

What Finance Officers Need to Know About Cloud Computing



February 19, 2014

Spencer Arnesen, Principal

Ronald Loos, Director

DeAnna Hilbrants, Finance Director, City of Sonoma

SoftResources LLC

11411 NE 124th St, Suite 270, Kirkland, WA 98034
(425) 216-4030 www.softresources.com

Agenda

- **What is Cloud Computing?**
- **Service and Deployment Models**
- **CSMFO Cloud Survey**
- **Cloud Software Discussion**
- **Decision – On-Premises or Cloud?**
- **DeAnna Hilbrants – City of Sonoma**
- **Questions and Answers**

What is “Cloud Computing”

“Cloud computing is a model for enabling ubiquitous, convenient, on demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.”

- *National Institute for Standards and Technology*

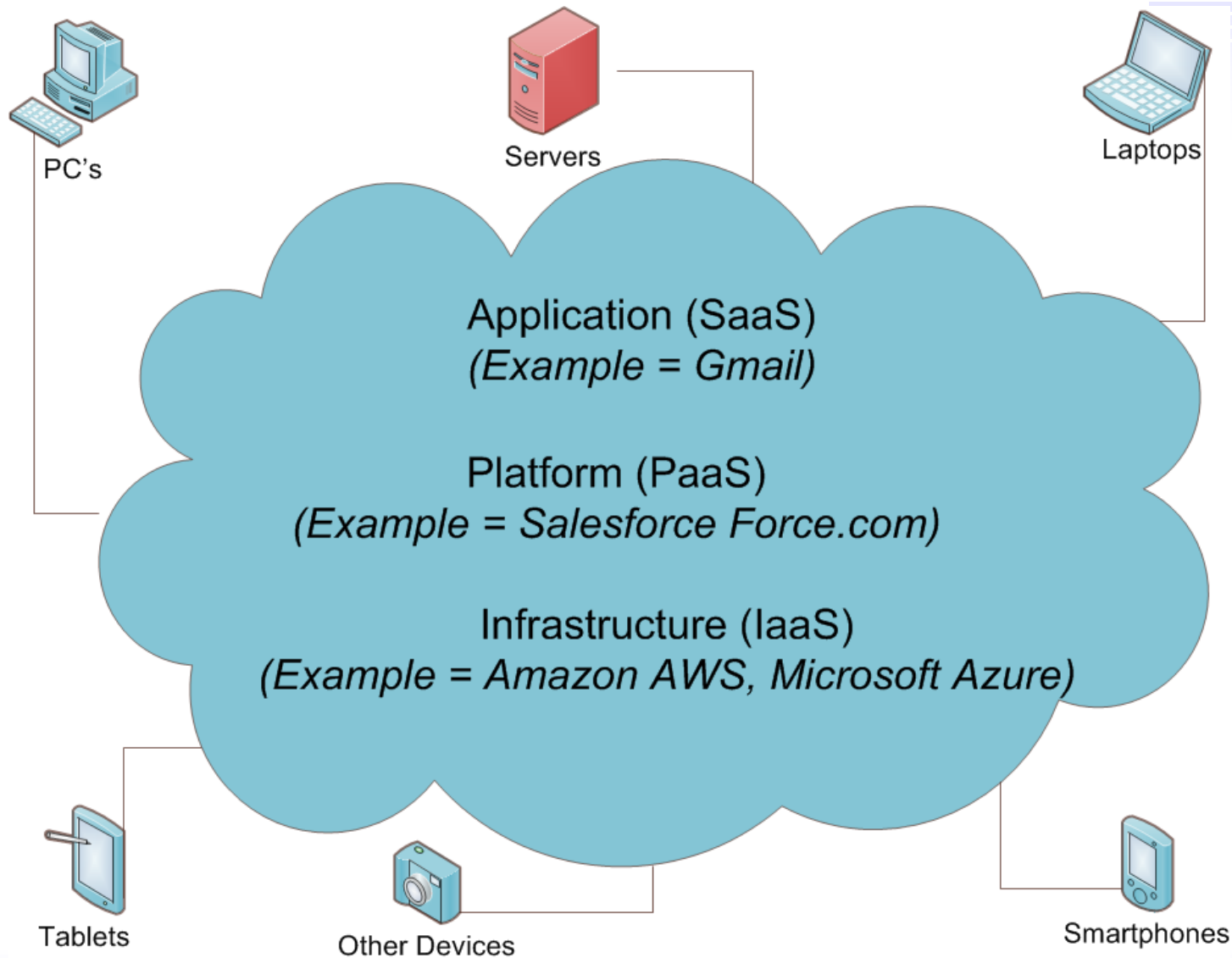
What is “Cloud Computing”

Translation:

Using the internet to access software applications and store data.



What is the “Cloud”



Service and Deployment Models

Service Models – “What do I use the cloud for?”

SaaS – Software as a Service

PaaS – Platform as a Service

IaaS – Infrastructure as a Service

Service and Deployment Models

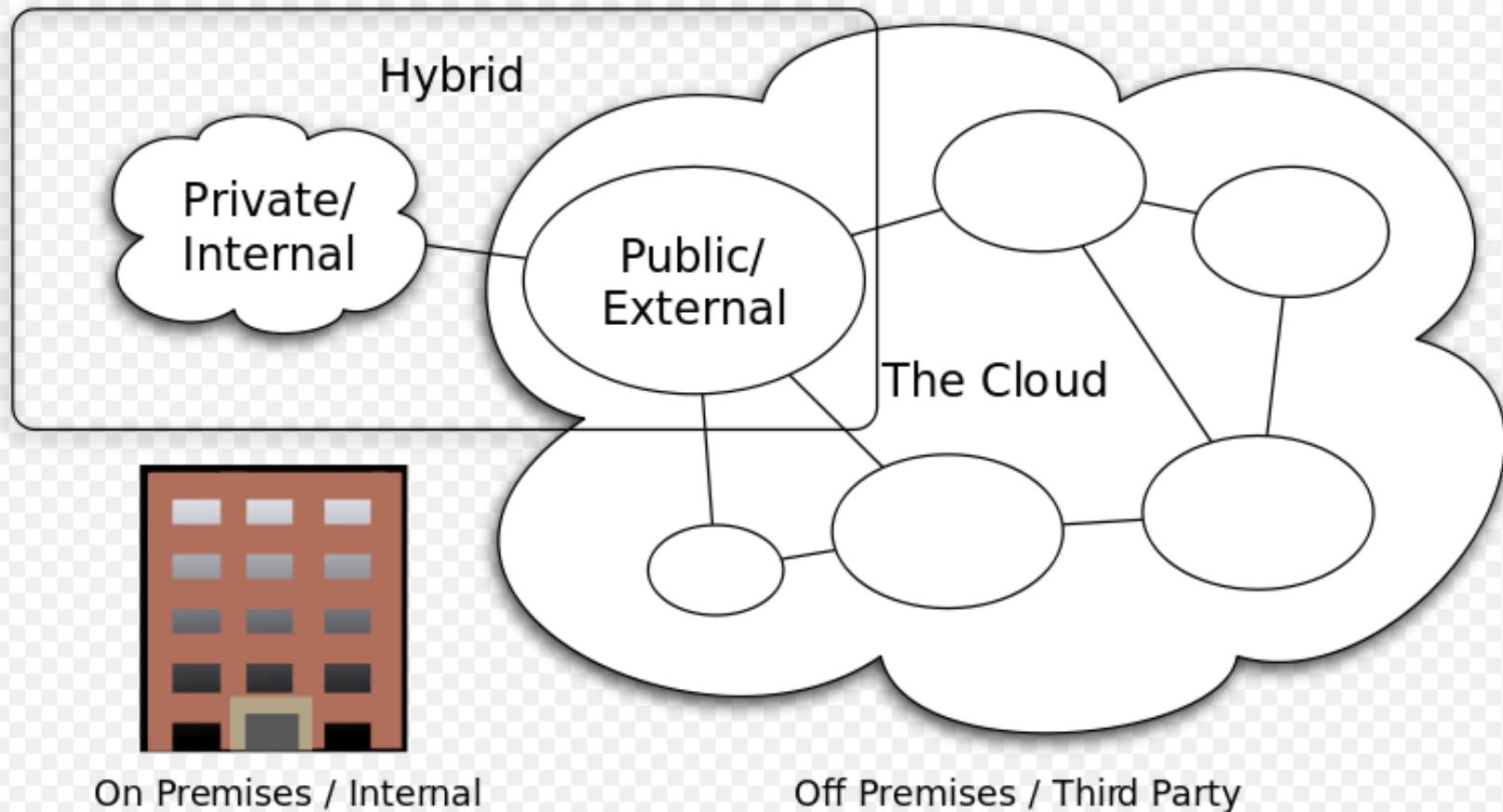
Deployment Models - “How do I want to design my use of the cloud?”

Public Cloud

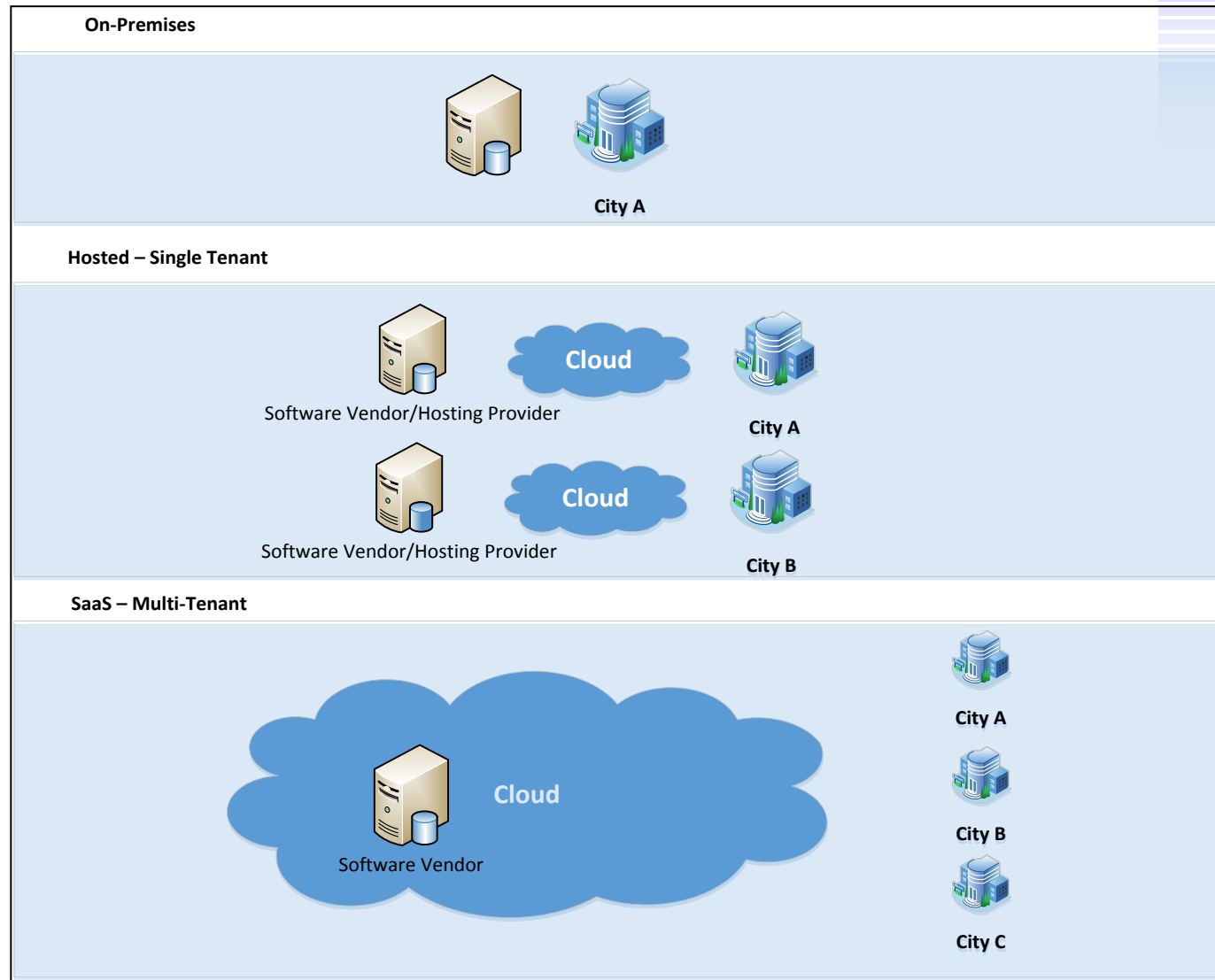
Private Cloud

Hybrid

Service and Deployment Models



On-Premises, Hosted, and Multi-Tenant SaaS



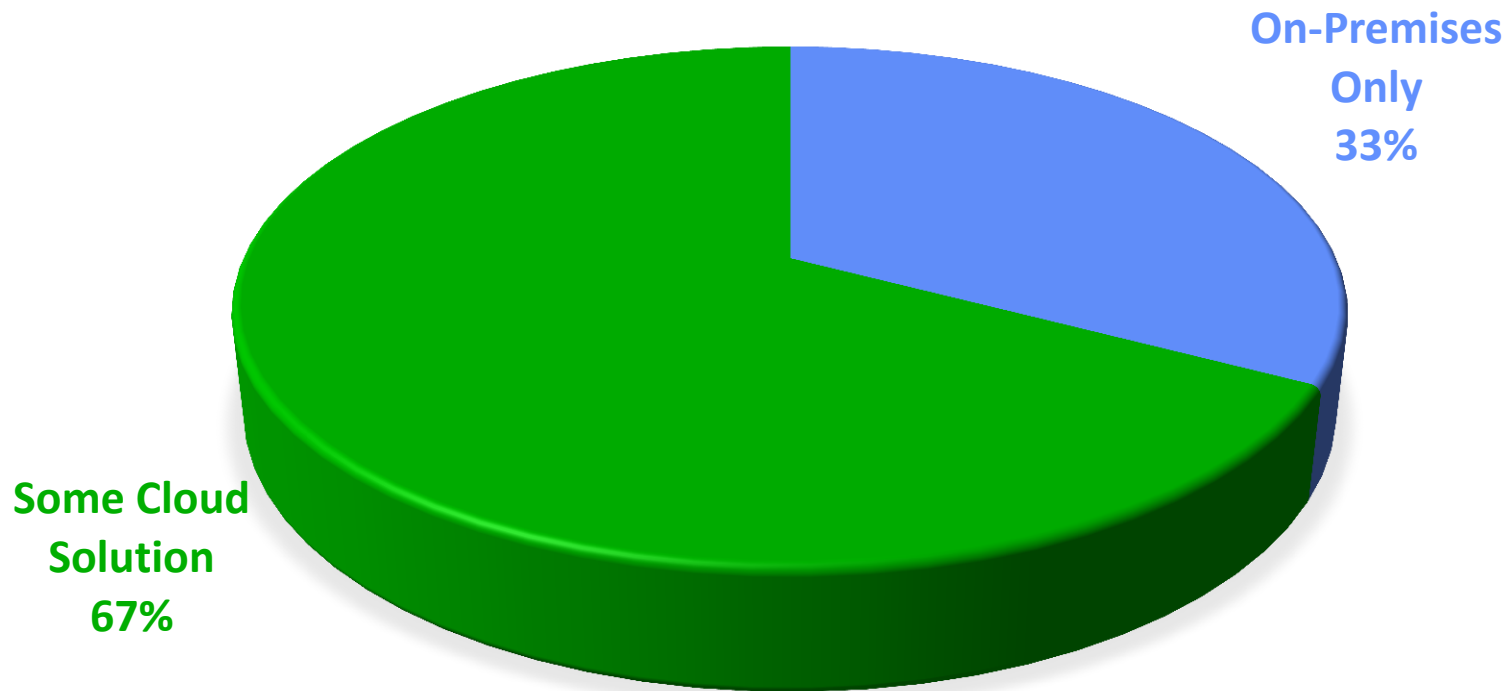
CSMFO Cloud Survey



- **52 California Municipalities and Special Districts responded**
- **Mix of small and large organization responses**
- **Survey is for informational purposes only - not scientific**

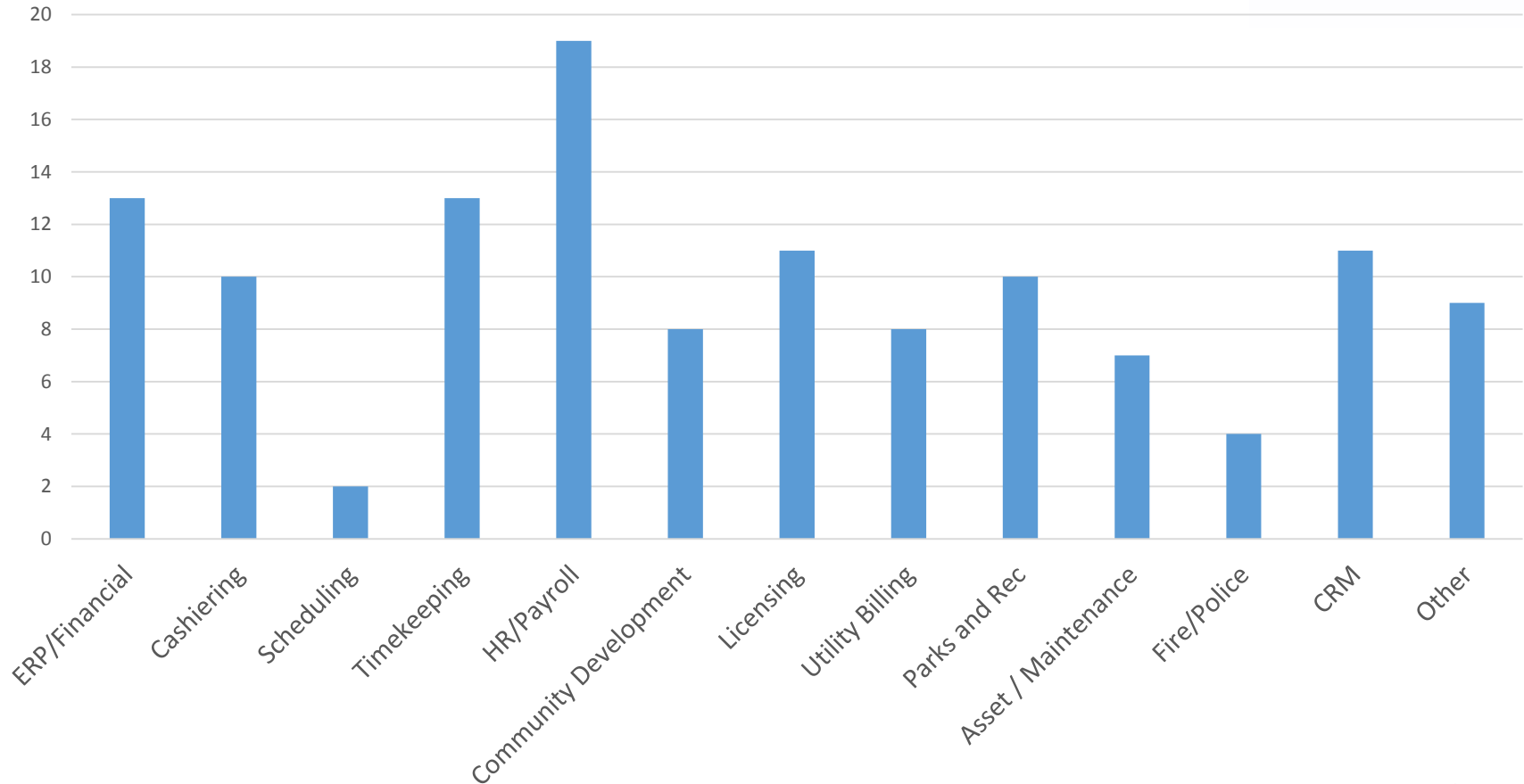
CSMFO - Who is Using the Cloud?

CALIFORNIA CITIES AND DISTRICTS USING A CLOUD SOLUTION

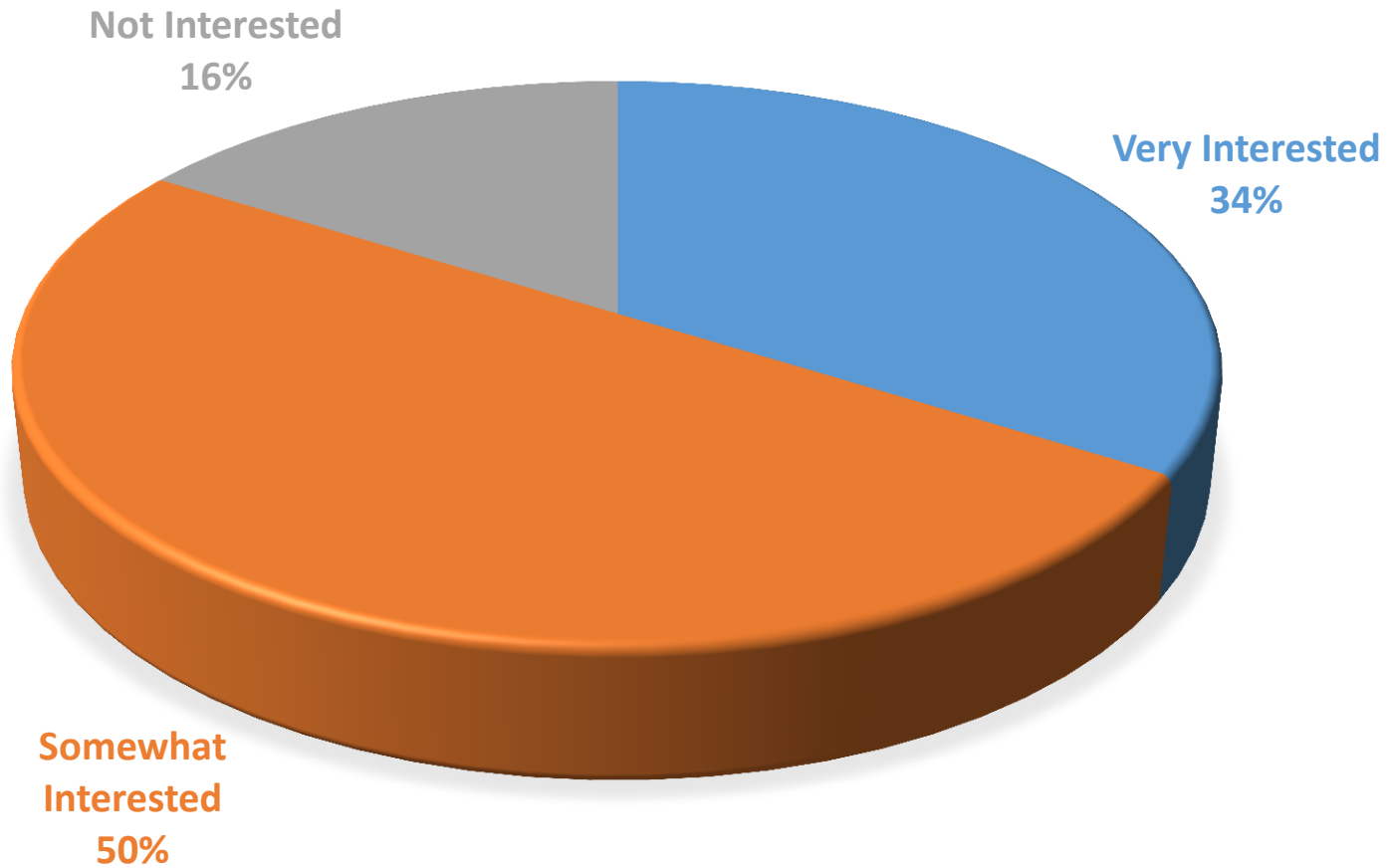


CSMFO – What Applications Used in the Cloud?

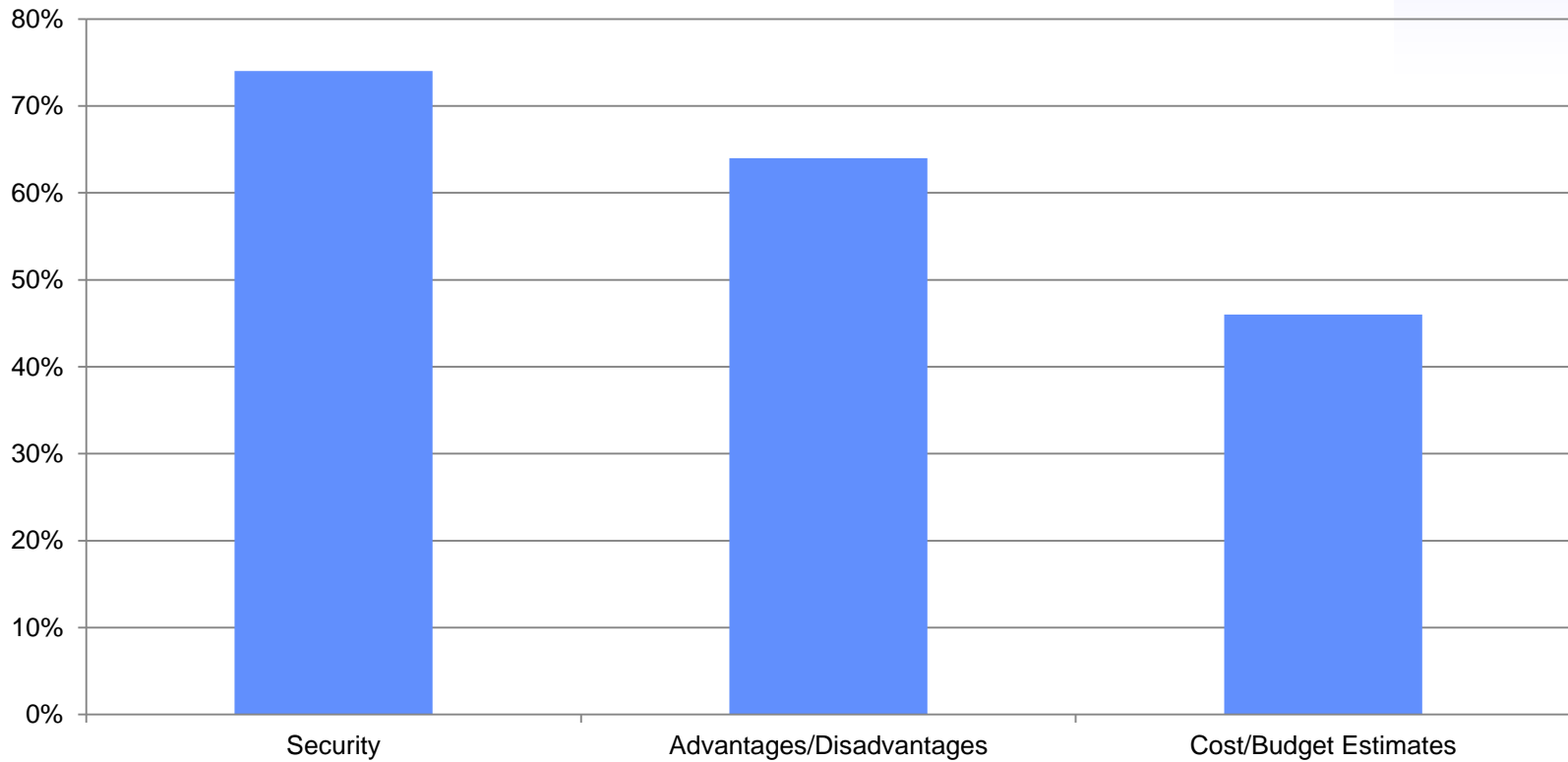
Cloud Applications Used by CSMFO Survey Respondents (52)



Interest in Implementing Cloud Solutions



Top 3 Cloud Topics From Survey



Cloud Security



Risks:

- Data outside of your control
- Data protection
- Access control
- Offshore development and/or support

Mitigation:

- Negotiate strong Service Level Agreement
- Audited security controls
- References - History of high availability – at least 99.95%
- Documented disaster recovery plans
- Regular penetration testing
- Data portability policy
- Confirm location of development and support

Traditional On-Premises Solution

ADVANTAGES

- Ownership – capital acquisition
- Internal control of data and software
- Control of integration
- Choose upgrades
- Ability to discontinue support and maintenance
- Lower long-term out-of-pocket cost
- Easier to customize

DISADVANTAGES

- Requires IT Infrastructure
- Requires IT Resources
- Requires System Knowledge
- Upgrades can be difficult
- Higher up-front cost
- Disaster recovery responsibility

Hosted Single Tenant Solution

ADVANTAGES

- Ownership – capital acquisition
- Internal control of data and software
- Choose upgrades
- Vendor manages software and servers
- Ability to discontinue support and maintenance
- Move on-premises
- Less IT resources to support system

DISADVANTAGES

- Upgrades can be difficult
- Higher out-of-pocket cost than On-Premises
- Integration with other systems may be more complex
- Requires high-speed, reliable internet connection

Multi-Tenant SaaS Solution

ADVANTAGES

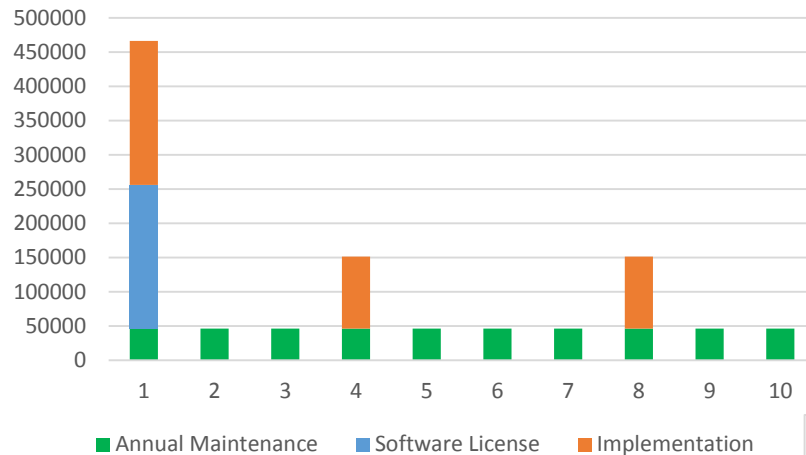
- Lease – operating expense
- Ownership of data
- Vendor manages infrastructure
- Vendor manages upgrades
- Lower initial out of pocket cost
- Fewer internal IT resources

DISADVANTAGES

- Software modifications limited
- Must stay on current version
- Cannot miss payments
- Vendor stability a risk
- Potential issues with leaving software vendor (how will data be returned?)
- Higher long-term out-of-pocket cost
- Requires high-speed, reliable internet connection

Hypothetical ERP Cost Estimates

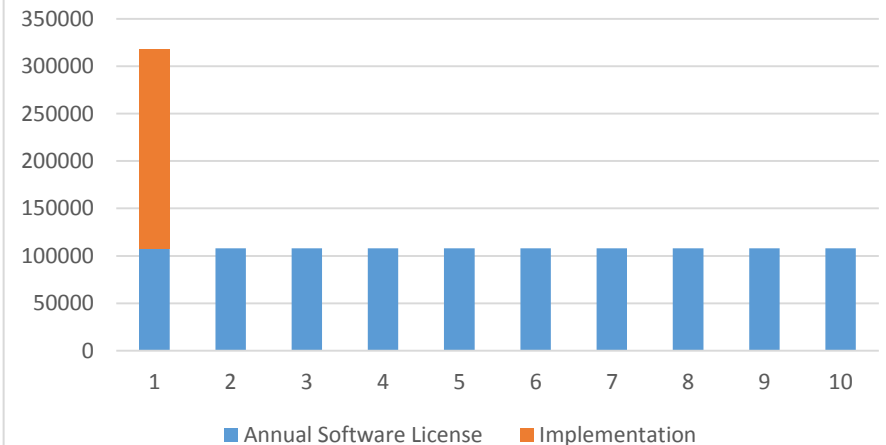
10 Year Estimated Cost - On-Premises



On-Premises/Hosted = Capital Cost

SaaS/Cloud = Operating Cost

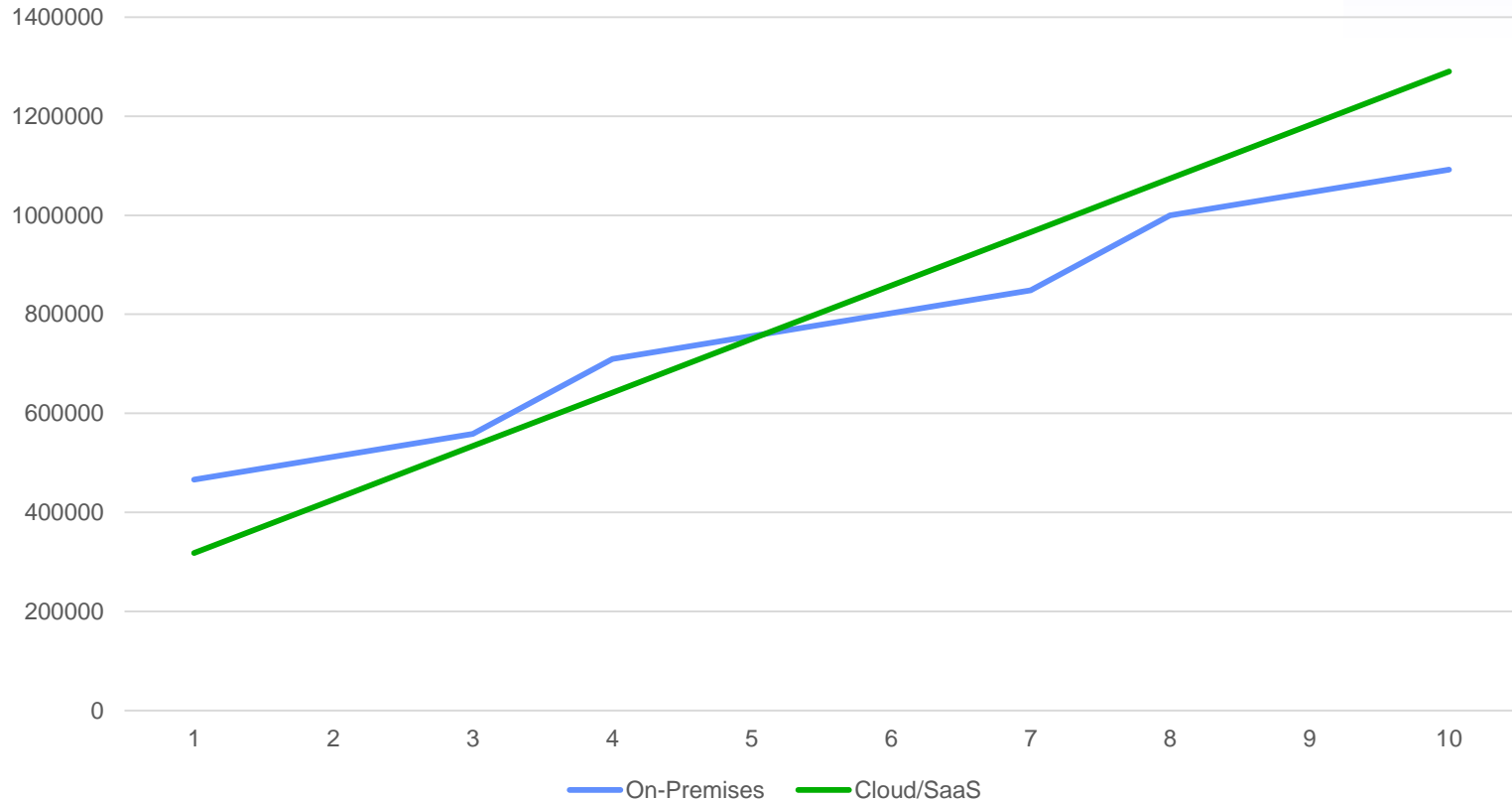
10 Year Estimated Cost - SaaS/Cloud



On-Premises vs. SaaS Cost Comparison



10 Year Out of Pocket Cost Comparison



On-Premises or Cloud?

On-Premises Decision

- Strong internal IT staff
- Outsourcing not an option
- Existing capacity in technical infrastructure
- Desire for direct control of software and data
- Software customization requirements
- Cost analysis/business case

Cloud Decision

- Stable software vendor
- Desire to outsource part of IT support
- Small or no IT staff
- Difficulty finding resources to support applications
- Maintain the latest version of the software
- Prefer to have operating expense rather than capital expense
- Cost analysis/business case

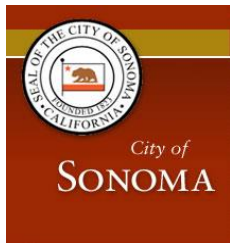
Evaluating Cloud Software Solutions

- Know the difference between Hosted and Multi-Tenant SaaS
- Understand Service and Deployment Models
- Evaluate both On-Premises and Cloud software offerings (some vendors only offer one or the other)
- Select delivery method right for you
- Analyze the cost of each option
- Negotiate the Service Level Agreement
- Different employee skill sets are required for managing Cloud software and vendors vs. on-premises



City of Sonoma

- **Selected Springbrook Cloud 2012**
- **Implemented ERP**
- **Selection Experience**
- **Why we went to the Cloud**
- **Experience moving to Cloud**
- **Benefits/Drawbacks**



Questions and Answers



Spencer Arnesen, CPA, Principal
(425) 216-4030
sarnesen@softresources.com



Ron Loos, CISSP, Director
(425) 216-4030
rloos@softresources.com



DeAnna Hilbrants, Finance Director
(707) 933-2235
dhilbrants@sonomacity.org

Thank You!