TARGETING 100 MILLION USERS:
Continuous Improvement at TODO1

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TODO 1

OUR BUSINESS MODEL

TODO 1

WORLD-CLASS OPERATION EXCELLENCE

CLIENTS ADOPTION AND BEHAVIOR

TODO1 BUSINESS MODEL

EXPERTS IN MEMORABLE EXPERIENCE DESIGN

BUSINESS-RESULTS BASED MODEL

EXPERTS IN INTEGRATION

B4B MATRIX

CLEAR FOCUS ON LATIN AMERICA´S COMMUNITIES, BOTH LOCALLY AND INTERNATIONALLY.

CONSISTENT INVESTMENT ON WORLD-CLASS-TECHNOLOGY PLATFORM.

LONG-TERM STRATEGIC CONSULTING APPROACH WITH LARGE BANKS.

SHARED-RISK BUSINESS MODEL LINKED TO SUCCESSFUL RESULTS FOR CUSTOMERS.

WHERE WE ARE

OUR PRESENCE IN LATIN AMERICA IS FOCUSED ON BEING THE **STRATEGIC ALLY** OF ONLY A FEW FINANCIAL INSTITUTIONS PER COUNTRY.

MIAMI

MEXICO

COLOMBIA

CENTRAL AMERICA

ECUADOR

PERU

NEW MARKETS

ARGENTINA

TODO1 – PRODUCTS AND SERVICES
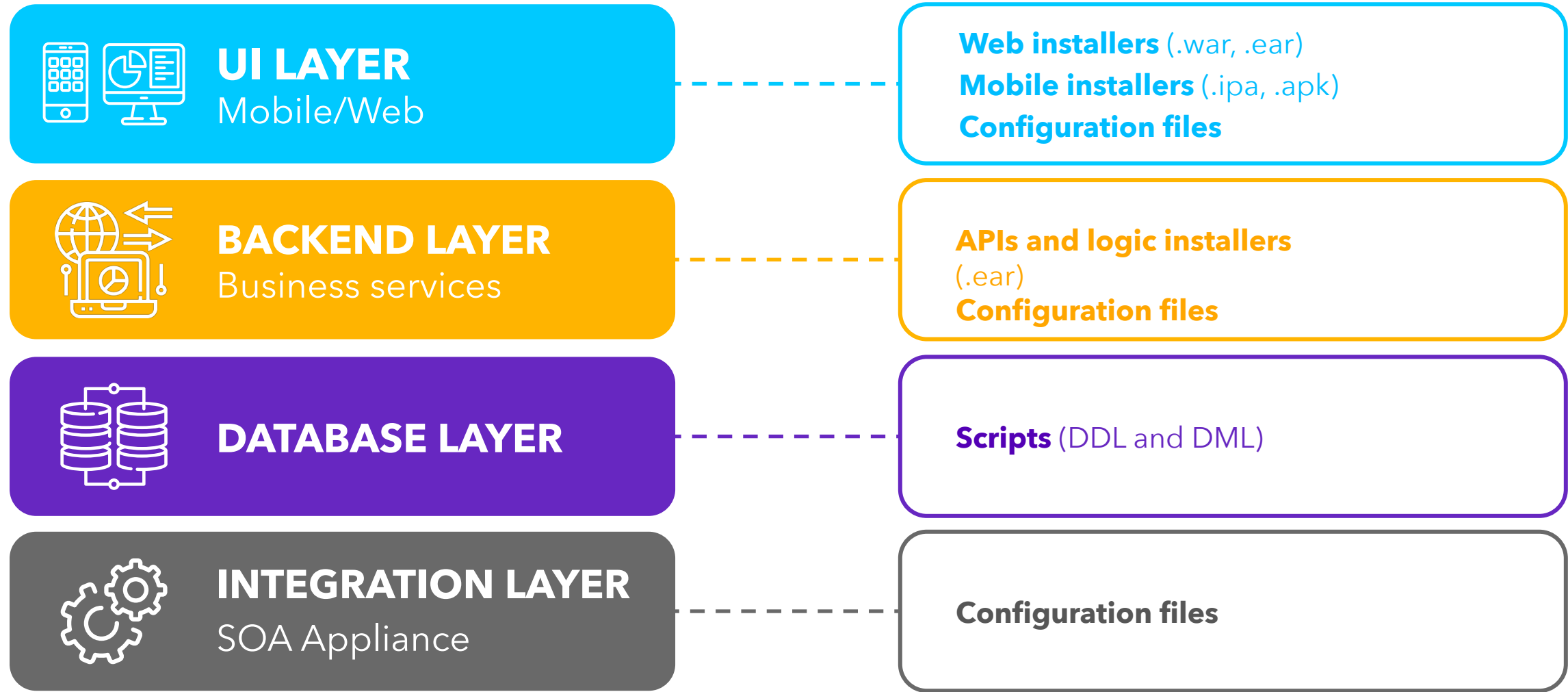
Retail Banking

Business Banking

On-line Banking

Mobile Banking

PFM/BFM
(Personal and Business Finance Management)

We work closely with our Bank Clients as business partners on the adoption of our Solutions, so that their success also becomes our success.

APPLICATION ARCHITECTURE

UI LAYER
Mobile/Web

Web installers (.war, .ear)
Mobile installers (.ipa, .apk)
Configuration files

BACKEND LAYER
Business services

APIs and logic installers (.ear)
Configuration files

DATABASE LAYER

Scripts (DDL and DML)

INTEGRATION LAYER
SOA Appliance

Configuration files

CONFIDENTIAL – DO NOT DISTRIBUTE

BUSINESS GOALS

TARGETING
100 MILLION
USERS

3-5 YEARS

CURRENTLY
~15 M
USERS

BUSINESS REQUIREMENTS

TODO 1

1

INCREASE RELEASE
CADENCE by 4X

SIMPLY, NOT
POSSIBLE WITH A
MANUAL PROCESS!

2

BETTER SERVICE QUALITY

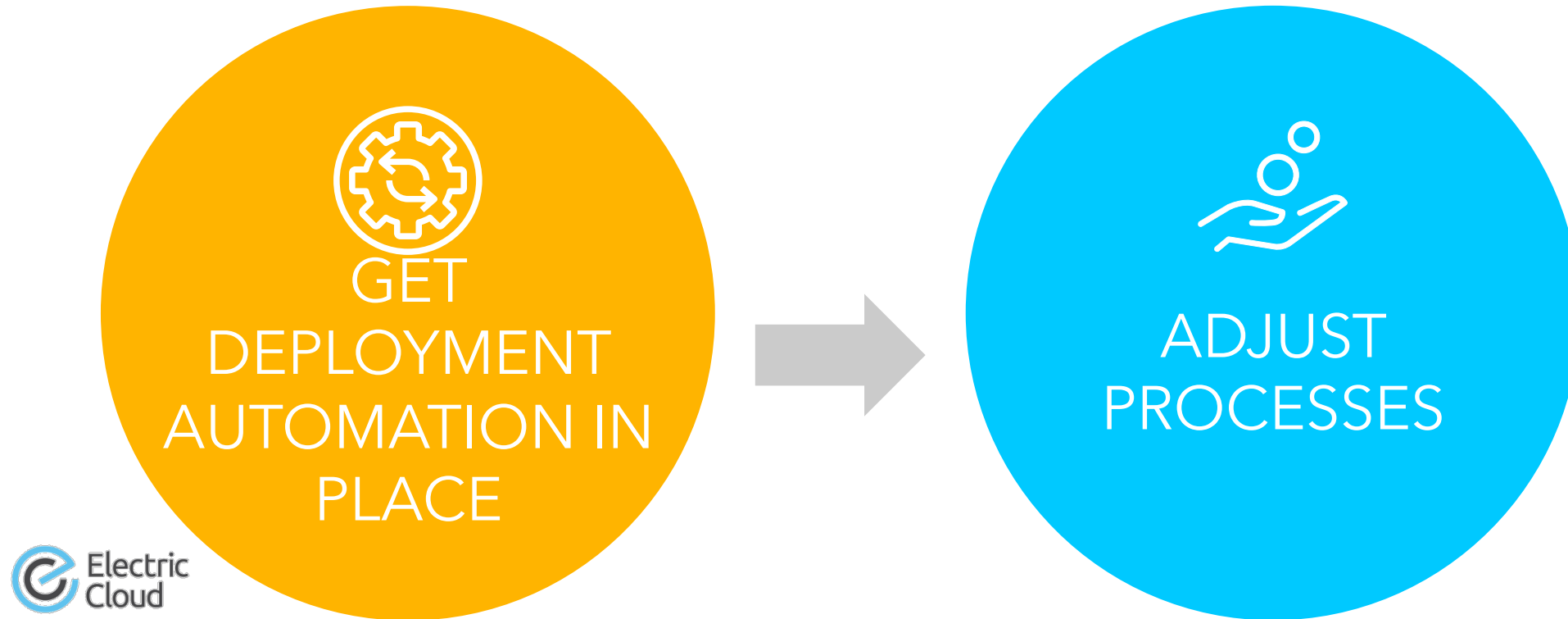Reduce human errors in manual
process.

SERVICE
AVAILABILITY

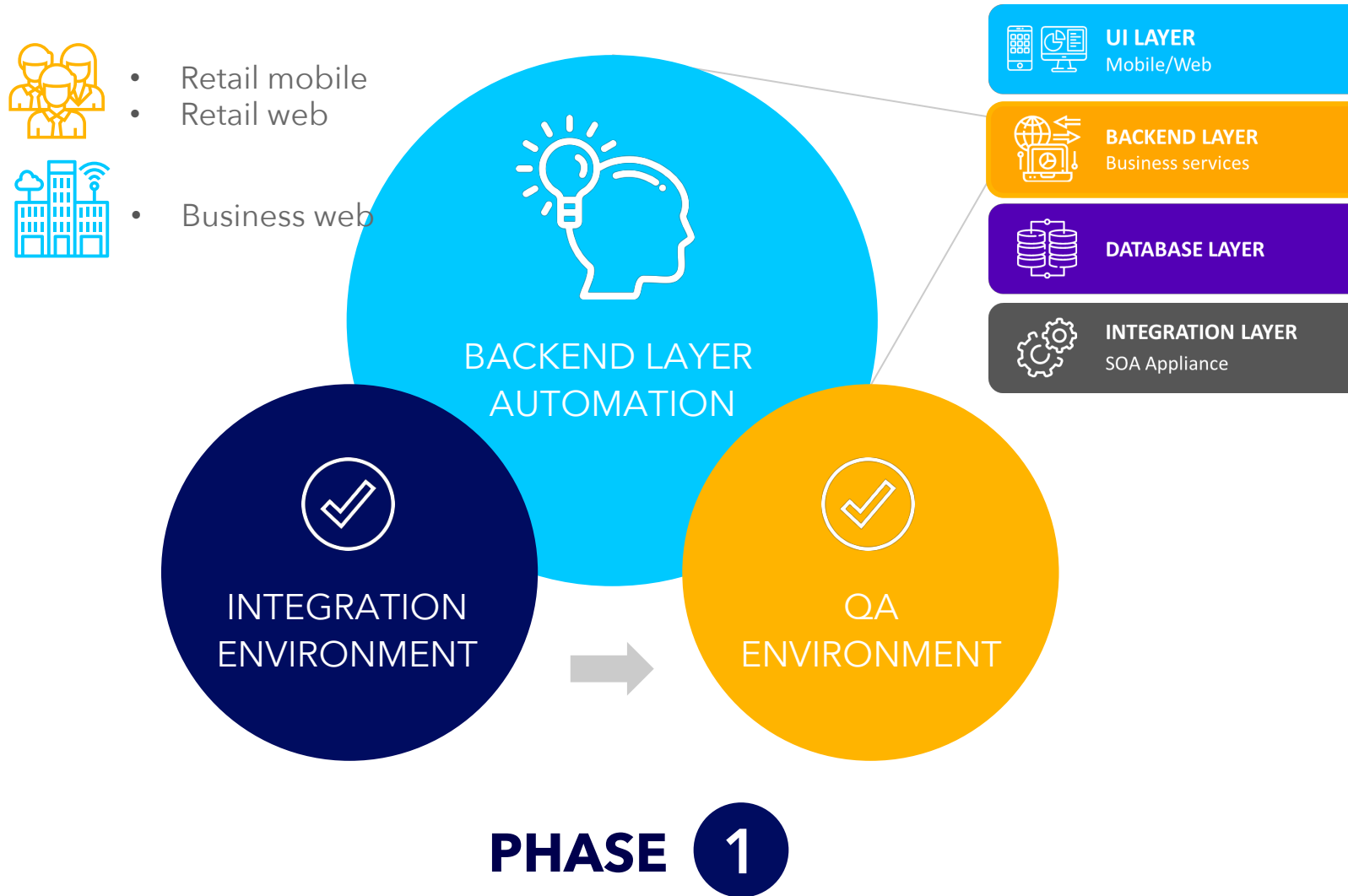SERVICE
RELIABILITY

CREDIBILITY

FIRST STEPS

GET DEPLOYMENT AUTOMATION IN PLACE

Electric Cloud

ADJUST PROCESSES

WHAT WE DID

INITIAL PLAN

- Retail mobile
- Retail web

- Business web

BACKEND LAYER AUTOMATION

UI LAYER
Mobile/Web

BACKEND LAYER
Business services

DATABASE LAYER

INTEGRATION LAYER
SOA Appliance

INTEGRATION ENVIRONMENT

QA ENVIRONMENT

PRODUCTION ENVIRONMENT

PHASE 1

PHASE 2

DEPLOYMENT PROCESS BEFORE AUTOMATION

TODO 1

DEVELOPMENT TEAM

OPERATIONS TEAM

INTEGRATION ENV

UI LAYER
Mobile/Web — Manual

BACKEND LAYER
Business services — Manual

DATABASE LAYER — Manual

INTEGRATION LAYER
SOA Appliance — Manual

QA ENV

UI LAYER
Mobile/Web — Manual

BACKEND LAYER
Business services — Manual

DATABASE LAYER — Manual

INTEGRATION LAYER
SOA Appliance — Manual

PROD ENV

UI LAYER
Mobile/Web — Manual

BACKEND LAYER
Business services — Manual

DATABASE LAYER — Manual
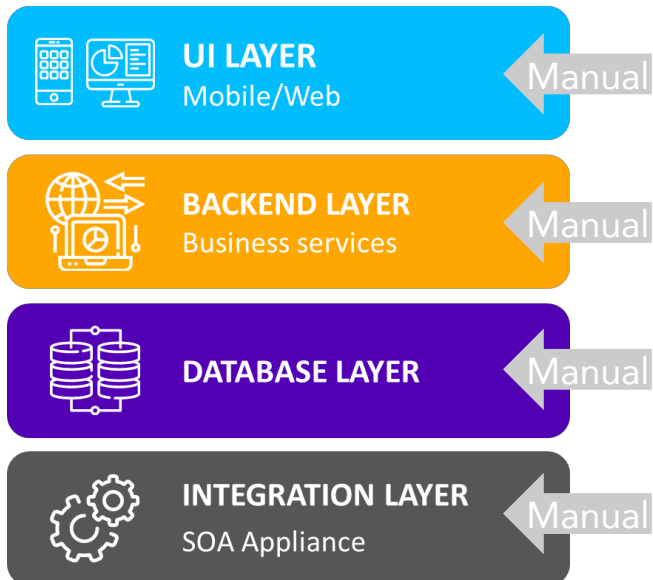
INTEGRATION LAYER
SOA Appliance — Manual
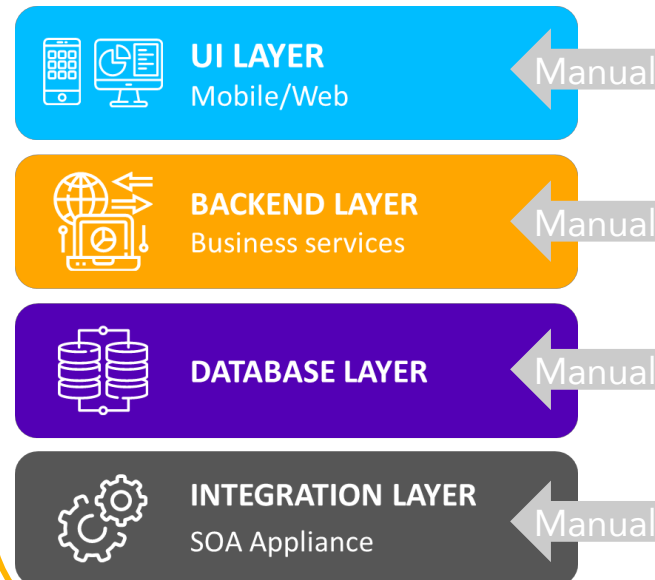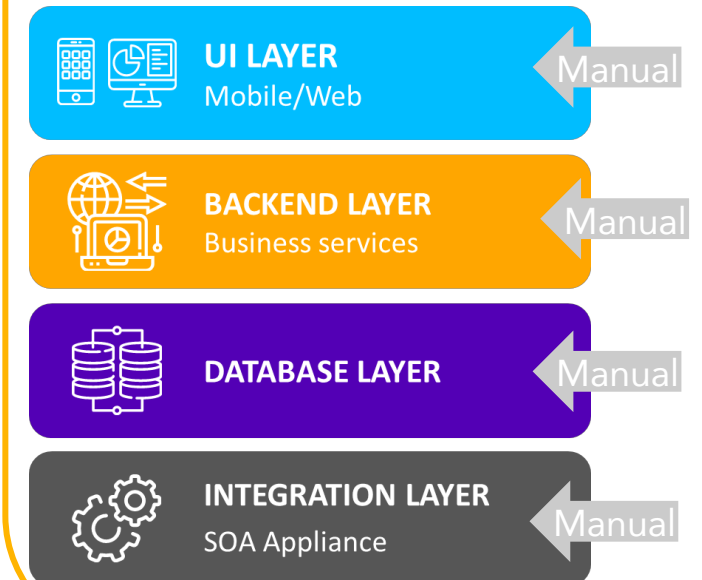
DEPLOYMENT PROCESS AFTER AUTOMATION

TODO 1

DEVELOPMENT TEAM

OPERATIONS TEAM

INTEGRATION ENV

- **UI LAYER** Mobile/Web — Manual
- **BACKEND LAYER** Business services — Electric Cloud
- **DATABASE LAYER** — Manual
- **INTEGRATION LAYER** SOA Appliance — Manual

QA ENV

- **UI LAYER** Mobile/Web — Manual
- **BACKEND LAYER** Business services — Electric Cloud
- **DATABASE LAYER** — Manual
- **INTEGRATION LAYER** SOA Appliance — Manual

PROD ENV

- **UI LAYER** Mobile/Web — Manual
- **BACKEND LAYER** Business services — Manual
- **DATABASE LAYER** — Manual
- **INTEGRATION LAYER** SOA Appliance — Manual
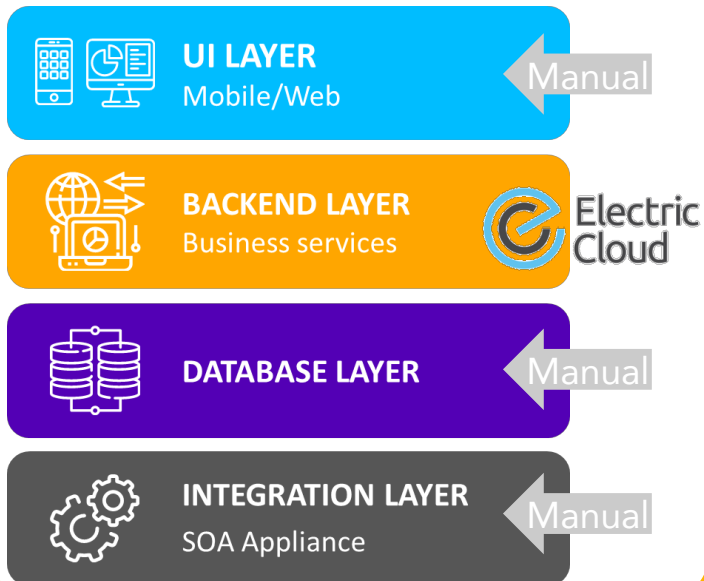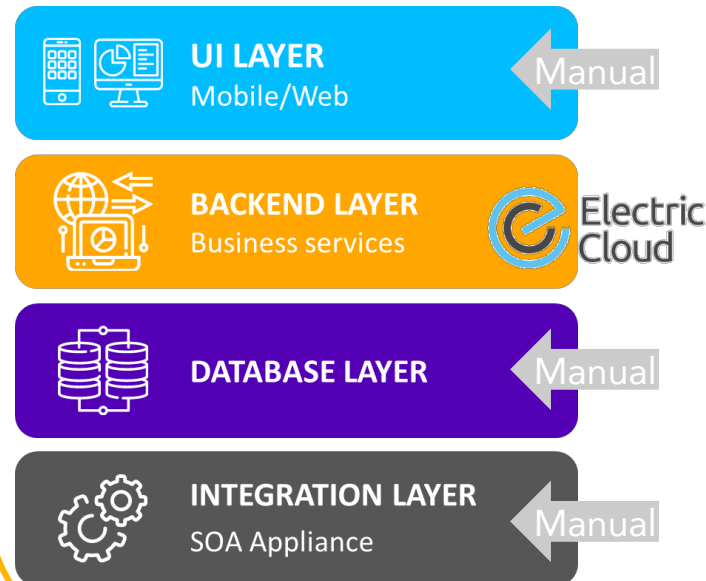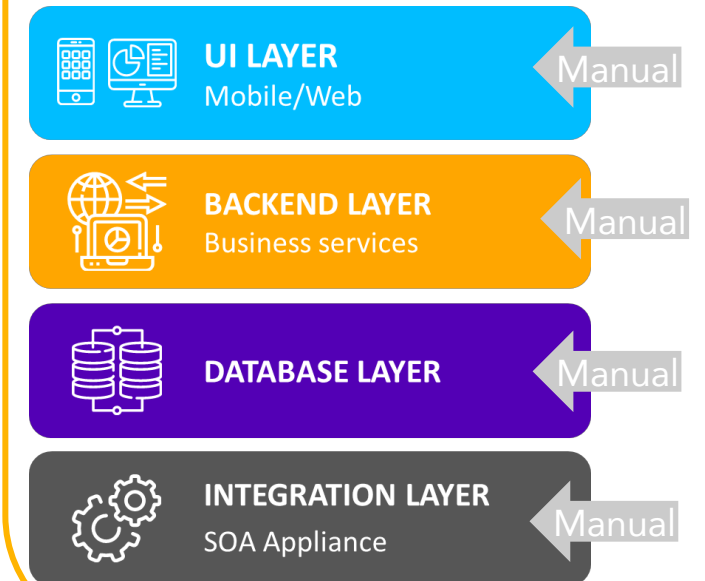
INITIAL RESULTS

OPTIMIZED DEPLOYMENT PROCESS
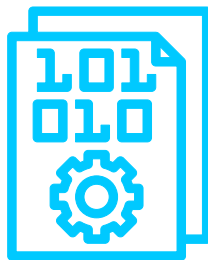
INTEGRATION DEPLOYMENT → **QA DEPLOYMENT**

WITHOUT OPERATIONS TEAM!

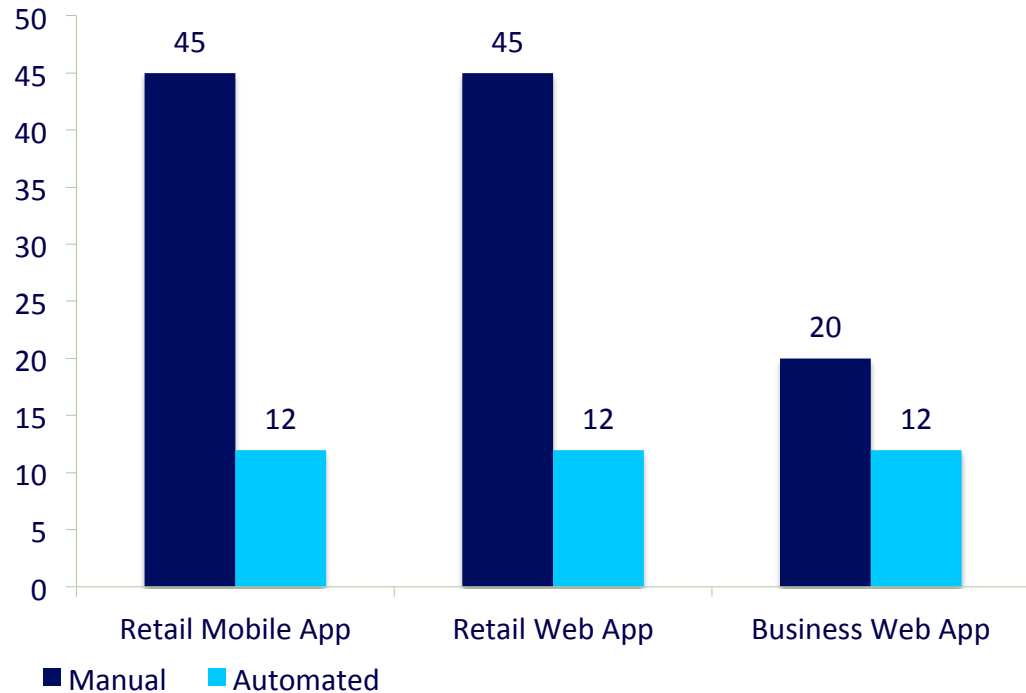**COMPANY-WIDE COMMITMENT!**

MANAGEMENT SPONSORSHIP

COMPLIANCE AND AUDITING

USER AUDITING	EXECUTION TRACKING	NETWORK SEGMENTATION
• Who? • What? • When? Electric Cloud	Track changes between executions. Electric Cloud	• Entry Gate Rules • Team → Own environment Electric Cloud

TEAMS **PROCESS** **INFRASTRUCTURE**

INTEGRATION ENVIRONMENT IMPROVEMENTS

Deployment time [mins]

	Retail Mobile App	Retail Web App	Business Web App
Manual	45	45	20
Automated	12	12	12

■ Manual ■ Automated

48 **192** **108**

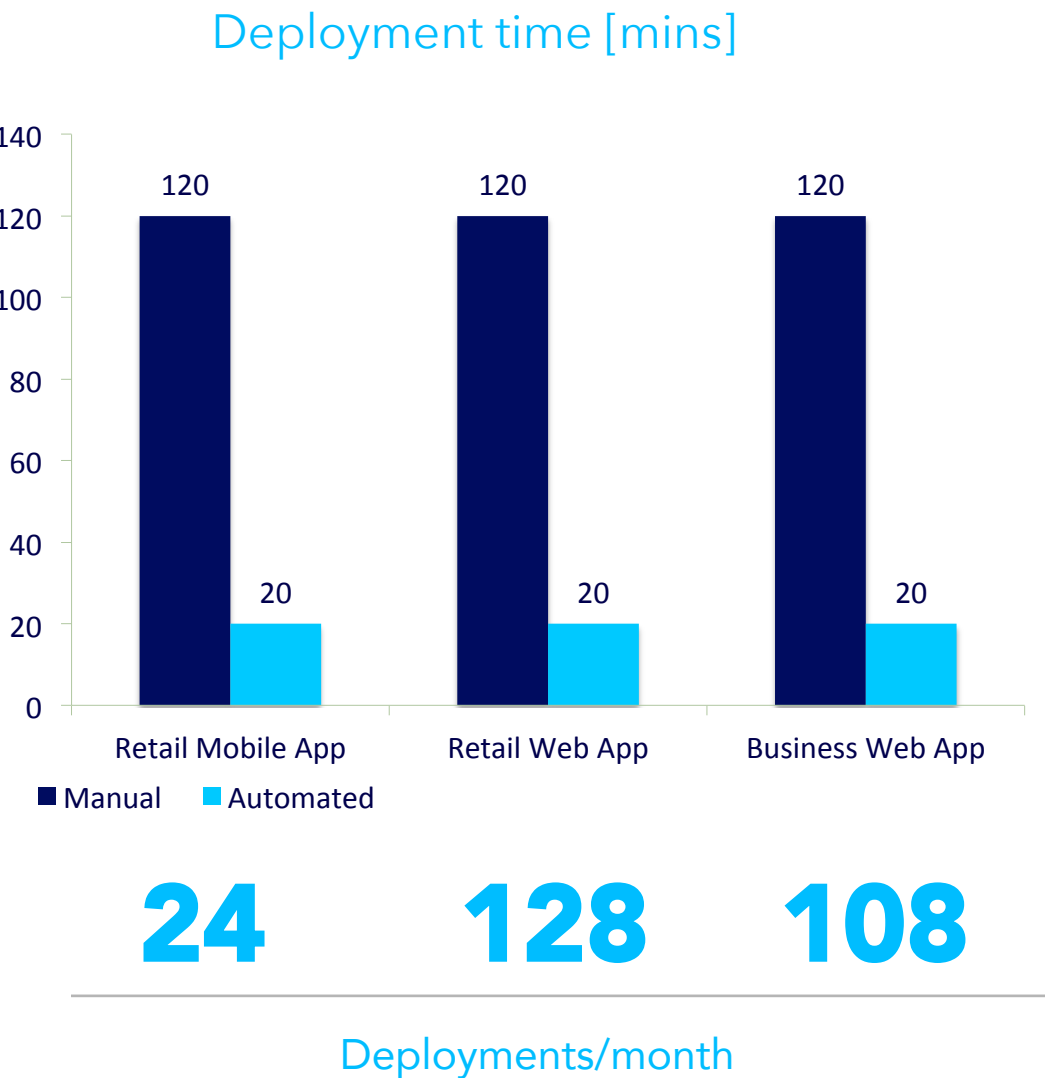Deployments/month

Savings for Development Team

40-73%

LESS TIME PER DEPLOYMENT

146

LESS HOURS OF DEPLOYMENT PER MONTH

This is almost 4 weeks of work of one Developer!

QA ENVIRONMENT IMPROVEMENTS

TODO 1

Deployment time [mins]

	Retail Mobile App	Retail Web App	Business Web App
Manual	120	120	120
Automated	20	20	20

24   **128**   **108**

Deployments/month

Savings for Operations Team

83%
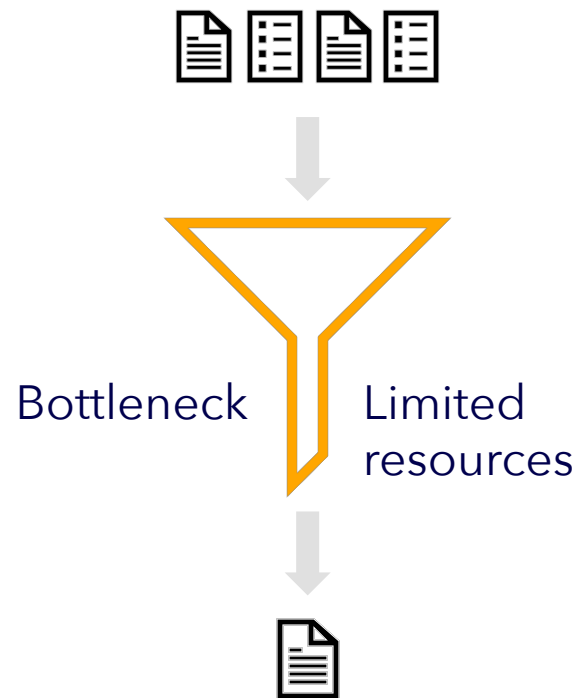LESS TIME PER DEPLOYMENT

433
LESS HOURS OF DEPLOYMENT PER MONTH

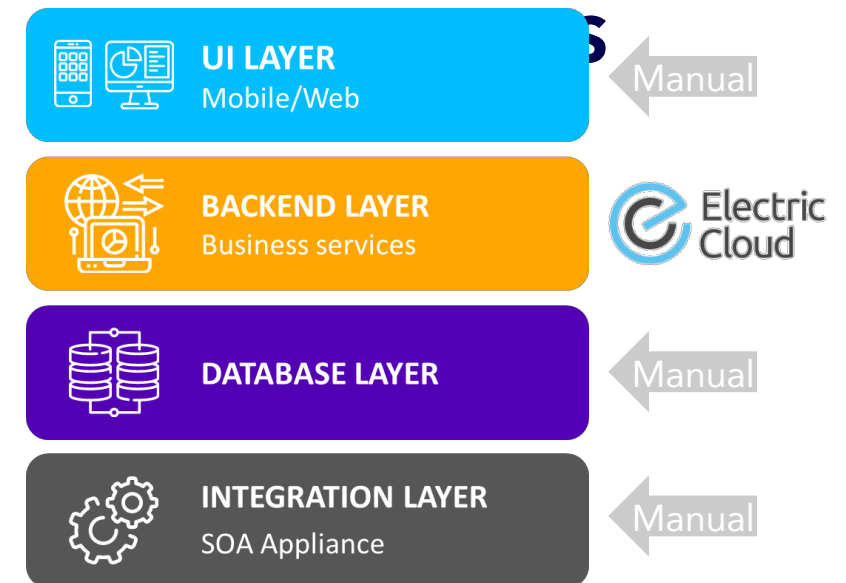This is almost 3 Operation Team members working full time per month!

NEW CHALLENGES

1

TOO FAST FOR QA!

Bottleneck   Limited resources

AUTOMATE SINGLE LAYER

MULTIPLE

UI LAYER
Mobile/Web
← Manual

BACKEND LAYER
Business services
Electric Cloud

DATABASE LAYER
← Manual

INTEGRATION LAYER
SOA Appliance
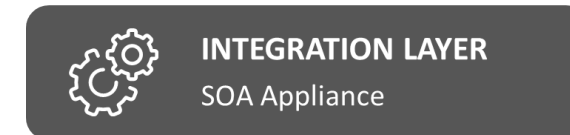← Manual

SOLUTION

1

CHANGE OF STATEGY

- One application
- All layers
- All environments

The goal:

Operations → just **one click** to approve.

AUTOMATE ALL LAYERS SINGLE APPLICATION

UI LAYER
Mobile/Web
— Electric Cloud

BACKEND LAYER
Business services
— Electric Cloud

DATABASE LAYER
— Electric Cloud

INTEGRATION LAYER
SOA Appliance
— Electric Cloud

NEW CHALLENGES

2 **RESISTANCE FROM OTHER TEAMS ADJUSTING TO THE NEW PROCESS**
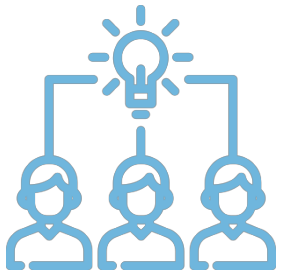
Leadership:

- Presentations
- Documentation
- Demos
- Coaching

Once they started, they really loved it!

LESSONS LEARNED

ENTERPRISE-GRADE DEVOPS PLATFORM A MUST

Electric Cloud

High Availability is a must have!

PLAN AND BUDGET FOR THE BEST!

INITIAL ESTIMATION OF NODES TO AUTOMATE

We started small. Benefits were so big, that we needed to expand automation to more nodes.
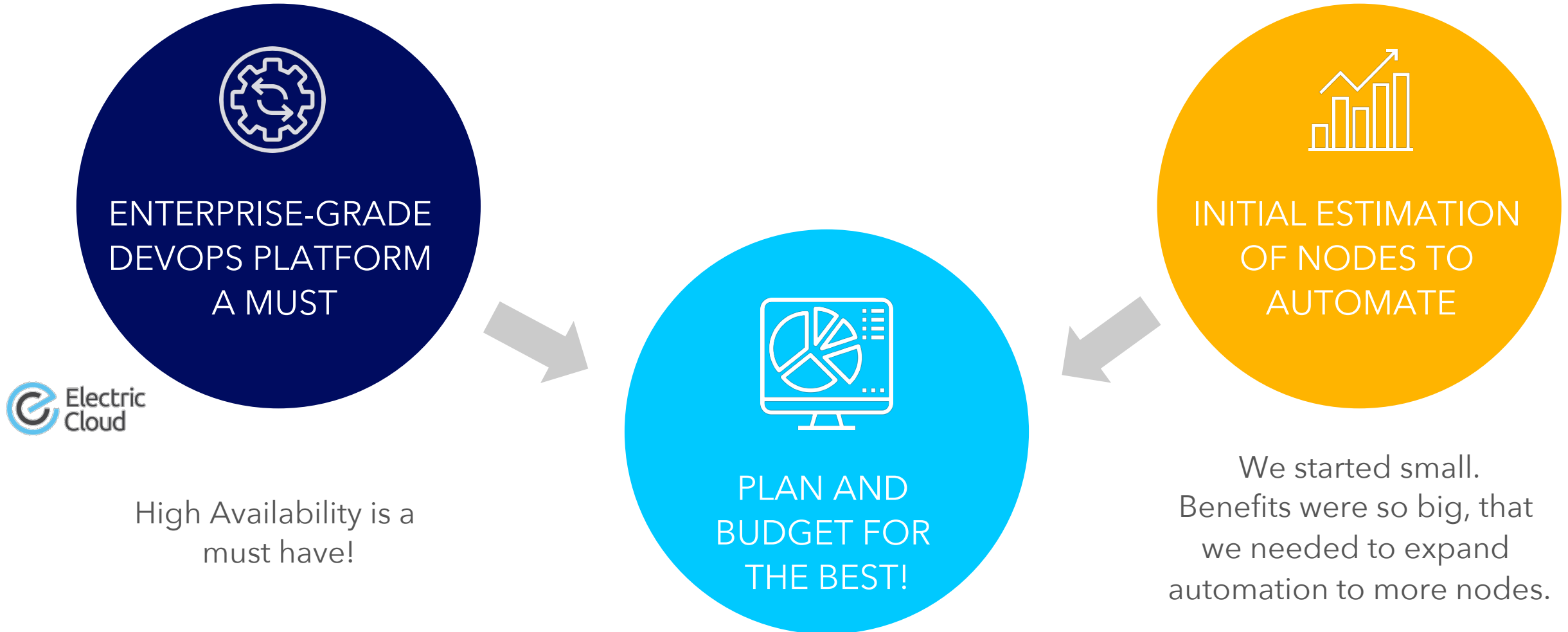
WHERE WE WANT TO GO?

ACHIEVE CONTINUOUS DELIVERY NIRVANA!

100
MILLIONS USERS

Currently 15 million users.
Goal 3-5 years.
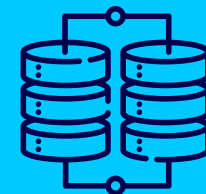
ALL
APPLICATIONS

Include all of our applications.

QA
FUNCTIONAL TESTING

Increase integration with Functional Testing Suites.

APPS
MOBILE APPS DEVELOPMENT

Mobile applications deployment and delivery.

DML
DATABASE AUTOMATION

Currently only DDL. Add database automation for DML.

TODO 1

THANK YOU!

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