Business SLA Prediction

Never miss a business SLA with Al-powered monitoring and predictions



Every business process is now a digital process

Digital business processes face risk of disruptions due to various technology challenges:

01

Increasing scale of automation

- Rapid addition of new platforms and applications
- Modernization of existing applications

02

Complexity of ecosystem

- 100K+ jobs across functions
- Complex inter-dependencies

03

Diverse systems

- Multiple workload automation schedulers
- Workload data scattered across platform silos

04

Changing environment

- Changing jobs, dependencies, infrastructure, business workload
- Legacy systems without knowledge of context

What it means for business teams

- Need for **real-time visibility** across workload processes, transactions, file transfers etc.
- Need for **Predictive Intelligence** that notifies business teams of any potential failures in advance
- Focus on ensuring accuracy and timeliness of IT processes for their business applications

Workload management currently controls around 40% to 45% of all IT workloads, tasks, and activities, making it one of the largest by volume*



Challenges in ensuring resilient digital process

TECHNOLOGY CHALLENGES:

- Lack of visibility due to fragmented processes across multiple schedulers and teams
- Large volume of false or irrelevant alerts
- Lack of analytics that links, prioritizes and analyzes
 process anomalies to business outcomes
- Lack of information and processes for quick and accurate resolutions

BUSINESS CHALLENGES:

- **High operational costs and large teams** engaged in continuous in-person monitoring and reactive resolutions
- Mandate to reduce the cost of monitoring even while dealing with increased volume of digital processes
- Frequent failures, delays, and SLA violations with adverse impact on businesses





Business SLA Prediction

Al-driven SaaS-based solution to predict potential SLA misses and ensure timely deliverables for business processes

A proactive workload management solution to predict delays in business processes, give ahead-of-time notifications, and provide recommendations to prevent outages and SLA violations.

Powered by ignio™ product

75+ Customers

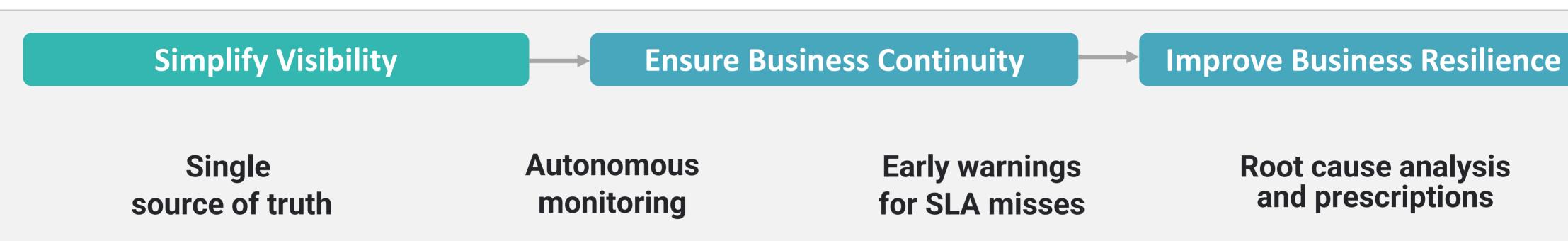
15+ Industries

6 Patents

ML Algorithms



Business SLA Prediction -An intelligent layer for workload automation





End-to-end view of workload ecosystem

Across schedulers and layers



Intelligent anomaly detection and autonomous monitoring

> Notify key anomalies



Al- based predictions for potential SLA violations

> Accurate predictions

Root cause analysis and prescriptions



Powered by a continuous learning engine

> Timely issue resolution



Business SLA Prediction – Intelligence for resilient business operations

UK-BASED FINANCIAL INSTITUITION

>14M

Savings and current accounts batch jobs processed

40K+

SLA violations reported till date

US-BASED RETAIL ORGANIZATION

2-3 Hours

Early warnings for potential SLA breaches

37

Occurrences of SLA misses predicted accurately within two months

AUSTRALIAN RETAIL ORGANIZATION

3-4

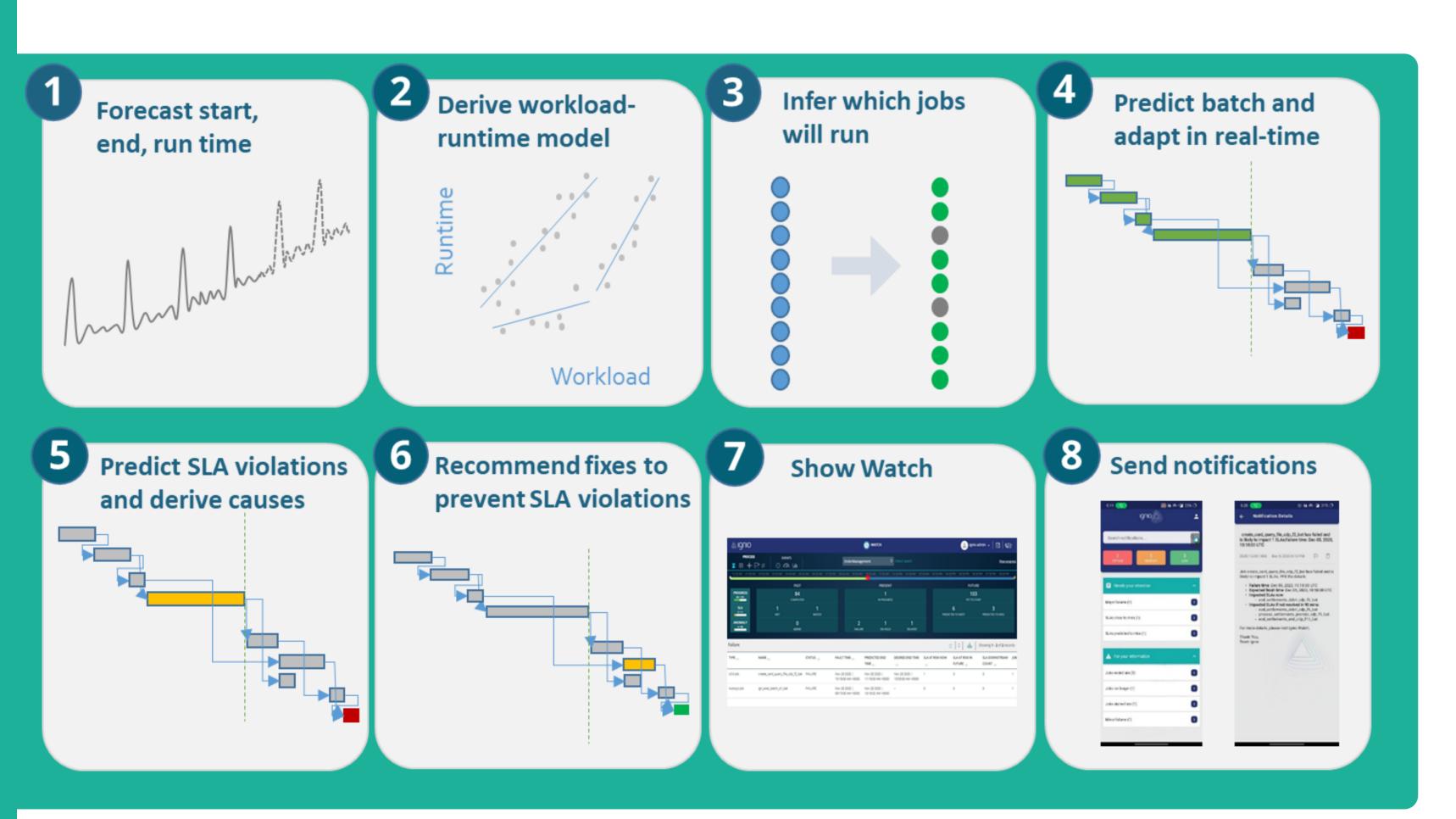
Average hours saved per failed/delayed job

90%

Reduction in time taken for SLA calculation and decision making



Business SLA Prediction – How It Works



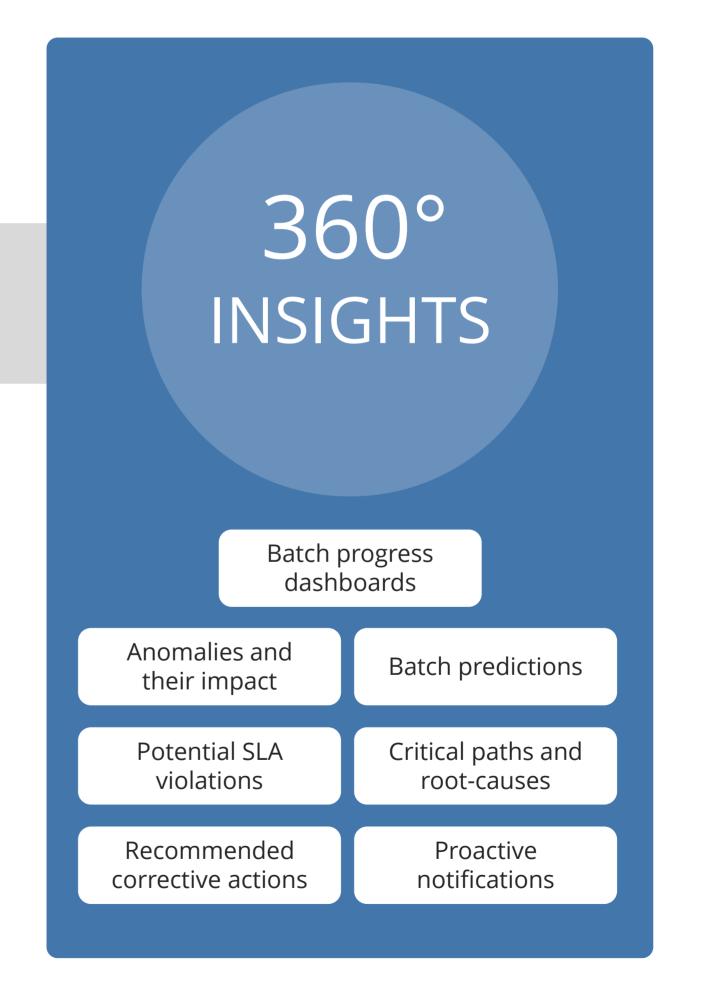
- Translates business process to SLAs,
 and learns context of IT operations
- Monitors and predicts batch jobs associated to the business SLAs
- Provides recommendations to be applied to fix potential delays



Business SLA Prediction – Leverages AI for 360° Intelligence

360° **BLUEPRINT** Schedules & Historical runs dependencies Events and incidents Business workload Preferences & **Business context** constraints Expert feedback SLAs

360° **ANALYSIS** Change and outlier Trend and pattern mining detection Regression and Anomaly detection forecasting Clustering and Multi-objective classification optimization Reinforcement Causality analysis learning





Key Differentiators

Single source of truth

with easy visibility that cuts across multiple business functions and schedulers

360° visibility and predictions

leveraging AI/ML models to ensure high degree of accuracy

Beyond predictions

to root cause analysis and prescriptions



Continuous-learning engine

that adapts to changing workload behavior



Business SLA Prediction – From reactive to proactive operations

Improved SLA Compliance

- Reduced risk of missing SLAs with timely notifications and prioritization
- Increased time-window to take corrective actions
- Reduced workload-induced delays and outages

Resilient Business Processes

- Reduction in day-to-day follow ups among different teams
- Reduced effort in monitoring batch processes for anomalies
- Reduced cost of monitoring batches and applying corrective actions
- Convert in-person monitoring operations to **on-call operations**







APPENDIX: Tech coverage

What is the supported tech coverage?

Scheduler	Fetch**	Parse#
Autosys R11	Yes	Yes
ControlM 9.0	Yes	Yes
ESP	No	Yes
TWS 9.5	No	Yes
UC4 11	No	Yes

Coverage is for open systems. Adapters for mainframes are not supported

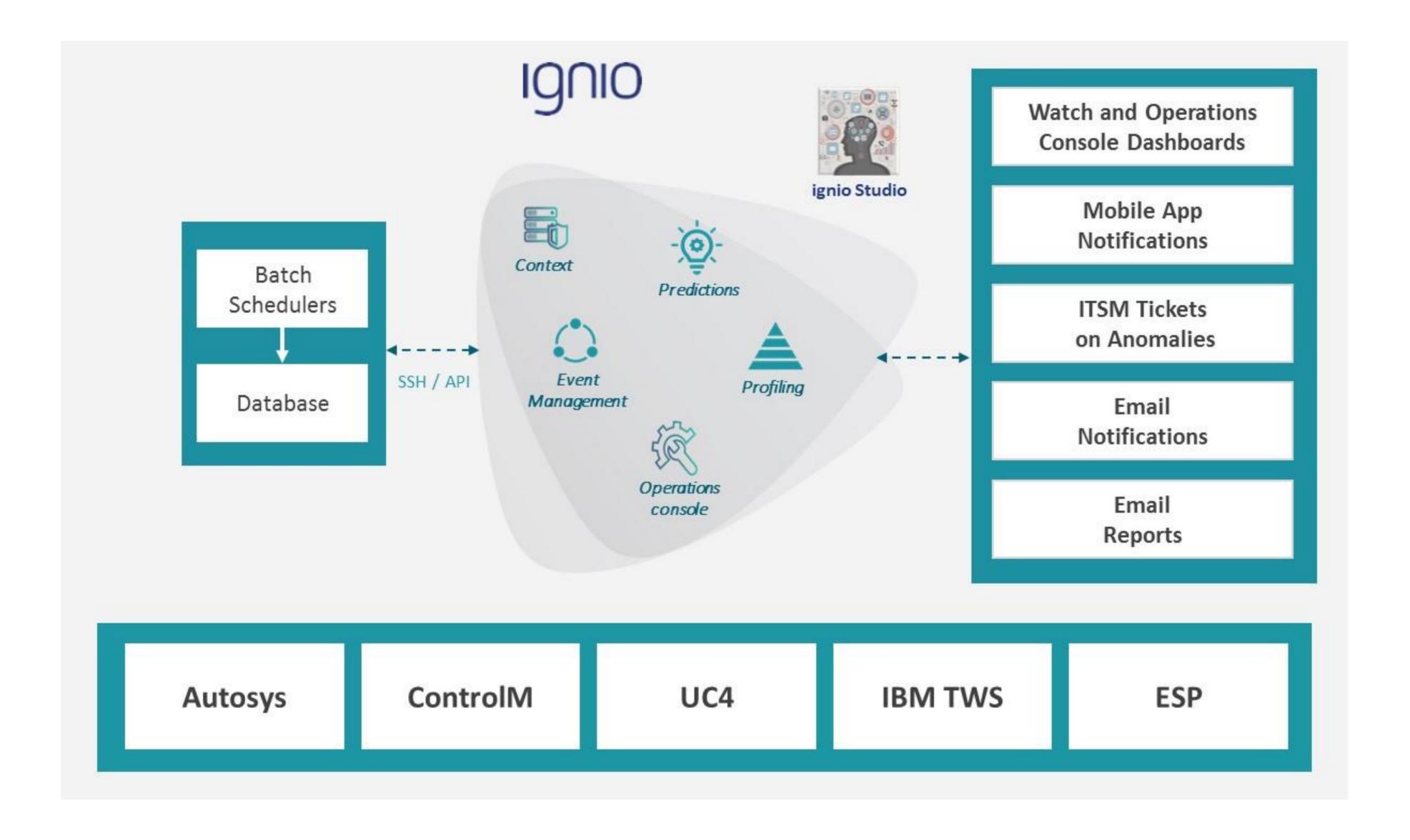
Other schedulers on open and mainframes can also be supported with an additional effort of development of an adapter to fetch data and transform it to ignio understandable format

** Fetch the raw meta-data such as jobs, schedules and dependencies by connecting to the scheduler

Converting raw data to a format that can be used by the product



APPENDIX: How it works





APPENDIX: Time and effort

Option A

Schedulers with OOB adapter support (Autosys R11, ControlM 9.0)

Resources: 1 FTE (ignio deployment engineer)

Duration: 4 weeks

- 1 week to define the business case and scope
- 1 week to collect / prepare / validate data
- 1 week to ingest data, run analysis, send notifications
- 1 week to validate

Option B

Schedulers that require development of adapter (ESP, TWS 9.5, UC4 11)

Resources: 3 FTEs (1 ignio deployment engineer, 1 scheduler SME, 1 Java / Python developer)

Duration: 8 weeks

- 4 weeks to develop adapter
- 1 week to understand the scheduler semantics
- 1 week to fetch the data from schedulers
- 2 weeks to parse the fetched data to bring it in ignio understandable format
- 4 weeks to enable ignio features (as in Option A)



Value Delivery in Phases

Task	Phase 1	Phase 2	Phase 3	Phase 4	What you Get
Collect run-history					
Prepare all other files (Make place-holder files if not available)					
Ingest files					Blueprint
Ingest SLAs or create SLAs by running profile thresholds on critical jobs					
Compute alerts and execute profile events to baseline last behavior of SLA jobs					SLA report
Run process forecast and base prediction (Schedule to run it every day)					
Receive and ingest feeds (Schedule to run it every few minutes)					
Run update predictions (Schedule to run it every few minutes)					Watch
Configure notifications policies					
Validate that notifications are being sent					Notifications
Prepare a report of anomalies reported by ignio					Notification report

