SENTINEL:
Bridging the security, privacy and data protection gap for smaller enterprises in Europe

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Company overview

Location
- Headquartered in Athens, Greece (est. 2011)
- Offices also in Limassol, Cyprus

Size
- 50 people (50% in R&I) and growing
- 80% growth rate per year for the last 3 years

Competences & Target Markets

Design thinking / CX
- User-centric solutions

Cyber Security
- Threat & Infra monitoring

Data Analytics
- Decision support solutions

Maritime
- Performance monitoring

Indicative Clients

- INTRASOFT
- ΔΕΗ
- WIND
- SUNLIGHT
- AXA
- European Environment Agency
- EU
- EXUS
- Hellenic American University
Create a single market for data that will ensure Europe’s global competitiveness and data sovereignty. Common European data spaces will ensure more data are available for use, while keeping companies and individuals in control of their data.

The challenges to address

- **Availability** of high quality data to create and innovate
- **European rules** and values are fully respected
- **Data can flow** within the EU and across sectors

Rules for access and use of data are fair, **practical and clear data governance mechanisms** are in place.
SMEs represent 99% of all EU businesses (25M SMEs)
Create around 85% of new jobs (2/3 of private sector)

Role of SMEs in the Data Value Chain
- Data owner, data acquisition, data aggregator, data storage, data analysis, data user, data services

- 79% failing to meet the GDPR’s requirements
- 25% don’t consider themselves knowledgeable about the GDPR regulation

- GDPR costs are related to installation costs (IC) of technical and organization measures, as well as maintenance costs (MC).
  Usually, implementation costs are at least twice than maintenance
- GDPR cost for small business is 0 – 50,000 euros annually!
SMEs lack awareness and are confused

- A lack of easy-to-understand information on GDPR
- A lack of awareness on the need to protect data and digital infrastructure
- Outdated operating systems
- Outdated business models
- Multiple platforms
- Tight budgets
SENTINEL provides a complete privacy, cybersecurity and data protection suite that enables small and medium enterprises to achieve business security, safeguard their and customers’ assets in an efficient and affordable manner.

- It integrates security and privacy technologies into a unified digital architecture and then applies disruptive intelligence for compliance.
- It educates SMEs on GDPR requirements and how to achieve compliance.
- It automates GDPR compliance and provision of recommendations for personal data protection and cybersecurity.
- It provides a plethora of tools for real time monitoring and threat mitigation.
SENTINEL Key Performance Indicators (KPIs)

- 20 novel cybersecurity services among which
- 10 dedicated to personal data protection and privacy assurance
- 40% improved privacy compliance efficiency
- 40% reduction in compliance-related costs via automation
- >10 critical aspects addressed (maintenance and software update) for long-term sustainability
SENTINEL overview

Uls: Compliance, Self-assessment, Awareness, Incident response

- Privacy assurance, GDPR/PDP Compliance and Simulation-based training
- Threat Intelligence & Information sharing
- Intelligent Recommendations and policy drafting

SENTINEL
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Cybersecurity offerings
Privacy and personal data protection offerings

SENTINEL consortium contributed, engaged during project, and open-source
SENTINEL offerings in detail

- SMEs/MEs systems’ information
- Financial Status
- SC-related expenses
- Inventory analyses
- Vulnerability & Compliance Assessment
- Financial Risk Assessment

**Explicit data**

- SME’s RASE scoring

**Implicit data**

- Artificial neural networks (ANN)
- Decision trees (DT)
- Genetic algorithms (GA)
- Support Vector Machines (SVM)

SENTINEL available offerings

Tool #1
Tool #2
Tool #3
Component #1
Component #2
Component #3

Cost-Benefit analyses

Explicit data technologies and threat intelligence
SENTINEL offerings in detail

**Cybersecurity components**

- Security Infusion cybersecurity suite
- Cloud-based IT event management and risk mitigation for SMEs/MEs
- Endpoint protection & alerting
- Training & certification
- Organisational measures
- Event monitoring
- Forensics Visualisation Tools

**Privacy and personal data protection components**

- Holistic GDPR, Privacy and Personal Data Protection compliance framework
- Identity Management System (IdMS) for EU data portability based on MyData (Nordic model)
- Data collection / flow mapping
- Consent management
- Transparency / priv. notices
- Vendor and 3rd party risk management
- Privacy breach handling & reporting
- Regulatory compliance reviews

**SENTINEL available offerings**

- Security building blocks: contributed and open-source
- Vulnerability & Compliance Assessment
- Financial Risk Assessment

**Implicit data**

- Explicit data

**Cost-Benefit analyses**

- Tool #3
- Tool #2
- Tool #1
- Component #3
- Component #2
- Component #1
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Implicit data
- SME’s RASE scoring

SME’s RASE scoring

SENTINEL available offerings

Cost-Benefit analyses

Tool #3
Tool #2
Tool #1
Component #3
Component #2
Component #1

Open source data sharing platforms
Open-source incident response platforms
Open-source threat intelligence
National and local DRMs & CERTs
Observatory
Observatory/infowar
Information exchange, OPEN-all business, open-source threat intelligence
Cybersecurity components
Privacy and personal data protection components
Security-related metrics, indicators and frameworks
Security-related training, education and awareness
Professional development, training and certification
Usability, accessibility and privacy
System and service management
Infrastructure management
Cloud and cloud computing
Enterprise and data center
Networking and communication
Device and UE management
Software development and assurance
SMEs RASE scoring
SENTINEL available offerings

Machine Learning
- Artificial neural networks (ANN)
- Decision trees (DT)
- Genetic algorithms (GA)
- Support Vector Machines (SVM)

Open-source technologies and threat intelligence
- Artificial neural networks (ANN)
- Decision trees (DT)
- Genetic algorithms (GA)
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- SME's RASE scoring
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- Cost-Benefit analyses
- Open-source technologies and threat intelligence
- ENTINEL available offerings

- Open security data sharing platforms
- National and local DPAs & CERTs

- EDPS, CERT-EU
- Observatory
- Observatory interface
- Information exchange
  - OPEN API for threats, signatures, evidence, incident data, knowledge base, forum, FAQ, collaboration tools
- Data reuse policy

- Tool #1
  - Component #1
- Tool #2
  - Component #2
- Tool #3
  - Component #3
SENTINEL offerings in detail

Tool #3
Tool #2
Tool #1

Component #3
Component #2
Component #1

Cost-Benefit analyses

Intelligence

- Artificial neural networks (ANN)
- Decision trees (DT)
- Genetic algorithms (GA)
- Support Vector Machines (SVM)

SENTINEL available offerings

Open-source technologies and threat intelligence

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SENTINEL offerings in detail

- SME Training and Education
- Evidence-based GDPR compliance
- Cutting costs through automation

Raise awareness – engage EU SMEs & MEs
Thank you!

Find more:
www.sentinel-project.eu