Artificial Intelligence

A New Tool in Fighting Fraud

Presentation

Presenters

Sierra Forensic Group (SFG), headquartered in Chicago, Illinois, is a boutique forensic accounting firm specializing in assisting clients with matters involving financial fraud, investigations and analysis as well as litigation support and dispute consulting. SFG utilizes a variety of analytic tools and forensic technologies. We assist clients around the globe and have a particular expertise with organizations in Latin America.

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What is AI or Cognitive Computing

What is AI (or Cognitive Computing)

Artificial Intelligence or Cognitive Computing is software that gives machines the power to perform specific tasks that normally require human intelligence such as visual perception, speech recognition, decision-making, and language translation.

Artificial Intelligence is not a single technology or function:

Why Should We Care About AI?

Ransomware is now the biggest cybersecurity threat

Edward Snowden: the whistleblower behind the NSA surveillance revelations

How Target Figured Out A Teen Girl Was Pregnant Before Her Father Did

Can Alexa help solve a murder? Police think so — but Amazon won't give up her data.

Tesla driver dies in first fatal crash while using autopilot mode

The autopilot sensors on the Model S failed to distinguish a white tractor-trailer crossing the highway against a bright sky

Petya ransomware slams Windows PCs shut in massive attack

The cyberattack is moving quickly, locking down systems at an alarming rate.

China is going 'Minority Report' with AI that predicts who will commit crime next

Hacking Experts Call Sony Cyber Attack 'Unparalleled And Well Planned Crime'

GDPR: time to explain your AI

Applications for AI Capabilities

Litigation Strategy	*"What are my odds of success with this motion before this judge"*	Lex Machina / PREMONITION / RAVEL
Pricing and Budgeting	*"How much should we charge for this matter?"*	IBM Watson
Legal Research	*"What is the statute of limitations on X in state Y?"*	WESTLAW / ROSS / blue J / Lexis Answers
eDiscovery	*"Which of these 2 million documents are likely to be responsive to the discovery request"*	Cura / CATALYST / Thomson Reuters eDiscovery Point / DISCO
Online Legal Services	*Self-service help with legal questions: "Is this person an employee or a contractor"*	NEOTA / kim
Contract Review	*"What risks or opportunities lie in these thousands of contracts"*	LEVERTON / kira / Luminance / RAVN

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AI in Various Industries

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AI in Various Industries
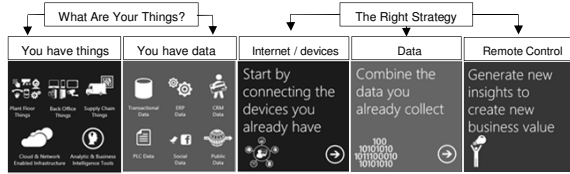
The 5 industries most affected by Artificial Intelligence

Healthcare	Finance	Customer Service	Transportation	Manufacturing
* AI Health Assistants	* Automated trading based on predictive data analysis	* Automated phone support systems w/ voice recognition	* Directions and real-time traffic with Waze, Google Maps	* One of the first industries to use AI
* Early and Precise Diagnosis	* Mobile banking	* Chat bots	* Self-driving cars	* Robots for product assembly
* Storage and Managing Medical Information	* Personalized financial advice	* Language translation services	* Collision detection systems	* Automated packaging processes
				* Testing for defects

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AI in Manufacturing

Three examples of technology revolution that will have an impact on manufacturing industry:

1. *Internet of Things (IoT):* The network of physical objects that contain embedded technology to communicate and interact with their internal states or the external environment.
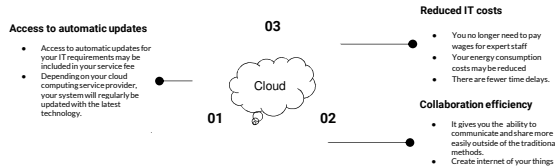
What Are Your Things?		The Right Strategy		
You have things	You have data	Internet / devices	Data	Remote Control

Start by connecting the devices you already have

Combine the data you already collect

Generate new insights to create new business value

AI in Manufacturing

Three examples of technology revolution that will have an impact on manufacturing industry:

2. *Cloud:* It allows you to set up what is essentially a virtual office to give you the flexibility of connecting to your business anywhere, any time.

Access to automatic updates

- Access to automatic updates for your IT requirements may be included in your service fee
- Depending on your cloud computing service provider, your system will regularly be updated with the latest technology.

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Cloud

01   02

Reduced IT costs

- You no longer need to pay wages for expert staff
- Your energy consumption costs may be reduced
- There are fewer time delays.

Collaboration efficiency

- It gives you the ability to communicate and share more easily outside of the traditional methods.
- Create internet of your things

AI in Manufacturing

Three examples of technology revolution that will have an impact on manufacturing industry:

3. *Machine Learning:* Computing systems that improve with experience.

Predictive analytics

Smart manufacturing systems designed to capitalize on predictive data analytics and machine learning have the potential to improve yield rates at the machine, production cell, and plant levels.
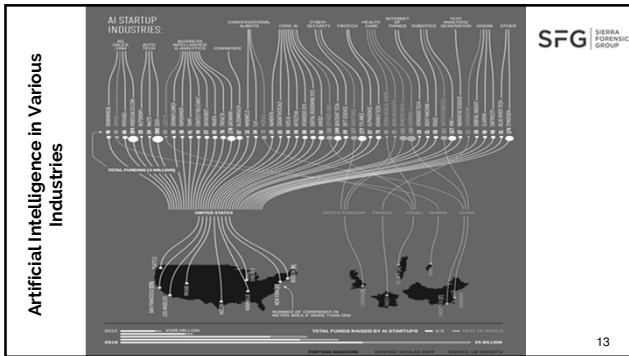
Enabling condition monitoring processes

Provide manufacturers with the scale to manage Overall Equipment Effectiveness (OEE)

Revolutionizing product and service quality

Machine learning is revolutionizing product and service quality by determining which internal processes, workflows, and factors contribute most and least to quality objectives being met.

Artificial Intelligence in Various Industries

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AI in the Accounting

& Finance Industry

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Benefits of AI in the Accounting

& Finance Industry

Improved Productivity and Reduced Costs	More Accurate and Transparent Data and Reporting	Better Customer Service

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Benefits of AI in the Accounting & Finance Industry

Improved Productivity and Reduced Costs:

- Simplify the process of recording transactions.

- Automate the entire workflow of researching, getting purchase approval, purchasing, receiving, storing, and retiring assets.

- Follow controlled process to eliminate risks.

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Benefits of AI in the Accounting & Finance Industry

More Accurate and Transparent Data and Reporting:

- Transparency of data used for reporting.

- Easier to find and correct errors.

- Storage and search software technology advances allow for easy document management.

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Benefits of AI in the Accounting & Finance Industry

Better Customer Service:

- US Bank uses AI to determine best time to call clients.

- Automate / mobile banking.

- Chat and customer service bots.

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How AI Helps Identify Fraud and Monitor Compliance

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AI Identifying Fraud and Monitoring Compliance

Management of:
- Compliance records,
- Contracts, and
- Other important documents

Identifying fraud and monitoring compliance

Banking Industry   Corporate world

is both essential and expensive work

Third party risk management

Banking Industry

Spends thousands of hours poring over countless pages of regulatory compliance filings, loan agreements, and other records to determine whether they comply with laws, terms and conditions.

Corporations

Have to deal all the time doing due diligence to their third parties in order to minimize all different kind of risks. For example reputational, corruption, and non compliance with internal policies and external requirements.

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AI Identifying Fraud and Monitoring Compliance

Systems Built on Machine Learning Technology

Stunning Reductions in the Time and Effort

More Efficiency, Transparency, Reduced Probability of Risks

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How AI Helps Identify Fraud and Monitor Compliance

Identifying Fraud:

- *Rogue employee detection:*
  - ➢ Catching employees opening fake accounts.
  - ➢ Finding multiple accounts using the same e-mail or IP address.

- *Trader monitoring:*
  - ➢ Learns trader personalities and behavior.
  - ➢ Increases the precision of suspicious trading, helping avert costly false alarms.

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How AI Helps Identify Fraud and Monitor Compliance

Identifying Fraud:

- *KYC:* Algorithmic machine learning models with a layer of human-like cognitive reasoning can:

  - ➢ Analyze vast amounts of data,

  - ➢ Search the web and find patterns that can strengthen and streamline the KYC processes.

  - ➢ Identify red flags

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How AI Helps Identify Fraud and Monitor Compliance

Identifying Fraud:

- *Money laundering detection:*

  - ➢ Monitoring reports, news items and regulatory alerts can be evaluated as risk indicators using AI.

  - ➢ Those alerts indicating the greatest risk exposures can be subject to further analysis.

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How AI Helps Identify Fraud and Monitor Compliance

Monitoring Compliance:

- *Law and regulation parsing :*
  - ➢ AI software can select specific rules in lengthy regulatory documents and
  - ➢ Send them to people and departments that need to comply.

- *Identification of regulation and policy updates:*
  - ➢ Cognitive engines can understand and analyze high volumes of regulatory changes and
  - ➢ Verify that a business is alerted to the most up-to-date policies.

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How AI Helps Identify Fraud and Monitor Compliance

Monitoring Compliance:

- *Identification of units, products and processes affected by compliance requirement:* Neuro linguistic programing systems can analyze documents to identify people, products and processes affected by legal and regulatory changes.

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How to Prepare

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How to Prepare

Focus	Individuals must be focusing on their insight and expertise and finding customers in need of those offerings
Self - Education	Individuals hoping to survive and thrive in the age of artificial intelligence must begin by Educating themselves on forthcoming technologies.
Market Yourself	Market yourself to your clients as someone who understands and has mastered the future, rather than someone who stands to be eliminated by it.
Innovative Thinker	Embrace AI technology in an effort to provide more value to clients.

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Questions?

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