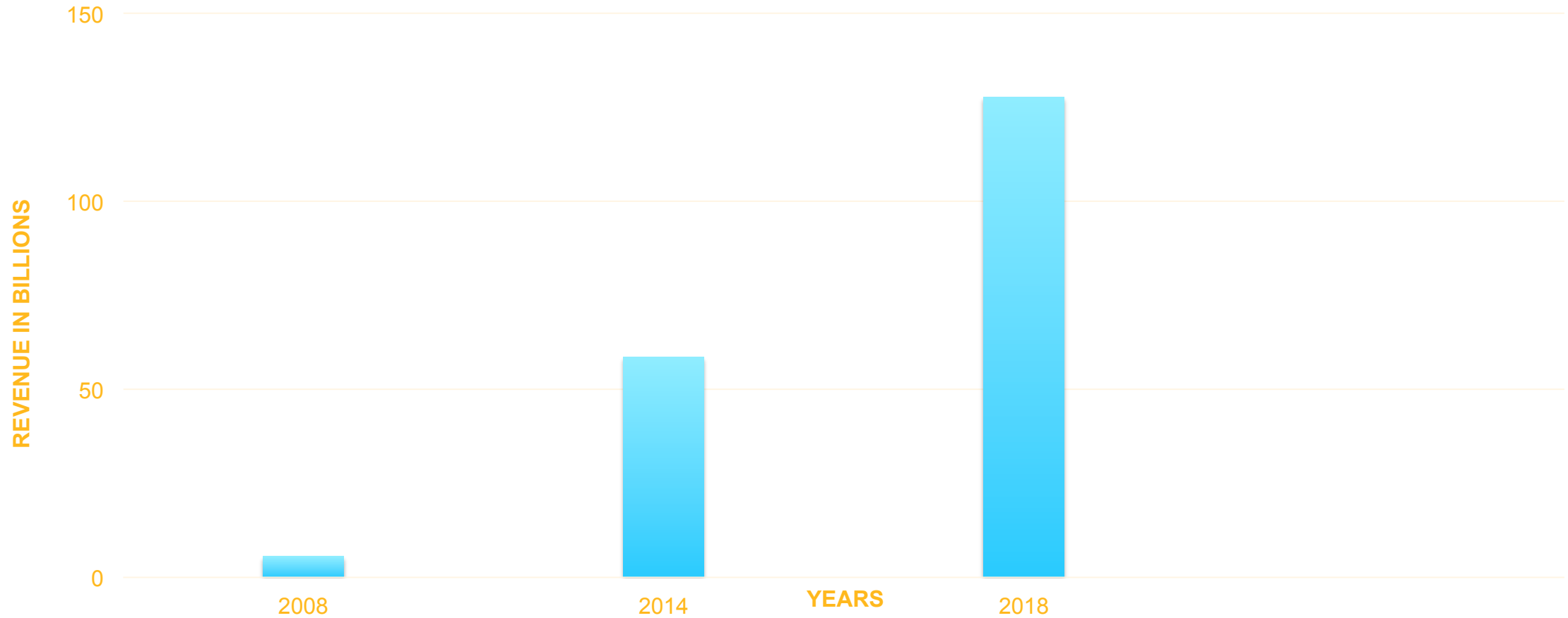




CLOUD REVENUE UP 10X IN LAST 6 YEARS PROJECTED TO GROW OVER 2X IN NEXT 4 YEARS



Source:

<http://www.forbes.com/sites/louiscolumbus/2015/06/20/by-2018-62-of-crm-will-be-cloud-based-and-the-cloud-computing-market-will-reach-127-5b/#1538d8016845>



CHILTERN

Designed Around You®

The Tempting Cloud and Clinical Trials

PhUSE SDE-Hyderabad

18th June 2016

Sujoy Ghosh
Naina Rani

Disclaimer



- The opinions expressed in the presentation are solely those of presenters and not of Chiltern.
- All product and company names are trademarks™ or registered® trademarks of their respective holders.
- Use of them does not imply any affiliation with or endorsement by them.

Route Map

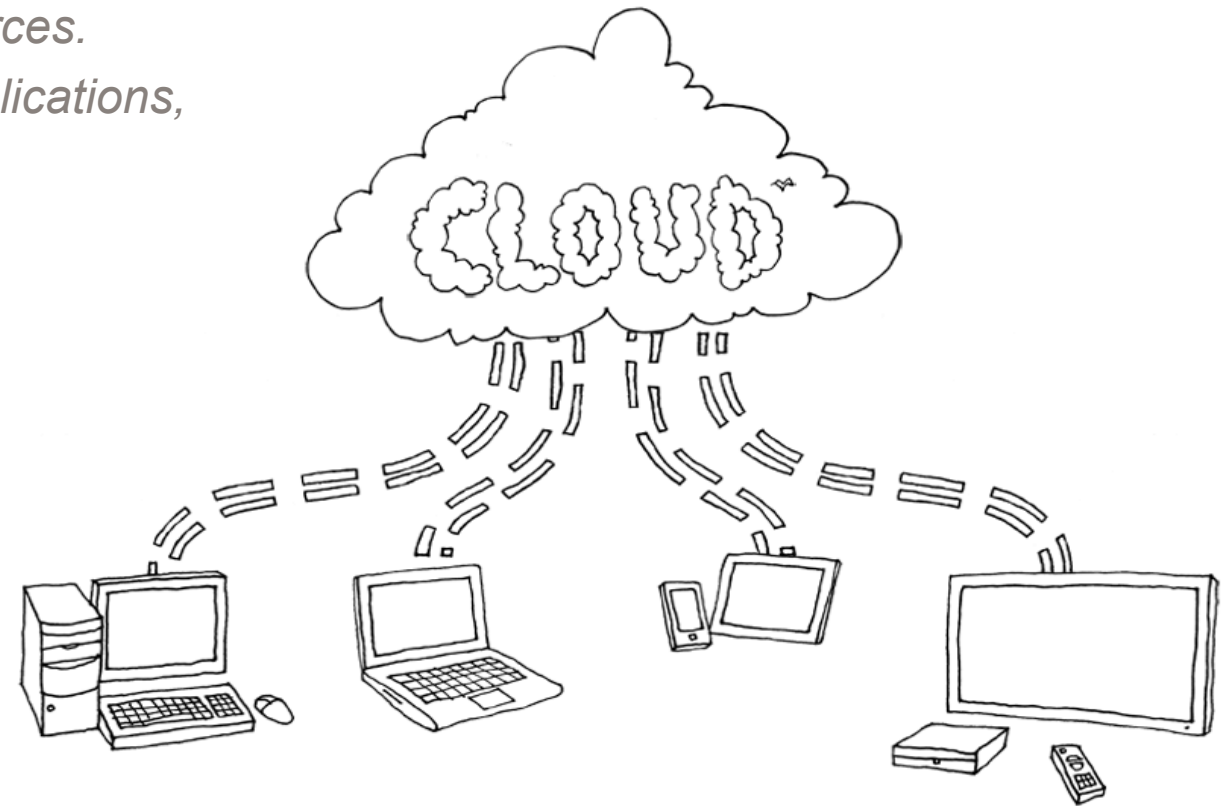


- Introduction
- Characteristics of Cloud
- Examples of Cloud Around Us
- Internet and Cloud
- Types of Service Models
- Comparison between the Service Models
- Verticals that can be moved to cloud
- A journey of life sciences companies using cloud
- Additional Benefits
- Challenges
- Conclusion
- References

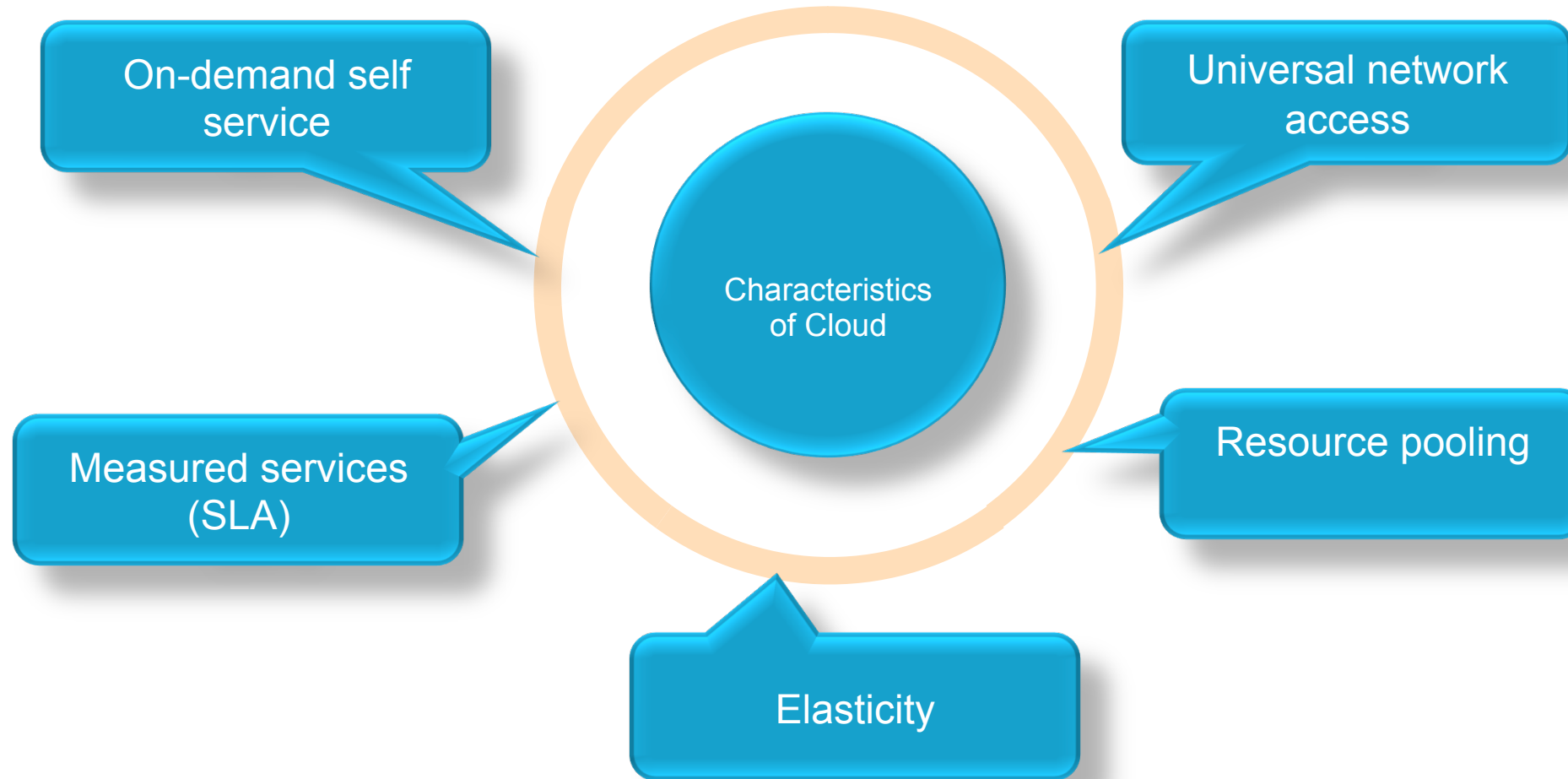
Introduction



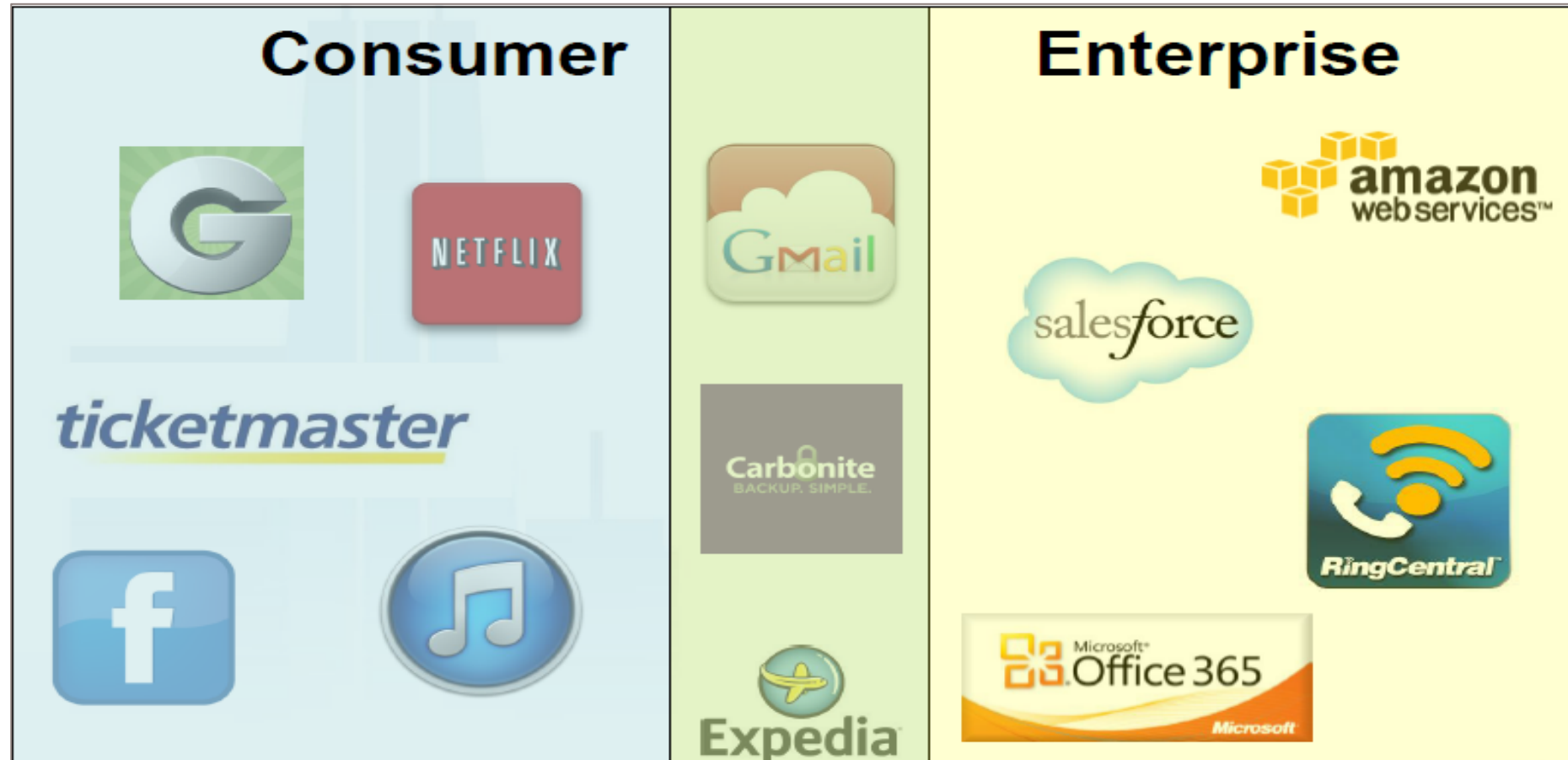
- *Cloud computing is a model for
Convenient
on-demand network access
shared pool of configurable computing resources.
(e.g., networks, servers, storage, applications,
and services)*



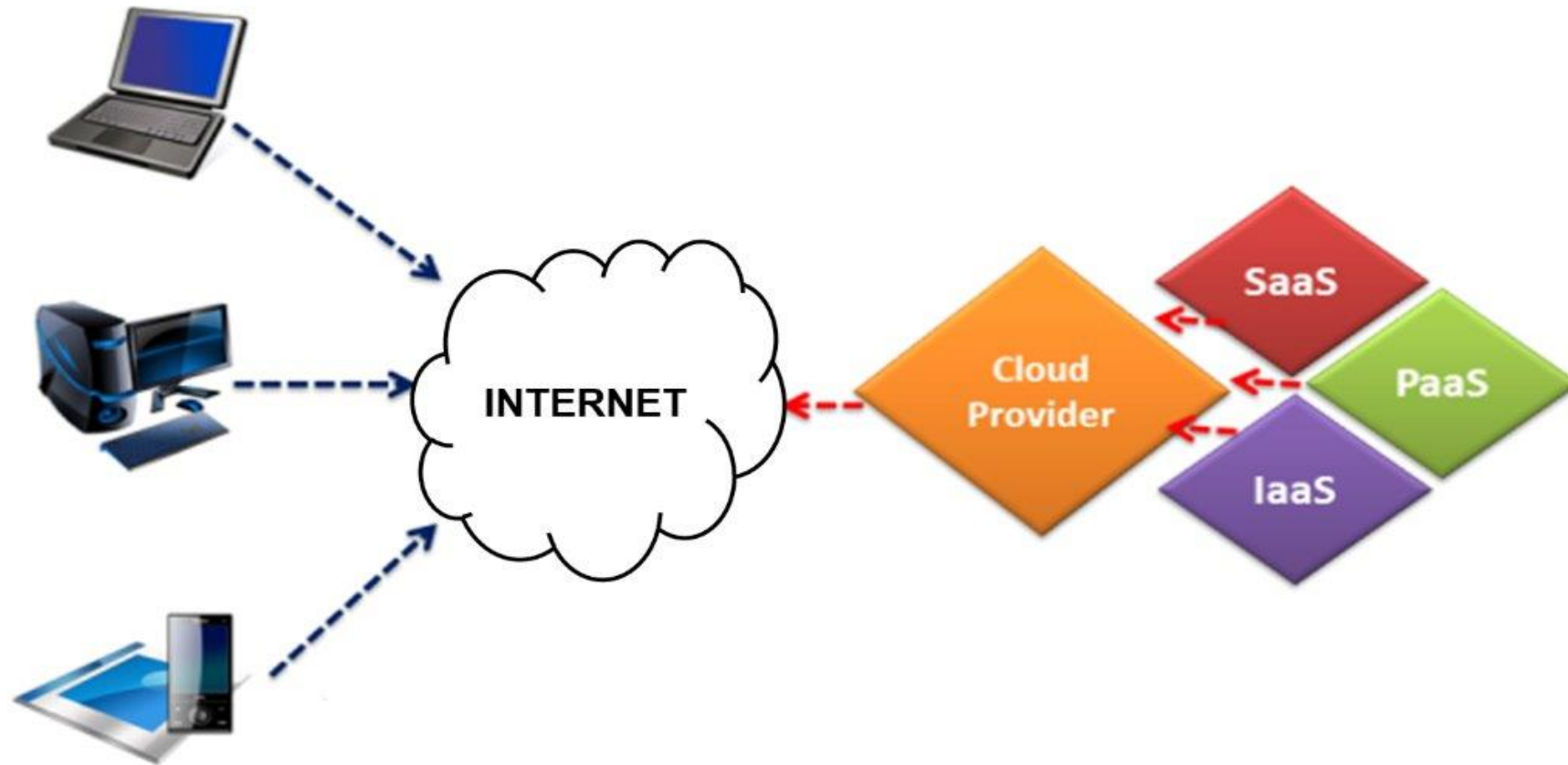
Characteristics of Cloud



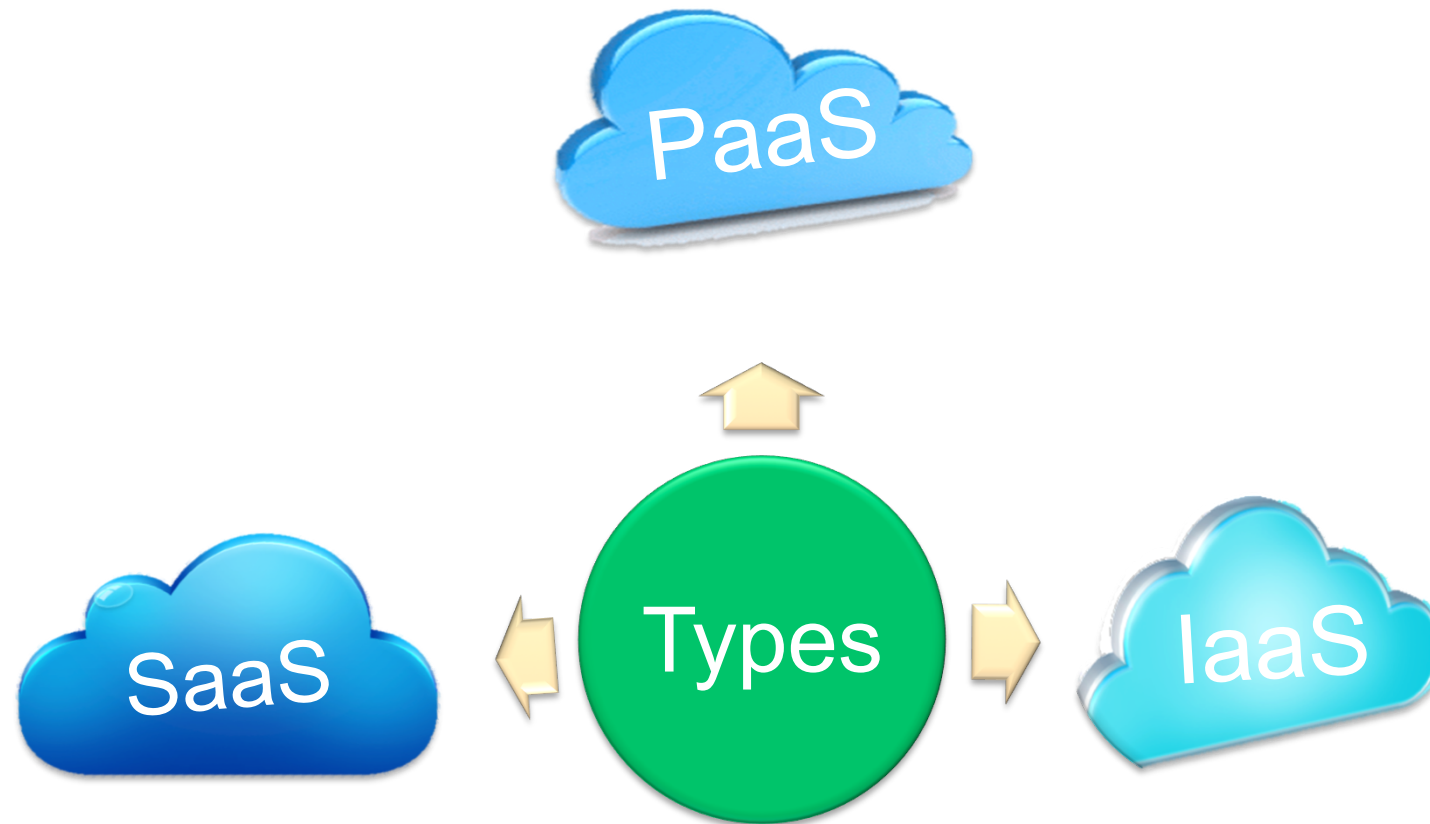
Examples of cloud around us



Internet and Cloud



Types of Service Models



Types of Service Models (contd.)

Software-as-a-Service

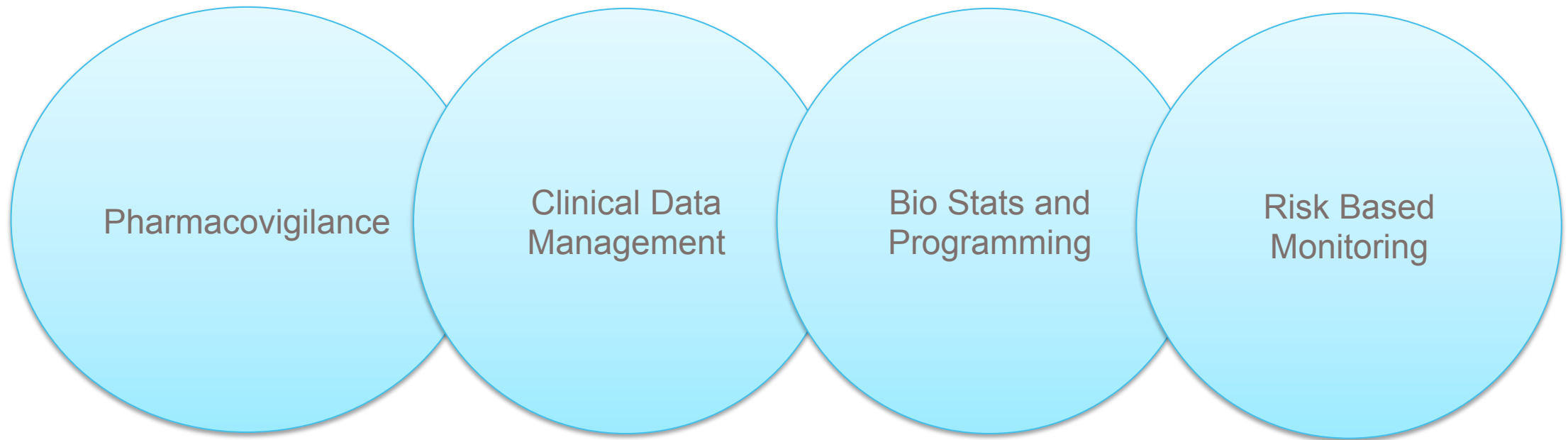
- Provides a consumable application running in cloud
- Software vendor must demonstrate adherence to 21 CFR Part 11 and evidence validation

Comparison between the Service Models

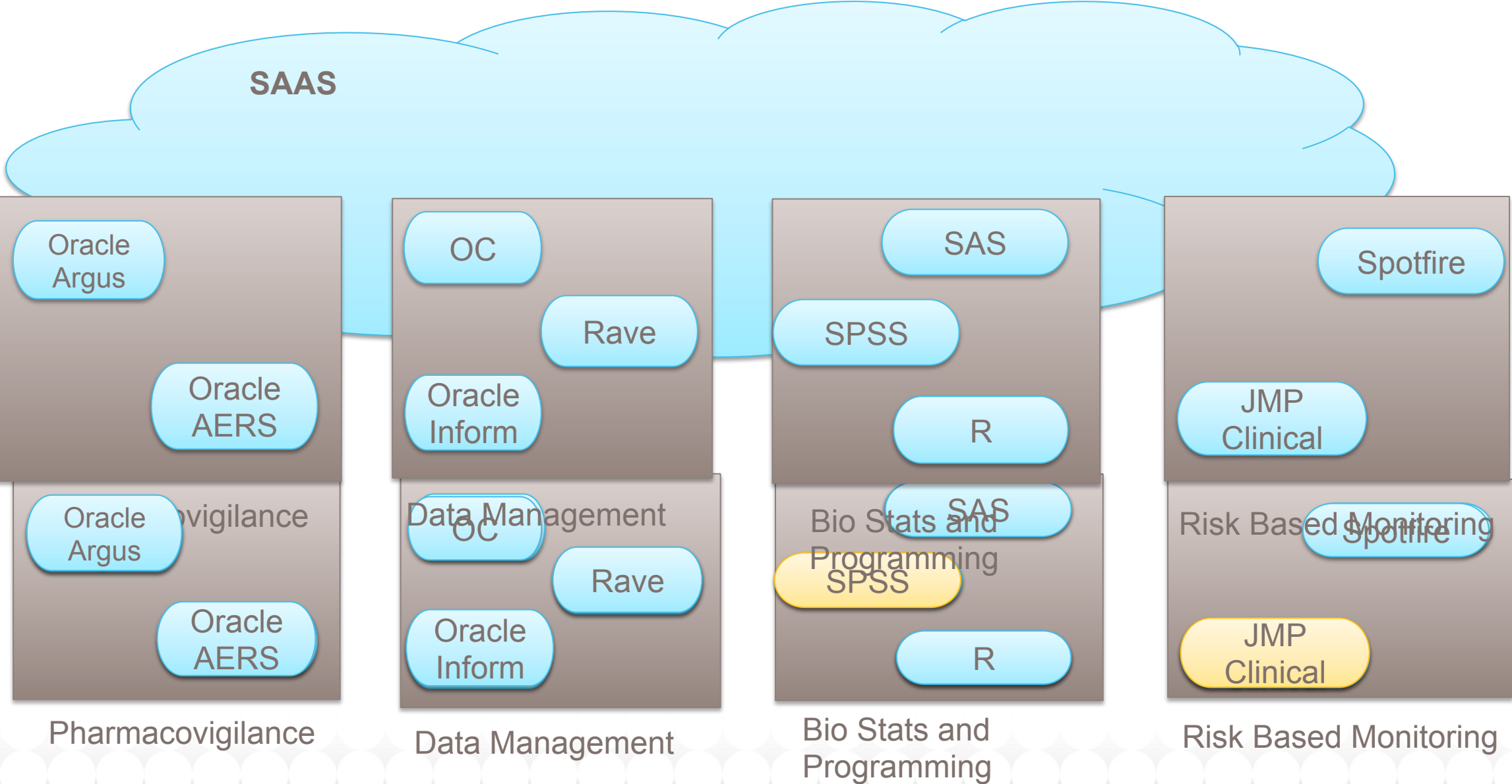


	Infrastructure as a Service	Platform as a Service	Software as a Service
Self Service	OK	OK	OK
Reduced Cost	Expensive for large deployment	OK	OK
Ubiquitous Access	OK	Caution with mobile platforms	OK
Automated System	OK	Caution with auto updates	OK
On-demand Scalability	OK	OK	OK
Can store clinical data?	☹️	☹️	😊

Verticals that can be moved to cloud



Verticals that can be moved to cloud



A journey of life sciences companies using cloud



- **Cost Reduction and Increased Speed :**

- Early adopters of cloud computing such as Pfizer, Johnson & Johnson, and Eli Lilly.
- Able to perform R&D, process proteomics, bioinformatics, statistics and adaptive trial design more rapidly with predictable time and costs using cloud.



- **Better Connectivity and Improved Performance :**

- Data protection, 24x7 disaster recovery, multi-site replication, real-time monitoring, and state-of-the-art emergency response systems



A journey of life sciences companies using cloud (Contd.)



- **Collaborative drug discovery and data analysis :**

- Researchers in remote areas, sometimes with few technological resources, to participate fully in research projects.



- **Cloud security :**

- CSPs (Cloud Service Providers) provide security on several areas. Such as,
 - ✓ Application Security
 - ✓ Data Security
 - ✓ Infrastructure Security
 - ✓ Process Security
 - ✓ Personnel Security
 - ✓ Product Development Security



Additional Benefits



- Improved scalability of IT resources – access to extensive file storage
- Quick set-up, more flexible, 24x7 connectivity and management.
- Enhanced security and privacy features.
- Increased collaboration on drug discovery.
- Availability of on-demand, redundant cloud databases.
- Better life sciences efficiency and regulatory compliance.
- The availability of multiple CSPs, thus providing more comparison and choices.

Challenges



- Maintaining Privacy and confidentiality of corporate data.
- Loss of control within the IT function (e.g. managing multiple platforms and devices)
- Maintaining reliability of key systems and availability of services or data.
- Lack of organizational control over services or data.
- Legal ramifications (government regulations, compliance and auditing)
- Concerns over cloud vendor lock-in.

Conclusion



Next Few Years...

Definitely cloudy with chances of changing winds! 😊



References



- Clinovo.com
- <http://www.forbes.com/sites/louiscolumbus/2013/09/04/predicting-enterprise-cloud-computing-growth/#c058e0d4b3f6>
- Images are from google.co.in
- <http://scholarworks.lib.csusb.edu/cgi/viewcontent.cgi?article=1015&context=jitim>
- Medidata.com

Acknowledgment



We take this opportunity to thank our Colleagues for their support. We also extend our heartfelt thanks to our Managers for suggesting valuable comments and insight to our presentation.



Questions ?



*Thank
you*

