

TIC 4.0

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INVESTOR DAYS, 29-30 OCTOBER 2015





MAJOR TECHNOLOGY TRENDS DRASTICALLY SGS INVED DAYS CHILE A 29-30 OCTOB



BIG DATA



Real-time collection and processing of massive data from disparate sources

HARDWARE TO SOFTWARE



Smart objects that are autonomous or digitally controlled

AUGMENTED REALITY



Virtual extension of reality via additional visual layer to enhance reality

SMART SENSORS



Translation of physical inputs into digital ones processed by computers

UBIQUITOUS CONNECTIVITY



Spread of high-speed broadband & mobile connections

SHIFT TO THE CLOUD



Remote data storage accessed via network connection

NEW DEVICE INTERACTION MODELS



Ability to interface with technology through gesture and voice commands

IMPROVED DEVICE PERFORMANCE



Miniaturization and lower power consumption combined with faster devices

VIRTUAL COMMUNITIES



Emergences of digital platforms for exchange and collaboration

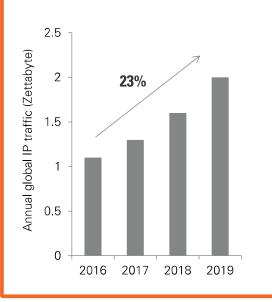


THREE MAJOR TECHNOLOGY TRENDS IMPACTING THE TIC INDUSTRY



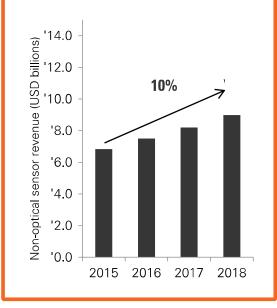
BIG DATA

90% of data generate in the last 2 years – global IP traffic expected to grow at 23%



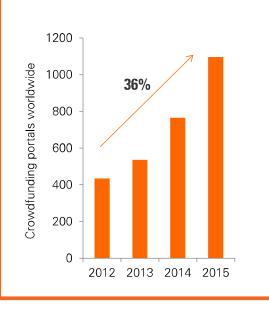
SMART SENSORS

Non-optical sensor market growing with +10% p.a. until 2018



VIRTUAL COMMUNITIES

Growing virtual communities providing new opportunities





SGS MODEL FOR PROFITABLE GROWTH THROUGH DIGITAL



FOCUS ON PROFITABILITY



DIGITALIZATION OF ACTIVITIES



ADVANCED DATA ANALYTICS

FOCUS ON PROFITABLE GROWTH



TIC FOR DIGITAL ENABLERS



ADVANCED DATA ANALYTICS



TIC FOR SYSTEMS OR PLATFORMS



MANAGEMENT OF SYSTEMS OR PLATFORMS



DIGITALIZATION OF ACTIVITIES

THE USE OF DRONES IN PRECISION FARMING





SUCCESSFUL USE OF DRONES IN PRECISION FARMING



THE MISSION



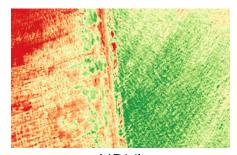
- Risk mitigation

 (i.e. evaluation of plant health)
- Reduce input costs or maximize yield

DATA ACQUISITION / PROCESSING: NDVI CARTOGRAPHY



High-resolution imaging



NDVI

THE OUTCOME

Early identification of nutritient problem enabled farmer to implement appropriate treatment during growing season - resulting in substantial savings





ADVANCED DATA ANALYTICS

ASSET TRACKING - SAVI TECHNOLOGY





SGS OMNIS – A NEW WAY OF ELECTRONIC CARGO TRACKING



JOINT DEVELOPMENT: SGS AND SAVI TECHNOLOGY



2013 Honors Laureate Award

- In 2010, SGS and SAVI Technology developed SGS Omnis
- SGS Omnis is a fully integrated supply chain visibility solution that helps organizations in virtually any industry overcome a lack of visibility into:
 - location.
 - status,
 - security,
 - and condition of high consequence business assets
- SGS Omnis delivers real-time end-to-end visibilty and security anywhere in the world (i.e. notifications, events, alerts about disruptions, change in ETA, etc.). SGS Omnis provides revenue securisation to Customs.



SAVI INSIGHT – REAL TIME SUPPLY CHAIN ANALYTICS



ENTERING A NEW ERA IN SUPPLY CHAIN ANALYTICS



- Shortly after, SAVI Technology and SGS decided to colaborate after SAVI developed SAVI Insight
- Savi Insight is a SaaS analytics solutions that
 - captures sensor data,
 - correlates multiple variables
 - and applies rules and logic that turn data into actionable information
- Savi analytic models continually learn from actual events to generate increasingly accurate predictions and recommendations every time data is collected
 - Improve ETA accuracy
 - Reduce supply chain disruptions
 - Improve cross-docking
 - Improve labor planning
- SGS and Savi identified new opportunities where SAVI Insight can be deployed rapidly





Built from proven, open source technologies including:



















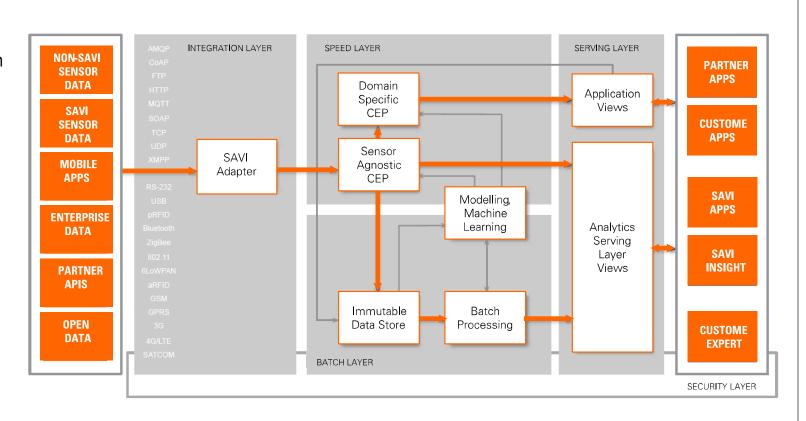


Reference architecture for











SGS AND SAVI TECHNOLOGY – THE WAY FORWARD



SGS OMNIS TO SGS ANALYTICS



- 2010-2012
 Tracking solution for Customs and Tax Compliance
- 2012-2015
 Supply chain visibility solution to assist Trade protecting assets and properties
- 2015 Introducing Analytics
 - Route optimisation
 - Real time data
 - traffic jam
 - regularly floaded areas
 - and its impact on traffic
 - Road and infrastructure
 - Road security



MANAGEMENT OF SYSTEMS / PLATFORMS

FOOD TRANSPARENCY SUPPLY CHAIN SOLUTION - TRACEONE





IMPACT OF THE SPEED OF INFORMATION



Sooner or later, everybody will discover critical information that might destroy:







A REPUTATION

CONSUMER TRUST

A COMPANY

TRANSPARENCY IS A NEW VALUE THAT IS BECOMING KEY FOR TRUST.

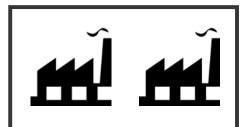


LIMITED VISIBILITY WITHIN THE FOOD SUPPLY CHAIN





Brand owners typically have no visibility beyond the first level of their supply chain.



MANUFACTURERS

VISIBILITY LAYER

- Fraudulent ingredients
- Unknown origins
- Unsafe facilities
- Undeclared allergens
- Unknown contact info

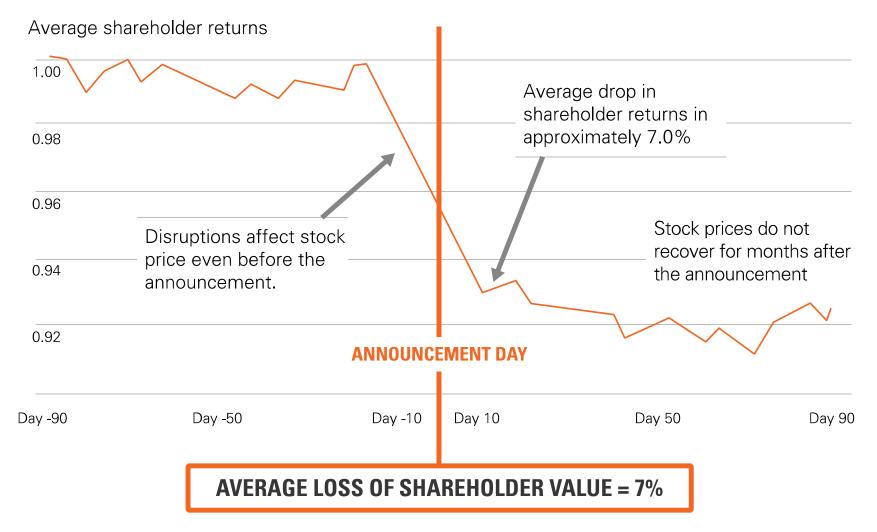


SUPPLIERS



IMPACT ON SHAREHOLDER VALUE OF THE LACK OF TRANSPARENCY



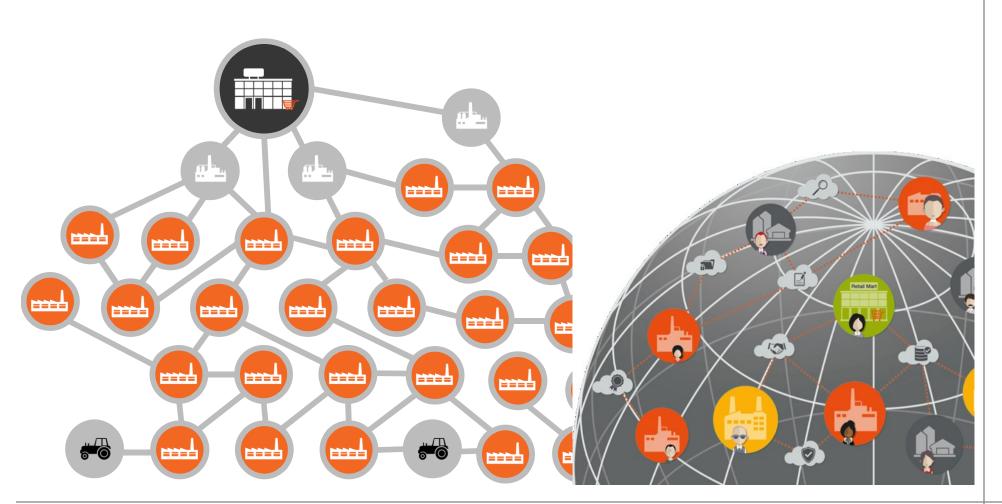


Source: Accenture analysis of 62 supply chain disruptions publicly announced during 2005-2011



THE FIRST B2B TRANSPARENCY SOCIAL NETWORK







SGS AND TRACEONE – AN INDUSTRY SOLUTION WITH A UNIQUE VALUE PROPOSITION











 Recognized brand name in the industry, inspiring trust and confidence

EXPERIENCE

- Expertise and track record in food with global revenue in excess of CHF 0.7 bn in this industry
- Risk management (food safety, social, fraud)
- Data integrity and verification
- Recommendation of risk mitigation strategies
- Strategy implementation and monitoring their effectiveness

REACTIVITY

 Quick response time with possibility to mobilize resources all around the world

GLOBAL FOOTPRINT

- Experienced food back office personnel used to communicate with suppliers in a variety of geographies
- Experienced in managing large-scale global projects across all regions



• Private Label PLM Market leader (EUR 40 Mio revenue)

EXPERIENCE

- Proven track record in the food industry
- 20.000+ Private Label suppliers representing 600.000+ raw materials suppliers connections
- \$300bn equivalent value spent on platform
- Founded in 2001 in France. Privately owned.
 Offices in Europe and USA. 250 FTE

TECHNOLOGY

• State-of-the-art IT platform (Graph data base)

DESIGN

 Solution built on a user friendly platform designed with simplicity in mind









STRATEGIC INITIATIVES: TIC 4.0 SGS AND BIG DATA - STRATEGIC FIT

SUME



Volume refers to the "mass quantities of data that organizations are trying to harness to improve decision-making across the enterprise" Variety refers to the complexity of multiple data types, "including structured, semi-structured and unstructured data"





VARIES











CITY WERACI

SGS

Velocity refers to the speed at which data is created, processed, and analyzed

Veracity refers to the "level of reliability associated with certain types of data"



SGS