instaknow

Real-Time Visibility and Integrated Program Management

with

HUMAN INTELLIGENCE AUTOMATION ®

I. Overview

In order to remain competitive in an increasingly saturated market, Banking firms are challenged to maximize efficiency and keep costs low. One well known approach to increased productivity and cost reductions is automation of repetitive business processing to eliminate manual touch points. Automation reduces the need for hiring and training staff, resulting in operational cost reductions and an "Agile Enterprise" with rapid and accurate responses to problems and opportunities. The Instaknow technology can facilitate a more flexible and reliable automation scenario than current or standard technologies.

To go to the case study directly, Click here

CURRENT PROCESS AUTOMATION TECHNOLOGIES: BPA AND RPA

With technologies like "Business Process Automation (BPA)", a new, integrated "collaborative" layer of composite business rules can be deployed across multiple systems to automatically control each system's actions. Another technology "Robotic Process Automation (RPA)" allows software "bots" to repeat pre-taught actions across user interfaces of diverse systems, doing the same work as a user does.

However, in reality, BPA is expensive and time-consuming because it requires every system to be reengineered to make it XML-enabled. RPA is not useful for high-volume complex processing because it BLINDLY repeats pre-taught actions, and is unable to handle even minor variations in data layout/formats in user-interfaces or documents, making it error-prone and unreliable. Lastly, both BPA and RPA lack the "fuzzy" intelligence that people can apply to solve the business problem.

A NEW APPROACH: HUMAN INTELLIGENCE AUTOMATION®

Instaknow.com, Inc. has developed a real-time process automation platform, the Instaknow-ACE™ (Active Collaboration Engine), that "overlays" integrated business processing on top of current systems and data sources, while retaining much of "Human-like" data awareness and flexibility. This is a far more cost and time effective way of deploying the benefits of process automation than BPA or RPA, because it can automate complex workflows with very high accuracy, without changes to systems, procedures, policies or documents; and can quickly and RELIABLY displace cost of manual work being done by hundreds of people.

Adapting in real-time, Instaknow overcomes the main scalability limitation RPA and Machine Learning have, i.e. inability of processing unfamiliar data layouts. Instaknow's Human-like vision does NOT need examples like Machine Learning does. Additionally, Instaknow runs multiple complex processes in parallel in the memory of each machine, WITHOUT opening visible user interfaces like browsers or Excels. With dramatically higher accuracy and throughput, Instaknow delivers high-volume, straight-through, unattended automation to realize the effort, time and cost savings promised by Scalable Intelligent Automation.

Working like many automated, expert users, Instaknow-ACE processes thousands of complex business transactions in minutes, rather than days taken by people, while following every rule and policy you ask it to follow. Built-in "fuzzy matching" capabilities allow for correlation of multiple, non-exact information across systems in a highly reliable manner. Audit trails are kept as desired and all existing security policies of all systems (digital certificates, passwords, LDAP based roles etc.) are honored automatically. The processing can happen as desired - triggered by users, invoked by other authorized system on demand, according to schedules or in a continuous mode till stopped by an authorized user.

INSTAKNOW MAKES IT SIMPLE

Instaknow Automates Complex Processing with Human Vision-like Scans of All Data

SEARCH CAPTURE DISCOVER

- Core Banking, CRM, Financials, Human Resource, BI & Analytics, Legacy, Project Management System
- External Web Sites, Legacy System Screens
- PDF, Excel, Word, Email
- Web Searches, Deep Web Mining, SaaS, Web 2.0, Blogs

INSTAKNOW PROVIDES SMART AUTOMATION ACROSS ALL SYSTEMS

ANALYZE PROCESS CONCLUDE

System agnostic - No changes to internal or external systems!
Processing can run on-demand by users, systems, schedules or continually.
Real-time Processing, Reduced Cost, Increased Productivity.

UPDATE PUBLISH ALERT

- Update Systems Public, Remote
- Publish Web Pages, Reports, Twitter
- Send Alerts, Email, IVR, SMS

Automated processing WITHOUT cost of re-programming every system * Rapid I2B

UNIQUENESS

Combining all capabilities of an advanced programming language AND those of many well-trained, expert business users, Instaknow's "Human Intelligence Automation" is distinctive because it is

- Designed for enterprise-class, high-volume parallel processing and multi-machine-load-balancing, to deploy mission-critical, high-volume operations, capable of processing <u>millions of complex business transactions</u> per month using only 2-3 standard machines, with built-in redundancy and fail-over.
- Does not require programming – Instaknow programs itself automatically from the external system interaction examples you choose to show, adapting to each system's unique data content, format and navigation. You can also add cross-system business decisions (business rules) via a point-and-click graphical interface to make the automation as intelligent as your expert business users, including exception handling.
- Easily links to all data - Reads-updates normal enterprise data sources (Databases, SOA, EDI, APIs etc.) as well as hard-to-integrate, unpredictable-layout sources (Web sites, portals, SaaS, Excel, Word, PDF, e-mails, attachments, mainframes, AS400 and other legacy systems). All natural languages are supported.
- Automatically adjusts to <u>infinite variations of data-of-interest</u>, e.g. data location/format changes, like an electronic "eyeball", making it radically more reliable than blind RPA bots. E.g. it can accurately isolate and read specific required data from complex web pages and documents, regardless of unknown Web page layouts, document page order, unpredictable paragraph sequence, varying data location within a page etc. It is also color/font sensitive and can apply color-based business rules like "Purchase Orders in bold text with yellow background need cross-verification with ERP invoices".
- Processes complex business transactions with broad awareness, e.g. in a single transaction, data from three emails, five browsers, three Excels and two PDFs – can be correlated (and updated, if required) in real-time, just like a trained user would do. And multiple of such multi-source transactions can process at the same time from a single machine, drastically reducing the number of machines required for automation.
- Applies multi-parameter "fuzzy matching" intelligence to find same or <u>similar</u> information with reliability of an expert user.

BUSINESS BENEFITS OF A INSTAKNOW-POWERED HYPER-CONNECTED SOLUTION

- Faster business processing at reduced operating costs. Millions of business transactions can reliably be automated per month.
- Leverage value of and investment made in existing systems without costly technical changes.
- Provide straight-through processing with internal and external partner, customer and supplier systems.
- Reduce manual data lookups / research / data entry / errors / corrections / re-do's / customer complaints; resulting in higher quality and performance. Free staff for higher-value tasks.
- Drastically reduce system integration costs and traditional delivery times.
- Bring enhanced product/service offerings to market faster than before.
- Provide solutions to business problems previously considered too costly, time prohibitive, unrealistic or impossible to achieve.

Case Study - Real-time visibility & Integrated Program Management

CLIENT

A Major US Bank

BUSINESS PROBLEM DESCRIPTION

The bank identified the proliferation of data across disparate, non-integrated systems as a major issue impacting their ability to make timely and accurate business decisions. Data warehouse and XML integration approaches were deemed too expensive and risky as each source system is a complex Enterprise class system onto itself.

Effective Real-Time Decisions involved accessing information from the following business area/ systems:
- Project Management
- Financials
- HR
- Contractors
- Production System Availability
- Personnel Travel Audit
- Personnel Time Off
- Compliance Training
- Mandatory Training
- Progress Reports
- More

INSTAKNOW'S SOLUTION

Instaknow - ACE was found to be the only solution to integrate such diverse systems without writing code and without changes to any systems. After identifying business rules, process, and data sources, the software was trained to sweep each system daily using its patented HTML automation capability linking data across systems.

An integrated dashboard was created enabling the CFO & CIO access to information from various systems / sources to make effective real-time decisions.

Results
- Achieved objectives without changes to current systems or procedures.
- No burden on scarce and expensive IT resources.
- No impact on current system users.
- Improved decision making based on more accurate and timely intra-day data (only monthly data was available previously).
- Saved hundreds of hours of people resources by automating the correlation and graphical presentation of raw data from multiple disparate sources.
- Compliance with security and confidentiality mandates ensured through on demand dashboard views defined and presented by user role.
- Retroactive analysis based on integrated historical data tracking available for the first time resulting in ongoing process improvements and planning. Many of the source systems do not provide historical views, making retroactive analysis impossible.
- Warning alerts allow for the intervention and resolution of impending threshold violations minimizing their detrimental impact across multiple business units

The following views / dashboards are provided by Instaknow based on user roles and permissions:

Audit Compliance
- Outstanding audit exceptions
- Upcoming audits (Breakdown by business group and Delivery Manager)
- Mandatory and/or optional compliance projects status
- Audit action items (counts and status by Delivery Manager)

Financials
- Planned Vs. Budgeted Vs. Forecast Vs. Actual cost by project with ongoing variance tracking
- Cost to service
- Charge backs to line of business by project and release
- Application development spend by application
- Infrastructure spends by application
- GL31 certifications (monthly scorecard requirement for AU managers of people certifying GL's)
- Costs to on board an employee (e.g. job posting, travel for interview)
- Customer acquisition costs
- Business development spend

People
- Recognition Portal (Count of employee recognition instances by Delivery Manager)
- Performance ranking (Count of employees by performance ranking by Delivery Manager)
- Attrition (Rate of employee attrition by Delivery Manager; by performance level (1-5))
- Hiring (Rate of hiring employees and contractors by Delivery Manager)
- Headcount (Trend over time)
- Efficiency of BASE personnel (Number of resources supporting each application)
- Employee engagement (Level of employee engagement by Delivery Manager)
- Open requisitions (Contractor requisitions by location and title by Delivery Manager)
- Education and Training (Hours by Delivery Manager)

Production
- Application Performance (Red/Yellow/Green for all critical business functions)
- Infrastructure availability (Server and network availability for all critical servers and network)
- Application Volumes (Red/Yellow/Green compared to benchmark)
- Preview of production changes (For upcoming 2 weeks of scheduled changes, counts by risk level, lead time and application team)
- Changes audit (For previous 2 weeks of production changes, counts of unscheduled/emergency changes, changes with impact, failed changes)
- Infrastructure performance – (Server and network performance for all critical servers and network locations)
- Problem Tickets (Ticket count and aging report by Delivery Manager by severity; tickets opened and closed by severity)
- Infrastructure capacity (Server and network capacity for all critical servers and network locations)
- Issue analysis and preventative actions (Counts and aging of issue analysis items and preventative actions by Delivery Manager)
- Capacity planning (Status of capacity plans in ECAP by application)
- Business Continuity Plan (BCP's and test status)
- System inventory status
- Security plans status

Projects
- People time and cost by activity, base, and incremental tasks
- Enterprise Test Completion (Completion percentage compared to schedule)
- Enterprise Test problem resolution (Outstanding tickets by Delivery Manager by status)
- Business value benefits by project (Benefits defined by client)
- Number of Change Requests by project
- Days late on each deliverable
- Open positions (Open positions by location and title by Delivery Manager)
- Days to project funding received
- Run rate by project
- Report on pieces of projects
- Milestones and deliverables (count of projects by release by milestone completion)

The solution was deployed over an elapsed timeline of 4 months.

BUSINESS BENEFITS OF THE INSTAKNOW POWERED HUMAN INTELLIGENCE AUTOMATION SOLUTION

Business Benefits

- Integrated Risk Monitoring Solution, helping the Bank take proactive & swift decisions.
- Best of Breed System Capabilities
- leverage investment in existing system
- No change to existing system (data continues to reside in original source systems)
- Ability of analyzing "cross-universe" data across fragmented sources

The solution has been a major success thanks to the Client's vision and Instaknow's unique capabilities.

About Instaknow

Instaknow is a fast-growing B2B Artificial Intelligence software company. Our "Human Intelligence Automation ®" AI software helps Fortune 1000 organizations and large government agencies become more efficient and productive by rapidly cutting time, effort and costs of data intensive manual operations. Our software has been granted five U.S. patents and more are pending.

Our current customers include global giants in banking, pharmaceuticals, logistics, legal, telecom, federal/state/city agencies and many more. Exciting new AI breakthroughs in our latest software release (think "dramatic advances beyond Robotic Process Automation") are about to revolutionize how corporations rapidly achieve "Digital Transformation" at mass scale.

Our AI software is used in many industries and in hundreds of different ways, providing multiple avenues to succeed, a rich learning experience; and a chance to solve high-value business problems in never-before-possible ways.

For more information, contact solutions@instaknow.com

Instaknow.com

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