Center for Leadership in Action (RCLA) and Wagner’s Office of Special Events. We interviewed other departments to confirm that we were covering many of the basic requirements.

RCLA, selected as the model research client for the implementation, collaborates with a range of public service organizations, from government agencies to community-based nonprofits. The center organizes experiential programs and conducts social science research on contemporary leadership issues. RCLA’s organizational structure was complex enough to represent the interests and needs of many administrative and research-oriented divisions.

The Office of Special Events, selected to represent a unit servicing common needs of the School overall, interacts with all divisions at Wagner. For Lisa Taylor, Wagner’s Senior Director of Career Services, Special Events, and Alumni Services, the appeal of Salesforce was the ability it provided to “identify and leverage relationships between individual and organizational partners,” and to understand our connection to these various audiences.

Shaping Salesforce to Benefit Wagner

Wagner uses Salesforce to complement core NYU services and offer a level of customization required to enhance productivity of the administrative and research divisions of the School. Comprehensive integration with our website of the following services was a major requirement:

Contact Management. The primary service of the Salesforce system is the capture and organization of a rich set of data related to the many activities and relationships Wagner contacts engage in.

Event Planning/RSVP. The Event section in Salesforce was customized to Wagner’s specific planning needs. Event proposals are reviewed in Salesforce, cataloged by very specific subject area terms, and published as RSVP forms directly to our website. Visitors reply online to invitations, thus submitting data back to the system; and the event title is associated with existing contact records or placed in a holding bin pending review.

Fellowship Applications. The formal admissions process for Wagner is managed by the Admissions Office, through ApplyYourself.com, but it was not cost effective to bundle Wagner’s other academic and programmatic applications with the primary Admissions product. Salesforce enables custom forms for these submissions, including a first-phase, online application system for the Catherine B. Reynolds Program in Social Entrepreneurship that serves all NYU schools and colleges.

Local Hardware/Space Management. We track the “public titles” of regular and grant-based employees, and publish this information to specific pages on our website, using workflow rules for new employees that trigger alerts related to office and equipment allocation. Staff use Salesforce to link every workstation or space

to a specific user and/or piece of equipment. A security checklist is associated with each workstation to monitor the review of electronic files during on-boarding and off-boarding process.

Marketing and Business Intelligence. Through sets of dashboards, we monitor the level of interest prospective students have in our academic events; identify contacts collaborating with multiple centers; review demographic profiles of fellowship applicants; and analyze the quality of our data, as well as staff time spent using the system itself.

Proposal Management. Wagner tracks the pre-award proposal process to identify key subject areas of interest; success rates of principal investigators; and strategies to improve the match rate of funders to proposals. In the near future, descriptions from the database will be published directly from Salesforce to the “Faculty/Research” section of our website.

Customization & Application Programming

In order to meet all the requests for customized functionality, beyond the configuration options available to standard users, Wagner developers made use of a variety of technologies provided by Salesforce. For customization and application development within Salesforce’s online platform, Wagner utilized Apex and Visualforce.

Apex is a programming language based on Java, but limited to managing behaviors of applications, data, and processes within the Salesforce platform. Visualforce is an XML technology for creating customized web pages for information display and input, fully integrated with the Salesforce user interface and with Apex for back-end processing. “In combination, Salesforce’s database system, Apex, and Visualforce provide a Model-View-Controller architecture, one of the dominant paradigms in

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Zimbra @ Stern

A New Web- Based Messaging & Collaboration Suite

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At NYU's Leonard N. Stern School of Business, over the past year or so, we have been working on a project intended to offer state-of-the-art web-based messaging and collaboration services that completely meet the needs of Stern students, faculty, and administrators. A review in 2007 of Stern's then-current email and calendar systems indicated that, among the features Stern community members had come to expect and need were a more up-to-date and friendly user interface, native support for mobile devices, and cross-browser compatibility. In addition, many community members were eager to subscribe to and publish calendar and news feeds, and to gain broader access to their mail and calendar through mobile integration.

Selecting Zimbra

The Stern Information Technology department, in conjunction with various members of the Stern community, formed an exploratory committee to investigate new messaging and collaboration services that offered a stable and scalable platform with improved functionalities. The committee investigated a number of options, and chose Zimbra as Stern's next-generation messaging and collaboration platform. Zimbra offered open standards and open source and provided a modern, innovative messaging and collaboration platform compatible with diverse desktop and application environments. In addition, Zimbra featured a user-friendly interface that supported next-generation user interface technology compatible with all major web browsers. One of our primary objectives was to provide a consistent and full messaging and calendaring experience within all popular web browsers. Zimbra worked well with client applications across the

Windows, Macintosh, and Linux platforms. It also offered excellent mobile device support for Windows Mobile, iPhone, and Palm. Best of all, Zimbra could be integrated easily into the existing underlying technology framework, making it not only an economical choice but one that required only minimal modification.

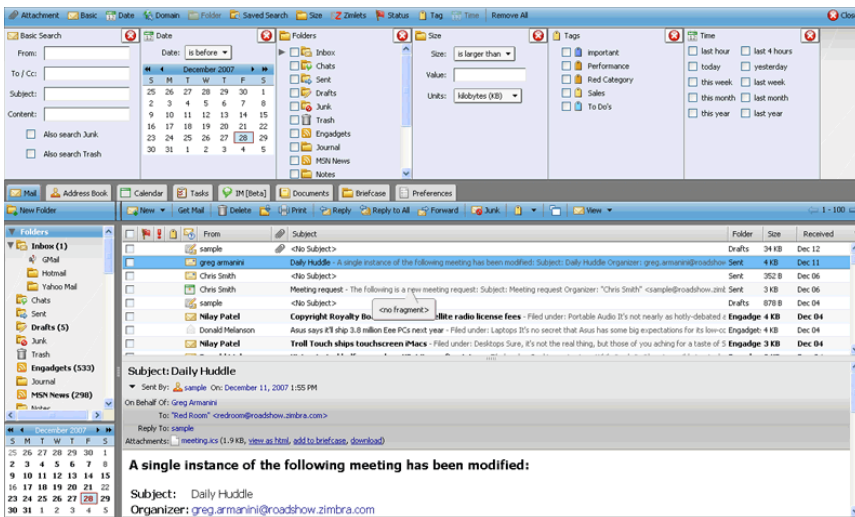
A Two-Phase Implementation of an Efficient, Intuitive Product Suite

Zimbra was launched at Stern in August 2007, and is being implemented in two phases. The first phase focused on providing integrated email and calendar capabilities, increased mail quota, and a redundant architecture. We are now planning the rollout of Phase 2, including enhancements and activation of additional new features. In addition to superior email, messaging, and calendar features, Zimbra offers new features surpassing those of earlier collaboration systems, such as a much-needed 1 GB mail quota, cross-browser compatibility, and RSS subscriptions. Additional features include the ability to interface with Microsoft Outlook, sync with the iPhone and Treo, share iCal calendars, and subscribe to multiple calendars such as the Academic and Public Events calendars.

The enhanced calendar, with its Free/Busy viewing option, simplifies the task of scheduling meetings and other events. Stern community members can view and confirm the availability of others, without having to contact them directly. With the addition of Zimlets (mash-ups), the integrated email and calendaring capabilities enable more effective and efficient management of collaboration tools. That is, a Zimbra user can access email and calendar services, and simultaneously pull information

from any internal system, all from one interface. For example, if an email arrives requesting your availability for a specific date, you can move your mouse over the date listed in the email, and your calendar for that day appears in a palette within the email. You can see if you're free at that time and add the appointment to your calendar without ever leaving that email. In that way, you can manage both email and calendar requests from one interface, without having to migrate to or open a new window.

Zimbra also offers advanced Search, Tag, Filtering, and Tracking services, providing a quick and easy tool for navigating through one's email and email attachments. Document collaboration, Instant Messaging, and Tasks/Project Management are other features in the system that will be rolled out shortly.



A sample of Zimbra's advanced search capabilities

The Stern community has found the Zimbra messaging and collaboration suite very efficient and intuitive. As with the launching of any new product, there were some challenges, but once installation and implementation were complete,

the system proved stable and fully capable of supporting the old and new features now available. Moving forward, Stern hopes to further develop the system's collaborative capabilities through the integration of additional Zimlets and other collaboration services. §

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modern web software development," says Paul Tepper, the lead developer on the Wagner project.

Like other SaaS and cloud-computing platforms,⁵ Salesforce also offers an application programming interface (API) for building web-based services that integrate with Salesforce. The API is accessible through a variety of language-specific toolkits, and since *wagner.nyu.edu* is implemented primarily in PHP, Wagner created a large number of pages and scripts using the PHP toolkit.

The Results

Our ability to customize the system through programming was both a blessing and a burden. Having in-house staff to provide seamless integration was ideal, but it opened the door to a higher volume of requests for specialized enhancements, some of which blurred the line between customization and personalization of a business process.

Whether a service is administered on or off site, locally or centrally, the level of granular customization impacts the labor, time, and expense of a project. Distinguishing among "required," "preferred," and "ideal" levels of customization was central to managing the project, which we launched in June 2008.

We completed the primary implementation three months later, and in the process, changed the way we work together. The project and the product provided us with a common platform for collaboration. We hold training sessions on site and meet regularly to formalize standards and protocols for the maintenance of some 48,000 records currently stored in the database. The CRM enhanced our business intelligence capability and is just beginning to provide us with actionable analytics to improve the productivity of our team, target our marketing efforts, and identify multiple relationships our contacts may have with Wagner.

The on-demand software model is a natural solution for a small IT shop like ours seeking to balance the needs and timelines of our School with the long term strategy of the University. Our goal was to provide a customized service within a dynamic platform capable of adapting to evolving technologies and responding rapidly to ever-changing user expectations. As we grow increasingly enmeshed in technical and social networks outside the University, Wagner IT is mindful to make every attempt to leverage in-house services. Having integrated this CRM with the Wagner site, we benefit from both the reliable support offered by ITS and the robust synergies of a platform supported by thousands of administrators, developers, and clients in the corporate and non-profit communities. §

⁵ en.wikipedia.org/wiki/Cloud_computing