State of the Nonprofit Cloud
August, 2018

An NTEN Report
By Robert Hulshof-Schmidt
Nonprofit organizations are embracing cloud technologies to help them more powerfully serve their constituents, and better connect their services and staff. NTEN and Microsoft surveyed more than 250 nonprofit professionals to assess the extent and use of cloud computing in the nonprofit sector, and this report is the result.

The benefits of hosted software and technology infrastructure are immense – including increased access, performance, features, and resources – and more than half of the respondents said they had moved one or more services to the cloud in the past year. However, challenges remain for nonprofits implementing new cloud solutions, training their staff, paying subscription costs, and calculating return on investment.

We hope you use this report to learn about how nonprofits are making decisions about cloud services, and to benchmark your own organization.

Mapping cloud challenges for Nonprofits

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Current Cloud Services

Are you currently using a cloud service that you access over internet for any of these things?

Cloud services are a regular part of the digital environment. 75% of respondents indicated current use of cloud services for at least three purposes; the average number of services used is about six. Data storage accounts for the largest use, with other established activities like donor and event management and document storage ranking high. Cloud services have become routine enough that many organizations have adopted new services in the past year or are considering adding new services.

Generally speaking, the larger and more established the organization, the more services they use and the more likely they are to be considering new services. Respondents who indicated that they did not use cloud-based services tend to be smaller in total staff, IT support, and overall budget.

Trending uses – those that respondents are considering or have recently implemented – tend to be more analytical and monitoring in nature. These purposes also tend to be less well known, accounting for larger portions of the “Don’t Know” response.

Based on these answers, cloud services are a significant component of the digital platform for most respondents, and most plan some growth in use.
Are you using a Public Cloud, Private Cloud, or Hybrid Cloud model?

Cloud services are typically provided in one of two ways. Private clouds are run by the organization itself to provide expanded access and enhanced resource sharing. Public clouds are run by an outside entity (such as Microsoft or Amazon); they allow an organization to obtain the benefits of cloud services without expending internal resources and maintenance efforts. Some opt for a hybrid service, relying primarily on the security and control of a private cloud and using a public service to ensure access during usage spikes and severe outages.

For respondents who are familiar with their options, cloud types are well distributed. A significant majority rely on some public component for their services.
Did your organization make a decision to move a particular service into the cloud in the past year, either an existing service that was previously not cloud-based, or a brand new service for your organization?

“Yes” 56.34%

“No” 37.56%

“Don’t know” 6.10%
Did your organization specifically decide against moving a particular service into the cloud in the past year, either an existing service that you decided to keep out of the cloud, or a new cloud-based service you considered but decided against?

Most respondents indicate looking into cloud service options in the past year. Over half have decided to migrate at least one service or adopt a new service that is cloud-based. Not all organizations feel that every service benefits from being cloud-based, as indicated by the 20% of respondents who decided not to move to or adopt new services.
Recent Cloud Product Decisions

Organizations make ongoing cloud services decisions, but many have established the environment they need. When it comes to making new decisions features, overall cost, and security are the top priorities. Curiously, the secondary factors are ranked in almost the inverse order of the primary factors, with the impact of time – on training and maintenance – being a far more important secondary consideration.

There is little difference across priorities based on the size of the organization. Smaller organizations place slightly greater emphasis on resources (cost and time) than on features.

When comparing your options for your most recent cloud service decision, how did the following concerns factor into your decision-making?

### Feature Set for the Service

- This was a deciding factor: 66.48%
- We considered it, but it wasn’t a top priority: 13.97%
- There was very little difference between our options: 10.61%
- This wasn’t a consideration: 10.61%

### The Ability to Work Remotely

- This was a deciding factor: 57.54%
- We considered it, but it wasn’t a top priority: 24.02%
- There was very little difference between our options: 11.73%
- This wasn’t a consideration: 6.7%

### The Security of Our Data

- This was a deciding factor: 57.54%
- We considered it, but it wasn’t a top priority: 23.46%
- There was very little difference between our options: 9.5%
- This wasn’t a consideration: 9.5%
The Ability to Work with Our Other Existing Applications

The Time it Takes for Our Staff to Use the Software (Productivity)

The Total Cost Over Time

The Cost of Converting From Our Previous Technology

The Time it Takes to Maintain the Software

The Time it Takes to Train Our Staff to Use This

We considered it, but it wasn't a top priority

This wasn't a consideration

There was very little difference between our options

This was a deciding factor
Has your organization measured the return on investment of your cloud service in comparison to other, installed solutions?

- **2.26%** have been substantially measuring this.
- **28.25%** looked at this somewhat.
- **69.49%** have not measured this.

While respondents have a good sense of the advantages and disadvantages of implementing cloud-based services, few have set up measurements for return on investment. Nearly 70% have done no measurement, while just over 2% have done substantial measurement.

Respondents provided free text answers when considering the advantages, disadvantages, and aid to mission of implementing cloud services. The replies fit into six broad categories.

- **ACCESS** includes collaboration, remote access, regional issues, and mobility. This was the most significant advantage given, accounting for nearly 40%. It also factored noticeably in helping organizations meet their mission.
- **BEHAVIOR** addresses changing habits of users, training, and adoption. It was primarily an issue in the disadvantages.
- **FEATURES** relate to the aspects of an implemented service, often related to a specific software package. This category was the least significant for all three questions but was emphasized heavily by the respondents who mentioned it. There is a sense among respondents that feature sets often vary noticeably between cloud-based and standalone versions of the same product.
- **PERFORMANCE** includes flexibility, reliability, speed, consistency, support, security, and efficiency. These tended to be the longest and most enthusiastic replies. Performance was by far the biggest factor in helping with the mission and a significant category for advantages. When mentioned as a disadvantage, this category almost always related to loss of control or concerns over backups and security.
RESOURCES, the classic business concerns of cost, staffing, and time. Nearly 25% of respondents listed this as an advantage and as a key factor in meeting mission. When considering this a disadvantage, most respondents referred to local internet access issues, either in terms of cost or network speeds.

NONE, indicating that the respondent did not have an answer for the question or answered with some form of negative. Nearly a third of respondents replied this way for disadvantages.

Most of these replies for advantages and mission came from respondents who indicated that their organization had not actively measured the impact of cloud services.

Have you found any specific advantages for your organization in using cloud services over installed?
Have you found any specific disadvantages for your organization in using cloud services as opposed to installed?

Do you feel that the cloud services you use help your organization meet its mission?
What sources of information did you use in researching cloud services?

When researching cloud-based services, nearly 1/3 of respondents relied on trusted partners and colleagues. The largest group of respondents used the “Other” option to indicate some variation on “most or all of the above,” which is broken out for the chart. Some respondents also indicated specific standards or protocols that their business requires (e.g. HIPPA compliance).
Who was involved in making purchasing decisions for cloud services?

In general, organizational leaders have the most influence on purchasing decisions, with the head of the organization listed most often. Respondents generally indicated between two and three decision-makers. Those that indicated just one usually opted for “organizational leadership.”
General Cloud Product Decisions

Cost and security are respondents’ biggest concerns when making software decisions. This differs from recent cloud-based decisions (see above), where remote access rose above those two categories. Training time for staff, while lowest as a primary concern, is the clear leader as a secondary concern, followed closely by maintenance time.

When comparing your software options generally, how do the following concerns factor into your decision making?

- The Total Cost Over Time
  - This was a deciding factor: 69.19%
  - We considered it, but it wasn’t a top priority: 18.6%
  - There was very little difference between our options: 5.81%
  - This wasn’t a consideration: 6.4%

- The Security of Our Data
  - This was a deciding factor: 67.44%
  - We considered it, but it wasn’t a top priority: 23.84%
  - There was very little difference between our options: 3.49%
  - This wasn’t a consideration: 5.23%
between our options
We considered it, but it wasn't a top priority
There was very little difference between our options
This wasn’t a consideration

This was a deciding factor

The Ability to Work Remotely

The Ability to Work with Our Other Existing Applications

The Time it Takes for Our Staff to Use the Software

The Cost of Converting from Our Previous Software

The Time it Takes to Maintain the Software

The Time it Takes to Train Our Staff to Use This
Do you think there are any specific advantages for your organization in using cloud services over installed software? If so, what?

Respondents see many advantages in the performance of cloud-based services, especially regarding efficiency and flexibility. Cost and time (resources) were frequently mentioned, as was improved access for all staff and partners.
Do you think there are any specific disadvantages for your organization in using cloud services over installed software? If so, what?

Over 1/3 of respondents noted no specific disadvantages. Most of the concerns cited related to security and cost over time.
What other concerns do you have regarding cloud services?

A significant majority of concerns fit into the performance category. These answers tended to fall into three subgroups:

- **Security** – How safe is our data?
- **Backups** – Where do they live and how do we manage them? This also came up in staff behavior concerns.
- **Viability and Reliability** – How accessible is the cloud owner? What happens if they go out of business?

As with disadvantages, over 1/3 of respondents had no additional concerns.
Demographics

What best describes your organization’s primary issue area?

The majority of respondents work in the areas of human and public services, with four categories accounting for over half of the responses.
What is the size of your overall organization staff?

- 10 or less: 28.02%
- 11–25: 23.35%
- 26–50: 14.79%
- 51–100: 14.40%
- 101 or more: 19.45%
About how many IT staff members does your organization have?

- No one is responsible for IT: 16.34%
- About a quarter-time person: 18.29%
- Less than a full-time person: 15.95%
- 1 full-time person: 20.23%
- 2 full-time people: 12.06%
- 3–5 full-time people: 7.78%
- 6–9 full-time people: 3.89%
- 10 or more: 5.45%
About how long has your organization existed?

The majority of respondents represented well-established organizations; over 2/3 have operated 20 years or longer. Approximately 7% were relatively new (five years or fewer).
What is the approximate annual budget of your organization?
What is your approximate annual spending on cloud services?

<table>
<thead>
<tr>
<th>Annual Spending</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>All of our cloud services are donated</td>
<td>9.34%</td>
</tr>
<tr>
<td>We don’t use any cloud services</td>
<td>4.28%</td>
</tr>
<tr>
<td>Less than $2,000</td>
<td>16.73%</td>
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<tr>
<td>$2,000 –$5,000</td>
<td>12.84%</td>
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<tr>
<td>$5,000 –$10,000</td>
<td>14.79%</td>
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<tr>
<td>$10,000 –$20,000</td>
<td>6.61%</td>
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<tr>
<td>$20,000 –$40,000</td>
<td>10.89%</td>
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<tr>
<td>$40,000 –$100,000</td>
<td>13.62%</td>
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<tr>
<td>$100,000 –$250,000</td>
<td>5.06%</td>
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<tr>
<td>$250,000 –$500,000</td>
<td>2.72%</td>
</tr>
<tr>
<td>$500,000 –$1 million</td>
<td>1.57%</td>
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<tr>
<td>More than $1 million</td>
<td>1.56%</td>
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Where is your organization located?

- Northwestern: 12.11%
- Midwestern: 19.92%
- Mid-Atlantic: 9.77%
- Northeastern: 22.27%
- Southern: 3.52%
- Southwestern: 8.98%
- Western: 14.45%
- Other International: 3.31%
- Canadian: 5.86%
Does your organization operate internationally?

“Yes” 22.57%

“No” 77.43%
From about how many locations does your organization work (offices, home, telecommuting)?

- 1 location: 22.95%
- 2 locations: 10.12%
- 3-4 locations: 19.07%
- 5-8 locations: 15.95%
- 9-15 locations: 13.23%
- More than 15 locations: 17.51%
- I don’t know: 1.17%
TAKE YOUR RESEARCH
A STEP FURTHER

Take the NTEN Tech Accelerate assessment for free to get actionable insights into how to improve your organization’s tech performance.
About NTEN

We envision a more just and engaged world where all nonprofits use technology skillfully and confidently to meet community needs and fulfill their missions. We support organizations by convening the nonprofit community, offering professional credentials and training, and facilitating an open exchange of ideas.

NTEN reports support the growth and development of the sector through benchmarking the technology goals and challenges of nonprofits, and identifying areas of need. For more, visit nten.org/reports.

About Microsoft

Microsoft’s Tech for Social Impact program empowers nonprofits and humanitarian organizations around the world with technology to advance their missions.

With recognition that many nonprofits have limited IT staff, the program provides solutions and resources that help nonprofits innovate new ways to tackle global issues. For more, visit microsoft.com/nonprofits.