



BUILDING GREAT TECHNOLOGY

Application Performance

Digital Technology Services



Agenda



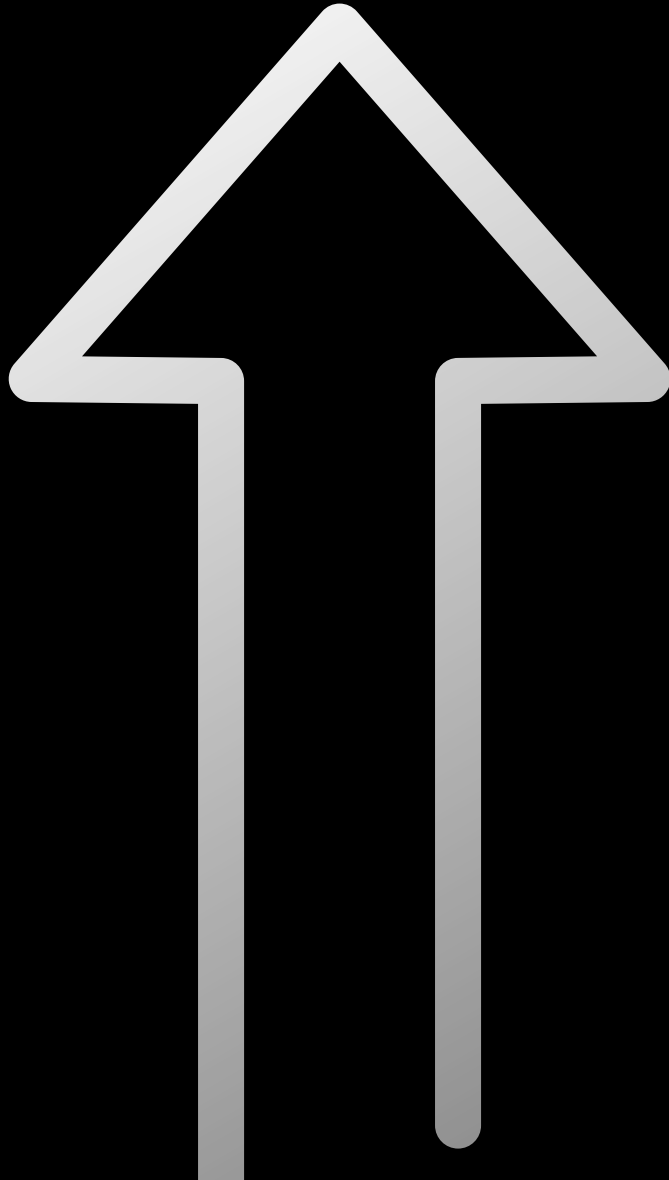
- SORINT.lab @ a Glance
- Overview
- Monitoring and Observability
 - Pillars
- Testing
 - Type of Testing
- Analysis & Team Adoption
- Sorint's Tailored Journey
 - Closer Look
 - Experts Involved
- Success Stories
- Bonus slide - Related by Sorintains
- Going Forward



Is behind many prominent entities
leading their industry. Assured!

98%

customer retention rate



Clients

By industry



Banking & Finance



Energy & Utilities



Telecommunication



Government & Public Services



Transportation & Automotive



Healthcare



Technology & Services



Industrial & Manufacturing



Entertainment

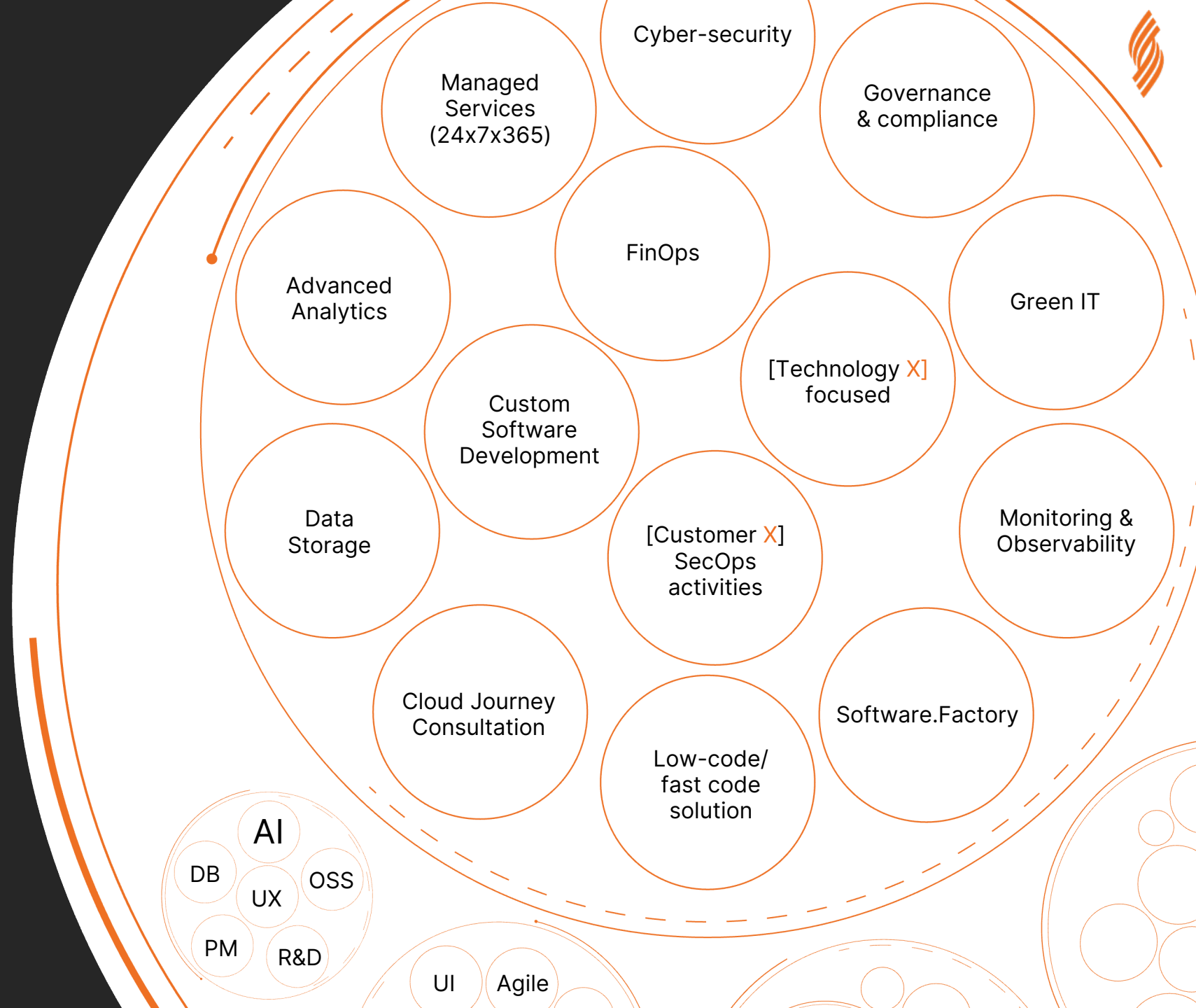


Tackling Challenges Together

A journey characterized by:

- Enabling clients to focus on core business.
- Secured solutions built upon best fitting technologies, practices, & latest findings.
- Quality, & cost optimization.

We harmonize passions!



SORINT.lab – IT Consultancy

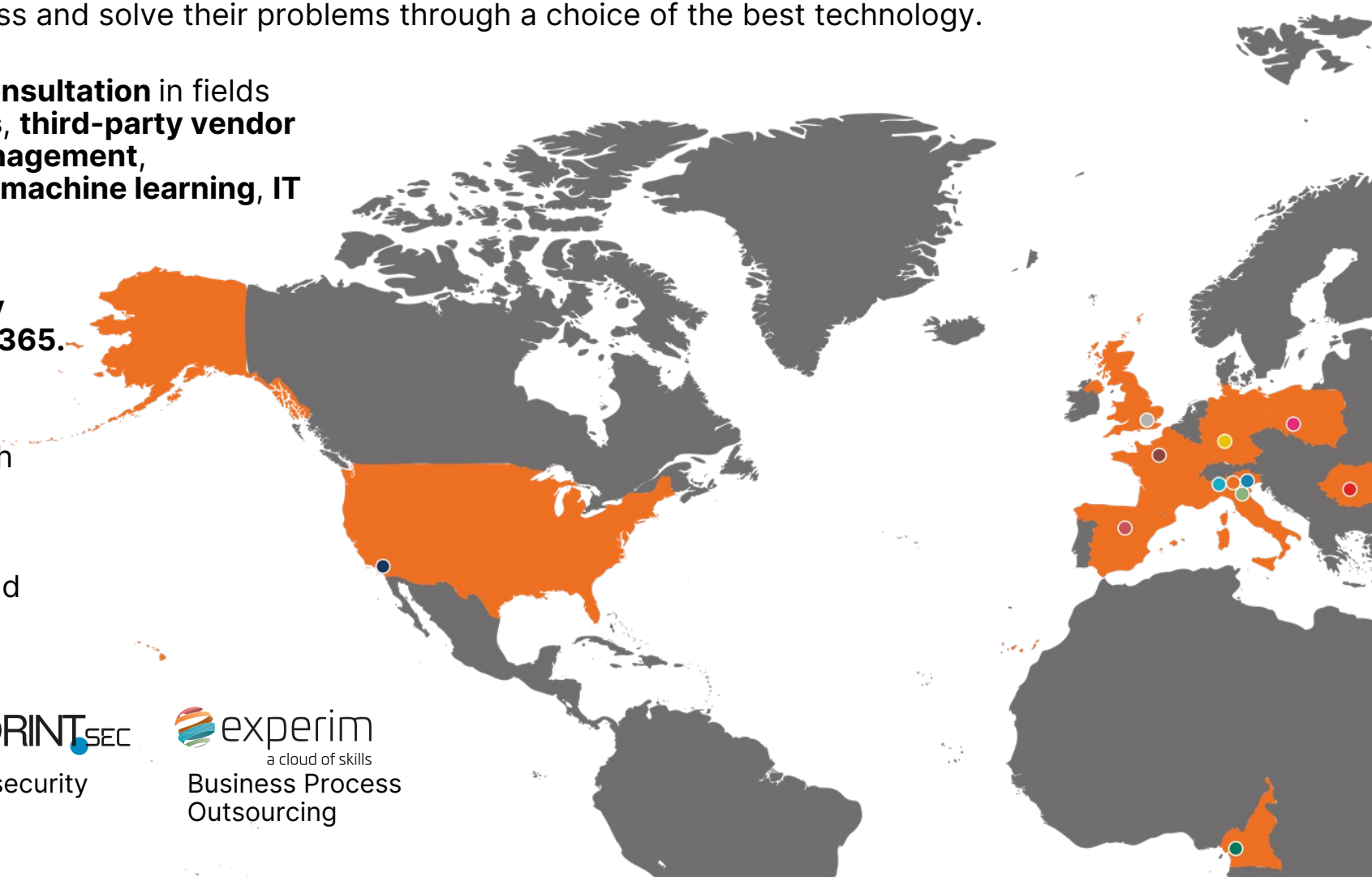


We believe in technology that fosters **innovation and human wellness**. Our commitment towards every company, institution or community is to help them run their business and solve their problems through a choice of the best technology.

Providing **digital technology services & consultation** in fields of **software development, cloud solutions, third-party vendor solutions, cybersecurity, data center management, management of daily IT operations, data, machine learning, IT recruitment** and **professional education**.

Delivering services ranging from **discovery and implementation** to **full support 24x7x365**.

SORINT provides IT services to prominent entities in Europe, USA, and Africa. Through a workforce of **1.5K professionals** and a presence spanning **17 offices** located in Italy, Spain, United Kingdom, Germany, France, Romania, Poland, United States, and Cameroon.



 **SORINT**.lab
IT Consultancy

 **SORINT**.TEK
Advanced Analytics Solutions

 **SORINT**.SEC
Cybersecurity

 **experim**
a cloud of skills
Business Process Outsourcing

Let's Tackle Your Next Challenge Together

“SORINT.lab is a company that's easy to do business with...”

A well-known testimonial from a client



Education

>40K

Training hours per year

130+ entities

Certification. Foundation to trainer level

Methodology

Vendor independent

Unbiased transparent consultancy

Project management

Prince2, PMI, Agile, SCRUM/UX

ISO compliance

27001, 20000, 9001, 14001

Experience

250+ large enterprises

Prominent entities in Europe, US, and Africa

>1K case studies

Tailored journeys documented



Euronext Group's ELITE SME network

The Make IT Model

Our philosophy towards journeys

Application Performance



- A service that aims to achieve the “peak performance” of a given software application.
- By employing techniques and focusing on the activities of:
 - Monitoring and observability
 - Testing
 - Analysis and team adoption
- to embracing software quality assurance



A combination of studies show that poor user experience will **directly impact** businesses' **conversion rate** from 1% up to 11%.
Beside customer's dissatisfaction and other negative factors

According to various source/references



Addressing



Responsiveness



Scalability



Reliability



Resource utilization



Overall user experience





Monitoring & Observability



Is knowing

- On Infrastructure(environment) and application level.
- Application Performance Monitoring (APM) and Observability techniques and tools facilitates the analysing of health, performance and the overall user experience of a given software.
- Monitoring is capturing and displaying data,
- while **observability** is understanding and evaluating the internal state by analysing
 - Logs
 - Metrics (gauge, delta metrics, cumulative)
 - Distributed tracing

Pillars of Monitoring & Observability




 Full-stack overview 


 Clarity. Data-driven 


 Utilize resources on cloud/infrastructure

 Reduced MTTD & MTTR

 Real time monitoring of security

 Errors and configuration issues

 Centralized data

 Business value. Decisions, improve customer experience, responsiveness, and satisfaction.

1st
of 20

For 12 consecutive years.

Dynatrace is the number one “Leader” in Gartner’s Magic Quadrant for Application Performance Monitoring and Observability tools.

Sorintains offering the service are certified experts.

*Gartner June 2022



Testing

Keystone to ensure the best user experience

- Functional and non-functional testing
- The process of evaluating a software code, application, or system to identify bugs, defects, or functional issues. Ensure project meets requirements.

Types of Testing



Assess the functionality of a software in operation in various contexts. BE – FE – DB – Infra

Performance, resilience, and availability

Types of test that help ensure that the software performs optimally, is robust in handling failures, and remains available to users when needed.

End-To-End

Using simulated real data, the test focuses on verifying real-life scenarios that will then be executed by the end user, validating build stability and data integrity. The scripts can be repurposed and reused in regression testing.

Regression

Performed to validate that changes made have not introduced new defects or caused any regression in existing functionality. Involves retesting the previously tested features to ensure they still work correctly.

User acceptance (UAT)

Involves testing the software from the user's perspective to ensure that it fulfills the intended purpose and meets user/clients requirements.



Analysis & Team Adoption

How to approach

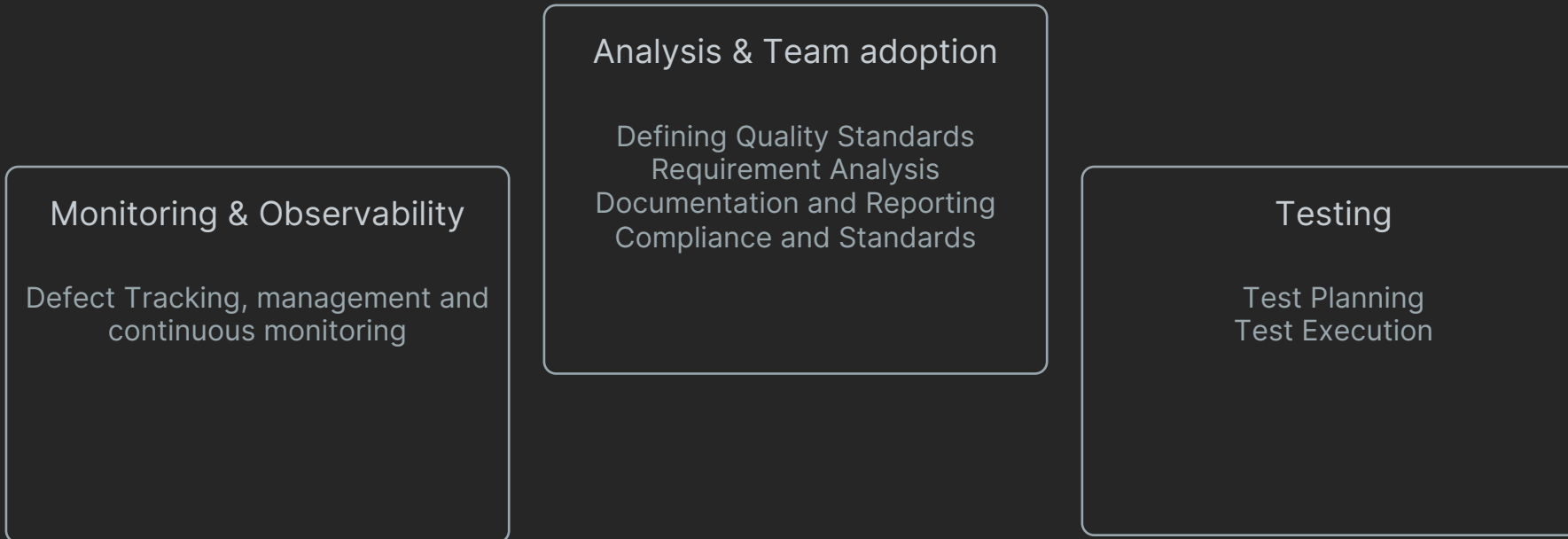
- Assessment of project team's competencies, training, communication, and collaboration (flow and responsibilities).
- Key factors:
 - Methodologies
 - Inspections
 - Requirements definition service application/architecture
 - CI/CD, version control, branching strategy
 - Design, code reviews, & code quality
 - Testing strategy & testing environment
 - Test planning, case design, execution, analysis, reporting
 - Monitoring & observability techniques and tools

SORINT.lab's Tailored Journey

Embracing Software Quality Assurance



Application performance



SORINT.lab's Tailored Journey



Know-how

Every journey is a unique challenge, but our know-how to the key aspects:

Clear Quality Objectives

Well-defined QA Processes

Skilled team

Tools Knowledge

Test coverage

Test automation

Metrics & Reporting

Continuous improvement



SORINT.lab's Tailored Journey

The make it model approach is instantiated from

Industries



Nourished experience from huge variety of business sectors.
At least 15

Adaptation



Adapting to client and project's needs, technologies and context

Meticulous compliance



Extensive knowledge of "highly regulated" industries

Agility



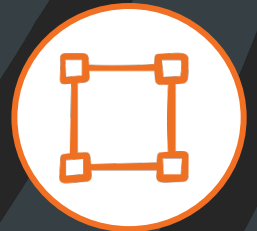
Easy access to full-stack and cross functional expertise

Involvement



Imparting knowledge, support and resources to help acquire the skills necessary

Automation



A mechanism aiming to streamline operations


Day x ———— Continues support ———— Continues support ———— Continues support ———— Day y



Experts Involved

- Application Performance
- DevArch
- NGMS
- CI/CD DevOps Engineering
- Other tech related circles

Senior masterminds



Luigi Savio
QA Test Engineer & Performance Manager | Dynatrace Specialist
+10 years of experience in sftw. testing & performance analysis. QA evangelist



Giorgio Cassia
QA Test Engineer Functional & Non-functional Specialist
+5 years of experience in developing & testing sftw.

Some prestigious certifications



Closer Look

Areas and field of focus



Monitoring & Observability	Testing	Analysis and Team Adoption	NGMS Support	All the journey
<p>Full stack, End-End monitoring.</p> <hr/> <p>From tools, configuring, reading outputs, consultation, to reporting and educating</p> <hr/> <p>Infrastructure, application, user experience and log</p>	<p>Planning to execution and reporting</p> <hr/> <p>Methodology of testing</p> <hr/> <p>Testing Culture and know-how</p> <hr/> <p>Implement automation testing and custom framework testing</p>	<p>Proved analysis reports and advice on problem solving and required QA improvements.</p> <hr/> <p>Embrace QA culture and know-how</p>	<p>Level 1 – 2 – 3 of support</p> <hr/> <p>24x7 Service plans</p>	<p>Side by side with client's team</p>

Some Common Tools



Application monitoring & observability full stack (APM)

dynatrace DATADOG splunk elastic New Relic. VMWare Tanzu APPDYNAMICS

Performance test

webperformance APACHE JMeter™

End-to-End – Regression / Mobile

cypress.io cucumber Katalon

Application monitoring open Source

OpenTelemetry Grafana Skywalking SigNoz

Resilience test

Chaos Monkey

Success stories



Delivered by: SORINTians



Confidential

European Certification Authority and Digital Trust Leader Automated End-To-End Testing

Challenge

Client's requirement included:

- Introduce the concept of "testing application" in the enterprise.
- Introduce automated E2E testing to some software applications.

Going forward

Carried out regular assessment-based meeting to understand the environment and Client's team skills.

Accepting the challenge - Solution and Implementation

In a proposal form. We divided the solution into three phases

- Phase 1: Details on the testing strategy, implementation + vendor selection
- Phase 2: Timing, Solution info, testing info, team involvement
- Phase 3: Details on the tool, how to create tests, methodology. Test source files

Result & delivery

- In total we delivered 13 file features. 120 Test cases.
- Integrated tests in CI pipelines.
- Client's team involvement. Introduces and practice BDD methodology.
- Shared a hands-on experience and knowledge to client's team in various projects.
- Project expanded to include application performance monitoring (APM) and Observability on more applications.

Success stories



Delivered by: SORINTians



Confidential

A Leading Healthcare Provider in Italy Monitoring Application Performance

Challenge

- Complete coverage of everything happening on app and infrastructure level.
- Identify optimal size of infrastructure's resources and eliminate waste
- Detect issues with calls to 3rd party services.
- Main activities happen on the core application. Impacts the quality of service and the operation-side of the hospital
- Poor synergy with software vendor.

Going forward

Carried out regular assessment

Accepting the challenge - Solution and Implementation

In a proposal form. The solution proposed was divided into 4 phases:

Titled as POC, Monitoring CUPS, Customization, Analysis.

- POC includes design for several units operating in the hospital.
 - Monitoring CUPS which focused on the implementation of the backend replacement
 - Customization user action, dashboard, availability test, session replay...
 - Analysis and consultation on slowdowns, application exceptions/errors, slow or overly burdensome queries
- Problems with 3rd party services.

Result & delivery

- No impacting problems recorded during Going live and now.
- Intelligent monitoring with full stack observability.
- Examples of issues detected are:
 - Error on request http 4xx / 5xx with stacktrace code level
 - User action slowdown related issues.
 - Performance trends. E.g. non optimized queries
 - Libraries/service subject to security vulnerability e.g. (logj4)



Bonus Slide

Related Solutions and Tools by SORINTians



SSL – Shift Security Left

Digital Technology Services

SSL promotes security as a common responsibility shared by all teams involved in software development. The service follows DevSecOps as a methodology.

[inquire](#)



NGMS

Core IT Services

Remotely manages IT infrastructures ensuring the correct functionality, support for vendor and Open-source products. Reducing response times to new problems. Speed, flexibility, method and technical preparation are part of our DNA.

[inquire](#)

Going Forward

How we can move forward from here

One hour
workshop

Read more on
/sorintlab



Alternative
approach



BUILDING GREAT TECHNOLOGY



IT | ES | UK | DE | US | FR | PL | CMR | RO

www.sorint.com