Microsoft Power BI Application Landscape
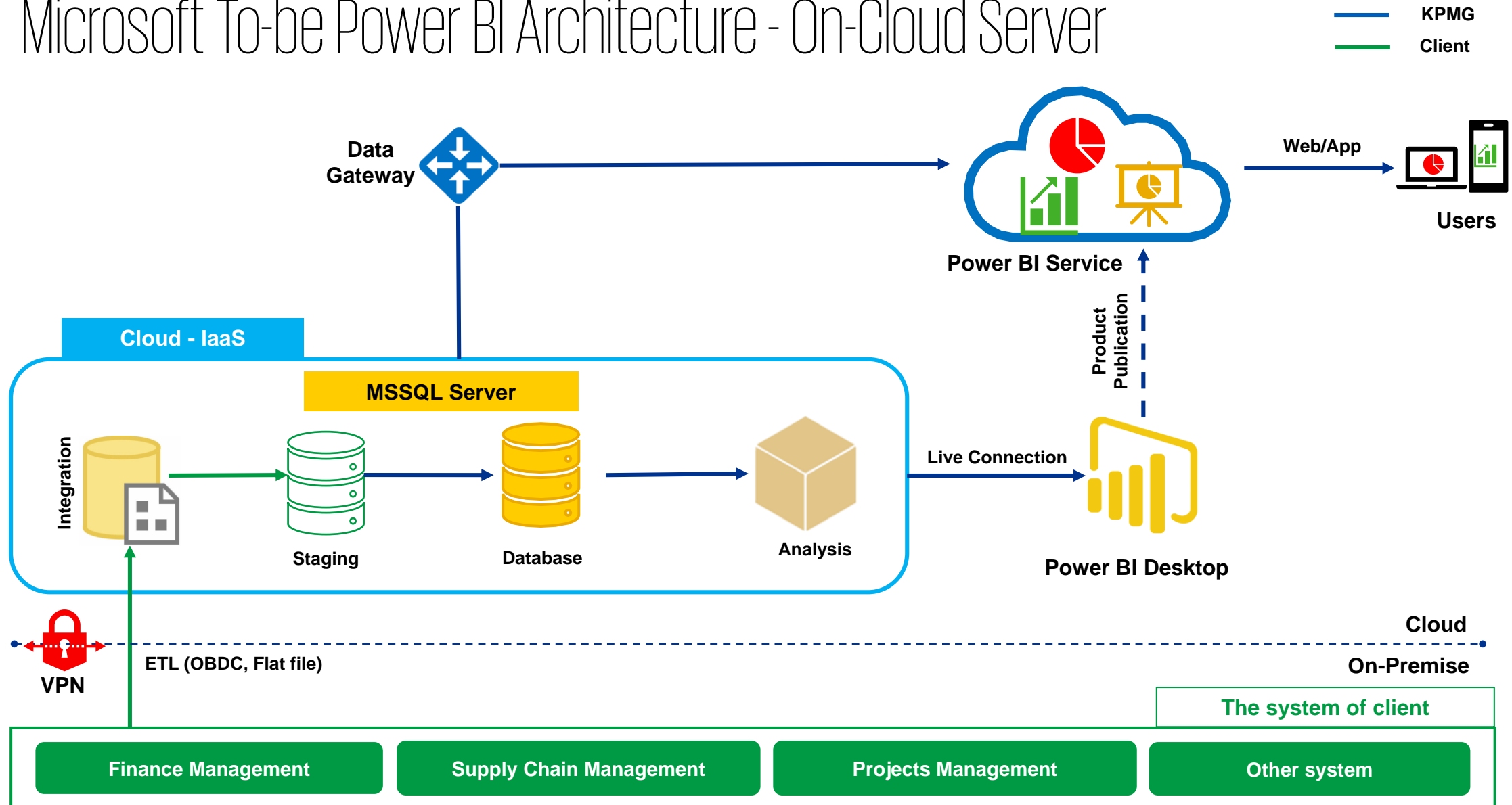
KPMG Tax and Advisory Limited Branch

April 2020

Agenda

- ✓ Microsoft To-be Power BI Architecture - On-Cloud Server

- ✓ Hardware Sizing for Data Warehouse with the Optimized shape

- ✓ Cost Components Estimation for reference

Document Classification: KPMG Confidential

Microsoft To-be Power BI Architecture - On-Cloud Server

KPMG
Client

Data Gateway

Power BI Service

Web/App

Users

Cloud - IaaS

MSSQL Server

Integration

Staging

Database

Analysis

Live Connection

Power BI Desktop

Product Publication

VPN

ETL (OBDC, Flat file)

Cloud

On-Premise

The system of client

Finance Management

Supply Chain Management

Projects Management

Other system

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Hardware Sizing for Data Warehouse with the Optimized shape

No	Component	Quantity
1	Core of CPU(s) (Processor)	8 Cores
2	Ram (Memory)	64 GB
3	SSD (*Storage for OS & Data*)	512 GB

The sizing methodology is based on the recommendations of Microsoft sizing document dedicated for data warehouse with Microsoft SQL Server - Enterprise Edition combines with KPMG's experience with the below following assumptions:

- ✓ Data Sources and Data Models:
- ✓ Total number of Users: <= 10
- ✓ Total number of Reports/ KPIs/ Analytics: <= 50
- ✓ Total number of Dashboards: <= 10
- ✓ Max rows returns of Analytics: 100,000
- ✓ Max rows returns of unformatted Reports: 1,000,000
- ✓ The available features of Power BI Pro: https://powerbi.microsoft.com/en-us/pricing/#powerbi-comparison-table

- ✓ Optimized shape for implementation phase & 1st year Going live. After 1st year, Data Warehouse may be considered to scale up based on the actual usage.
- ✓ Disaster Recovery & High Availability are not covered
- ✓ Dev/Test and Production environment will be utilized in the same environment.

Cost Components Estimation for reference

No	Cost Component	Type	Option 1 *(Viettel Cloud)*	Option 2 *(Azure Cloud)*	Note
1	Subscription Fee for Microsoft Power BI Pro | 10 Users	Annual	$1,200	$1,200	✓ Minimum #Users: 10 ✓ Microsoft Power BI Pricing for reference: https://powerbi.microsoft.com/en-us/pricing/
2	License Fee for Microsoft SQL Server – Enterprise Edition | 8 Cores	One time	$56,000	$56,000	✓ Microsoft SQL Server Pricing for reference: https://www.microsoft.com/en-us/sql-server/sql-server-2019-pricing ✓ This is the list price for license. It could be get high discount during actual negotiation
3	Subscription Fee for Hardware *- CPU: 8 Cores* *- RAM: 64 GB* *- Storage: 512 GB*	Annual	$6,500	$30,000	✓ Viettel Cloud Server Pricing for reference: https://viettelidc.com.vn/cloud-server ✓ Microsoft Azure Cloud Pricing for reference: https://azure.microsoft.com/en-us/pricing/calculator/
4	License Fee for Microsoft Window Server	Annual	*N/A*	*N/A*	✓ Utilize the existing license
5	Professional Fee of 3rd Vendors development for integration & automation of data source (Bravo, KBH)	Annual	*N/A*	*N/A*	✓ It is based on the design of integration & automation of data source and 3rd Vendors charge rate (Bravo, KBH)
6	Internal IT Development resource	Annual	*N/A*	*N/A*	✓ This resources to join the project, coordinate 3rd resources & KPMG project team, receive the transition from KPMG, etc.

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Screenshot of Viettel Cloud Server Estimation for reference

Screenshot of Viettel Cloud Server Estimation for reference

Save up to 40% with Windows Server Licenses you already own. Learn more about Azure Hybrid Benefit to save compute costs.

1			=	$2,476.75

Virtual machines

Effective cost per month

Reservation will be charged upfront for the entire 1 year duration

(~16% savings)

ⓘ   Virtual Machines are billed per-second. Learn more about Virtual Machines pricing.

Managed Disks ⓘ

TIER:

Standard SSD ▼

DISK SIZE:

E20: 512 GiB, $38.400/month ▼   ◉ ADD SNAPSHOT

1	✕	$38.40		=	$38.40

Disks

Per month

Storage transactions

100	✕	$0.0020		=	$0.20

Transaction units (10,000 transactions)

Per unit

Sub-total $2,515.35

Screenshot of Microsoft Azure Cloud Estimation for reference

① Đăng ký —— ② Giỏ hàng —— ③ Xác nhận —— ④ Thanh toán

Thông tin gói

Customize   0đ/Tháng

Số lượng	Thời gian		Khu vực
1	12	Tháng	Miền Nam ▾

Chọn tài nguyên, dịch vụ bổ sung   ⌃

TÀI NGUYÊN	THỜI GIAN	SỐ LƯỢNG	THÀNH TIỀN / ĐƠN GIÁ
CPU 1vCPU ————●———— 32vCPU	12	x 8	9,600,000 đ 100,000 đ
RAM 1GB ——————————●— 96GB	12	x 64	76,800,000 đ 100,000 đ

Ổ cài hệ điều hành

○ HDD	10GB ●———— 4096GB	12	x 10	0 đ 3,000 đ
⦿ SSD	10GB ●———— 4096GB	12	x 50	2,400,000 đ 4,000 đ

Thông tin dịch vụ

Customize   0 đ

TÀI NGUYÊN/ DỊCH VỤ BỔ SUNG

CPU 8	9,600,000 đ
RAM 64 (GB)	76,800,000 đ
SSD 50 (GB)	2,400,000 đ
Lưu trữ - SSD 500 (GB)	24,000,000 đ
Băng thông 100 (Mbps)	0 đ
Lưu lượng chuyển tải Unlimited (TB)	0 đ
IP 2 (IP)	1,800,000 đ
FW Compact HA	4,800,000 đ

Screenshot of Microsoft Azure Cloud Estimation for reference

☑ Lưu trữ

○ HDD   10GB ──●──────── 4096GB   12   x   [10]   0 đ / 3,000 đ

◉ SSD   10GB ────●────── 4096GB   12   x   [500]   24,000,000 đ / 4,000 đ

Băng thông

100Mbps ●──────────── 1000Mbps   12   x   [100]   0 đ / 10,000 đ

☐ Backup Snapshot

Lưu lượng chuyển tải **Unlimited**

IP

1IP ──────────●──── 3IP   12   x   [2]   1,800,000 đ / 150,000 đ

☑ Cloud Firewall

[FW Compact HA ▼]   12   x   [1]   4,800,000 đ / 400,000 đ

☐ Cloud Loadbalancer

☑ License

[Windows Server Standard ▼]   12   x   [1]   7,200,000 đ / 600,000 đ

☑ Backup Cloud Server

[Backup Medium ▼]   12   x   [1]   5,880,000 đ / 350,000 đ

☐ Cloud Security

☐ vSwitch

Windows Server Standard   7,200,000 đ
1

Backup Medium   5,880,000 đ
1

Số lượng: 1   Thời gian: 12 Tháng

Phí khởi tạo   0 đ

Tiền chưa VAT   132,480,000 đ

Tổng   **145,728,000 đ**

[Quay lại]   [MUA NGAY]

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