

Driving a greener S/4HANA move

*How energy
costs affect your
TCO now and
in S4 Cloud*



 : 21.10.2020



Driving a greener move to S/4HANA

How energy costs affect your TCO
now and in S4 cloud

Speakers:



Lawrence Hill

*Data Management
Consultant*



Steve Peirce

*Head of Sales
UK & Ireland
at TJC Group*

Hosted by:



Because Your Data Matters

TJC Company Overview



Genuine experts in Data Volume Management



HONDA

Deutsche Post 

L'ORÉAL

SONY



KEY FACTS

- + **23 years** of experience in Data Volume Management
- **SAP Certified** solutions to overcome DVM challenges
- Thought Leadership in **Data Archiving & GDPR and Retirement** of legacy systems
- **SAP Partners**
- +**500 clients**

SANOFI 



ENGIE

sodexo

Dunelm



www.tjc-group.com

TJC Group: 4 areas of expertise



01

DATA ARCHIVING & SAP ILM

Make the right-sized move to **S/4HANA** and Lower the TCO of **S4**,
Automation of recurring Data Archiving for long-term benefits

02

GDPR DATA MANAGEMENT

Manage data in your **SAP** systems to comply with
General Data Protection Regulations.

03

RETIREMENT OF LEGACY SYSTEMS

- For SAP and non-SAP systems
- Based on SAP Cloud Platform

04

COMPLIANCY: TAX & AUDIT READINESS

- Compliancy with tax and audit regulations
- FEC AND SAF-T regulations





Today's Agenda

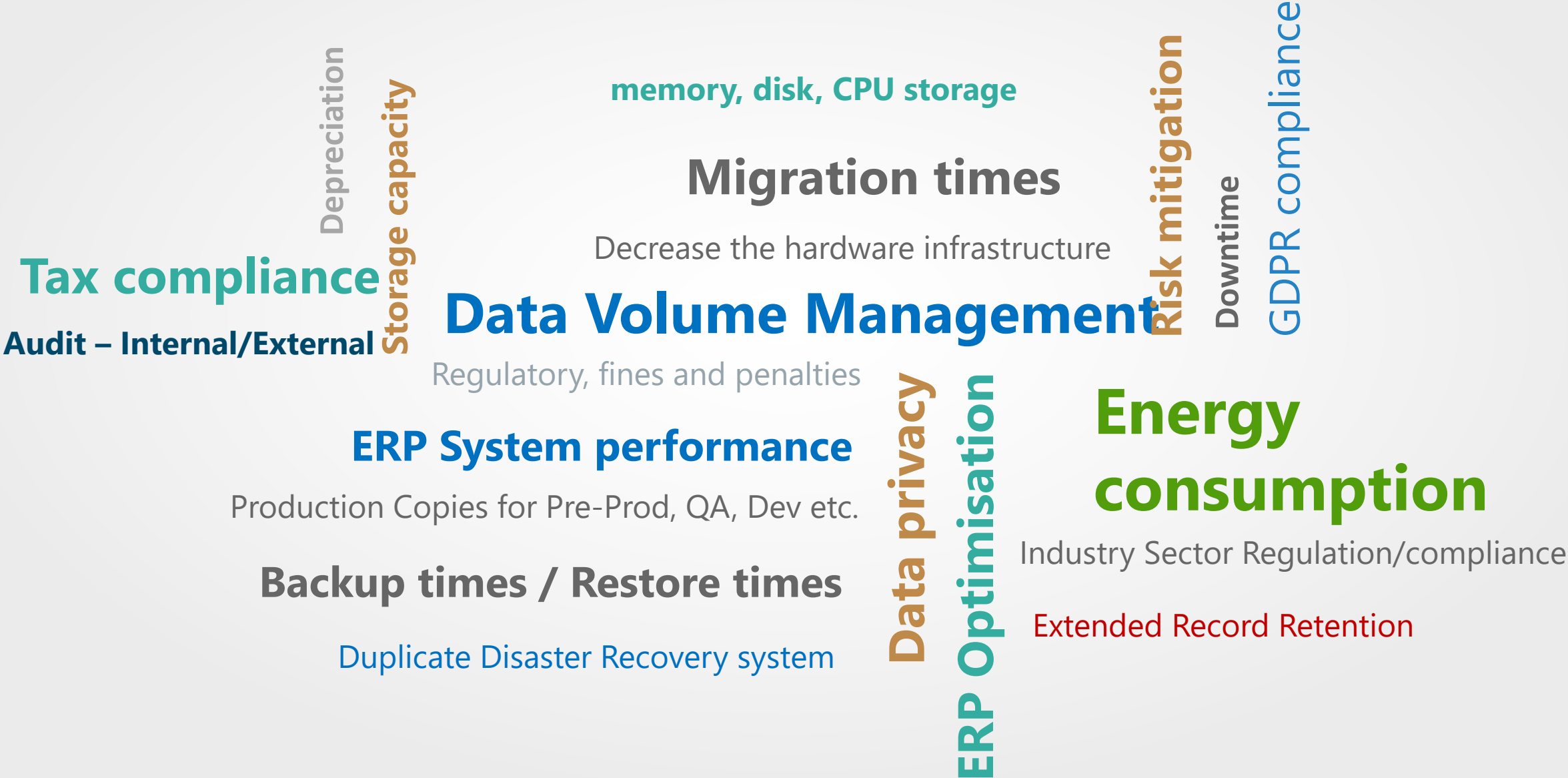
- **Energy:** Savings of energy costs by archiving
- **Move to S4:** Two examples of preparing and moving to S4
- **Q&A Session**



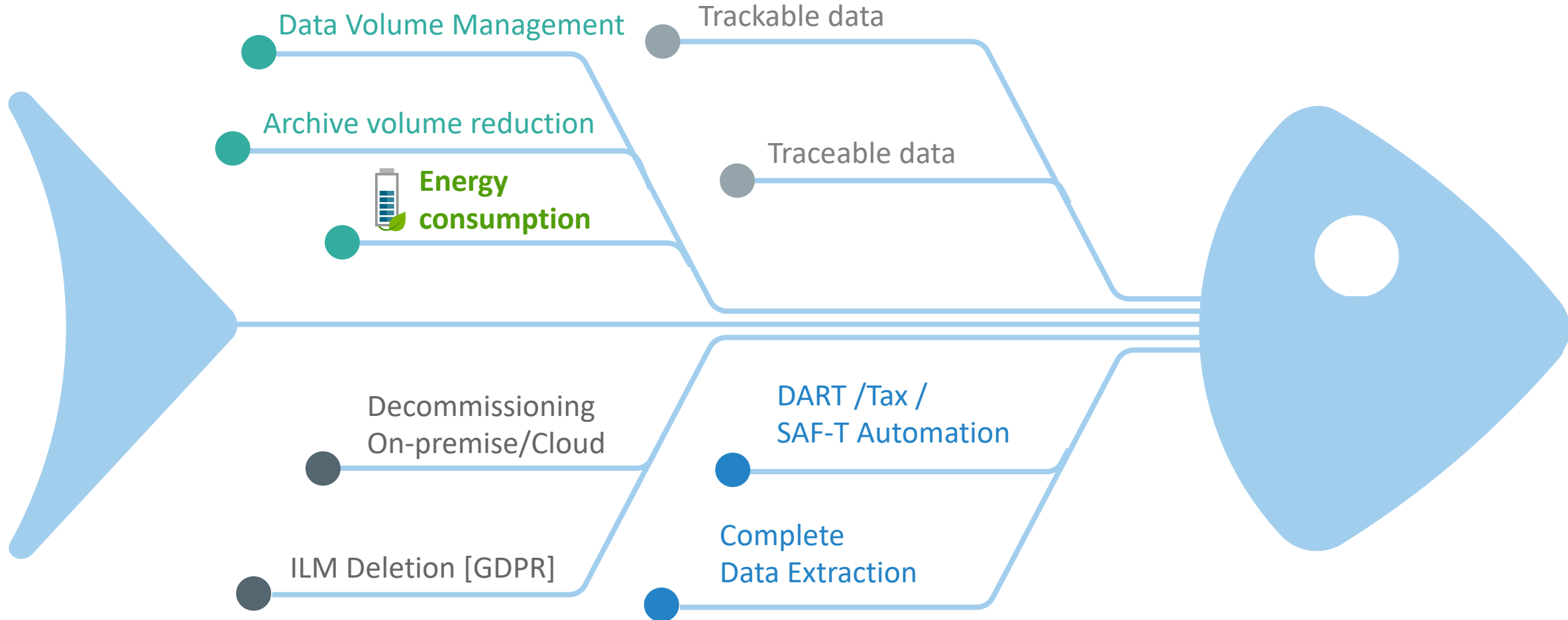
Energy and savings by Archiving



Typical **TCO** components



TJC: TCO variables archiving/ILM impact



Let's take a look at **Energy usage**



SAPs' view: UN Global Sustainability Goals



1 NO
POVERTY



2 ZERO
HUNGER



3 GOOD HEALTH
AND WELL-BEING



4 QUALITY
EDUCATION



5 GENDER
EQUALITY



6 CLEAN WATER
AND SANITATION



7 AFFORDABLE AND
CLEAN ENERGY



8 DECENT WORK AND
ECONOMIC GROWTH



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



10 REDUCED
INEQUALITIES



11 SUSTAINABLE CITIES
AND COMMUNITIES



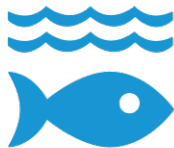
12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



13 CLIMATE
ACTION



14 LIFE BELOW
WATER



15 LIFE
ON LAND



16 PEACE AND JUSTICE
STRONG INSTITUTIONS



17 PARTNERSHIPS
FOR THE GOALS



SAPs' Target areas on UN Global Goals



SAP can create the biggest and most direct value within the **economic** layer with the **help of our core competency of improving business process management**, resulting in a specific focus on **UN Global Goals 8, 9, 10, and 12**.

8 DECENT WORK AND
ECONOMIC GROWTH



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



10 REDUCED
INEQUALITIES



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



SAPs' Target areas on UN Global Goals



Our best input to the **SAP UN Global Goals** is 9 and 12.

Industry, Innovation & Infrastructure Responsible Consumption & Production



Energy Savings



Sustainable?

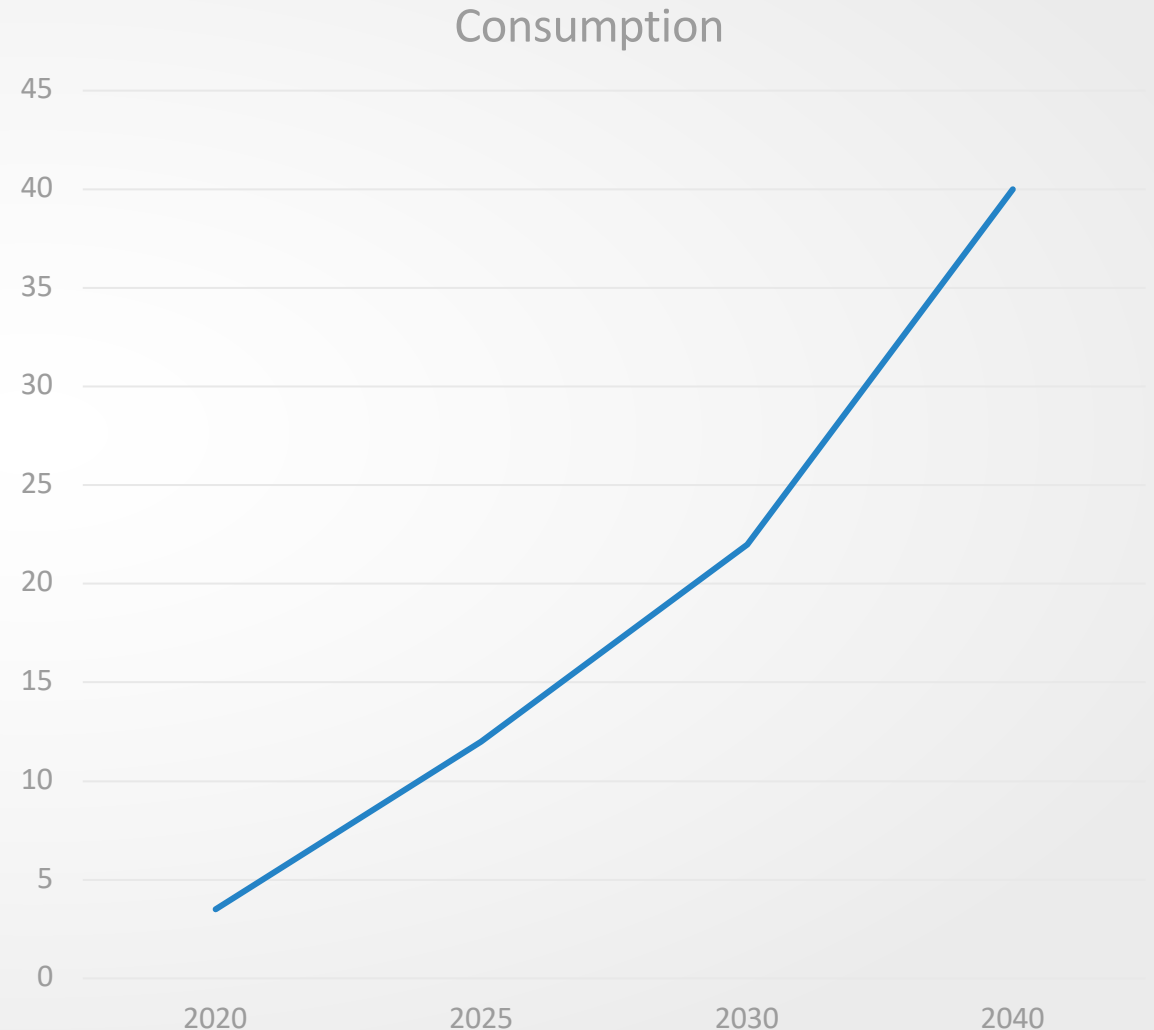
OR



Problem?

In **2020**, energy consumption of data centres is expected to account for **3.5%** of total worldwide carbon emissions.

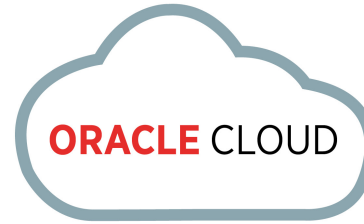
Projected to grow to nearly **40%** by **2040**.



Who are the big **Data Centre** energy users?



Google Cloud



VMware vCloud® Air™



IBM Cloud

[-] Alibaba Cloud

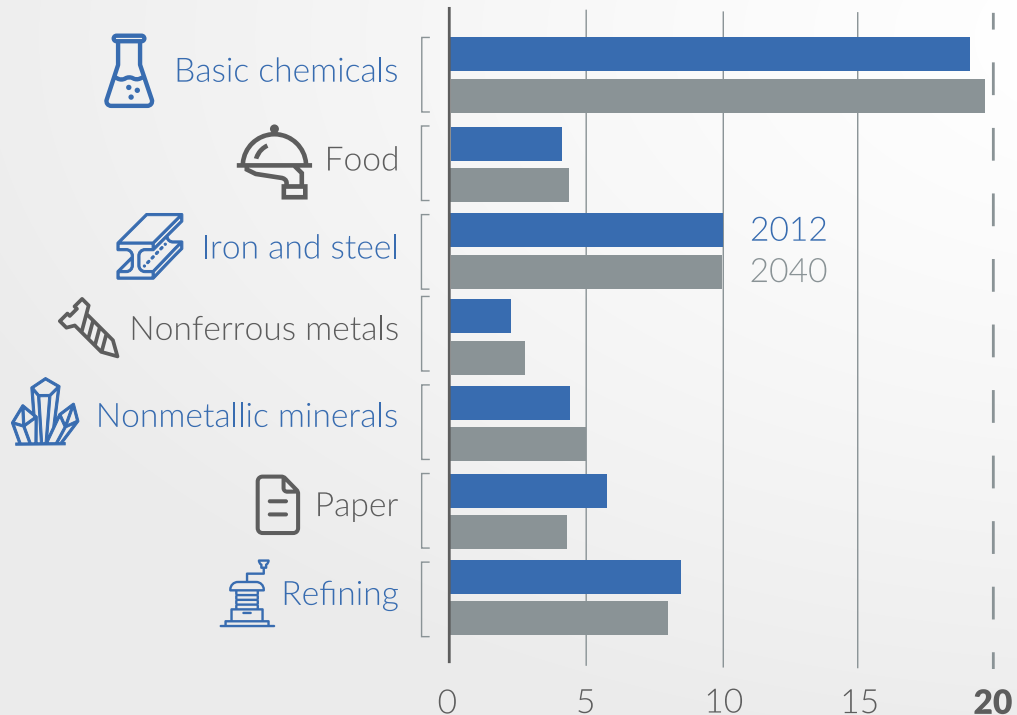


Energy Savings

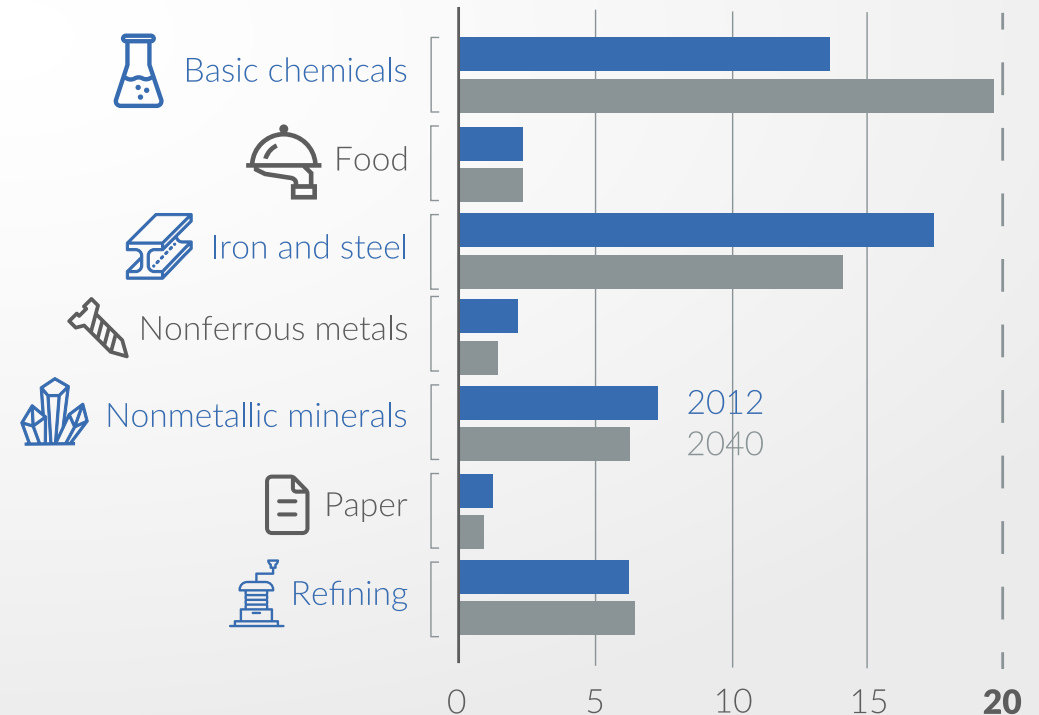


Data centres are predicted to use **20%** of the world's electricity by **2025**, more than any other sector.

Energy-intensive industry shares of **total OECD** industrial sector energy consumption, 2012 and 2040 (% of total)



Energy-intensive industry shares of **total non-OECD** industrial sector energy consumption, 2012 and 2040 (% of total)





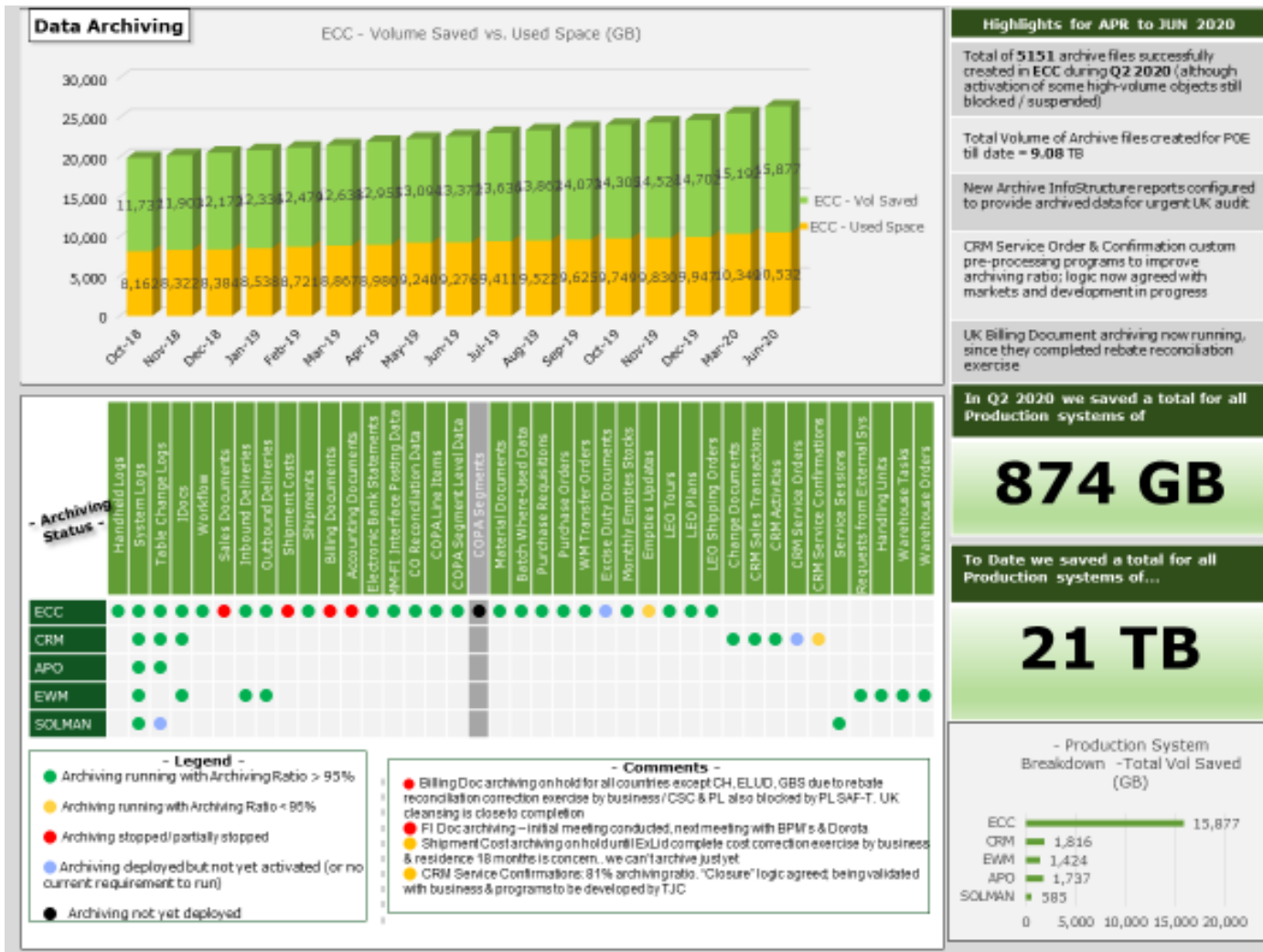
Case Study



Energy & Archiving Savings



Client example:



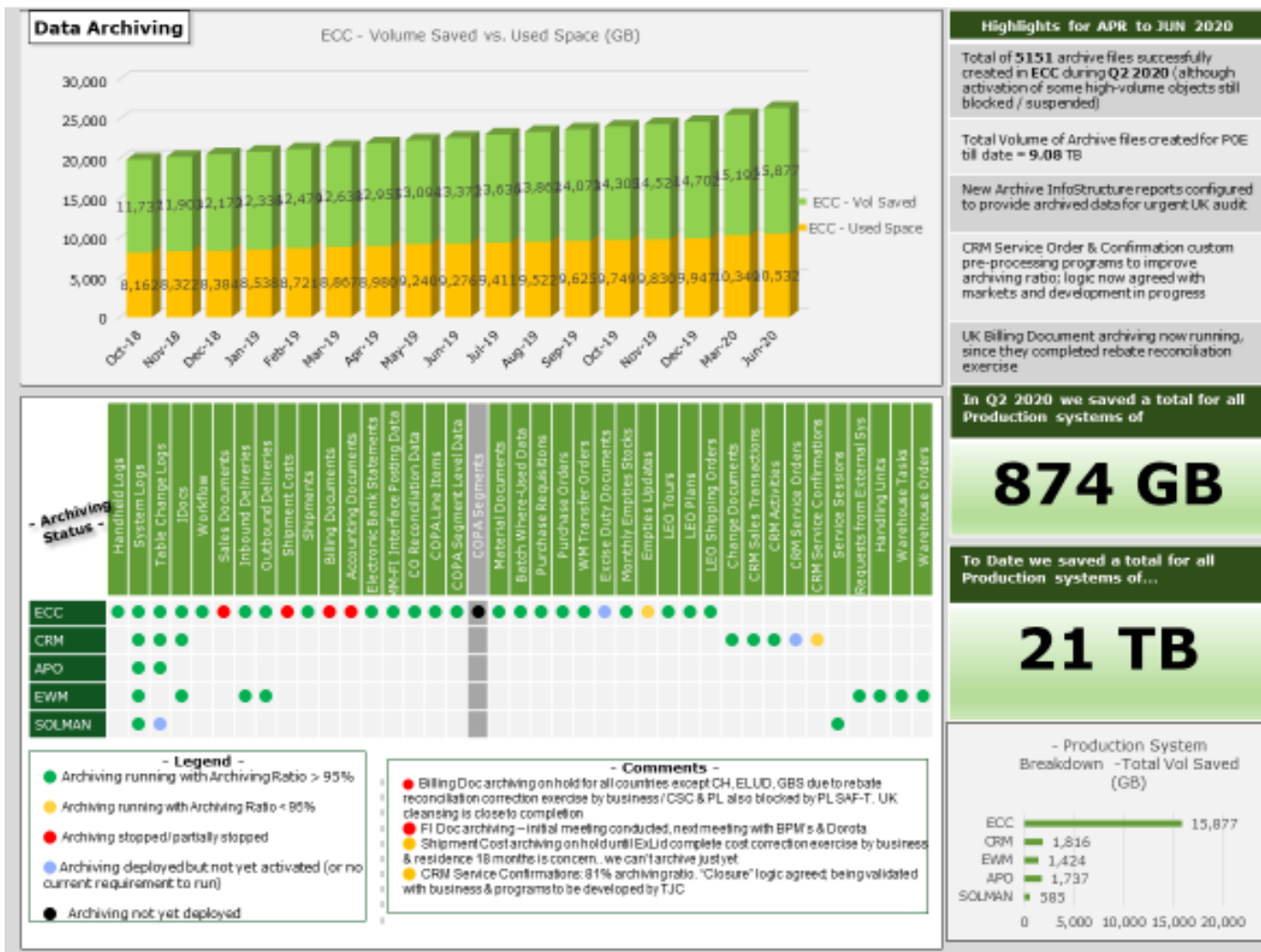
Using their monthly archiving KPI sheet

21TB applying SAP's own compression information, this becomes **16TB** saved in the system

- **16TB** on Production
- **16TB** on DR system
- **16TB** on the PRE-PROD Copy
- **7TB** estimated on other copies

Therefore, total **55TB** is saved

Client example:

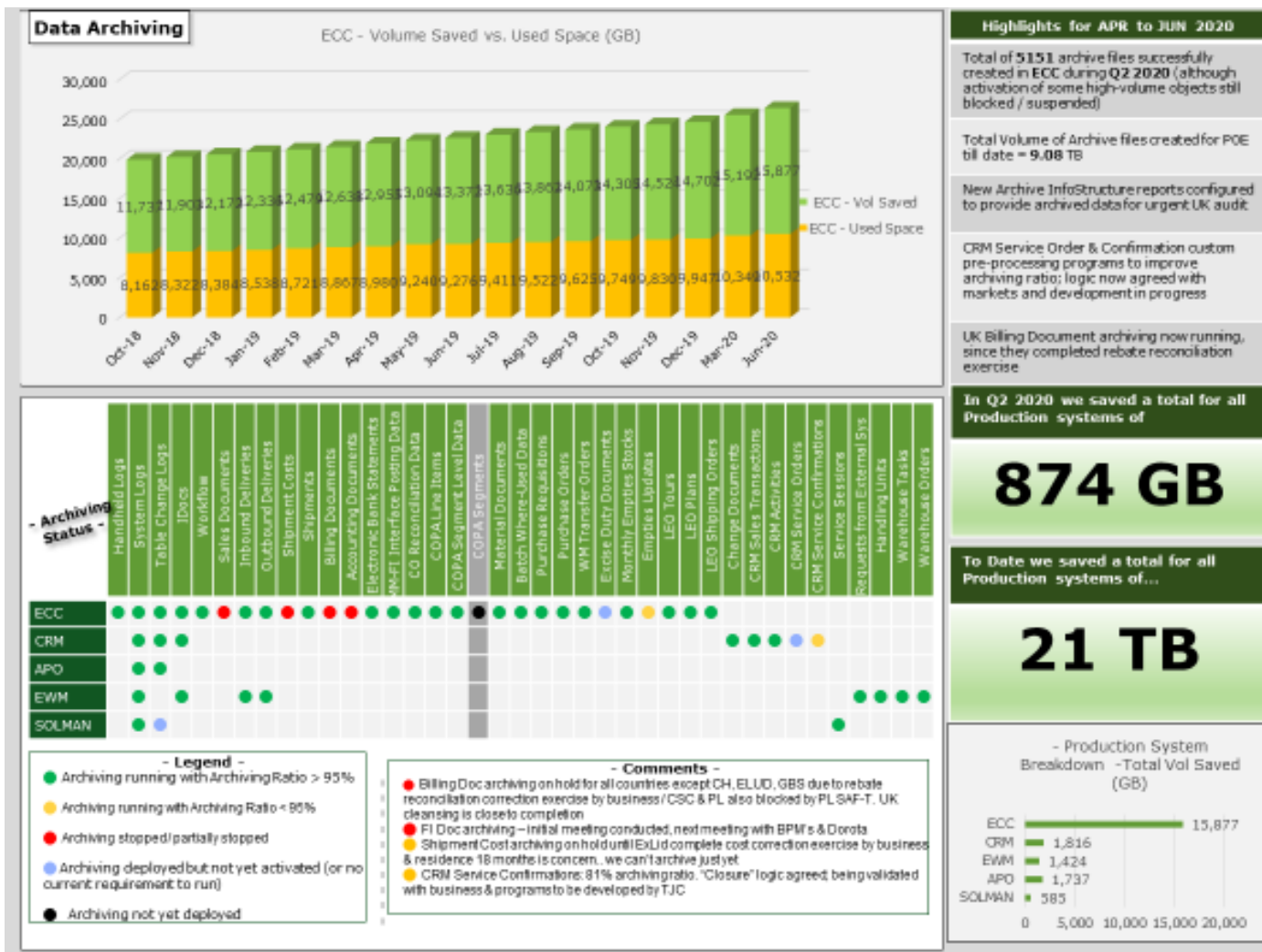


The current environment has **10.5TB** on the live database, which means the full storage is a multiple of **3.5** times across the landscape; that equates to **37TB** which is currently consuming energy.

....And archiving has saved

55TB

Client example:



That's **149%** of the current energy costs saved.

Compared to the status if archiving was not being carried out!

Using standard global pricing

\$.1012 Avg. Comm. Price per Kwh	Power Cost per Disk / Year	BPUs to Cool each Disk / Hour	Kwh per Disk / Year for Cooling	Cooling Cost per Disk / Year	Total Energy Cost per Disk / Year	No. of Disks in 100 TB	Energy Cost Per 100 TB for 1-Year	Total Cost Per 100 TB for 5- Years
Electro-Mechanical								
\$.1012	\$14.50	55.8	143.29	\$14.50	\$29.01	171	\$ 4,959.90	\$ 64,300.52
\$.1012	\$11.46	44.1	113.23	\$11.46	\$22.92	342	\$ 7,838.77	\$ 81,259.85
\$.1012	\$7.03	27.0	69.41	\$7.02	\$14.05	342	\$ 4,805.19	\$ 111,235.95
\$.1012	\$6.57	25.3	64.94	\$6.57	\$13.15	702	\$ 9,228.15	\$ 177,646.41
\$.1012	\$7.11	27.4	70.29	\$7.11	\$14.23	86	\$ 1,223.58	\$ 49,031.90
\$.1012	\$7.03	27.1	69.50	\$7.03	\$14.07	114	\$ 1,603.75	\$ 49,628.76
\$.1012	\$6.50	25.0	64.24	\$6.50	\$13.00	171	\$ 2,223.61	\$ 56,433.07
\$.1012	\$10.02	38.6	99.03	\$10.02	\$20.05	52	\$ 1,042.42	\$ 14,728.08
\$.1012	\$10.52	40.5	103.94	\$10.52	\$21.04	26	\$ 547.04	\$ 11,263.19
Solid State Drives (SSD)								
\$.1012	\$3.59	13.8	35.49	\$3.59	\$7.18	128	\$ 919.65	\$ 321,910.27
\$.1012	\$3.29	12.7	32.51	\$3.29	\$6.58	256	\$ 1,684.90	\$ 342,760.48
\$.1012	\$2.41	9.3	23.84	\$2.41	\$4.83	512	\$ 2,470.58	\$ 356,416.88



2015 Prices

Taking a mid-range figure;
Carlsberg are high-end technology
but this example uses a more
average value

- for 55TB is €27K

assuming 149% in accumulated
savings = €40K

Just in Energy!!!

Using standard global pricing

\$.1012 Avg. Comm. Price per Kwh	Power Cost per Disk / Year	BPUs to Cool each Disk / Hour	Kwh per Disk / Year for Cooling	Cooling Cost per Disk / Year	Total Energy Cost per Disk / Year	No. of Disks in 100 TB	Energy Cost Per 100 TB for 1-Year	Total Cost Per 100 TB for 5- Years
Electro-Mechanical								
\$.1012	\$14.50	55.8	143.29	\$14.50	\$29.01	171	\$ 4,959.90	\$ 64,300.52
\$.1012	\$11.46	44.1	113.23	\$11.46	\$22.92	342	\$ 7,838.77	\$ 81,259.85
\$.1012	\$7.03	27.0	69.41	\$7.02	\$14.05	342	\$ 4,805.19	\$ 111,235.95
\$.1012	\$6.57	25.3	64.94	\$6.57	\$13.15	702	\$ 9,228.15	\$ 177,646.41
\$.1012	\$7.11	27.4	70.29	\$7.11	\$14.23	86	\$ 1,223.58	\$ 49,031.90
\$.1012	\$7.03	27.1	69.50	\$7.03	\$14.07	114	\$ 1,603.75	\$ 49,628.76
\$.1012	\$6.50	25.0	64.24	\$6.50	\$13.00	171	\$ 2,223.61	\$ 56,433.07
\$.1012	\$10.02	38.6	99.03	\$10.02	\$20.05	52	\$ 1,042.42	\$ 14,728.08
\$.1012	\$10.52	40.5	103.94	\$10.52	\$21.04	26	\$ 547.04	\$ 11,263.19
Solid State Drives (SSD)								
\$.1012	\$3.59	13.8	35.49	\$3.59	\$7.18	128	\$ 919.65	\$ 321,910.27
\$.1012	\$3.29	12.7	32.51	\$3.29	\$6.58	256	\$ 1,684.90	\$ 342,760.48
\$.1012	\$2.41	9.3	23.84	\$2.41	\$4.83	512	\$ 2,470.58	\$ 356,416.88



2020 Prices

The world average price is now US \$0.13 per kWh for business users.

That's 29% higher than the 2015 source data

\$52K today!!!

Takeaways: Energy / Archiving savings



STORAGE CAPACITY REDUCTIONS

Carlsberg have achieved savings greater than **€2 Million** on their archiving projects by removing **73TB** into archive



ENERGY CONSUMPTION SAVINGS

Carlsberg has saved **149%** of their current energy consumption based on the **55TB** in to archive, which is **\$52K**



AUDITABLE DATA - SAFE, SECURE, TRACEABLE

Securing data in to archive, prepares it, using the standard **SAP technology**, for long-term retention and retains a clear record of what was done, when and by whom.



LESS DATA; LESS RISK

Archiving/ILM as the key platform underpinning the **IRP** means retention & deletion are enacted to reduce risks of non-compliance to GDPR

Ready for **S/4HANA** ?



DVM: Value Proposition for S4 move



ECC6



EXPERTISE

TJC Workscope



WORK PROCESS

S/4HANA



CONTINUITY

Global DVM Strategy by *TJC Group* with archiving automate **ASC** in ECC, BW, EWM,APO,CRM or Solman

Copy/Paste your DVM strategy with installation of **ASC** on **S/4HANA** whether On-premise or Cloud

Safe license path for **ASC** to **S/4HANA** access to ECC6 archived files & volume growth controlled through archiving automation



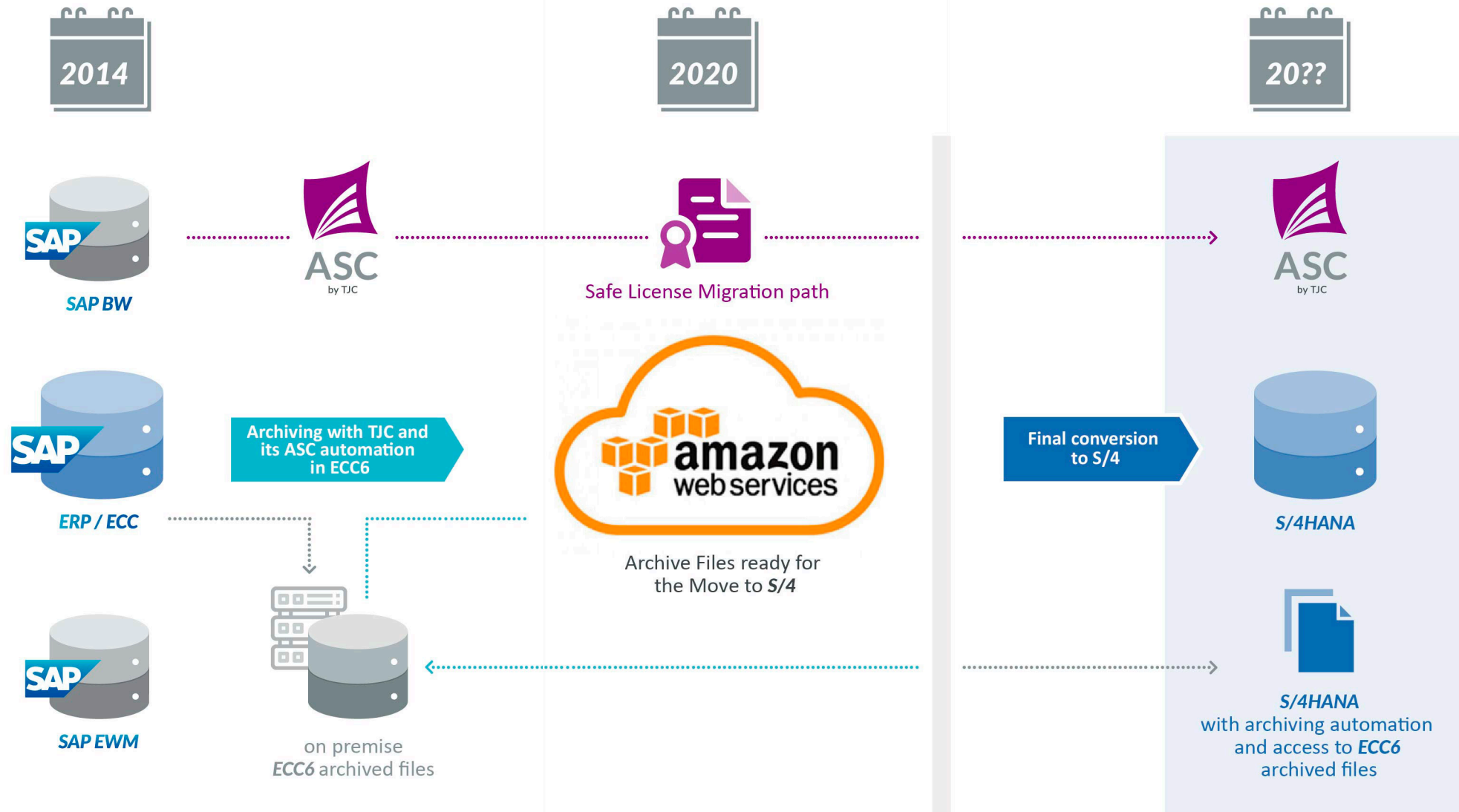
Case Study



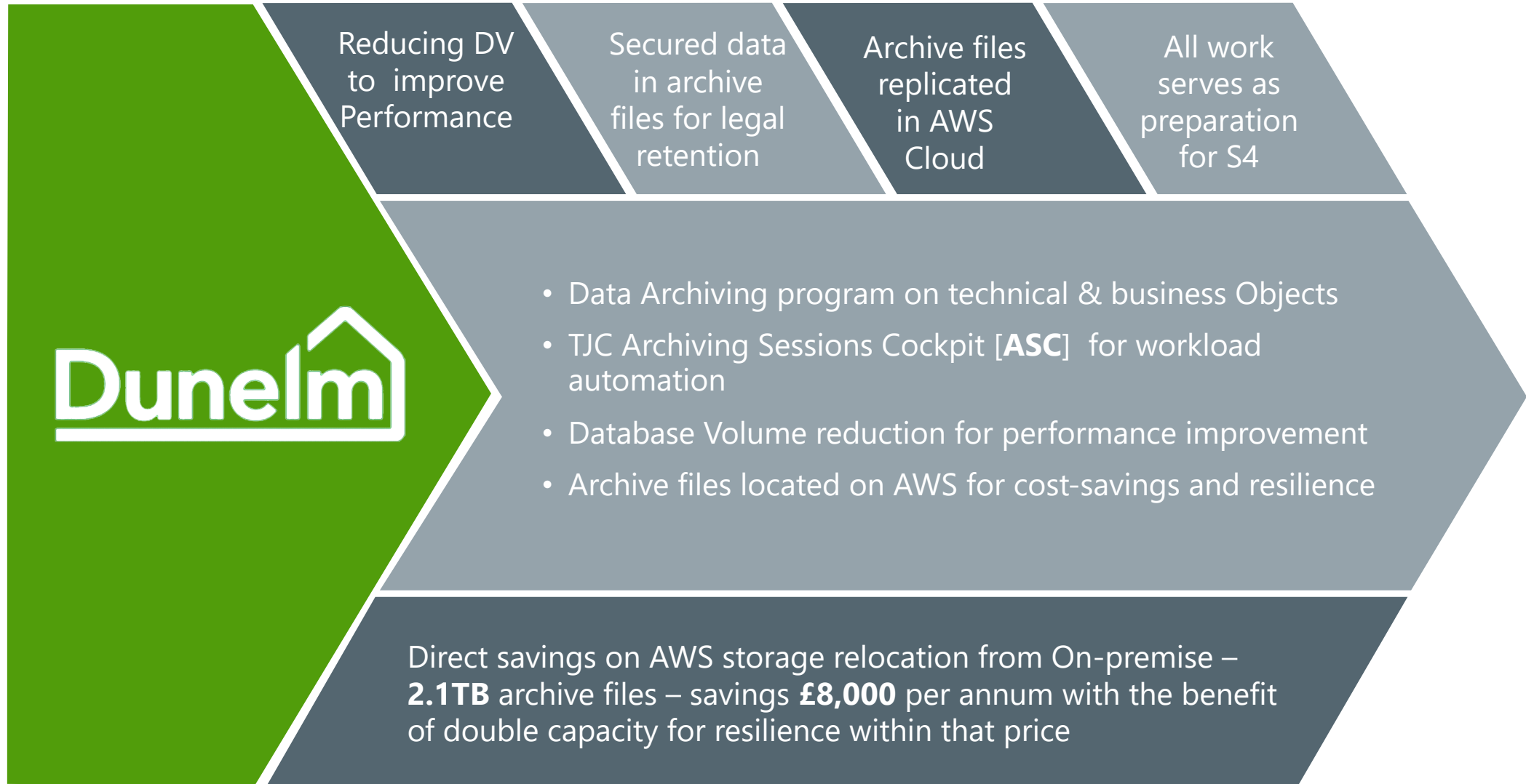
Preparing SAP ECC6 for the Future



Dunelm: Preparing for the move to S4



Dunelm: Preparing for the move to S4



Dunelm: Preparing for the move to S4



Direct savings on **AWS** storage relocation from On-premise:

2.1TB archive files savings

£8,000 per annum with the benefit of double capacity for resilience within that price



Dunelm: Takeaways



DATA ARCHIVING STARTED BY DUNELM

Data Archiving started in-house manually but It was identified they required more specific knowledge & resources to move it forward for greater benefits.



TJC TO STREAMLINE DATA ARCHIVING RESULTS

TJC expertise turbocharged the results by identifying and working on more archive objects and larger volume reductions



GREATER RESULTS WITH THE ASC ARCHIVE SESSIONS COCKPIT

The Big Win: automating manual processes with the Archiving Sessions Cockpit, [an application certified by SAP] reduces the long-term costs



AWS CLOUD STORAGE

Further **reducing costs** and **energy consumption** moving archive files into the cloud and with duplication for resilience.



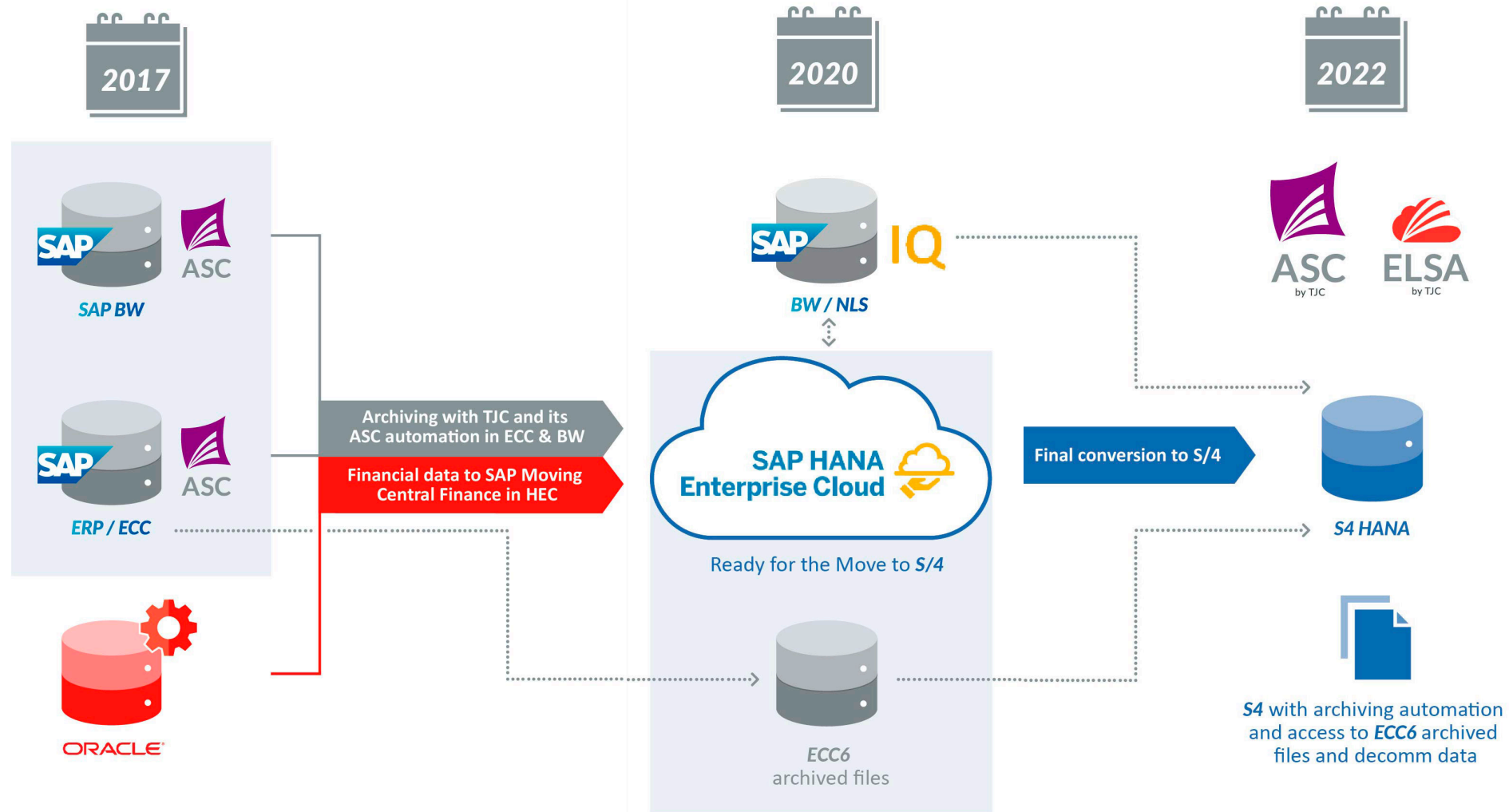
Case Study



Moving to HEC, then S4?



BT: The Move to S4

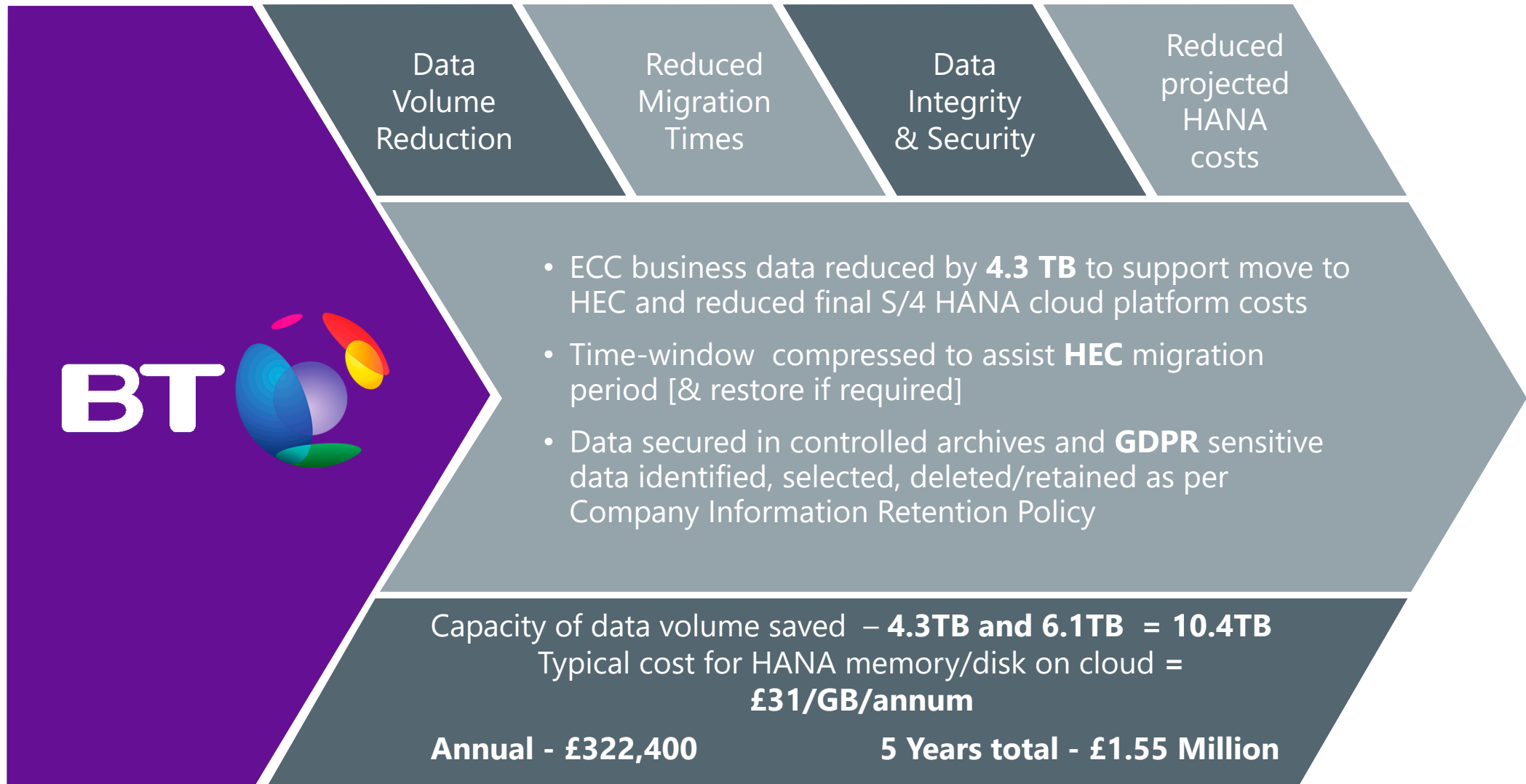




by TJC

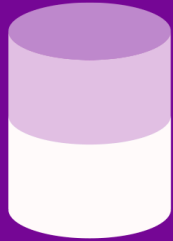


S4 with archiving automation
and access to **ECC6** archived
files and decomm data



BT: The Move to S4

CAPACITY OF DATA
VOLUME **SAVED**



4.3TB and **6.1TB**
= **10.4TB**



Typical cost for HANA
memory/disk on cloud
= **£31/GB/annum**

Annual: **£322,400**

5 Years total: **£1.55M**



BT: Takeaways



DATA ARCHIVING STARTED BY BT TO SUPPORT MIGRATION TIMESCALES

Data Archiving started in ECC and automated to minimize resources and maximise data volume reductions. Data secured, named & traceable for **Tax/Audit/Regulatory purposes**.



GDPR: EXTENDED ARCHIVING WITH ILM OBJECTS TO CONTROL DATA

TJC expertise enables a 'bottom-up' approach to **SAP ERP** systems and select the identified **GDPR** sensitive data for action(s) – Retention/deletion.



BW: NLS ARCHIVING TO MANAGE HANA COSTS IN TARGET S4 SYSTEM

By removing significant data from BW reduces the target system **HANA** requirements and thus the costs – this is a permanent savings year on year as it creates a lower entry point on HANA



TOTAL COST OF OWNERSHIP: ACCUMULATED GAINS

Managing the data volumes in **ECC & BW** reduces **HANA** requirements in the final S4 platform; impacts energy costs, reduces timeframes on back-up/migrations/restores; enables safer **BAU** routines on upgrades, enhancements and transfers.

Final thoughts



Final Thoughts

- **TCO:** Have you considered the aspects like Volume reductions & Energy savings?
- **S/4HANA Platform move:** Is your Organisation considering how to achieve the savings on their HANA memory costs?
 - Preparing ECC ready for S4
 - Migrating over to HANA and then S4



Q&A

Ruben Venter
Senior SAP Consultant



Contact us



KEY: ● Distributors ● Export Network ● Offices TJC Group

www.tjc-group.com



Steve Peirce

speirce@tjc-group.com

+44 (0) 7833 122778

www.tjc-group.com