AWS
re:Invent

ENT237

Transform your enterprise using AWS experience-based accelerators

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Consider this

15
YEARS

The average lifespan of an S&P company was 67 years in the 1920s. It's 15 years today.

Increased pressure →

90
PERCENT

Almost 90% of enterprises have a cloud-first strategy.
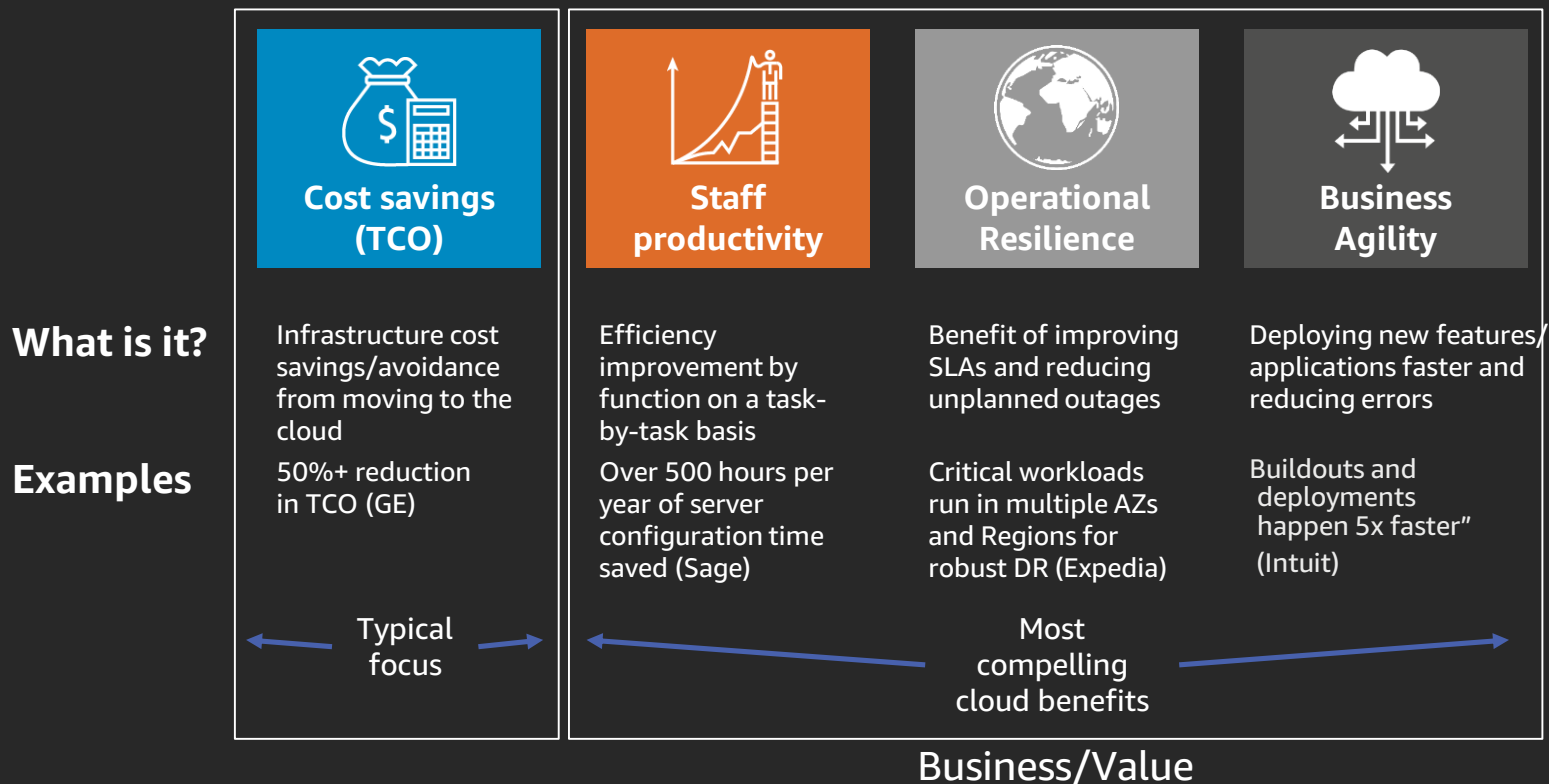
2/3

Maintenance eats 2/3 of tech budgets, sidelining human capital on non-value-added work.

← **The C-suite business value gap** →

Migration to AWS creates value beyond cost savings

	Cost savings (TCO)	**Staff productivity**	**Operational Resilience**	**Business Agility**
What is it?	Infrastructure cost savings/avoidance from moving to the cloud	Efficiency improvement by function on a task-by-task basis	Benefit of improving SLAs and reducing unplanned outages	Deploying new features/ applications faster and reducing errors
Examples	50%+ reduction in TCO (GE)	Over 500 hours per year of server configuration time saved (Sage)	Critical workloads run in multiple AZs and Regions for robust DR (Expedia)	Buildouts and deployments happen 5x faster" (Intuit)

Typical focus ⟷

⟷ Most compelling cloud benefits ⟷

Business/Value

Enterprises have different metrics and decision mechanisms for each silo

Old-IT decision mechanisms are one-way doors

And because cloud is new, one-way-door decisions require assumptions, creating demand for more analysis for every silo and every project

+ Business value	← No lighthouse reference
+ Total cost of ownership	← Assumption
+ Return on investment	← Assumption
+ Cost to achieve	← Assumption
+ Savings	← Assumption
+ Operational efficiencies	← Assumption

= **Business case based on assumptions**

When enterprise realize this, they ask us for a two-way-door prescriptive approach using AWS best practices to replace assumptions with insights
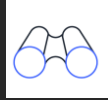
"To get insights, you need to experiment."

Pieter Notelaers, AXA Belgium – Head of Cloudification, AWS NY Summit 2019

Essentials for accelerating cloud migration

Executive sponsorship

Stakeholder alignment

Break silos and involve other teams, including security

Learn by experience

Two-way-door decisions

Migrate with operations in mind

Be ready to tweak the approach

What is an experience-based acceleration party (EBA)

2–3 days immersive, learn-by-doing customer engagements that help enterprises address significant blockers and critical path items to cloud adoption and migration

- Learn by experience

- Waterfall project-based focus to iterative agile-based execution

- Long-lead analysis changed to actions

- Create and deliver patterns that help customers achieve transformative business outcomes

- Customers change the way they work—e.g., legacy siloed teams to cross-functional empowered teams

EBA dashboard—April '19

Participants with an overall positive feeling

80%

🙂 25 😐 5 🙁 0

Big tickets accomplished

12

work in progress   4

Secure enterprise-grade landing zone features

5

work in progress   2
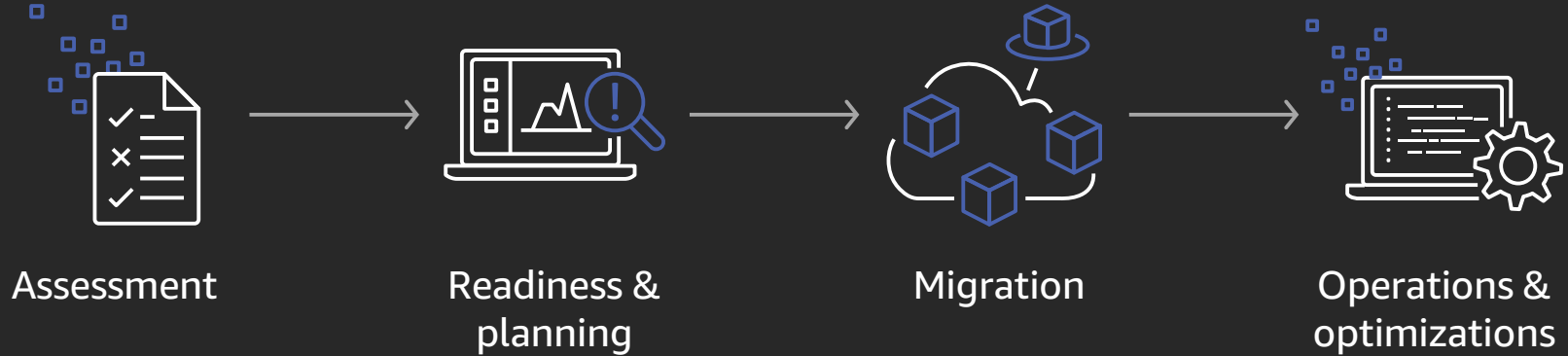
Business solution
AI—Recours

80%

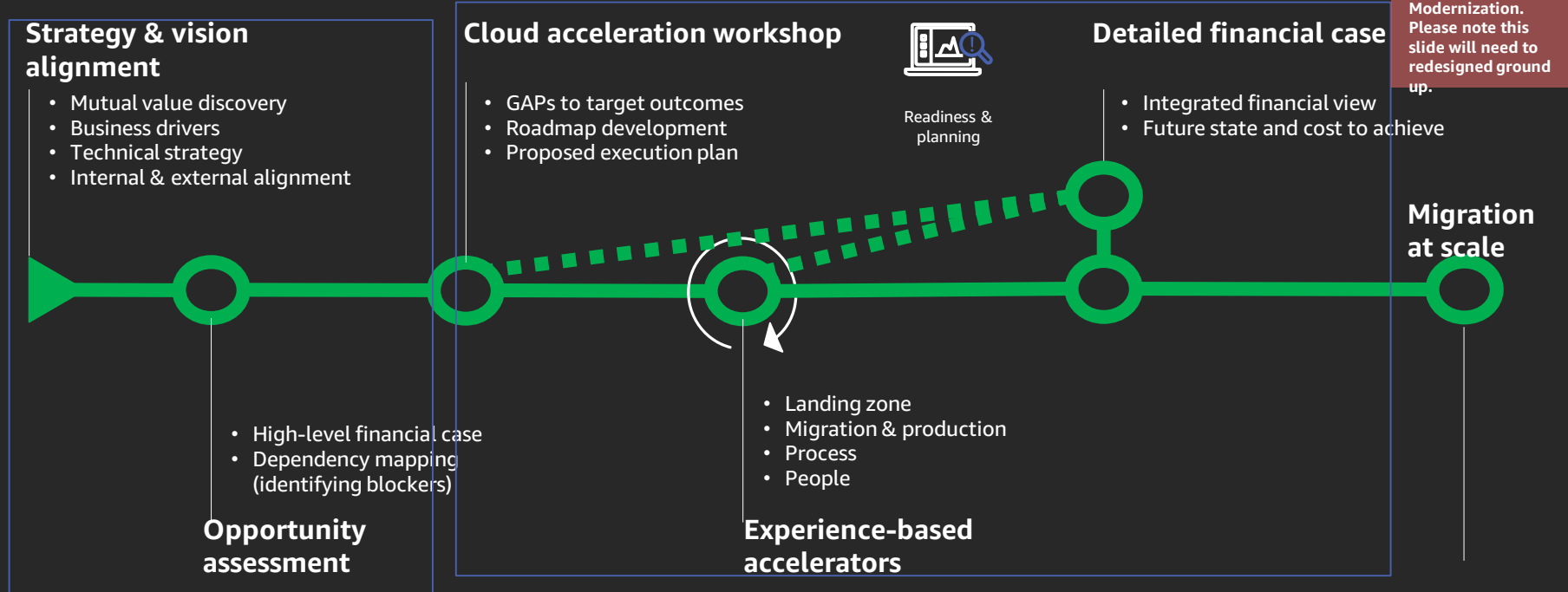Business solution
AI—Smartmail

100%

Business solution
ERM

80%

Migration process

Assessment → Readiness & planning → Migration → Operations & optimizations

Experience-based acceleration flow

Assessment

Strategy & vision alignment

- Mutual value discovery
- Business drivers
- Technical strategy
- Internal & external alignment

Cloud acceleration workshop

- GAPs to target outcomes
- Roadmap development
- Proposed execution plan

Readiness & planning

Detailed financial case

- Integrated financial view
- Future state and cost to achieve

Migration at scale

- High-level financial case
- Dependency mapping (identifying blockers)

Opportunity assessment

- Landing zone
- Migration & production
- Process
- People

Experience-based accelerators

How do we do this?

"By throwing a party"

"EBA helped us in identifying our process, people, and system bottlenecks, elevated them, and in three days let us subordinate our other tasks to them. Our teams were stuck in a holding pattern; working across teams, together, they did more in three days than in the prior three months in some cases. It unequivocally demonstrated the power of AWS to us."

Cameron Etezadi

Chief Architect, SAP Concur

aws

SAP Concur migration party

Fast facts

- Founded early '90s
  - Cloud-only since 2001
  - Acquired by SAP in December 2014

- 48K customers in 150+ countries

- Used by over 75% of Fortune 100 & Fortune 500 companies

- Available in all the top 10 countries for business travel

- 61M+ end users

- More than 2M unique reports in SAP Concur Analytics

- 336M billable transactions in the last four quarters, representing over $136B of customer expenses

SAP Concur

A single busy day* with SAP Concur

- More than 272K trips booked

- More than 747K expense reports processed

- More than 66K expense reports audited

- More than 82K invoices processed

This generates 1+ petabytes of data to maintain, not including all the metadata about the platform (logs, metrics, derived fields, pub/sub events)
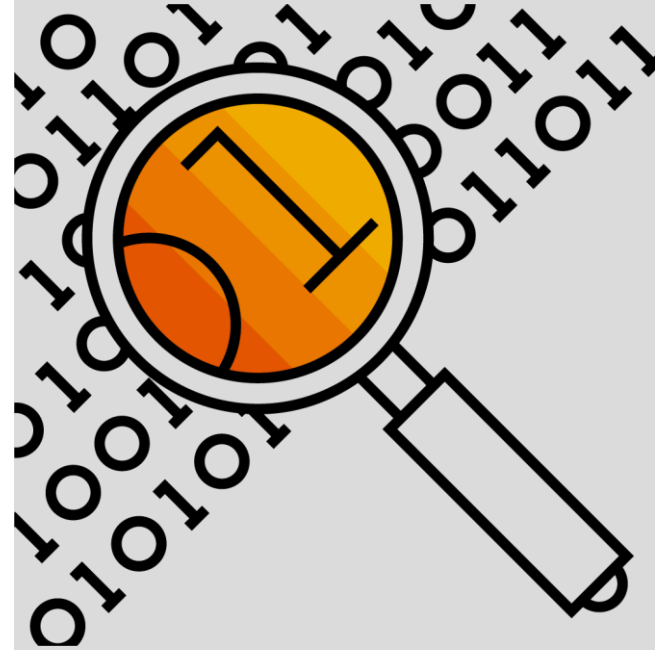
Q2 2019:

SAP Concur C·

Pre-history: self hosting…

Outdated infrastructure:

- Three-tiered model (web, middle tier, RDBMS)

- Multiple languages and platforms from M&A

- Architecturally broken techniques
  - Stored procedures and triggers on the database(s)
  - Business logic in SQL
  - Business logic in UI

Even more bad ideas:

- ETL jobs

- Shared data stores

Getting Stuck—Doing it on our own

- Multi-year AWS migration process on our own with little success
  - Operations as a blocker
  - Co-Lo lift-and shift methodology
  - Corporate policy mistakes, especially around security
  - Fear and obstruction as a core skill

- Lack of forcing functions
  - Requirements misinterpretation
  - Public Sector customer contract
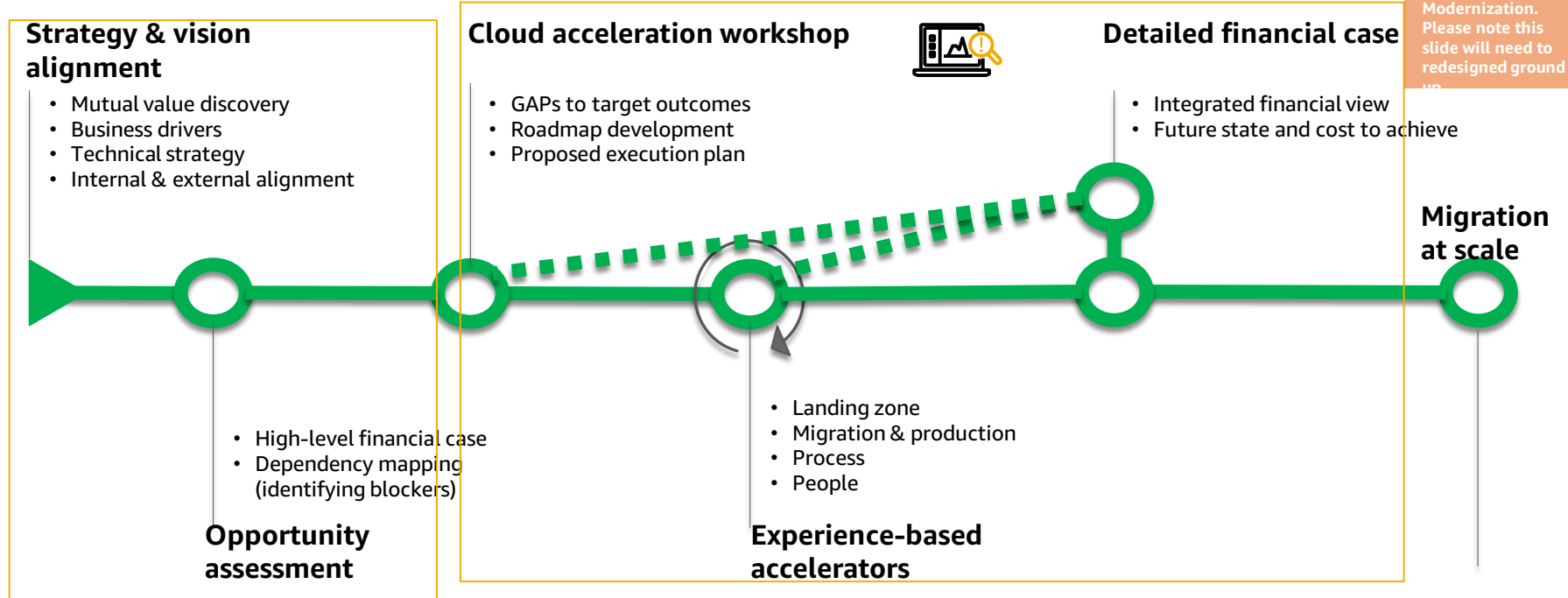 - Corporate cultural blockers

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Choosing the EBA

- Perfect storm
  - Leadership changes
  - Public sector scenario as a forcing function
    - Ab initio environment
    - Date-driven
    - Clear requirements
  - Org structure changes

- Fear and self-doubt persist

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Experience-based acceleration flow

Strategy & vision alignment

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Experience-based accelerators

What was accomplished as part of the EBA

- 9 days (3x3)
  - 25+ teams (platform, security, network, services, automation, etc.)
  - 10+ teams "self-selecting" outside the cadre

- 19 services deployed (travel, core, spend, mobile platforms)

- 400+ work items (backlogs to move 19 services to AWS)

- 60+ blockers removed (security, platform, automation, process)

- 150+ cowbells (success celebrations)

- 30+ gongs (significant accomplishments)

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Top 3 blockers driving scalable patterns from EBA

Blockers
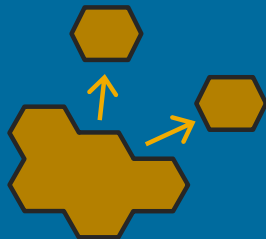
Monolith migration

(1)

Patterns

Break up the work

Monolith to miniliths

Security

(2)

Zero touch deployment

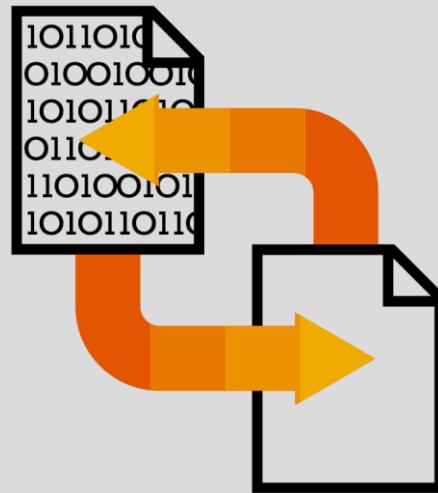Automate everything
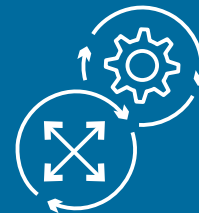
Legacy and regimented process

(3)

Simplify and automate bureaucracy

From start to end of process

Monolith to minilith

- 12-factor applications

- Microservices, containers, K8s

- Removal of MSSQL and other RDBMS systems

- Isolation of data stores to become shared-nothing

- Data center closures

- Least-privilege access control

- Stronger encryption

- API-first (and only data in motion matters)

Zero touch

- Forced by contract

- SRE vs. DevOps model

- Complex landscapes
  - Data residency
  - Isolation of tenancy
  - Security (citizenship)

- Desire for provable compliance

- Automation of everything

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Simplify and automate process bureaucracy

- Any ticket-based process is a big red flag

- Design for self-service

- Orient around workflows
  - Technology is a "detail" of the API contract

- Subordinate to the bottleneck
  - Moving tables
 - Decision-makers in room

What makes a really good EBA party?

- Everyone is invited (group of peers that might not always interact)

- In-person presence

- Self-contained (people, food, drink, supplies)

- Interactions are different/personable (face to face, outside of SOP)

- Celebration (successes, outcomes)—cowbells, gongs, smoke machines
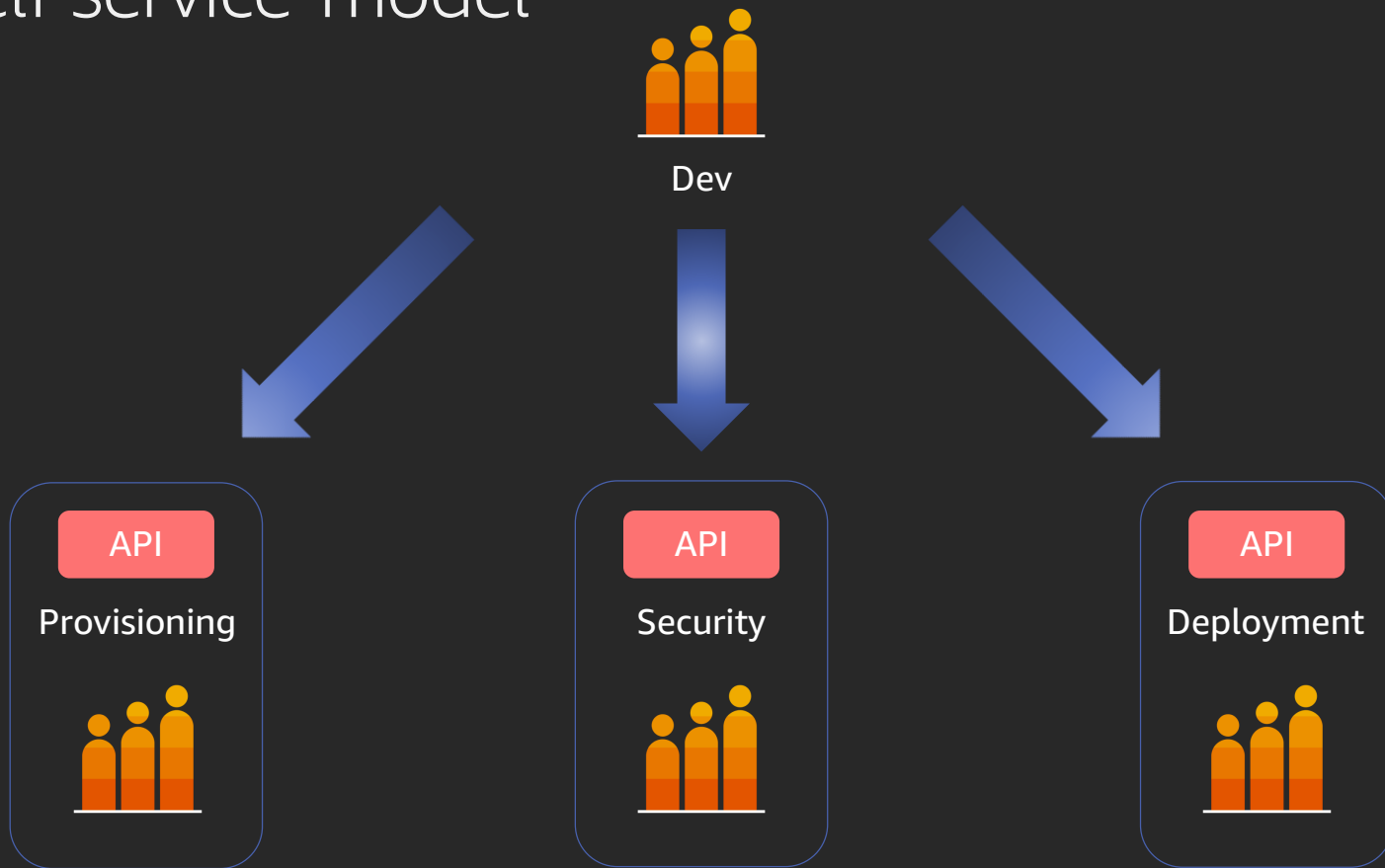
If it's a great party, word of mouth enables the next one!

From existing mode of tickets
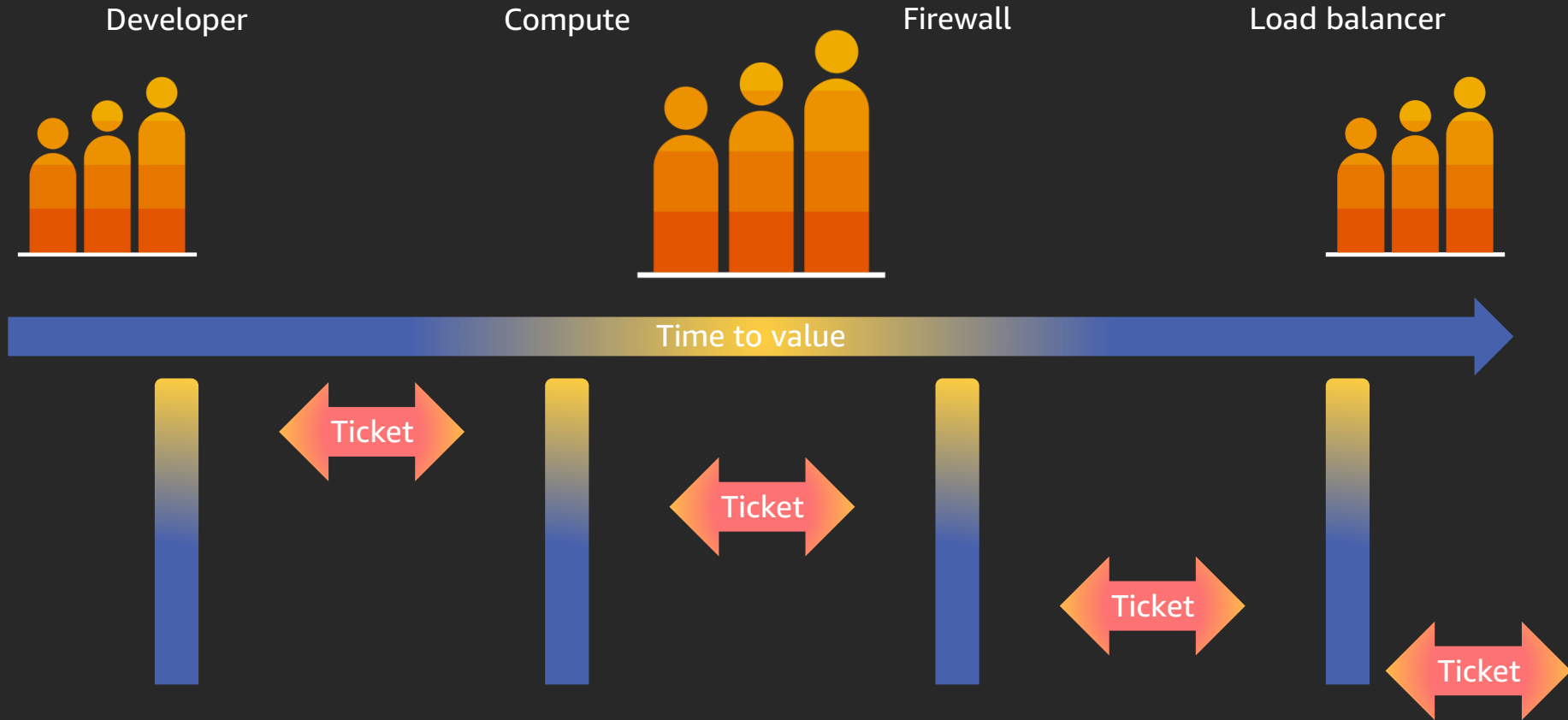
To self service-model

With multi-layer impacts powered by EBAs

| Specialized skills | Culture | KPIs | ← People |

| Enables scale/cross-team | Optimized for KPIs | ← Process |

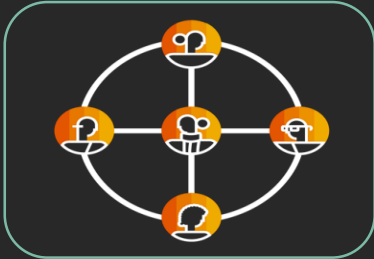| Underpins process | Philosophy-specific | ← Systems |

Kaizen in sheep's clothing
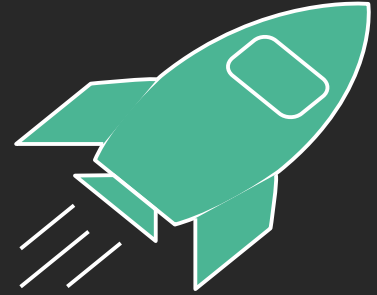
Invest in people

Rethink process

Adopt new systems

Accept the journey

Enabled by EBA

"EBA creates the environment and inflection point to bring people together, work collaboratively, and make rapid progress in areas where we had significant experience gaps. Thanks to the EBAs, we delivered a functioning AWS environment on schedule to our implementation teams; this was a task many thought impossible. Without AWS and the EBA process, they would've been correct!"

Michael Weingartner

Chief Technology Officer, SAP Concur

aws

EBAs at scale

Tenets of EBAs

- **Cross-functional** teams working together with a defined common outcome and shared time frame

- Employ "**Hands-on experience-based**" activity and "iterative" approaches to **accelerate learning and build confidence and trust**

- **Enable an interaction** model that changes the way the you build, collaborate, and problem solve

- Incorporate an overall process that is **sustainable** *at scale*

- **Involve sponsors to** become escalation points

Change the way you work

How do plan for an EBA?

- Pick a no-regret critical path item

Landing zone **Operating model** **Skills** **Apps** **Organization** **Migration** **Finance** **Business case** **Innovation** **App modernization**

- Align sponsors and stakeholders on scope and objectives
- Identify cross-functional teams to work on a single threaded objective
- Identify a venue to host the party
- Have fun in the party and build/migrate applications in 3 days

EBA provides a platform to accomplish outcomes "together"

Actions to get started

1. Identify stakeholders in your organization

2. Identify your blocker/applications for transforming on AWS

3. Engage your AWS account manager to plan for an EBA

4. Get ready to party and move applications to AWS

5. Harden and repeat

Recommended sessions

ENT226 – Increase business value through modernization

ENT218 – Executing a large-scale migration to AWS

ENT307 – Strategies and tools to migrate hundreds of applications

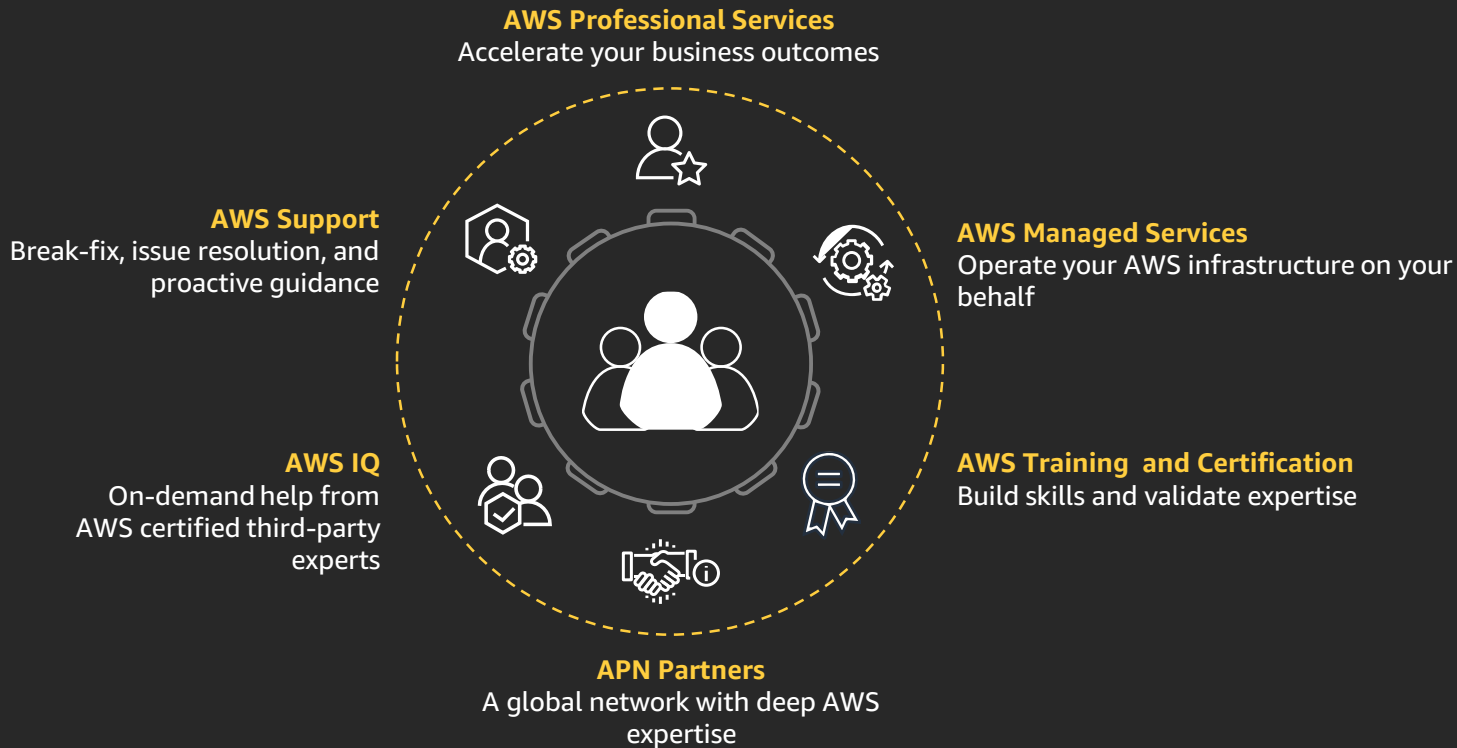ENT311 – Accelerate migration planning using automated processes

ENT313 – Migrate to AWS using CloudEndure and AWS Migration Hub

Workshop

ENT304 – Build a migration factory with CloudEndure and Migration Hub

AWS customer enablement
Migrate and build faster in the cloud

AWS Professional Services
Accelerate your business outcomes

AWS Support
Break-fix, issue resolution, and proactive guidance

AWS Managed Services
Operate your AWS infrastructure on your behalf

AWS IQ
On-demand help from AWS certified third-party experts

AWS Training and Certification
Build skills and validate expertise

APN Partners
A global network with deep AWS expertise

AWS Training and Certification for the enterprise

Resources to help your organization build cloud skills and achieve business objectives

Cost savings (TCO)

Staff productivity

Operational resilience

Business agility

Comprehensive skill development plan for broad cloud fluency

Digital training

Classroom training

AWS Certification

Enterprise resources

Talent pipeline

Visit aws.amazon.com/training/enterprise

aws training and certification

Thank you!

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Please complete the session survey in the mobile app.

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