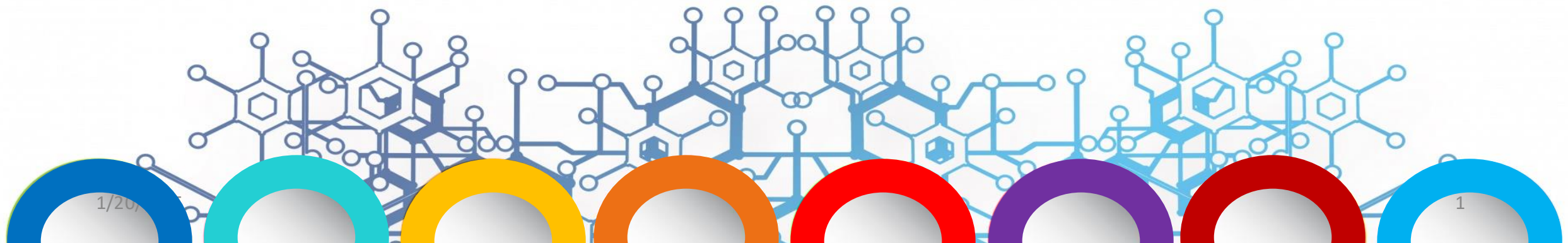


Active Learning

Cost Model & Service-Application Fit



Question (1): Cost Model

Based on our discussions on the cost model for cloud resources* please discuss:

- What is the effective cost model for each of the services below?
- When would you use each item?

	<i>Service</i>	<i>Programming Interface</i>
1	<i>Cloud Functions</i>	<i>Arbitrary Code</i>
2	<i>BigQuery</i>	<i>SQL-Like Query</i>
3	<i>Dynamo DB</i>	<i>puts() and gets()</i>
4	<i>SQS</i>	<i>enqueue/dequeue events</i>

Question (2): Service Packaging

Consider following architectures used for web applications:

Big Data

Event Driven

Web-Queue-Worker

Microservices

Discuss the cloud resource requirements of an application architecture for compute, store, and network resources, and indicate if you have one of the following packaged virtualized resources, what would you choose for each architecture:

	<i>CPU/GPU</i>	<i>vCPU</i>	<i>Memory (GiB)</i>	<i>Bandwidth (Gbps)</i>
1	N/A	8	16	Up to 10
2	1	8	16	Up to 10 + 2 Storage Optimized BW
3	N/A	8	64	Up to 10 + 4 Storage Optimized BW
4	N/A	8	16	Up to 10 + 8 Storage Optimized BW
5	N/A	2	16	Up to 25 + Local Storage

Acknowledgement

The list of resources used in preparation of this slide set are provided on:

<https://canvas.sfu.ca/courses/88212/pages/references>

Pictures and quoted resources are mentioned in each use.

