



Protecting the Enterprise and Consumer

Product Track Trace and Authentication (TT&A) Innovation and Implementations

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Today HP is the largest technology company in the world—committed to using our products and services to unleash new possibilities and have a meaningful impact on business and life

- Fortune 9 – U.S.
- Fortune 32 – Global
- Doing business in approximately 170 countries
- 321,000 employees
- 145,000 sales partners
- 210,000 service partners
- 88,000 retail locations



LEADERSHIP ACROSS THE PORTFOLIO

Worldwide market share data for calendar Q2

| MARKET | SHARE | POSITION |
|---|-------|----------|
| Blade Servers ¹ | 52.9% | #1 |
| x86 based Servers ¹ | 36.9% | #1 |
| Unix + Linux + Windows Servers ¹ | 32.9% | #1 |
| Branded Tape Drives ⁹ | 41.2% | #1 |
| External Disk Storage Systems | 17.5% | #1 |
| Open SAN Systems ⁵ | 17.4% | #1 |
| Automated Software Quality ^{1,6} | 44.8% | #1 |
| Distributed System Management Software ^{1,7} | 15.4% | #1 |
| IT Asset Management Software ^{1,6} | 21.4% | #1 |
| IT Services ^{1,4,7,9} | 6.5% | #2 |
| Outsourcing ^{1,7,9} | 9.6% | #2 |
| Support and Training ^{1,7,9} | 7.1% | #2 |
| Inkjet printers ⁸ | 47.0% | #1 |
| Laser printers ⁸ | 31.0% | #1 |
| Ethernet Switches | 5.4% | #2 |
| Workstations ³ | 41.8% | #2 |
| Notebooks ² | 21.9% | #1 |
| Desktops | 17.1% | #1 |
| Thin Clients ⁹ | 26.9% | #1 |

© 2009 HP Worldwide Quarterly Software and Services Data



What is the problem we are trying to solve

W.H.O Statistics – Global Drug Counterfeit Problem

- Drug counterfeiting is an estimated **\$75 billion** business in 2010.
- Fake medications are responsible for at least **700,000 deaths** every year.
- Malaria medication is especially at risk, killing an estimated **100,000 persons in Africa/year**.

Region

% Fake Drug Sales

In the developed world

< 1%

Many countries in Africa and parts of Asia and Latin America = 10% ~ 30%

Many of the former Soviet republics

> 20%

Medicines purchased over the Internet

= 50%

Other Industry Segments

Global Food & Beverage Anti-Counterfeit MV est @ \$60Billion/Year (Pira International)

Other – Branded Clothing, Games, Cigarettes, Toys, Car Parts...All CPG Luxury goods

Global Industry Analysts (GIA) Report

“ Global market for anti-counterfeiting technologies could reach **\$82.2bn by 2015**”

“ Food & Pharma industry most vulnerable”

“... increase in investment in technologies is coming despite the downturn in the global economy, helped by regulatory drivers including US and EU moves towards serialization and track-and-trace for pharmaceuticals”

Focus: Integrated, Scalable Product Tracking And Authentication (PT&A) Solution Portfolio as a service for Enterprise Business and Consumers

KEY CHALLENGES

- Counterfeiting
- Product diversion
- Regulatory compliance
- Retaining customers
- Supply chain optimization
- Recall management
- Consumer engagement

PT&A SOLUTION PORTFOLIO

- Smart Labels and packaging solutions
- ePedigree and compliance solutions
- Supply chain transformation services
- Mass serialization (RFID etc)

INTEGRATED, SCALABLE PT&A SOLUTION PORTFOLIO





Combating Drug Counterfeit in Developing world



How does the Service Work

Generation of Secure Codes that can uniquely identify Products

HP has developed IP to

- Generate mass serialized numbers while avoiding collision (replication of a unique IDs)
- That can be applied to products under a Authentication aaS offering
- While ensuring that the mass serialized strings have a cryptographic level of randomness.

Key : Random number generator of the mass serialization engine is cryptographically secure.

Patents Pending, Whitepaper Developed

Development of a Service Infrastructure that enables Authentication via a SMS network

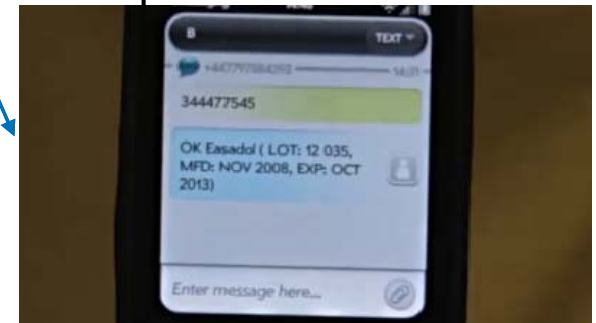
1-Consumer purchases Drug



2-Consumer Texts Unique Code to an agreed Short Code for Drug Authentication

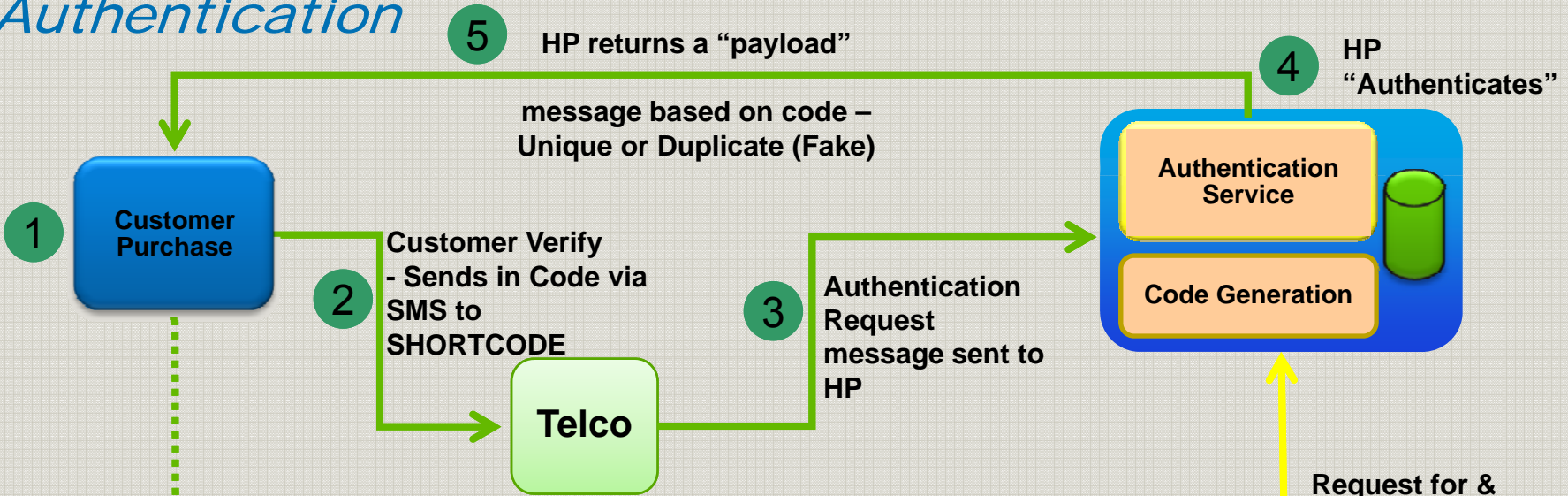


3-Consumer receives SMS Response – OK or Fake

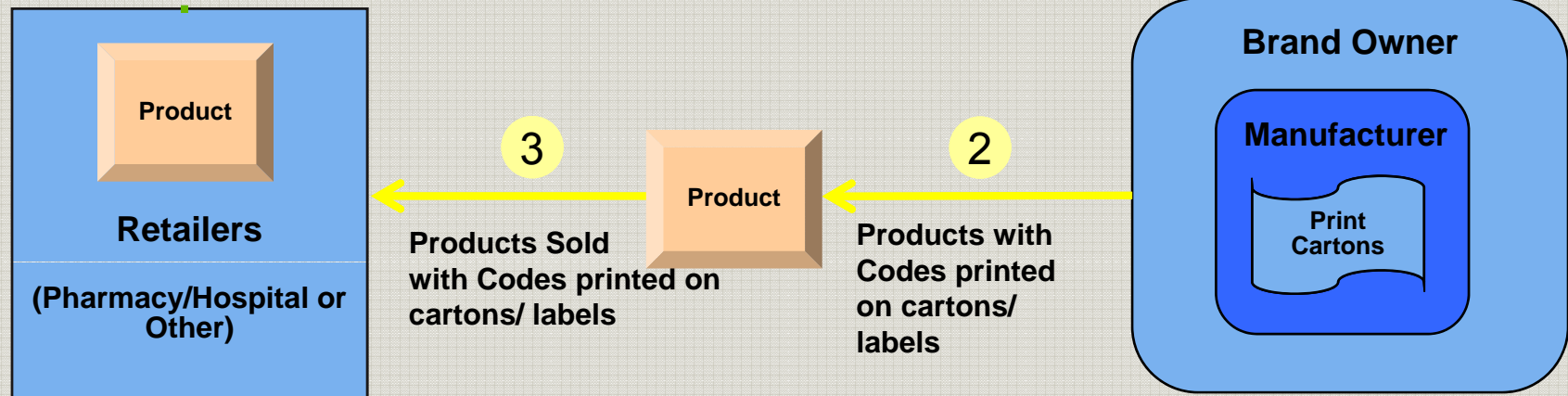


How does the Service Work - Business Process Overview

Authentication



Code Generation and Association



HP Involvement

- Design, creation and operation of core authentication software service (HP IP)
 - HP software services managed and supported
- Management of SMS aggregator solution (TR2)
- Hosted in HP owned and managed mission critical data centre
- Software as a service model (pay per code)
- Single point contact for Pharma industries/Telecom providers
 - Contracts, “Authentication Service” request (Orders), Support
 - BI and Analytics services requests
- HP Go to Market programs
 - Pharma industry entities and global organisations
 - Governments
 - Global healthcare bodies
 - NGO engagements



HP MPedigree relationship

- Initial Partnership established 2009
 - Due diligence, market evaluation, complete investigations
 - Business and technical partnership 2010
- MPedigree Focus (Africa)
 - Market awareness campaigns
 - Regional engagements with Global Organisations, Local Government, Regulatory bodies, Local Telecom providers
- HP focus
 - All technology and Solution provision, IT management
 - Services Solution creation and launch
 - Authentication service
 - Business analytics
 - Business contracts (pharmaceutical companies, telecom providers)
 - Go to market programs



HP & Mpedigree Pharma Anti-Counterfeit Service

HP helps mPedigree test its SMS drug verification

Phil Taylor

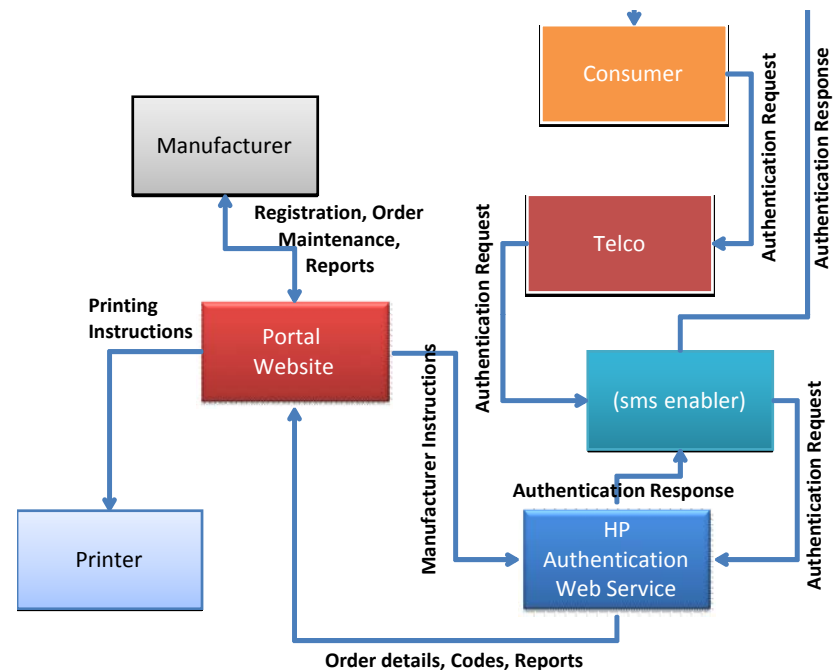
03-Jun-2010

mPedigree started testing the feasibility of its text message-based verification system for pharmaceuticals in Ghana last month, as part of an ongoing collaboration with Hewlett-Packard and mobile phone carrier Zain.



Using the system, consumers scratch off a panel on a medicine pack to reveal a 10-digit numerical code, which can be sent via text to a free SMS number. The request is routed to a secure HP server in Ireland and a reply is texted back within a few seconds to indicate whether the number is legitimate.

The overall aim is to find a low-cost solution to the problem of counterfeit medicines in Africa, particularly countries such as Ghana, Nigeria, Angola, Burundi and Congo where it is estimated that up to half of all medicines are substandard, according to a report published last year by the International Policy Network (IPN).



Scratch & Win War on Africa's Counterfeit Malaria Medicines Gets Under Way



mPedigree effort



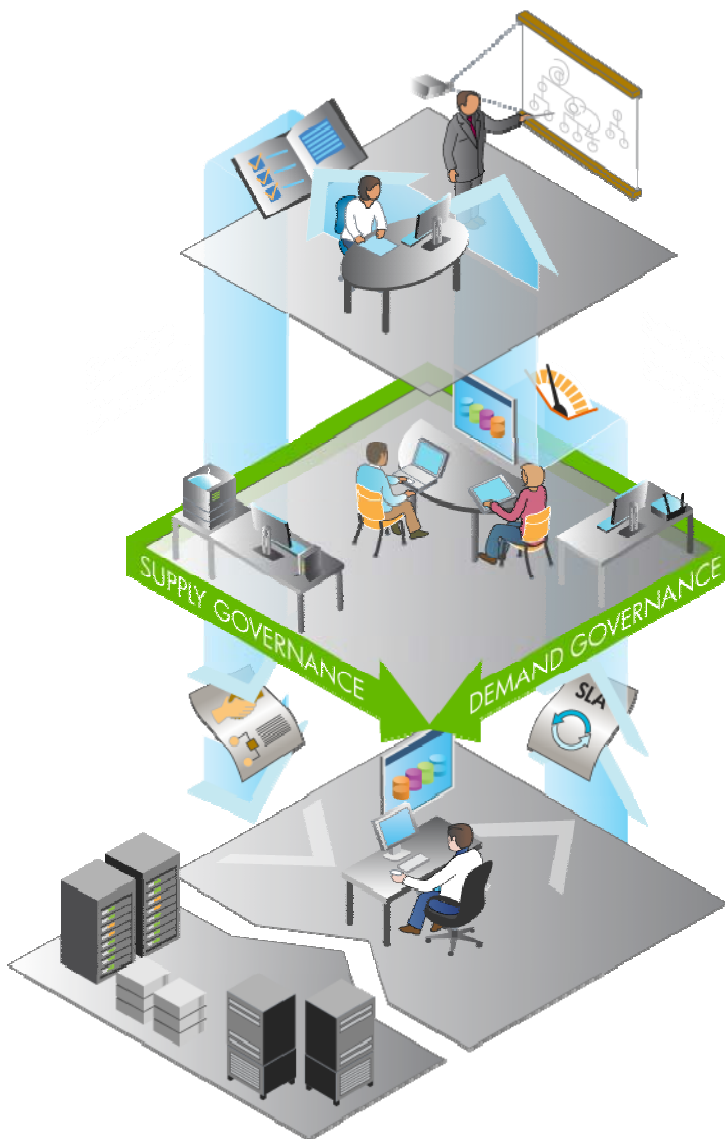
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Mass serialized, color corrected, scratch-off



HP is your partner in bringing all of the pieces together



Service portfolio and catalog



Sourcing and governance



Shares services and service management



Utility-based services, metering and reporting



Training and professional services

Support strategy



HP I.P. / Technologies

- US Patent 7,455,013
 - Hybridization of two or more serialized printed elements
 - Independent serialization
- US Patent 7,466,234
 - Use of multiple elements, where one is intentionally non-functional (used as bait/supply chain auditing)
 - Identifier on label/package indicates functionality
- US Patent 7,543,745
 - Printing/affixing 3+ data-dense items
 - 2+ items linked by using other (e.g. 3rd) item as key
 - Off-line, on-line possibilities





Happy to help

- We are Happy to help you protect your product and roll out this solution for your organization.





Questions





Thank You

