

# Systemkey™ Dialog-driven Risk Discovery

*client stories*

*Because of confidentiality, these stories are sanitized composites of existing events. None of these five stories are, or claim to be, verbatim reports of actual events.*

- 1) Foodstuff Manufacturing: crisis response  
**Safe supplier report delivered in 6 hours**
- 2) Oil & Gas/Pipeline: physical asset management/legacy system integration  
**Cost savings over \$30,000 (USD) per hour**
- 3) Weapons Manufacturing: system integration  
**Cost savings over \$8 million**
- 4) Steel Mfg: quality assurance/personnel/communications  
**94% productivity improvement in 7 days**
- 5) Foodstuff Manufacturing: finance/currency hedging  
**Cost savings over 6 billion yen (¥6B ≈ \$970M USD)**

## Foodstuff Manufacturing: Crisis response

Mesopotamia's largest bakery conglomerate announced that they are expanding the use of the Red Sky™ Risk Discovery software powered by the Systemkey™ Risk Modeling Language (SRML), throughout their entire supply chain after it helped immediately quell a potentially catastrophic egg scare when two competitor's wholesale egg suppliers were shown to have delivered eggs contaminated by dioxin-laced chicken feed.

“As a global leader in the foodstuffs industry, we have access to the best tools, techniques, processes and quite frankly, the best staff in the business. Technology can leverage people but never replace them. Our experience with Red Sky™ has shown us this hands down, during our recent dioxin egg scare.” reports Division Director Domino Welch, speaking at the 2011 Food Safety & Quality Conference hosted at Inka Cola HQ in Lima, Perú.

### Why a Risk Solution powered by Systemkey™?

“Because Systemkey™ is a dialog-driven model, not just mere software” continues Welch, “the Red Sky™ 5-layer inquiry software guided us in the questions and feedback channels we developed day-to-day. Only when the dioxin scare erupted did any of us in the entire MSC supply chain realize how much more business intimacy we had developed, not just vendor-to-vendor, but person-to-person.

“That may sound like an odd endorsement for a risk software solution, but I'll say it again; the fact is, that Systemkey™ Risk Intelligence is a *next-generation risk discovery solution that is beyond mere software*, because it was the strengthened personal relationships, and the data those structured questions delivered, that allowed every MSC egg supplier to uniformly deliver consistent datasets.

“For us to issue a report with our highest confidence that no MSC supplier had contaminated feed in their egg production, in less than six hours(!), is like moving heaven and earth. Anyone that doesn't understand the staggering achievement that represents simply needs to learn more about the food industry. We're sold on risk solutions powered by Systemkey™ and STETA membership helps us leverage what we've learned to build mindshare within our industry.”

ABOUT Systemkey™ Risk Solutions and STETA: see last page.

## Oil & Gas/Pipeline: physical asset management/legacy system integration

A Fortune 10 Oil & Gas pipeline operation “lost” hundreds of millions of dollars in assets across North America, but they have never moved. What’s the problem? Because this global company had no uniform vocabulary for assets, the finance function literally could not find giant storage tanks that had not changed location in decades. Wave after wave of legacy system integration (in name only) made their physical asset inventory into a Tower of Babel.

With a comprehensive risk and asset modeling language, **Red Sky™** software powered by Systemkey™, delivers a globally uniform, XML-based, platform- and language-independent tool for both assessing risk and tracking assets, because they are intimately linked: *we cannot protect what we cannot find.*

### Why a Risk Solution powered by Systemkey™?

As a dialog-driven model, it goes *beyond mere software* with the unfair advantage of scaling to every level of the company, available to every conversation, in spite of power outage, natural disaster, legacy system hiccups or other events too numerous to list. Systemkey™ frees you from the:

- increased exposure to
- vulnerability of
- and money wasted on

assets hiding in plain sight. With cost savings over \$30K (USD) **per hour**, the implementation has essentially instant payback once the value-added training is completed and the staff begin using the software routinely.

The open-source CMMI®-compliant Systemkey™ platform, in coordination with our market partners, leverages our existing investment to sustain and improve financial performance while expanding our capacity to identify hidden areas of potentially catastrophic business impact. This leverage includes risk data correlated from corporate silos (OpEx, InfoSec, GRC), service outage and availability. Not only does **Red Sky™** Risk Suite highlight & aggregate risks from programs and investments, but we’ve found the Semantic Compression™ Risk Discovery element has expanded our capacity to recognize the *messenger events* that have been hiding in plain sight, just like our storage tanks. These insights are now transparent and searchable at a level of unprecedented granularity. We’re sold on Systemkey™ Risk Discovery as a financial choice and our people love the ease-of-use.”

ABOUT Systemkey™ Risk Solutions: see last page. (CMMI is a registered trademark of Carnegie-Mellon, used for identification only, no endorsement implied.)

## Weapons Manufacturing: System integration

Mid-tier munitions supplier RCP Reactive Chemistry delivered a rarity in government contracting: they are delivering a current order on-time, under-budget, while urging the acceptance agency to **tighten** the spec under which the order is produced.

RCP won the contract to produce an automated shuttle that assembles a round and primer (“a big bullet”) aboard a new class of Navy ship, which can operate in sea state 6 (*rougher than anything Gilligan or the Skipper ever experienced*). With questions driven by Red Sky™ software, using the Systemkey™ Risk Modeling Language, the work team created a full-size demo of the full shuttle system then discovered *and resolved* two potentially catastrophic design flaws:

- They redesigned the four independent wheel motors to have a failover network so that the shuttle could *gracefully degrade* yet still retain transport capacity by redistributing drive power to the other wheels in case one or two failed.
- They redesigned the loading arm so that losing the signal (in battle) could no longer result in the round and primer being loaded in reverse order.

**SOLUTION:** a system that met the desired result, not just the system requirements. This is a clear case of the whole being greater than the sum of the parts, because the team brought the **WHOLE** brain of their **WHOLE** workforce to bear on challenge of keeping America safe.

ABOUT Systemkey™ Risk Solutions: see last page.

## Steel Manufacturing: quality assurance/personnel/communications

A leading New Brunswick Steel Manufacturer chose **Red Sky™** Risk Discovery Suite powered by Systemkey™ to solve a multi-layered problem with logistics, chemistry and cultural elements. Solving this issue reversed a severe production decline and resulted in an astonishing 94% improvement on the bottom line. With a payback *in less than 7 days* (for the single location, not the company as a whole), the six-figure implementation cost was a trivial expense compared to taking production from catastrophic 6% of capacity back up to full output.

### Why a Risk Solution powered by Systemkey™?

As a chemical production process, making steel is well defined and well understood. What Ingarb AG discovered was that the people-to-people linkage was anything but. “Without **Semantic Compression™** structured questions guiding us, I can’t think of any risk software in the world that would’ve uncovered the solution to our vanadium quality control failures, because it wasn’t a chemical failure or even a logistics failure. Our solution came from listening and *being willing to hear what our staff was actually telling us*, not what we wanted to hear,” reports CFO Donald Vadnais.

IN BRIEF: the new chief chemist was assigned the additional duty of checking-in the components that arrived on Fridays after the full-time technician started taking every Friday off for chemotherapy.

“The HR/Payroll function made the assignment without ever checking with either the Chem Lab or the chemist herself, who has a formal work memo on file to leave work before sunset on Fridays because she is devoutly orthodox. The upshot of that is that the vanadium deliveries were arriving with no one to check them in and the quality test folks were shipping the orders back – at our cost! – because they had no traceability signature from Chem within the one hour of delivery required by our contract.

“Not only did this take us a month to get to the root of the issue before our Systemkey™ Risk Discovery sessions; I can assure you that the very humanity of the issue would never have come up on a traditional risk checklist!” says Global Personnel Director Guy Van der Root. “The **Red Sky™** software had literally a one-week payback, in fact, *many times over*, because this single example has given us a template to examine dozens of other supply chain procedures for similar ‘brittleness’ or lack of attention to the realities of our very human workforce.”

ABOUT Systemkey™ Risk Solutions: see last page.

## Foodstuff Manufacturing: finance/currency hedging

Armadillo Powders is a global provider of precursor ingredients to the spice & flavorings industry. During the planning & construction of a new plant in Brazil the company used the Red Sky™ Risk Discovery Suite, powered by the Systemkey™ Risk Modeling Language, to uncover that they had no foreign currency hedge to cover their exposures to a devaluation of the Brazilian real. Executing on this recognized risk saved the company over 6Billion yen when the currency markets drastically devalued the real. The company considers that the investment in Systemkey™ paid for itself *more than 30x over cost* and continues to add value.

## Why a Risk Solution powered by Systemkey™?

The Systemkey™ dialog-driven risk discovery process was seamlessly integrated across the entire company without the usual training headaches of a software-centered solution. “As a global leader, we have access to the best software in the world,” says Division SVP Cambert Alange. “Even so,” Alange continues, “by choosing a solution that integrated live structured questions into the full range of employee activities, we uncovered a gaping hole in our financial coverage that had passed three levels of formal financial review. An enterprise risk assessment powered by Systemkey™ is not cheap, but compared to what it saved us on this instance alone, cost of implementation is not even a factor.”

“Because Semantic Compression™ structured questioning opens up the WHOLE brain of our WHOLE workforce, the company was able to overcome the on-going business nightmare of **wondering what we don't know we don't know** and realize a 6B yen savings by asking so-called ridiculous, irrelevant and outlandish questions.”

ABOUT Systemkey Risk Solutions: see last page.

## What makes solutions powered by Systemkey™ so distinctive?

Imagine the benefits in clarity, time saved and resources freed up when your C-level decision makers have the capacity to correlate the relative impact of risks across your various silos. With Systemkey™ Risk Intelligence, your perspective includes more than just data:

Current methods (heatmaps, dashboards, radar plots) give just a glimpse by operation or line of business, without a view of the whole. If we don't explore the inter-related risks, then the project is doomed to fail. Is that too strong? Ask Toyota, BP, Carnival Cruise Lines, Lightsquared and tragically many others.

When it comes to uncovering those interrelated risks that are *just below the surface*, no one group has the visibility to mitigate them. **Cross-disciplinary insight** is vital to uncovering those latent risks your *so-called experts* have reviewed and discounted.

The dialog-driven Systemkey™ structured questioning reaches every facet of your business, regardless of legacy systems or distributed operations. Systemkey™ Solutions leverage the best of your technology assets and the best of your human capital so that the unplanned, unexpected events that are definitely going to happen don't result in multi-billion dollar headline disasters, but only speed-bumps that are easily overcome.

With our **Semantic Compression™** process embedded in our **Red Sky™** software and available separately (in non-software form), events across your operations are normalized into a common format and language that can be rationally compared not just across your supply chain, but extended out to all your value-added partners, at every point in the product and customer life cycles. The opportunity to focus on the urgent without neglecting the important over the long-term is the mouthful we distill into the phrase Cross-disciplinary Insight (CDI).

Intuitively we know that as companies grow, the problems they face grow at a much greater rate. At a \$100MM volume, very often find yourself solving half-billion dollar (\$500MM) problems.

Systemkey™ Solutions help you solve those problems before they undermine your ability to grow to the next level.

### About Systemkey™ Risk Solutions:

Systemkey™ Risk Solutions is a suite of software, processes and services for dialog-driven risk discovery. Field trials show that firms who adopt and implement Systemkey™ Risk Solutions experience many times more than the 10x ROI promised. Detailed field trial data is available under a confidential disclosure agreement. Founder and Board Chair Matthew E. Weilert has transferred the rights to the Systemkey™ suite to a unique “chamber of commerce for risk” chartered in Lost Pines, Texas after the devastating Deepwater Horizon oil spill in the Gulf of Mexico.

This organization, The Systems Thinking & Engineering Technical Alliance (STETA) has the mission of evangelizing *technology solutions powered by people* to transform the culture of how risk is measured and managed. Currently STETA works with business, industry and academic leaders in Texas, North Carolina, Normandy (FR), Istanbul (TR) and Malta.

Systems Thinking Institute LLC (STI) is a global provider of business risk solutions focused on equipping businesses to drive profit by resolving the hidden risks in their business and exploiting new opportunities within those recognized risks. (See <http://globe.systemkey.net> for an animated global tour.) Our CMMI-compliant Systemkey™ platform, in coordination with our market partners, leverages your existing investment to sustain and improve financial performance while expanding your capacity to identify hidden areas of potentially catastrophic business impact.

STI contracts with STETA, a non-profit chamber of commerce for risk, to deliver Systemkey™ certification training meeting the evolving standard of dialog-driven risk discovery. As of Q3: 2014, STI is migrating its focus beyond the training arena and working actively with STETA to assemble and qualify a global cadre of leaders who will train on behalf of STETA to certify both members and client firms to meet this member-driven emerging standard and to recertify organizations according to frequency set by industry and location.

Systemkey™ Risk Intelligence offers the capacity to manage specific risk consequence in the broader context of related risks, so key leaders Know & Grow™ with our Certified Risk Intelligence Specialist designation. Unlike most certification programs, Systemkey™-certified leaders avoid the term “expert” because the real genius powering Systemkey is learning to listen to what we **need** to hear, not just what we **want** to hear.

With a comprehensive and coherently layered approach to managing risk, *Systemkey™ delivers clarity that moves the needle* in reducing costs, by resolving the most critical threats to your triple-bottom line and allowing a pragmatic approach to handling risks of lesser consequence.

Red Sky™ software powered by the Systemkey™ risk modeling language, identifies risk consequence according to potential impact on business performance, helping C-level executives and their teams to prioritize and schedule business process improvement, problem resolution and overall spending. Red Sky™ Risk Suite outcomes typically include: reduced organizational risk profile; reduced OpEx; improved customer experience and competitive advantage.