Migrating to SAP Suite on HANA on AWS

Fender Musical Instruments' Road to HANA *with a detour for COVID

Quick Fender Facts

- Founded in 1946 by Leo Fender
- Produces and sells electric guitars, acoustic guitars, bass guitars, ukuleles, amplifiers, effects units, accessories, and lifestyle products
- Global manufacturing, procurement, and distribution
- HQ in Arizona with operations in California, Mexico, the UK, Japan, Australia, and more
- SAP is utilized for finance, order to cash, supply chain, manufacturing, QM, BW, and more
- The IT team is lean but highly experienced

SAP Upgrade/Migration Goals

Key Goals

- Address the challenges and limitations of the current SAP landscape.
- Deliver significant benefits (performance, scalability, user experience, etc.)
- Support rapid growth of the business for many years to come.
- Minimal business disruption.

The Decision – Suite on HANA or S/4 HANA?

Key Factors

- 1. Addresses Key Goals
- 2. Risk/Complexity
- 3. Business Disruption
- 4. Cost/Benefit
- 5. Timeline, resources and competing needs
- 6. Project ownership IT or Business Driven Project

SAP Upgrade/Migration Summary

Changes to the SAP landscape

1. SAP ECC (PRD) Version: From 6.0 EHP4 to 6.0 EHP8 on HANA 2. SAP BW (BIP) Version: From 7.02 to 7.5 on HANA 3. SAP Portal: All new component 4. SAP GUI for Windows: From 7.20 to 7.60 5. Operating System: From Solaris to SUSE Linux 6. Database: From Oracle 11.2 to HANA 2.0 7. File Management: From Local SAN to AWS FSX From hosted data center to AWS Cloud 8. Location:

Benefits Delivered

- **1. Performance:** Transactional operations in PRD are slightly faster, but some long running jobs and reports are much faster, averaging 30% to 50% of previous runtimes. Improvements in BW are even more significant (up to 10x).
- 2. Scalability: The nature of the AWS platform allows us to bring online a new/additional application server in as little as one hour. This flexibility can be leveraged to handle peak demand periods like financial closing or to create a sandbox for testing changes.
- **3. New capabilities:** The new versions of SAP introduced new technologies and new features. While these capabilities were not leveraged at go-live, the IT team is now identifying opportunities and using these capabilities to improve functionality and the user experience.
- **4. Security:** Supports the latest and most secure communication protocols. Several security vulnerabilities were eliminated by the upgrade.
- 5. Support: All new component versions are within standard support and should remain in support for the near future.
- **6. Hardware:** Current hardware for the SAP systems was due for replacement. The new hardware should improve reliability and reduce business risk due to component failure.
- **7. Europe on SAP:** The all-new landscape provides an ideal platform to unify operations on a single ERP.

Challenges Encountered

1. Conflicting Guidance:

SAP guidance vs. peers and independent research.

- SAP guidance makes it seem like S/4 HANA is the only way to go.
 Very few companies with mature SAP installations have migrated to S/4 HANA.
- Allow enough time for research, use your network, and attend ASUG meetings.

2. Finding the right tools: Tools can save 50% to 80% (time/cost) and reduce risk.

- SAP tools and services HANA sizing, HANA readiness, etc.
 Leverage 3rd party change management and test automation. We used Panaya.

3. Finding the right partners: Identify the help you need to be successful

- Even an experienced SAP team will have technical, functional, or administration gaps with respect to the future state.
 Migrating to the cloud and optimally architecting an SAP cloud landscape should not be attempted without an
- implementation partner.

4. Competing business needs: It was business as usual in most respects The needs of the business didn't slow down during the SAP upgrade and migration

- Allow for resource limitations (IT and non-IT) when creating the project timeline

5. Cutover duration:

Go-live cutover took longer than originally expected; 60+ hours

- Perform multiple mock migrations to minimize risks and surprises.
- Upsize servers minimal cost relative to benefit
- "Double Upgrade" was a Fender specific challenge. EHP4 \rightarrow EHP7 \rightarrow EHP8

6. Supporting the new landscape: Is your team capable/prepared? With so much focus on "getting there" don't forget about support and maintenance post go-live. Add skills to the team through training, hiring, a 3rd party, or some combination of all three.

7. A 100% Remote Team: COVID!!!

COVID-19: Executing an SAP upgrade and migration 100% Remote Project Impacts

- For the first few weeks, not much changed. We were still in the research and planning phase.
- Became a Zoom expert and built up a unique collection of backgrounds.
- Forced a higher frequency of scheduled meetings and updates during execution and testing
- Testing printers, scanners, and other connected hardware was limited and required extra planning
- All training was done remotely with how-to guides, recorded instruction, or small Zoom sessions.
- No "war room" for trial go-lives or the actual go-live. This was probably the most difficult and challenging impact. There was a persistent and legitimate concern that when it came time for a critical handoff, the key person might be asleep, their internet might be down, or some other time-line affecting issue could arise.
- No post go-live "walk around" checking on users. Had to rely on tickets, emails, and calls.

Summary and Other Thoughts

Looking back, the project and go-live were a success. We achieved our key goals, completed the production cutover within the necessary window (barely), and the new landscape is delivering the benefits detailed earlier.

Moving to Suite on HANA instead of S/4 HANA was the right call. It solved our most critical needs. The change to virtually every component of the SAP landscape was a huge technical undertaking for the whole team. It was challenging, but it can be done.

An upgrade to S/4 would have been much more complex and could have been delayed or badly impacted by the sudden, fully remote environment induced by COVID.

Questions?