



Technology Management Solutions for Healthcare IT

Developing new products and services, managing strategic relationships, and managing complex system implementations in these main areas:

- Applying insights from direct clinical experience as well as IT
- Simultaneous Vendor and Client development
- Implementations involving diverse software and equipment
- HIPAA Privacy and Security
- Credit card and alternative payments systems
- Medical device integration with IT systems

A history of success in the following areas:

- *Product Concept Refinement, Requirements Definition, and Development Oversight*
 - Clarifying goals and translating them into requirements to guide development
 - Managing product development life cycle through launch and operations
- *Global Expansion*
 - Identifying local requirements and organizations
 - Creating and capitalizing on strategic relationships
 - Negotiating contracts
- *Programs and Projects*
 - Managing relationships and projects
 - Interpreting between technical and business groups
 - Litigation support
- *Data Security*
 - Leading business and technical efforts to prevent data breaches
- *Regulatory Compliance*
 - Interpreting and evaluating requirements
 - Designing compliance programs
 - Negotiating with agency officials
- 12 years IT Product Management and Project Management

Technical and business credentials:

- MBA in Technology Management,
- Certified Respiratory Therapy Technician
- Registered Civil Engineer (Environmental focus)



OBSERVATIONS about HEALTHCARE IT

The advent of Electronic Medical Records, increased networking of medical devices in hospitals, and telehealth, not to mention technology for clinical decision support, is contributing to the convergence of Information Technology with Clinical Technology. These are adding to already complex demands on IT staff for handling insurance and other financial aspects for hospitals, clinics, medical practices, and ancillary services. Compliance with HIPAA security and privacy requirements also continues to be a challenging and evolving area due to the growth in healthcare data storage and transmission.

Medical device development and implementation continue to follow a similar trajectory of increasing complexity and regulatory pressure.

With healthcare costs amounting to more than 2.4 trillion dollars per year in the U.S., or about one-sixth of Gross Domestic Product, there is intense pressure to not only be effective, but efficient.

In light of these trends, I see a need for individuals with broad experience who can understand and translate business and medical requirements for engineers and developers and explain technical features and constraints to medical and business professionals, both within organizations and across organizational boundaries.

-- David Snyder

APPROACH AND EXAMPLES

Mr. Snyder helps organizations implement new technology internally or for their customers.

Typically, this means assessing what system and organizational changes are needed, developing relationships with vendors or other parties, and leading internal technical and business resources to achieve their goals.

Stated more simply, Mr. Snyder helps people see what needs to be done and provides leadership to get it done efficiently.

One of the most important benefits Mr. Snyder brings to organizations is the development and management of relationships with external parties, ranging from vendors to standards organizations and regulators. Often, his key role is to coordinate customization at the vendor and integration at the client (merchant), which means getting two separate groups of developers working in concert.

Mr. Snyder's **diverse background** in healthcare, environmental engineering, financial systems, software, networks, and data security means he can understand and work in many areas. His IT experience spans more than 12 years and includes work for a technology vendor, as well as merchants and a payment processor.

As a Certified Respiratory Therapy Technician, he provided **direct patient care**, ranging from treatments for asthma and chronic lung disease patients to ventilator support for patients in critical care units. He also drew arterial blood samples and conducted laboratory blood gas analyses.

Mr. Snyder is also a California-registered Civil Engineer with over 20 years of **environmental engineering** experience that includes laboratory data analysis and data management. He has consulted on topics ranging from environmental impact studies to hazardous materials



management and hazardous waste cleanup, as well as compliance with environmental, health and safety regulations.

Diagrams depicting processes and workflows are key tools Mr. Snyder uses to help business people understand technical issues and technical people to understand business issues. Often, this means comparing the existing state of affairs with the desired future state, outlining the criteria for success, and creating the list of requirements that define a solution.

Recent Examples:

Combination Medical ID Card and Payment Card for Kaiser Permanente

Provided technical direction for creation and deployment of a private label payment card on the same magnetic stripe card used for health plan Member identification.

<u>Driver:</u>	Create convenient tool for Members to pay for health services not covered by insurance, such as designer glasses frames, cosmetic surgery, and high deductibles.
<u>Existing State:</u>	Membership ID card with magnetic stripe and no financial tool for extending credit.
<u>Desired Future State:</u>	New private label credit card built into Membership card to enable Members to pay for health care with a line of credit.
<u>Accomplishments:</u>	Guided creation of pilot project for two of eight Kaiser regions, from Concept through Design, Development, Testing, Deployment, and Troubleshooting.
<u>Results:</u>	Successful pilot demonstrating feasibility of a combined Membership ID card and credit card.
<u>Key Factors:</u>	<ul style="list-style-type: none"> Relationships with GE Capital (private label card issuer) and Global Payments (payments processor) Troubleshooting Point of Sale device telecommunications problems in the field.
<u>Healthcare Relevance</u>	<ul style="list-style-type: none"> <i>Patient safety aspects of membership ID cards; hospital and clinic work flows; data security</i>

Electronic Payments Switch Enhancements for Kaiser Permanente

An electronic payments switch consists of centralized servers, software, and network connections to aggregate credit card payments processing from many locations, as an alternative to thousands of individual telephone line connections from each point of sale.

<u>Driver:</u>	Desire for cost savings by adding network connections to American Express.
<u>Existing State:</u>	All credit card processing being done through a single payments processor, with a fee being added for each American Express transaction.
<u>Desired Future State:</u>	Frame relay and VPN connections from merchant data centers to American Express data centers.
<u>Accomplishments:</u>	Interpreted technical issues for business management and explained business drivers to technical team. Reduced information on network connectivity and payments process changes into requirements and project plan. Managed internal and external resources over a six-month project timeline.
<u>Results:</u>	Despite vendor issues, achieved implementation on time and working correctly.
<u>Key Factors:</u>	<ul style="list-style-type: none"> Anticipated most risky tasks and ensured long lead times for these tasks Used diagrams to explain complex connections and work flows to business and technical teams.
<u>Healthcare Relevance</u>	<ul style="list-style-type: none"> <i>Healthcare revenue cycle improvement; hospital and clinic work flows; data security</i>



Global Expansion for Apple Inc. Online and Retail Stores

Between 2005 and 2008, helped Apple expand its direct sales in Europe, Asia, Australia, and Latin America.

<u>Driver:</u>	Corporate plan to expand Apple's direct sales outside the U.S.
<u>Existing State:</u>	Online stores in more than 20 countries and retail stores in UK, Japan and Canada.
<u>Desired Future State:</u>	Add online stores and retail stores in more than a dozen countries.
<u>Accomplishments:</u>	Bank and vendor relationships established for each country. Design, development, testing and deployment guided for several countries between 2006 and 2008.
<u>Results:</u>	Global expansion objectives achieved.
<u>Key Factors:</u>	<ul style="list-style-type: none"> Created diagrams of global payments processes to explain work flows and roles to management and technical teams Architected redesign of payment gateway vendor's processes and wrote business requirements to guide needed changes Bank negotiations onsite in Mexico Bank negotiations onsite in Brazil Extensive phone, e-mail, and face-to-face negotiations with banks and vendors in Europe, Asia, Australia, and Latin America
<u>Healthcare Relevance</u>	<ul style="list-style-type: none"> <i>Workflow analysis; requirements definition; contract negotiations and relationship management</i>

PCI DSS Compliance for Apple Inc.

Between 2005 and 2008, helped Apple achieve compliance with the Payment Card Industry Data Security Standard (PCI DSS).

<u>Driver:</u>	Rapid growth of iTunes, Online Stores, and Retail Stores put Apple over the threshold for Level I compliance with the Payment Card Industry Data Security Standard (PCI DSS). Requirement for annual assessment by Qualified Security Assessor (QSA).
<u>Existing State:</u>	Basic information security practices in place, but variable among business units and not always aligned with PCI DSS requirements.
<u>Desired Future State:</u>	Not only compliance with PCI DSS, but "gold standard" protection for customers' payment card data.
<u>Accomplishments:</u>	Managed Qualified Security Assessor selection process and engagement of QSA. Managed efforts of diverse business units to upgrade systems to meet PCI DSS requirements and prepare for assessment by QSA. Coordinated initial and annual assessments.
<u>Results:</u>	Compliance achieved and processes established to maintain compliance.
<u>Key Factors:</u>	<ul style="list-style-type: none"> Identified and secured services of independent security professional to advise management and referee discussions regarding standards interpretation and compliance approaches. Coordinated efforts among fiercely independent departments Negotiated Compensating Controls for selected requirements Created Security Awareness Training program.
<u>Healthcare Relevance</u>	<ul style="list-style-type: none"> <i>Data security; cross-functional leadership; compliance management, including negotiation of alternative approaches;</i>

Additional relevant experience includes Radio Frequency Identification (RFID) technology.