Cloud Computing in the U.S. Banking Industry

Background

ABA and Endorsed Solutions provider Crowe LLP conducted a survey* to better understand current and future use of cloud computing in banks. The following is a summary of those findings.

The primary research objectives were to understand banks':

- Current cloud use
- Attitudes toward cloud use
- · Level of cloud maturity
- Near-term plans and priorities for cloud use
- Intended future investment (both budget and staffing)

About our 62 total survey respondents:

- 85% from banks with assets under \$5 billion
- 60% from the Midwest and South

Top four titles of respondents:

- 30% Chief Information Officer
- 20% CEO
- 11% Chief Information Security Officer
- 10% CTO/COO



Digital transformation is driving strategy for many financial institutions. A key component of this is the rapidly changing use of cloud computing.



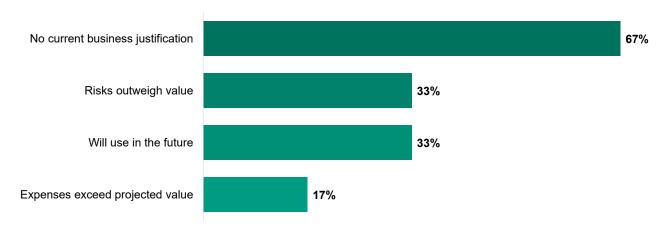


Key Findings

1. Use of cloud computing is nearly ubiquitous

- More than 90% said they maintain at least some data, applications or operations in the cloud. Of the institutions using cloud computing, just over half are doing so with a hybrid cloud architecture.
- · Institutions not using cloud computing have either not yet determined the need, or feel the risks outweigh the benefits.

Of the 10% not currently using the cloud, here are the top reasons why:

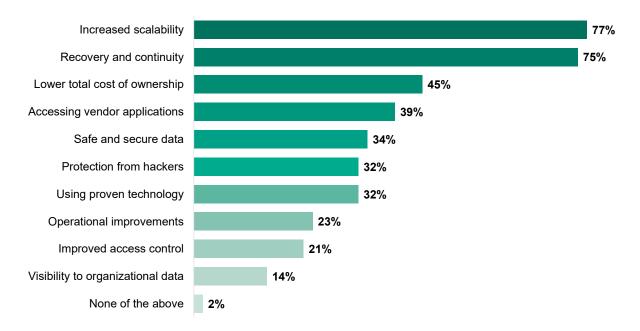


2. Banks' view of cloud computing is generally positive

Top three cited benefits:

- Increased scalability
- · Recovery and continuity
- Lower total cost of ownership

Benefits of cloud usage



3. Cloud computing is in its nascent stage

- More than 80% indicate they are in the "adoption" or "early adoption" phase, and just 5% say their cloud use is "mature."
- Only one-third have a formal cloud strategy.
- Fewer than 25% have a cloud-specific leader or other staff.
- There is limited knowledge of detailed cloud technology, or implementation of a comprehensive cloud approach.
 - Nearly three out of four respondents don't know about, or don't have a preference between, cloud native vs. cloud migrated applications.
 - Fewer than 20% currently utilize infrastructure as a service, and nearly one-third do not plan on creating one in the next 12 months.

80% are adopting cloud technology

Pre-Adoption: 11%

- A few third-party applications that are cloud-based
- No formal strategy
- No major cloud applications
- Undecided about future cloud use

Early Adoption: 41%

- · A few third-party applications that are cloud-based
- · No cloud infastructure
- Informal strategy
- Major project in development

Adoption: 43%

- Multiple third-party applications that are cloud-based
- · Beginning to use cloud infrastructure
- At least one major cloud project completed

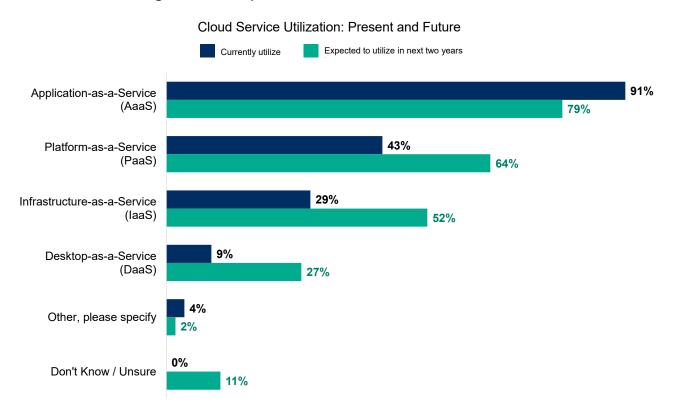
Mature: 5%

- Numerous third-party applications that are cloud-based
- Implemented architecture for at least 1-3 years
- Ongoing developments in the cloud

4. More than 9 in 10 banks expect to increase their cloud presence

- Of the 91% that say their bank will increase cloud usage, most say it's to enhance customer experience.
- The most frequently mentioned apps are consumer focused (lending, digital banking and CRM), followed by the core system.

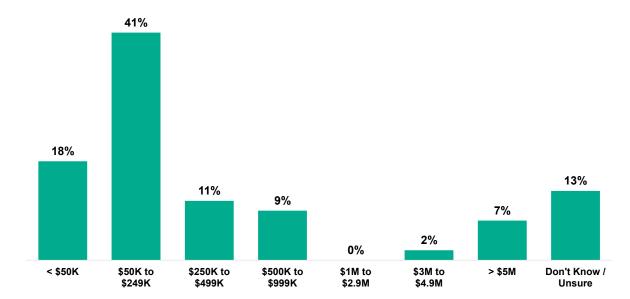
Current cloud usage and future plans



5. The planned investment in cloud computing appears to be low

- Nearly 60% say cloud spending will be under \$250K over the next 12 months.
- Almost two-thirds are unsure if they will add cloud-specific leadership or cloud engineering staff next two years.

Spending on cloud services over the next 12 months



6. Concerns about cloud computing remain, but are seen as conditions to address rather than reasons to to avoid using the cloud

- Data security and regulatory compliance are the top two concerns.
- · Lack of control (i.e. reliance on cloud providers), managing cloud governance and lack of cloud experience are the next three most frequently mentioned concerns.

Top concerns with increasing cloud usage





Banks rely on ABA Endorsed Solutions to deliver high quality performance and reliable results. For more information, contact Deborah Whiteside at dwhiteside@aba.com.

To explore how Crowe can help your bank's cloud strategy, visit www.crowe.com.