
TOPCON

Topcon Positioning Systems “Chalk Talk”

Topcon Corporation

- Established in Japan in 1932
- Currently 2 divisions: EyeCare / HeathCare and Positioning Systems (TPS)
- Topcon Positioning Systems:
  - GNSS Software, Hardware & Solutions for Global Construction and Precisions Agriculture Markets, Surveying, Correction Services, etc
  - >1B in revenue in 60+ locations globally
  - ~2000 Employees
  - Cloud Landscape for all upstream & downstream processes: Sales, Commerce, PLM, Service, HR, Analytics, Planning, Subscriptions

History / Context 2016

- Corporate HQ in Livermore CA went live on SAP ECC in 2011
- Multiple historical acquisitions left independent
- Transition of EU subsidiaries from corporate parent to Positioning Division, all legacy local separate ERPs
- Portions of our channel to market (dealers) were acquired
- Decentralized, federated decision making for many of the acquired locations

2-Tier Strategy in 2016

Topcon 2-Tier ERP Architecture

Tier-1 “Owned license”

- Corporate or Regional office
- Larger scale manufacturing
- Complexity that may drive business case for customizations
- Scale to make complexity worth supporting
- B2B, B2B2C

- ➢ Allow each side to independently prioritize
- ➢ De-coupled – Each tier not required to participate in regression and tests of other tier
- ➢ Each tier can pursue purpose fit capability
- ➢ Cloud pushes localization compliance on vendor. Ex: tax, e-invoicing, etc

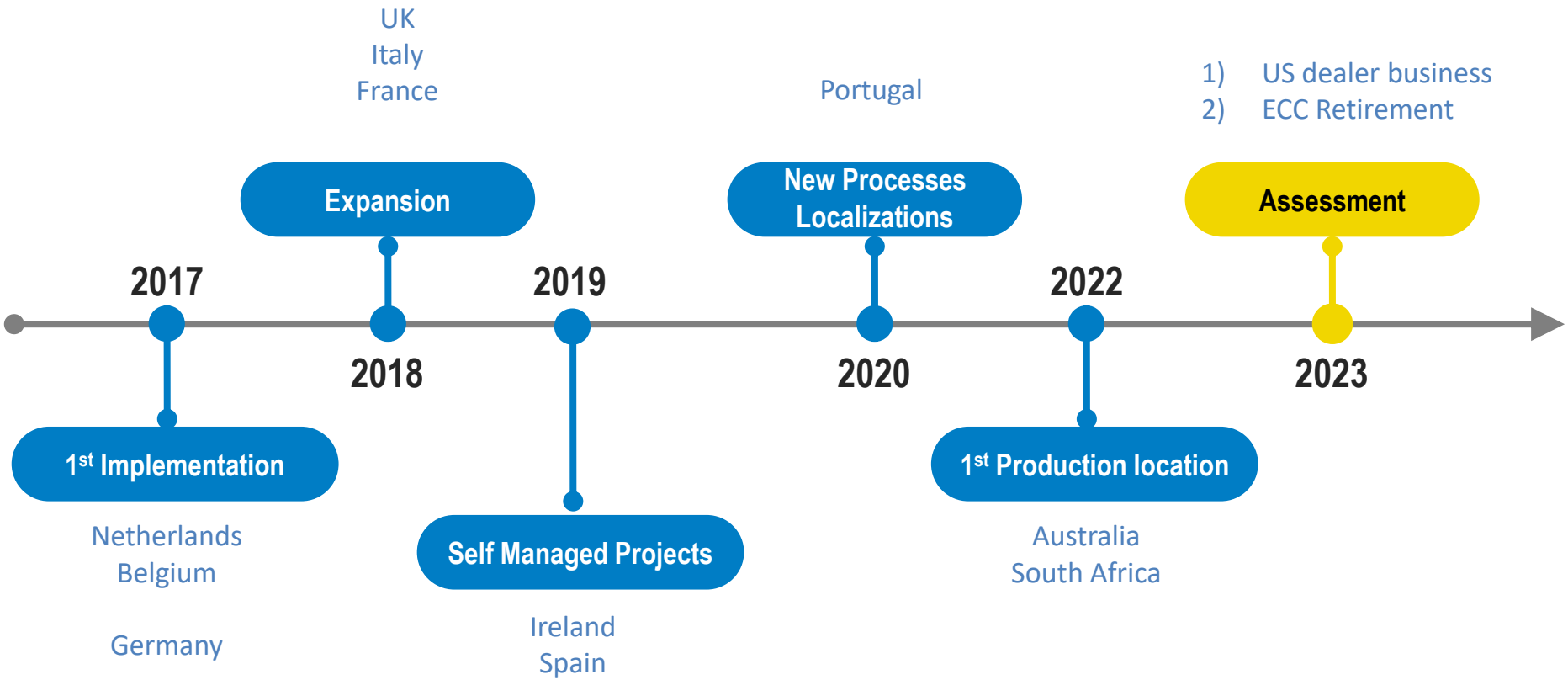
(-) Complexity of landscape and Integrations

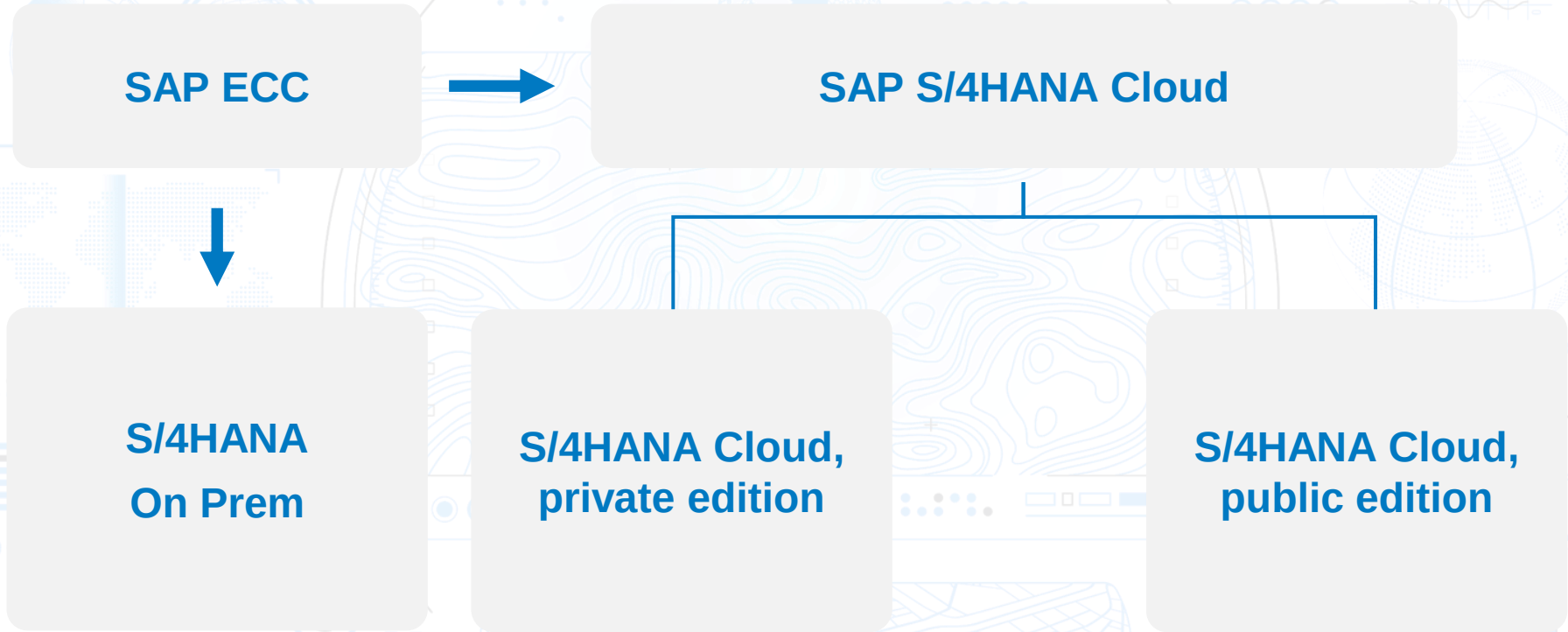
(-) Monitor and regulate that common process remain common and do not deviate without justification

Tier-2 “SaaS”

- Sales, Marketing, Service, Finance
- Small scale or no manufacturing
- Standard processes - changes can be delivered and/or absorbed quicker
- Easy standardization – Smaller size and processes are cost effective
- B2B, B2C

Tier 2 S4 Public Cloud: Timeline




SAP ECC
SAP S/4HANA Cloud
S/4HANA
On Prem
S/4HANA Cloud,
private edition
S/4HANA Cloud,
public edition

Considerations On Prem vs Cloud

Run on customer standard		Run on industry standard
Tailored processes	**Business processes**	Standard processes
At Customer pace	**Speed of innovation**	Available at industry pace
Full Control	**Autonomy/Control**	Consume what is available and only build/add what's not
Topcon or consulting staff required to know customer specifications	**Level of Resource**	Resource scalable, lower training and sustaining costs

Summary of Decision Factors

Hypothetical weighting of Flexibility vs Scalability

Counter argument is flexibility can be met through integrating to boutique applications

Impact of Change Management & Risk

Public cloud changes 50 years of business <-> IT way of working. There are only high level requirements like “we need cash application functionality” or “we need ATP” and then we use what is available, with the configuration options that are available

Thoughts about loss of visibility on operations: “If it’s down, we have to rely on vendor updates”

How much do we weight the talent availability and cost issue?

Global shortage

- Technology and science jobs in the United States outnumbered qualified workers by roughly 3 million as of 2016, according to data from Netherlands-based human resources consulting firm Randstad NV. **By 2030**, there will be a global shortage of more than 85 million tech workers, representing $8.5 trillion in lost annual revenue, according to management consulting firm Korn Ferry, based in Los Angeles.
- Among the economies expected to be hit hardest are Brazil, Indonesia, and **Japan**, which could face shortages of up to **18 million** workers apiece, according to Korn Ferry's projections. **The United States and Russia are expected to be short 6 million workers each, while China could face a deficit of 12 million.**

ASUG 2023 Pulse of the SAP Customer Research

Key Findings

Lack of knowledge and skills continues to be a roadblock

Top Challenges

Maintaining knowledgeable staff/turnover	Budget	Integration	Master data maintenance & governance	Internal skills to manage new products
37%	33%	32%	32%	30%

Topcon add

Why Topcon is considering Public Cloud for HQ/Mfg:

- **Talent shortage isn't going to get better**
- **Most of our business is standard**. The key IP areas are already in separate applications like Manufacturing Test, License activation management. There is no current strategic reason for customization of order process and management.
  - We could stay standard on prem/private cloud, but this requires a highly mature structure for governance
- **Some Innovations will be cloud only**(4^{th}+ gen AI) or **cloud first**

(-) Opex Licensing costs will vary more, price increases, consumption models, etc

(-) Fastest, lowest risk to HQ would be to keep what we have and upgrade mostly as-is "Brownfield". However that would mean keeping older process models that may not scale

Today

Complexity Juggling Act: Unifying the Tiers

Technical

- Future of Solution Manager
- Testing Tools
- Data Archiving & Exfiltration
- Cloud ALM
- Technical Integration landscape and skills

Business

- WM vs AWM vs EWM, Manufacturing, SCM
- 3rd Party Integration solutions, keep or change
- Transition periods of 1-3 years where common functionality like Stock Transfer Order is disconnected
- Business Process Change Management with (x) Applications * (y) Releases…..

General thoughts

- Standardization ***in any solution*** will likely need to be tops down approach
- We believe the challenge is not “Innovation Creation”, but rather “Innovation Consumption”
- Standardization both solves complexity <custom code> and adds complexity <integration architecture>… but the 2nd one also gives flexibility and speed
- **ERP as a Service** means that operations, communication and commercial agility are now on equal footing with functionality. “Up, Fast, Secure”


TOPCON
For Work That Matters™

Questions?