915 S Himes Ave Tampa, FL 33629 +1.813.251.1295 (home) +1.610.659.6671 (mobile) mgc@markclancy.com

Mark G. Clancy

Overview

- Business and technical management of information security and risk management, business continuity management including strategy, operational methods, risk analysis, standards & policies, and regulatory compliance.
 - Industry leadership for protection of critical infrastructure with public and private sector. Accomplished public speaker in both industry and government forums
- Broad range of experience in risk management, information security, ecommerce and financial systems, networks, wireless technology, and messaging applications.

Experience

September 2014 to present Depository Trust and Clearing Corporation

CEO Soltra Solutions LLC; Managing Director, DTCC Solutions Data Products

Launched a joint venture between DTCC and the FS-ISAC to productize an internal DTCC solution for sharing cyber threats between organizations using open standards. Developed the business case, risk profile, and joint venture agreement framework. Recruited top engineering and development talent to build the cyber information sharing system. Drove market adopt of the Soltra Edge platform across 25 different industry verticals, 75 countries, and 2500+ organizations. Managed P&L, cash flow, and revenue forecasts. Developed materials to solicit external investment proposals to capitalize the company and pitched to growth equity and strategic investors.

Aug 2009 to July 2015 Depository Trust and Clearing Corporation

Managing Director, CISO and head of Technology Risk Management

- Responsible for protection of the Central Securities Depository of the United States representing \$36 Trillion in digital assets and transaction processing for critical equities, fixed income and money market instrument clearing and settlement functions in excess of \$1,600 Trillion in annual volume. Responsible for all aspects of the IT Risk management Business Continuity Management, and Information Security efforts in the company across all business lines, subsidiaries, and several joint ventures.
- Frequent presentations to parent company and multiple subsidiaries independent Boards of Directors on the Information Security, Business Continuity, and IT Risk management programs and issues. Secured approvals for programs and policies to meet regulatory requirements. Convinced board to support additional investments in risk mitigation efforts based upon management assessment of threats
- Supported business team in winning industry wide RFP for Legal Entity Identifiers to support Dodd-Frank requirements and developing solutions to support four other wins in the derivatives space to address commodities, foreign exchanges, equities, and interest rates swaps data repositories.
- Developed program and strategy to mitigate Advanced Threats to ensure the integrity and availability of DTCC core clearance and settlement systems. Improved capabilities for protection of confidential data to reduce events to meet privacy requirements.
- Created and Implemented an IT Risk management framework from the ground up to address a regulatory issues and improve company business management approaches to

risk mitigation decision making processes.

- Leads the company's Information Security executive committee, serves on the New Initiatives Committees reviewing risk aspects of all new business and technology efforts and serves on Architecture and IT management committees
- Support company's legislative affairs group in policy matters and has briefed congressional staff on company's programs and industry challenges related to Cyber Security and testified before house and senate committees on cyber security

Aug 2003 to Aug 2009 Citigroup

Executive Vice President, O&T Risk Management (Feb 2008 to August 2009)

Senior Vice President, Information Security Technology (Aug 2003 to Feb 2008)

Operations & Technology Risk Management Office

- Supported the Citi Institutional Client Group in winning over \$100 Million USD in client business. Worked with the sales teams in augmenting the financial products offering with additional value as a trusted partner by taking Citi's experiences within global IT Risk Management and applying them to corporate and government customers' own IT Risk programs.
- Created a new Cyber Intelligence Center function to centralize the collection and analysis
 of threat intelligence to drive improvements in the quality of IT Risk Management
 decisions.
- Implemented a set of process and tools to manage Third Party offshore vendors to ensure franchise level risks were mitigated with key controls while not inhibiting the growth in offshore resources needed to meet cost control objectives
- Chaired the Information Security Technology Group, a global cross-business governance body composed of senior Information Security and technical subject matter experts chartered with development of key IS processes, such as vulnerability and threat management, application vulnerability assessment, cryptographic standards, and infrastructure survivability.
- Provided leadership for Financial Sector-wide cyber security activities in partnership with peer institutions and US Government entities such as US Treasury, Federal Reserve Board, DHS, and the Department of Defense to improve the resiliency of the sector and inform national security policy.
- Interfaced with many government and industry regulatory authorities around the globe to support examinations or to address concerns.
- Managed key Information Security technology initiatives, subject matter experts, and cross-functional teams within Citigroup. Direct management of Citigroup senior security professionals and contractors. Financial management of annual departmental operating budget of more than \$9 million USD and capital investments of over \$20 million USD.

Jul 2001 to Aug 2003

Citigroup

Senior Vice President

Emerging Technology Office & E-Citi

 Lead technical due diligence effort to support Private Equity investment units in Information Security products and services. Analysis of business plans, valuations, technical capabilities, market needs, and feasibility for venture investments. Advisor to Citigroup Private Equity portfolio companies to refine products and business strategy to meet needs of target markets.

- Developed of business unit specific policies and procedures for information technology management. Demonstration of compliance to federal regulators including the OCC, OTS, and the Federal Reserve.
- Managed technical, risk, and security analysis of emerging technology projects spanning internal Citigroup and external facing consumer applications. Investigation of wireless systems, LAN\WAN\carrier technology, Voice Over IP, Single Sign-On and authentication technologies.

Apr 2000 to Jul 2001 Citigroup

Vice President, Director

Internet Hosting

- Developed methods, policies and processes for financial grade Information Security management of customer facing web applications in an Internet web hosting facility supporting 1 million visits daily and transactions of \$ 1 billion USD per month.
- Established Security Incident response processes, tactics, and threat level positioning. Implemented and managed real time Intrusion Detection program and system activity monitoring. Performed needs and risk analysis. Established security models. Developed secure system configuration guidelines. Co-ordination and performance of penetration and vulnerability testing. Consulted and advised application developers on secure application design methods and practices.
- Direct management of contractors and Citigroup operational security staff. Management of department annual budget of \$1.5 million USD for Information Security.

Jan 1999 to Apr 2000 Self Employed

Independent Consultant

- Provided technical consulting, project management and business management services to various clients in the areas of Electronic Commerce, Internet Security and Enterprise messaging.
- Performed system and network architecture and design. Policy, standards, operational methods development.

Sep 1993 to Jan 1999

I/G Open Solutions

Chief Technologist

- In consulting engagements worked with dozens of Fortune 500 companies, educational institutions, and government agencies crossing many business and technology areas. Implementation of Consumer and Business-to-Business electronic commerce applications.
- Developed and implemented methods for information security, high availability, disaster tolerance, and multi-site operation. Developed operational procedures and change control processes.
- Developed customer leads, created proposals, and negotiated contracts. Managed consulting staff for Microsoft messaging practice.

Jul 1992 to Sep 1993 Arms, Inc.

Consultant

- Information systems consulting and system management for DuPont Merck pharmaceuticals.
- Education Drexel University, BS in Electrical and Computer Engineering, June, 1992
- Professional Activities
- Financial Services Information Sharing and Analysis Center (FS-ISAC)
 - Vice Chair, FS-ISAC Board of Directors (2010-present)
 - Threat Intelligence Committee (2008-present)
 - Clearing House and Exchange Forum (2010 Present)
- Financial Services Sector Coordinating Council (FSSCC)
 - Member of FSSCC Executive Committee (2010- Present)
 - Co-Chair of FSSCC International Committee (2014-Present)
 - Co-Chair of FSSCC Policy Committee (2012-2014)
 - Member of FSSCC Sector Wide Activities committee (2010 2012)
 - FSSCC lead for sector-wide cyber security exercise jointly with Financial and Banking Information Infrastructure (2008-2011)
 - Cyber Security Steering Committee (2008-2009)
- Independent Consultant (unpaid) to the Institute for Defense Analyses (IDA) at the request of the US Treasury Department. (2013-Present)
- Speaker at US Air War College National Security Forum (2009, 2010)
- Speaker at US Air University: Senior Joint Information Operations Applications Course (2008)
- Panelist at United States Air Force symposium on Cyberspace (2008)
- Panelist at the Committee for National Security Systems on privacy (2008)
- Speaker at the US Army Enterprise Solutions Competency Center conference on identity management (2008)
- Financial Services chair for INCITS Study group on Security Best Practices (2007-2008)
- Board alternate on Accredited Standards Committee X9, Financial Industry Standards (2006-2008)
- Member of Chief Security Officer Councils for both Microsoft and Oracle (current)
- Red Team expert participant in Silent Horizon II, a national security simulation (2007)
- Federal Financial Institutions Examination Council: Speaker (2005)
- Encompass: Director, Board of Directors (2002)
 - Frequent Seminar and Symposia Speaker. (1995-2000)

- Guardent: Technical Advisory Board (2001-2003) Verisign Customer Advisory Council (2002) ٠
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- Member of IEEE (since 1987) •
- Holds an active TOP SECRET/SCI clearance with US Department of Defense and SECRET clearance with US Government via Department of Homeland Security •