Introducing: Trusted Knowledge Automation

Delivering a 3x increase in Enterprise Automation benefits through Advanced AI and a graph-based data platform.

INVESTOR PRESENTATION

NASDAQ: WKEY
SIX: WIHN

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WISEKEY
INVESTOR PRESENTATION

STRICTLY CONFIDENTIAL
COVID-19 has accelerated the need for digital transformation and created a new wave of demand for automation software.
Knowledge Automation: The next evolution in business process automation is about to start now

Increasing **market size** with each wave

**Fourth wave 2020s (knowledge automation)**
- API automation using data and applied AI
- Enables all tasks to be automated from cloud
- Fully digitizing end-to-end processes

**Third wave 2010s (task automation)**
- Task automation engines: RPA and Solution builders eliminated need to build software
- On premise replication of human actions with more advanced tooling and script options

**Second wave 2000s (task automation)**
- Runbooks and BPM tools to manage scripts
- Scraping enables UI automation
- Automation software custom built

**First wave 1990s (task automation)**
- Scripts on server replicate human actions
- Every automation is a new application

Increasing **performance** with each wave

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Scalability and Maintenance Limitations Have Inhibited Each Wave

RPA Scaling limited to static tasks
- Best suited to low complexity, low variability tasks
- Maintenance costs scale linearly with automation adoption

Cybersecurity threat restricts applicability
- RPA and scripts applied directly to UI or server
- Requires on premise presence for security

Automating tasks is not Digital Transformation
- RPA increases throughput of staff, but requires staff to operate automation
- True Digital Transformation is end-to-end, not patchwork automation of tasks

The RPA wave is now reaching its limits
Wisekey Knowledge Automation breaks Through Current Limitations – We Are the Next Automation Wave after RPA

Automation powered by Advanced AI based on data and insights – not on scripted instructions to automate a specific task; reducing effort to automate.

AI engine automatically selects knowledge to apply based on contextual data – adapting dynamically to change and lowering maintenance costs (TCO).

Reliance on data enables automation of complex and variable tasks enabling full end-end-to-end process automation and true digital transformation.

Automation is via secure APIs and data secured by Trust technologies, enabling a SaaS model and cloud based automation, lowering costs.

True Digital Transformation through Knowledge Automation
Diving Deeper into our Proposition
Merging Together Two Leaders in Their Respective Industries

WISEKEY WITH ITS TRUST TECHNOLOGY
- Leader in cybersecurity
- Core technology used to generate digital identities and authenticate data and IoT
- Enabling trust in IoT, data and identification

ARAGO WITH ITS AI AND DATA TECHNOLOGY
- Leader in business process automation
- Next generation Knowledge Automation enables up to 3x higher automation at lower ownership cost
- Enables full digitization of end-to-end processes and establishes customer data platform to support AI and analytics

OUR COMBINED TECHNOLOGY
- Adding Trust to Knowledge Automation - delivering next generation business process automation with the Trust required
- A cloud based SaaS offering designed for an unclear cyberthreat environment - customer data secured and authenticated
- Delivering unprecedented value to customers
Our Combined Technologies Deliver Unprecedented Value to Customers

Business Value
- Business Processes Automation
- Workflow Automation
- Automatically Action Data Insights

Knowledge Automation
- Digital Transformation

AI

Data

Risk Mitigation
- Automated Brand Protection
- Automated Digital Identities
- Automated Secure Elements
With Our Technology We Ensure that Customers Can Trust the Cloud
Deep Dive: The Knowledge Automation Breakthrough

**Task Automation with RPA**

1. Process mining to identify high frequency activities
2. Process analysis and design to limit complexity/variability
3. Process re-engineering to optimize for RPA automation
4. Document sequence of steps, commands, errors, etc.
5. Code the solution to automate task
6. Prepare input data and manage automation
7. Update and repair script with any change in environment

Each addition to task requires update of automation.
Each new task in a process area potentially start at Step 1.
Each new process area is a new project with new systems.

RPA is repeating a series of sequential steps robotically.

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**Knowledge Automation**

1. Identify data required to make decisions to automate
2. Integrate system APIs to HIRO for data transfer
3. Send ticket to HIRO to Automate
4. Using agile automation, encode knowledge in HIRO
5. Adapts to change based on knowledge; add if missing

Each variation of a to a task may require new knowledge.
Each new task in a process area may require new knowledge.
Each new process area may require new integration.

Knowledge Automation is taking actions based on contextual data.

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THROUGH DATA HIRO CAN EASILY AUTOMATE AND DIGITIZE A PROCESS BREAKING THROUGH SCALE LIMITATIONS OF RPA
Deep Dive: IT Operations Solution Deployment

Knowledge Automation solution
- HIRO ships with pre-built integration for common applications
- Data models exist for IT and there are solutions in place for digitizing tickets and the process
- Key steps for delivery are to identify all data, integrations and ticket categories and connect systems to HIRO
- Agile Automation allows customer to immediately see results, customer success guides customer to business case
- Deployment (time to value) where required integrations exist: in as little as 4 weeks
- Time to 90% automation of 500 tickets: as little as 3 months

Generating new solutions
- Adding a solution is as simple as understanding the process, building a data model and initial integrations
- Typically 2 weeks of preparation and 2 customers implementations to confirm solution details

AI Data Warehouse benefit
- All data used by HIRO during automation is stored in Knowledge Graph
- Data is structured and tagged for analytics – AI ready

Planned Solution Portfolio Rollout
- IT Ops/ITSM: 2021-22
- Finance: 2022-23
- HR Processes: 2023-24
Go-To-Market
HIRO™ can automate any process that has data based on customer knowledge.
Phased GTM to Establish our Brand and Messaging
Prior to Scaling through Partners

1. Direct Sales
   - Direct Enterprise sales team to establish sales process and messaging in parallel with marketing awareness
     - Focus on early adopters of automation software
     - Market education and lead gen focus

2. Outsourcing Partners
   - Add Knowledge Automation to outsourcing partner toolkit; and enable sales to their customers
     - Focus on partner sales and marketing enablement
     - Build market awareness
     - Initial partners established

3. Implementation Partners + VAR
   - Enable System Integrators to sell digital transformation services to global customer base. Enable resellers for global reach.
     - Knowledge Automation enables digitizing of complete process, which will require SI help to transform companies
     - SI will become a key pull channel to enable software sales
     - Establish reseller channel for global sales coverage

Expand to US market
Expand to Global market reach

Western Europe
Customer Success Stories
“HIRO™ is a strategic choice that will allow us grow our service portfolio.”
- Dr. Berthold Kaib, Senior Vice President

“Implementing HIRO™ into our IT environment will be one of the levers for the further digital transformation of our company.”
– Gisbert Rühl, CEO

“With amount of work we have done with HIRO™ and the knowledge [items] we have been able to create in the last five years, we see a brilliant future for our automation journey.”
– Satyajith Mundakkal, VP
Customer Success Stories – Selected Examples

**Network Automation**
- Started piloting various automation tools for 1st level support
- Could not get above 30% overall automation using RPA approach
- Little standardization possible due to high level of base automation

**Proof point:** HIRO with superior automation capabilities

**IT Automation**
- Best in class IT operation services using standardization and all typical automation techniques.
- Desire to beat large competitors with better service, higher availability cheaper prices and faster reaction times

**Proof point:** HIRO with consistent results over a very long-term

**Arago’s Service**
- Used to automate highly individual service requests in first level support.
- Then extended to automate core network operations
- Now partnering to resell Arago HIRO to business customers

**Impact**
- **Automated work of**
  > 100,000h
  Annually with >90% automation rate

**Automated Tasks 2019 ~275k**

**Challenge**
- HIRO applied to 28 dedicated use cases for IT incident and client service request resolutions (e.g., unlocking accounts, creating new email boxes)
- Extending now to all incidents, problems and service requests

**Proof point:** HIRO with consistent results over a very long-term
## Customer Success Stories – Selected Examples

### Challenge
- Online marketing campaigns with hundreds of line items
- Optimization of campaigns currently performed once per day by specialists
- Objective: improve efficiency and frequency of optimization to run more campaigns more effectively

### Arago’s Service
- Continuous tracking and analysis of campaign performance (5m cycle)
- HIRO automatically updates in real time
- Campaign managers freed up to work on strategic customer need

### Impact
- Improve campaign effectiveness though faster adoption by 20%
- while reducing manual effort put into managing a single campaign 80% more specialist time for other clients and strategic

**Proof point:** HIRO’s automation cannot only be used to save cost, but also to increase revenue

### Challenge
- Credit approvals for sales orders being approved manually daily by review of bank receipts (110 FTEs + 1 FTE in each country)
- Objective: speed up order fulfilment for larger clients, extend checks to smaller clients

### Arago’s Service
- HIRO performs hourly checks of bank receipts removing credit blocks on SAP sales orders
- Automates credit approval according to company policies close to real time for any size of customers

### Impact
- Top- and bottom-line improvement by approval of 15k Blocked sales orders of business that would have never happened otherwise per month

**Proof point:** HIRO capable of fully automating large amounts of complex decisions, making them applicable to every client
Investment Thesis
Immediate target market: RPA (Minimum Addressable Market)

Extending into Process automation market (Realistic Addressable Market)

Business Process Outsourcing (Total Addressable Market)

Source: IDC, McKinsey, Markets and Markets, Statista, company information

Large Immediate Market Potential With Further Upside
Wisekey: Transitioning Trust from Chips to the AI and Data Economy

WISEKEY FOUNDED TO BUILD TRUST TECH
• Focus on PKI certificates with Root of Trust in Switzerland
• Initial business based on certificates distribution (2000s)
• Followed by investments in secure chip design and distribution (2010s)
• Digital certificate business divested in 2019 to DigiCert

INVESTING IN TRUST IN AI AND DATA
• Retaining ownership of core PKI Root of Trust (OSTE)
• Implementing in AI through arago acquisition and Knowledge Automation product line
• On-going research in Block Chain and other areas to further leverage and gain return from Trust technology

Semi-Conductors
Secure authenticated chips
Brand protection

SSL/TLS
Secure authenticated chips
Brand protection

Knowledge Automation

Innovation Labs
BlockChain Applications
Arago: Early AI Leader Struggled under KKR and Now Poised for Growth

**PE mismatch for deep tech startup 2014-2020**
- Focus on general AI market, not finding product market fit
- Governance and exec talent suited for PE portfolio company
- Market focused on RPA and immature understanding of AI
- arago focused on rapid “big bang” US/global expansion

**KKR bought out by Founder 2020**

**Restructuring business for growth 2020-Future**
- Rebuilding GTM around automation and solutions
- Focus on high potential talent and growth experience
- Legacy Automation (RPA) and AI scaling limitations recognized
- Focus on Europe leads to manageable early growth

**Focus on growth investors who can support global scaling**
OUR VISION

Changing the nature of work from task to knowledge based.
OUR MISSION

To enable organizations worldwide to digitize their business through knowledge automation – combining data, AI, and trust technologies to bring work into the digital age.
Management Team Set For Growth

Carlos Moreira  
Founder & CEO  
- 20+ years experience in CyberSecurity  
- Founded WISeKey in 1999  
- United Nations Expert on CyberSecurity and Trust Models

Peter Ward  
CFO  
- Chartered Management Accountant  
- Significant experience as Executive Staff (Board) level in International, multi-cultural environments

Chris Boos  
CTO  
- 20+ years of fundamental tech experience  
- Founded arago in 1995  
- Strategic Advisor on AI to German Chancellor, US Army  
- Serial innovator and entrepreneur

Patrick Williamson  
COO  
- 20+ years tech experience across Silicon Valley, Asia and Europe  
- 6 years CxO leadership  
- Built and launched 9 high growth products

Benjamin Stump  
CRO  
- 20+ years experience in global tech and security markets  
- 15+ years CxO excellence  
- Digital transformation leader
Reasons to Invest

Unique advanced AI and semantic graph data layer delivers a 3x increase in benefits. Combination with trust technology makes entire market accessible.

Post COVID19 Enterprise automation market poised for high growth – no other competitor provides trusted automation solutions across AI and data value chain.

Automation has already created multiple enterprise Unicorns – combined entity poised for growth.
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