



# *WHY NOW IS A GOOD TIME TO HAVE YOUR HEAD IN THE CLOUDS*

***Marcie J. Haitema  
All Things Payments***

Confidential - All Things Payments

1



## Agenda

### ***Demystifying Cloud Computing***

- *What It Is and How It Developed*
  - *Business Challenges*

### ***Why Should My Head Be In Clouds Now?***

- *Opportunities and Benefits*
- *Pitfalls and Vulnerabilities to Avoid*
  - *Cloud Protection*
    - *Contracts and Service Levels Agreements*

### ***Questions and Answers?***

Confidential - All Things Payments

2

## Cloud Computing – Not a Mystery

### *Developed Because of Key Business Challenges*

The convenience, flexible access and near real-time delivery of information are a direct result of powerful, yet, ever-changing, technology advances that have irrevocably transformed the commercial process and customer expectations.

- But these advances present a new set of challenges for businesses and especially financial institutions
  - **Cost** – compression of technology life cycles
    - Inefficient use of server capacity
  - **Compliance demands** – FI's pressured to do what government cannot
    - The openness and ubiquitous of internet become a costly and tremendous burden for FI's
    - FI's must meet higher and higher standards to protect customers and their sensitive data from the sophisticated and adaptable fraudsters - who are global

## Cloud Computing – Not a Mystery

### *Developed Because of Key Business Challenges*

#### ❖ Scale Matters

- Market consolidation of FI's and providers (FiServ, FIS, etc.) make it very difficult for smaller banks to compete independently and to maintain their customers, much less attract new client business – it just costs more!

#### ❖ Hence cloud computing arose as a means to solve these business problems for businesses as a whole and FI's as a market segment.

- Why? Cloud computing providers have the technological scale, expertise and development budgets to manage complex server farms, their applications and access methods more cheaply than most businesses can do on their own
  - It is much like the benefits one can get from leasing a car vs. buying it You can get more car through leasing than buying
  - Cloud customers are able to “rent”, “lease” and/or pay as you go vs. having to endure the enormous costs of owning, operating and maintaining its own equipment
  - **Simply put - Cloud Computing is just a newer flavor our outsourcing**

## Cloud Models

- **Private Cloud**: operated solely for an organization, typically within the firewall.
- **Public Cloud**: accessible over the internet, available to the general public or a large industry group and is owned by a cloud service provider.
- **Hybrid Cloud**: composition of two or more interoperable clouds (e.g. private + public), enabling data and application portability.
- **Community Cloud**: shared by several organizations with shared concerns, managed by the organization or a service provider.



Confidential - All Things Payments

5

## Community Cloud Is Best – Why?

### **Public Clouds:**

- Security concerns
- Not industry focused
- Application 'unaware'

### **Private Clouds:**

- More costly
- Not as scalable - no room to grow – typically built for 100% capacity
- Requires focus on infrastructure, not business

Confidential - All Things Payments

6

## Community Cloud – What Is It?

- **A typical “Cloud” provider harnesses the processing power of numerous internetworked servers to deliver efficient and powerful application oriented computing services to businesses and consumers**
- **The operations and complexities of the technology architecture are not apparent to customers – they are concealed in the “cloud”**
- **Customers are able to access applications resident “cloud” servers by using an internet browser or other device such as a mobile phone or tablet**
- **Today cloud computing providers not only provide low cost “renting” of highly scalable and powerful servers, they also commonly develop and maintain the software applications necessary for FI’s to compete effectively in today’s marketplace**
- **This is now commonly referred to now as a “Software-as-a-Service” Model” or “SaaS”**
  - Software as a Service or is just a new name for purchasing software from the developer who also just happens to own and operate the hardware too.

## SaaS Benefits

- ***Avoidance of large capital expenditures - the provider owns the software - not you***
  - You do not have to develop, host or maintain software or infrastructure hardware
- ***Easy Accessibility - Customer access to the software and hardware is easy***
  - Via a web browser from you device of choice
- ***Lower operating costs - pay as you go pricing is common and can be tied to actual usage!***
  - Provider/Vendor is in physical possession of customer data (or in some cases customer’s customers data) and processing occurs on the vendor’s hardware systems
  - Vendors manage application compatibility enabling and access
  - Connecting through mutually defined APIs so programs can share data on-demand and easily

## SaaS Benefits

- **Software is feature rich and done by expert developers**
  - Features are easily turned on and off once connectivity is established
  - Functionality is intuitive creating a better customer/user experience
- **Buyers can create competitive advantage by knitting together a unique set of features and functionality from multiple SaaS providers**
  - Only have to buy the applications you know will better satisfy your customers

## <sup>1</sup>Issues: Defining Service

### VENDOR

- ASP, SaaS, or the Cloud – legally conceptually the same
- Benefit and differences lie in technology developments
- Want to minimize back-end customization
- Want to limit specialized support and development
- Know limitations of your development organization and pipeline

### FINANCIAL INSTITUTION

- What exactly am I getting?
- Is it simply a platform or does it come ready with apps?
- Secure training commitment
- Secure sufficient support and development assistance
- Does the important functionality already exist or does it need to be built?

## <sup>1</sup>Issues: Security

### VENDOR

- Need to control cost and system uniformity
- More customized security situations make overall system harder to manage
- Push cost of additional physical security back to customer if possible
- Control hardware and access, have protocols
- Can I use subcontractors

### FINANCIAL INSTITUTION

- Who has the data?
- How, When, and Where can my data be moved?
- Servers – outside the firewall
- In light of virtualization, how can my data be secure everywhere?
- Need vendor to be compliant with industry security standards (e.g., background checks, drug testing, etc.)
- Backup/Redundancy

## <sup>1</sup>Issues: Where is my data?

### VENDOR

- Do they offshore data to increase margins?
- Want to take advantage of virtualization and multi-tenant architecture; centralization defeats this
- In maximizing hardware efficiency, try to group similar customers with common interests (e.g., government, regulated industries)

### FINANCIAL INSTITUTION

- Knowing in advance where data will reside
- Can my data be sent outside the US?
- Public/Private Cloud or community hosting? Co-location arrangement
- Notifications prior to mass data movement or relocation in network
- Approval rights over data relocations

# <sup>1</sup>Issues: Regulatory Compliance

## VENDOR

- Need to have solutions and answers ready for regulated customers
- Security testing as required by industries (e.g., SAS 70, Type II audit)
- Limit special access unless absolutely necessary; other customers may be concerned

## FINANCIAL INSTITUTION

- Regulatory Security Requirements
- Secure access for customer's own business purposes
- Secure access for regulators
- Access rights that are co-extensive with laws and regulations

# <sup>1</sup>Issues: Data Privacy

## VENDOR

- Offerings needs to consider privacy and data protection obligations of customer
- Consider where data is going to be collected, where it will be sent, and where it will be processed and stored
- Need to stay current with laws in all jurisdictions where your customers operate
- Consider ways to shift risk to the customer for compliance
- Consider compliance certification depending on level of comfort with compliance

## FINANCIAL INSTITUTION

- Highly regulated so representations, warranties and covenants need to track the law closely
- Make vendor agree to comply with laws that are applicable to the customer
- Draft privacy policies carefully, maybe even make them an attachment

## <sup>1</sup>Issues: Data Portability

### VENDOR

- Have a plan in place for when customer leaves or asks for a copy of their data
- Try to charge services or consulting fees for migration assistance
- Have defined APIs to efficiently assist customers with hooking up to existing systems

### FINANCIAL INSTITUTION

- Have a plan in place for when customer leaves or asks for a copy of their data
- Minimize charges migration of data and assistance and ensure that these same terms and fees are in your customer contracts
- Have defined APIs to efficiently assist customers with hooking up to existing systems

## <sup>1</sup>Issues: Performance

### VENDOR

- Avoid breach terminations by using SLAs, keeps customer locked in
- SLAs and the related credits are really liquidated damages
- Control the formula and SLA metrics
- Don't forget to carve out maintenance and emergency downtime
- Press to keep SLAs uniform across customer base
- Keep good metrics for customer reporting

### FINANCIAL INSTITUTION

- Have rock solid SLA's that define support, response time and communication of problems/incidents
- Redundancy / Back-Up / Disaster Recovery
- Know what service levels matter to your business (availability, error-free processing)
- Be careful of tricks with the formulas
- Obtain penalties or credits for service level failures
- Seek termination right for multiple
- SLA failures
- Demand reporting and right to audit

## <sup>1</sup>Issues: Relationship & Disputes

### VENDOR

- Limit number of customer representatives you are required to deal with
- Add layers of escalation to prevent customer from racing to court
- Attempt to limit post-signing changes to service by customer
- Pricing protection for changes to services
- Consider arbitration to keep customer disputes confidential

### FINANCIAL INSTITUTION

- Define governance and project management
- Project over-run clauses
- Liberal change control
- If vendor is not US-based and might present service issues, consider arbitration over court
- Avoid cumbersome escalation procedures

## <sup>1</sup>Other Issues to Consider

### VENDOR

- Ability to use customer name in marketing material
- Liability limitation
- Subcontracting
- Technology improvement obligations
- Solicitation

### FINANCIAL INSTITUTION

- Recovery of consequential damages
- Confidentiality
- Records retention, audit rights
- Insurance n- especially cyber
- Termination rights

## Additional Steps for Implementation Success

Unlike many on-premise software projects, implementing a cloud solution can be quick—almost too quick if you're not prepared. Don't skip the steps discussed earlier—then make sure these bases are covered, too:

- **Designate a project manager.** While it's true that many in your organization will want to function well as a team during the project, too many opinions can spell trouble so appoint a single individual who will spearhead the project. The ideal project manager understands both the technology and the business requirements that will drive it. Who sets timelines, phases the work, oversees deployment efforts and acts as primary contact with the vendor? The project manager—of course.
- **Identify an administrator.** On an ongoing basis, you'll need to manage your solution's configuration—so name a primary and backup resource early on, so they can get up to speed and even help refine requirements.
- **Work closely with the vendor.** Fortunately, you already identified a vendor with plenty of experience implementing cloud-based contact center solutions. Now make sure that vendor assigns the right resource to your project. Insist on an individual with deep expertise in the solution and broad knowledge of contact center business processes. Then, plan to work very closely with that individual, through configuration, testing, implementation, and in the early weeks thereafter.

## Wrap Up - Conclusion

- **SaaS great method to reduce costs while enhancing competitiveness**
  - Get rich features and functionality leveraging provider's budget and R & D
- **Know what you need and want**
- **Tenaciously negotiate favorable contractual terms and penalties**
  - Make it ease to move with at no cost to you
  - Regulators won't allow you to outsource compliance but ensure SaaS provider meets or exceeds current requirements and is committed to meet new regulations on their dime, not yours
- **Monitor performance carefully – It is still your business to protect!**



Q & A

***Thank You!***

Marcie J. Haitema

All Things Payments

[www.allthingspayments.net](http://www.allthingspayments.net)

816-407-1787