Project WILD**FIR**E

This project is designed to develop and promote a set of Fourth Industrial Revolution (FIR) strategies that can be adopted and implemented, as a whole or in part, by any enterprise in any vertical market, industry or sector … to transform the enterprise into alignment with FIR norms, standards, objectives and capabilities (*think*: **better**, **faster**, **cheaper**).

Strategy.1: Migrate Data & Applications to **Cloud**-based Infrastructure (*aka* "Lift & Shift")

Objectives
1. Retire legacy IT investments in facilities, hardware, networking and other infrastructure
2. Reduce or eliminate IT support roles and attendant costs (e.g. infrastructure, systems administration, networking, security, DBAs, systems analysts, testers, etc.)
3. Transfer IT-related risks to cloud-computing and services providers
4. Outsource all routine, commodity, non-value-adding IT functions to external, third-party vendor(s)
5. Reduce ongoing IT spend by 50% or more

Strategy.2: Leverage **Big Data** Opportunities

Objectives
1. Build or buy large-volume, high-value data sets
2. Use (rent, lease) software tools, platforms and services specifically designed to process and analyze exceptionally large data sets
3. Adopt best practices related to the acquisition and/or formulation of useable data sets from all sources (multi-modal), e.g. transactions, sensors, unformatted, third-party, ontological inference, etc.
4. Provision access to big data resources through a robust service abstraction layer
5. Invest in data quality governance (people, processes, technology components, etc.)

Strategy.3: Adopt **AI/ML** Advanced Analytics

Objectives
1. Leverage artificial intelligence (AI) and machine learning (ML) technologies to enable the availability of, and access to, more advanced forms of data analysis enterprise-wide
2. Use AI/ML to develop more and better business insights into customer needs/expectations, competitive market forces, organizational performance, and risk/opportunity exposure
3. Increase the precision of software-based predictions and model-based simulations
4. Provide business decision makers (both human and software agents) with more and higher-quality decision support information resources
5. Explore opportunities to apply idiosyncratic AI performance and capabilities to develop and deploy new, innovative business capabilities, products and services

Strategy.4: Favor **Loosely Coupled Services**

Objectives
1. Leverage the service-oriented architecture (SOA) development paradigm to develop a portfolio of composable services that can be orchestrated into numerous business processes and use cases
2. Decouple business services from underlying technology services for greater business agility and technical implementation flexibility
3. Decouple technology services from underlying data stores to provide data sourcing flexibility, robustness, and fault-tolerance
4. Design services (e.g. business, technology, data) for maximum reuse potential to create and maintain high degrees of ROI in the organization's SOA investements
5. Adopt service-oriented analysis & design (SOA&D) best practices (incl. governance) to ensure maximum utility of all services, and unified adoption of service-oriented solution engineering

Strategy.5: Leverage **Blockchain** Technologies

Objectives
1. Establish and maintain high degree of transactional data integrity in a decentralized operational environment (e.g. cloud-based, see Strategy.1 above)
2. Use software agents and AI/ML components (e.g. see Strategy.3 above) to quickly and easily (read: cheaply) test and validate data accuracy, integrity and veracity
3. Invest in blockchain technologies (software) and skills (people), and promote the horizontal adoption of blockchain technologies based on established standards, best practices and protocols
4. Reduce the costs of data storage and retrieval by leveraging blockchain technology's inherent ubiquity, decentralize nature, and validity/verification features to improve data access automation
5. Embed blockchain-based solution architecture within remote, decentralized IT infrastructure (e.g. cloud-based, see Strategy.1 above)