



Discover the truth about discovery

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Management: To ITIL and beyond!"
(www.effectiveitsm.com)*

Are you sitting in the right session?

- Discover the truth about discovery
 - Automated discovery was, and indeed still is, seen by many as the holy configuration grail and yet over the past couple of years it has become apparent that it poses as many questions as it answers. Sure, it will tell you what you have, some tools will even tell you where it is and what it talks to, others will tell you how it's being used and even how the stuff is configured... But the advent of agent-less discovery and context sensitive intelligent discovery sensors have also raised many questions regarding their use and how they should be implemented in conjunction with the configuration management process. Like the chicken and the egg, there is much debate over whether the change closure, CMDB update or the automated discovery reconciliation should come first – although this presentation will not necessarily answer that particular question, hopefully it may answer a few others...

A little about me...



What my publisher says...

- *Rob Addy is an ITSM professional with over a decade of hands on experience in the field with both enterprise and medium sized organisations. During this time Rob has been fortunate to work for many of the biggest names in the industry in a variety of roles in the UK and the US. From application development and support, to direct solution implementations, to product management and marketing, to consulting management and technical sales, Rob has gained insight into the ITSM world from a wide variety of angles. This 360 degree view of the market enables Rob to balance real life scenarios, customer requirements, best practice processes and technical solution capabilities and limitations to give a unique pragmatic approach to improving IT services using a combination of current best practice and tried and tested experience.*

Disclaimer

- The content of this presentation does not necessarily represent the position of my employer. Nor does it represent any intent upon their part to deliver products and services to meet the objectives and requirements covered. Any product references or comparisons are not intended to show a preference and should in no way be taken as a recommendation or otherwise

What we will be covering...

- Discovery – The truth is out there...
- Bursting a few bubbles
- Truth is always relative
- The current state of the discovery union
- Discovery and Configuration Management

The background of the image is a dark, atmospheric landscape. It features a body of water, possibly a lake or a wide river, reflecting the dim light of the sky. In the foreground and middle ground, there are dark, silhouetted mountains and hills. The sky is a deep, dark blue with some lighter, hazy patches, suggesting a twilight or dawn setting. The overall mood is mysterious and somber.

A VERSION OF THE
~~THE~~ TRUTH IS OUT THERE

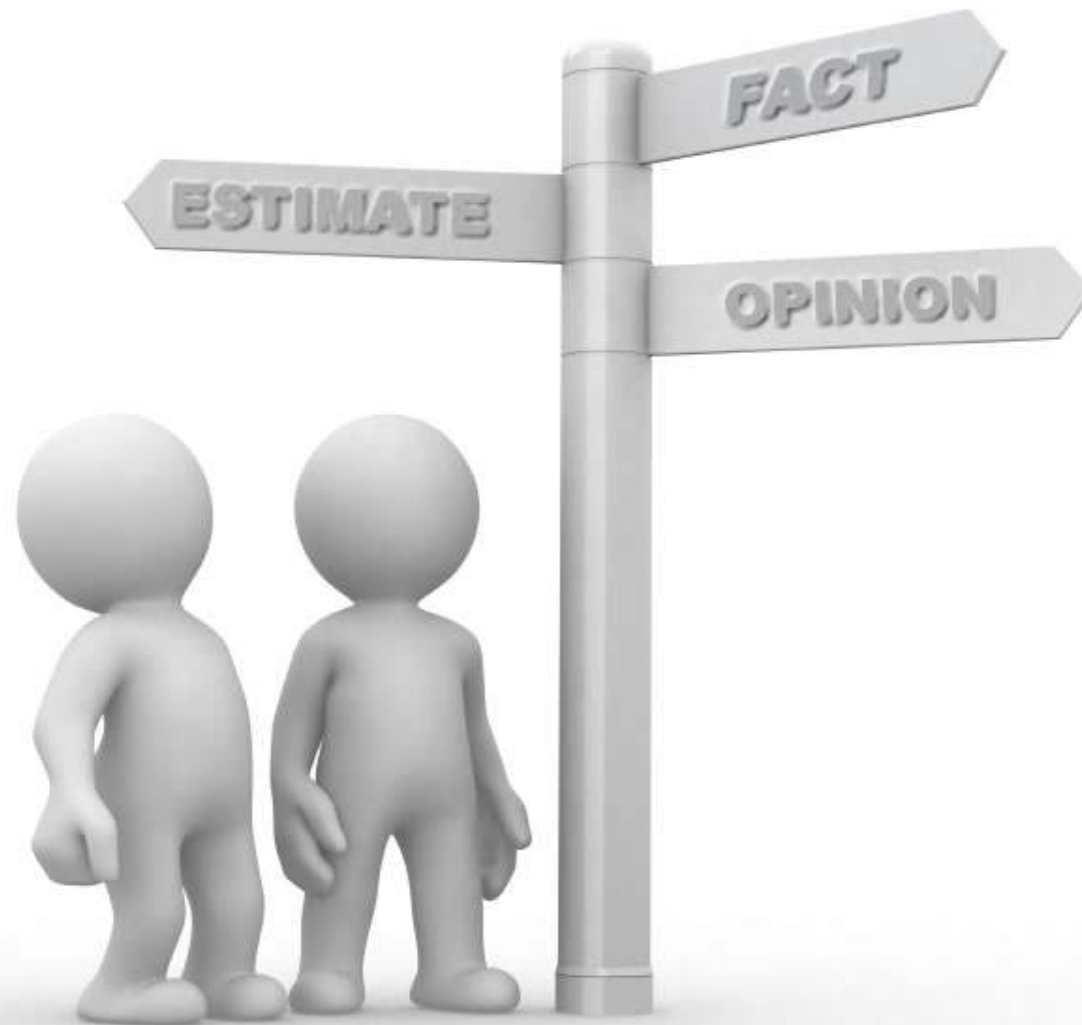
Is Automated Discovery really the magic pill that the vendors claim?

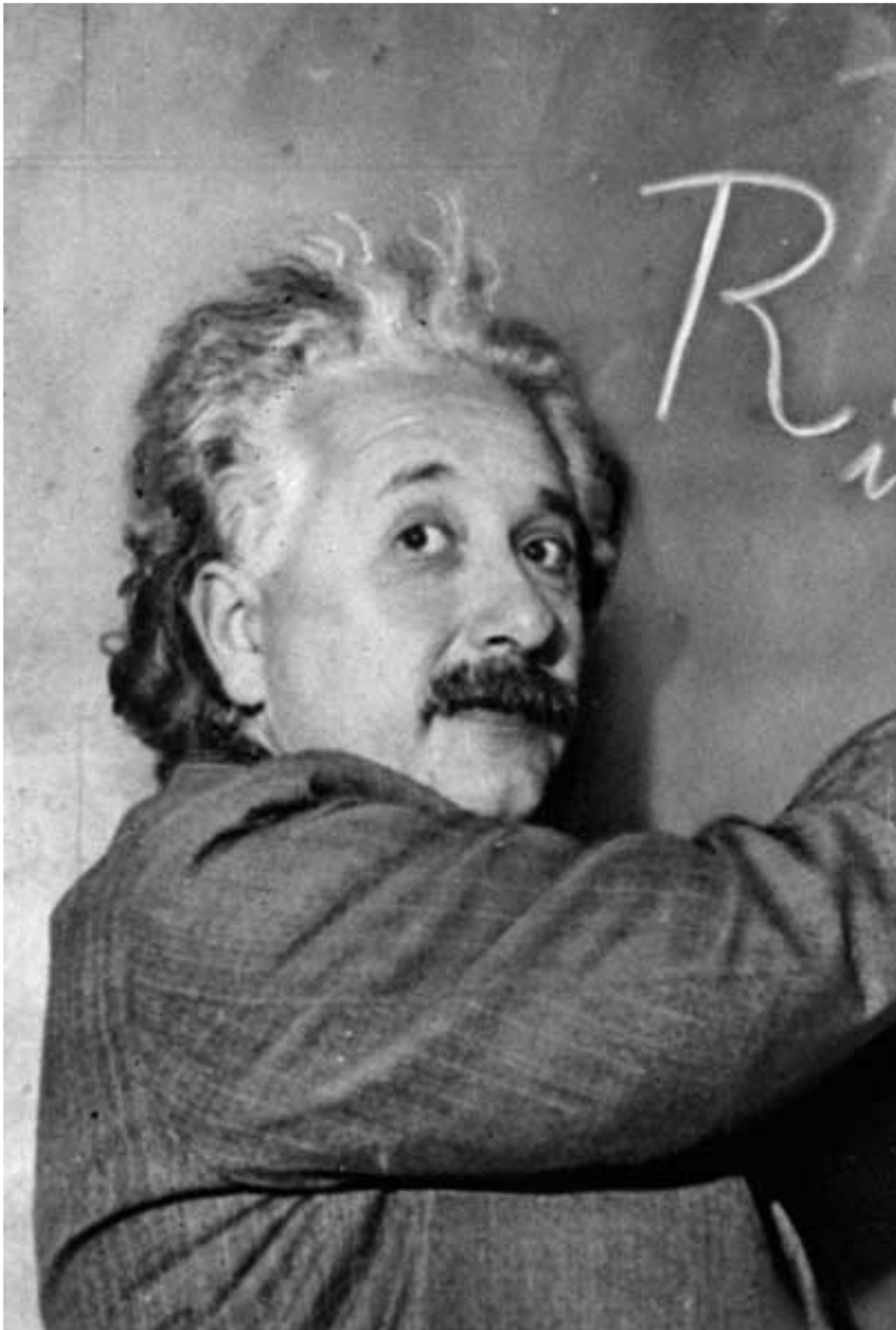


Why do we inherently believe what
“the machine” tells us?



So, what is truth?





*“Not everything
that counts can
be counted, and
not everything
that can be
counted counts”*

The current discovery market

- Device discovery
- Hardware discovery
- Software discovery
- Topology discovery
- Configuration discovery
- System dependency discovery

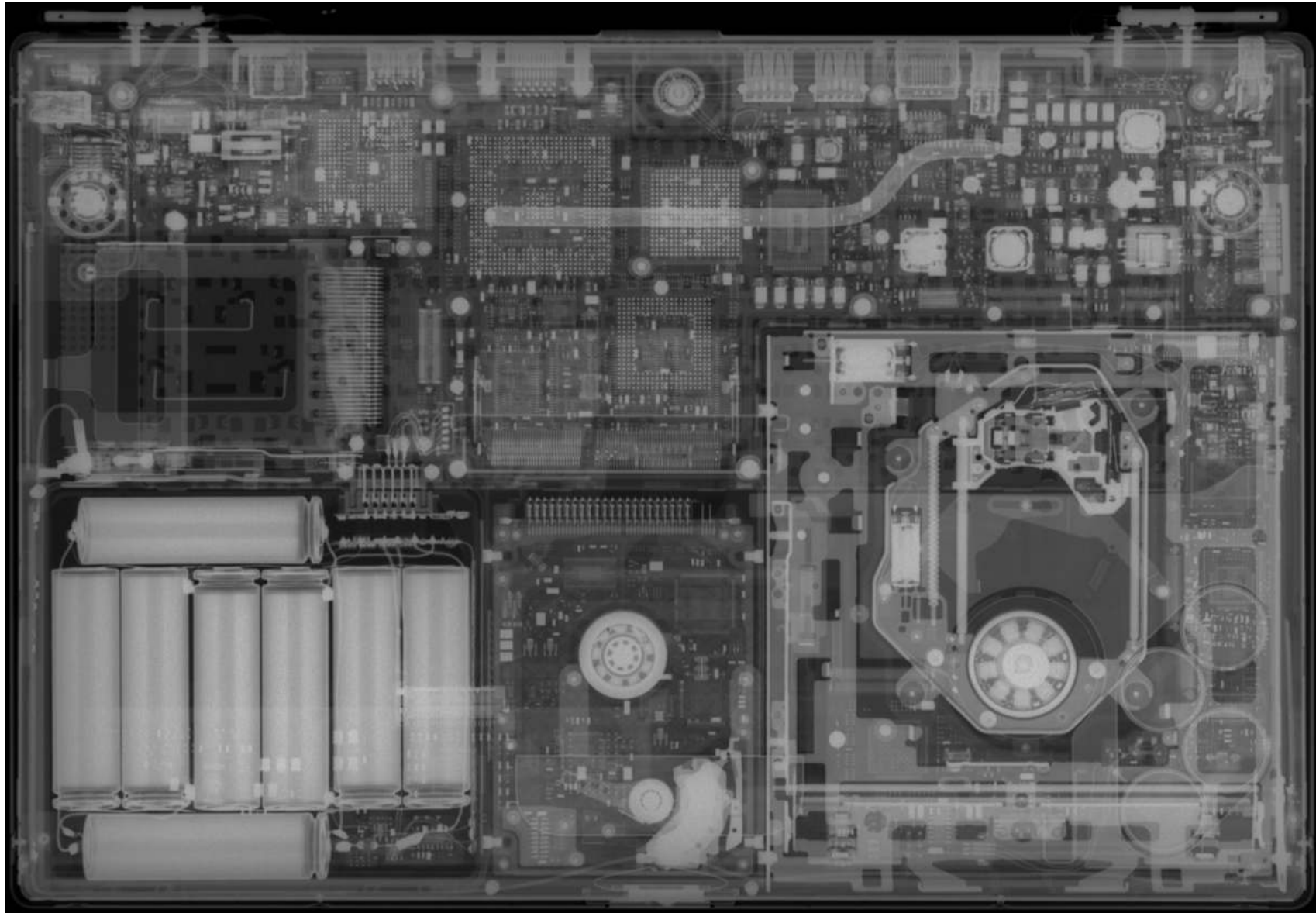
Device discovery



Do not confuse device discovery with
intrusion detection and/or network
security management...



Hardware discovery



Do not confuse hardware discovery
with event management...



Software discovery



Do not confuse software discovery
with software asset management...



Topology discovery



Do not confuse topology discovery
with service impact management...



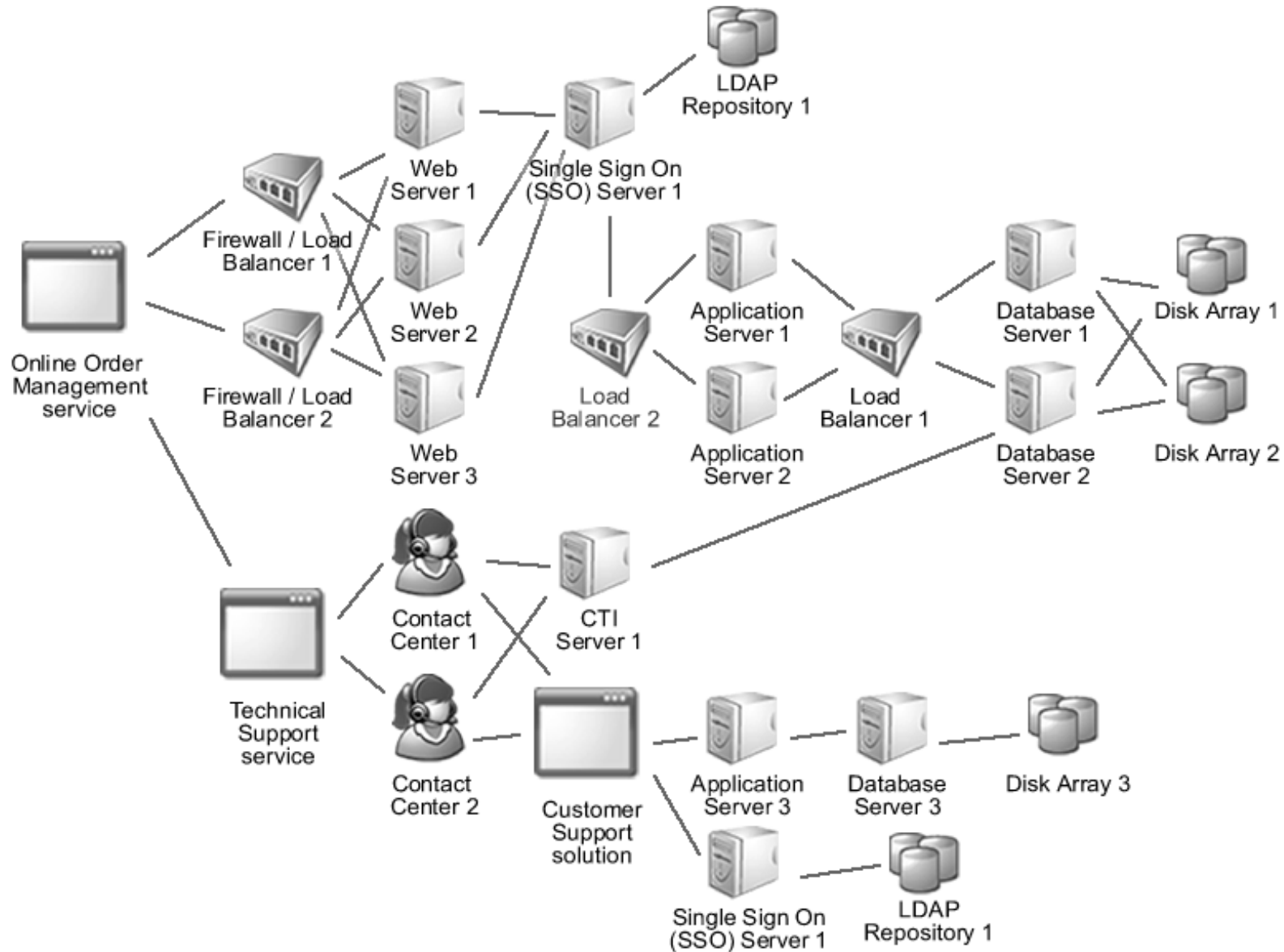
Configuration discovery



Do not confuse configuration discovery with
hardware and/or software discovery...



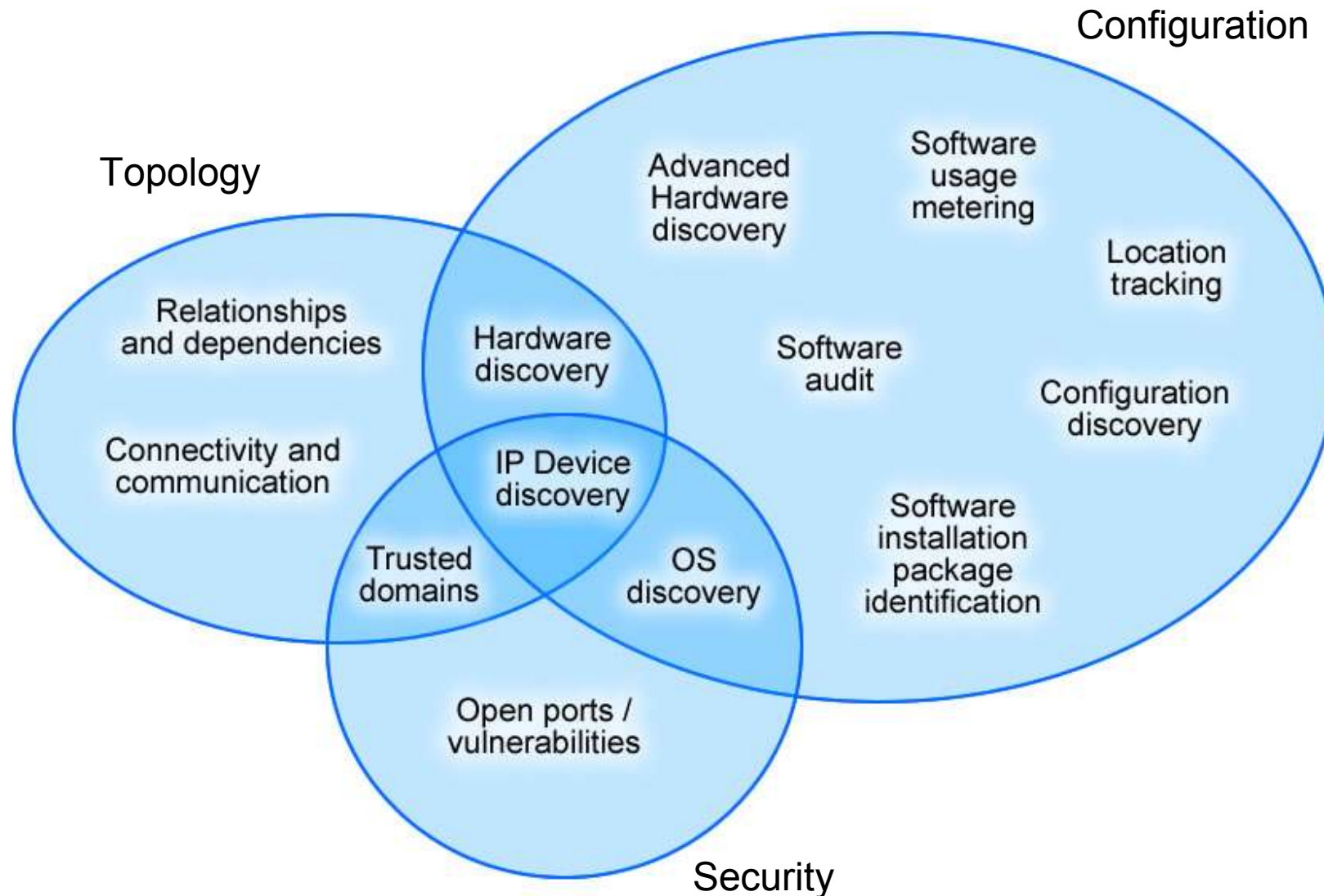
System Dependency discovery



**Do not confuse system dependency discovery
with a crystal ball or a magic wand...**



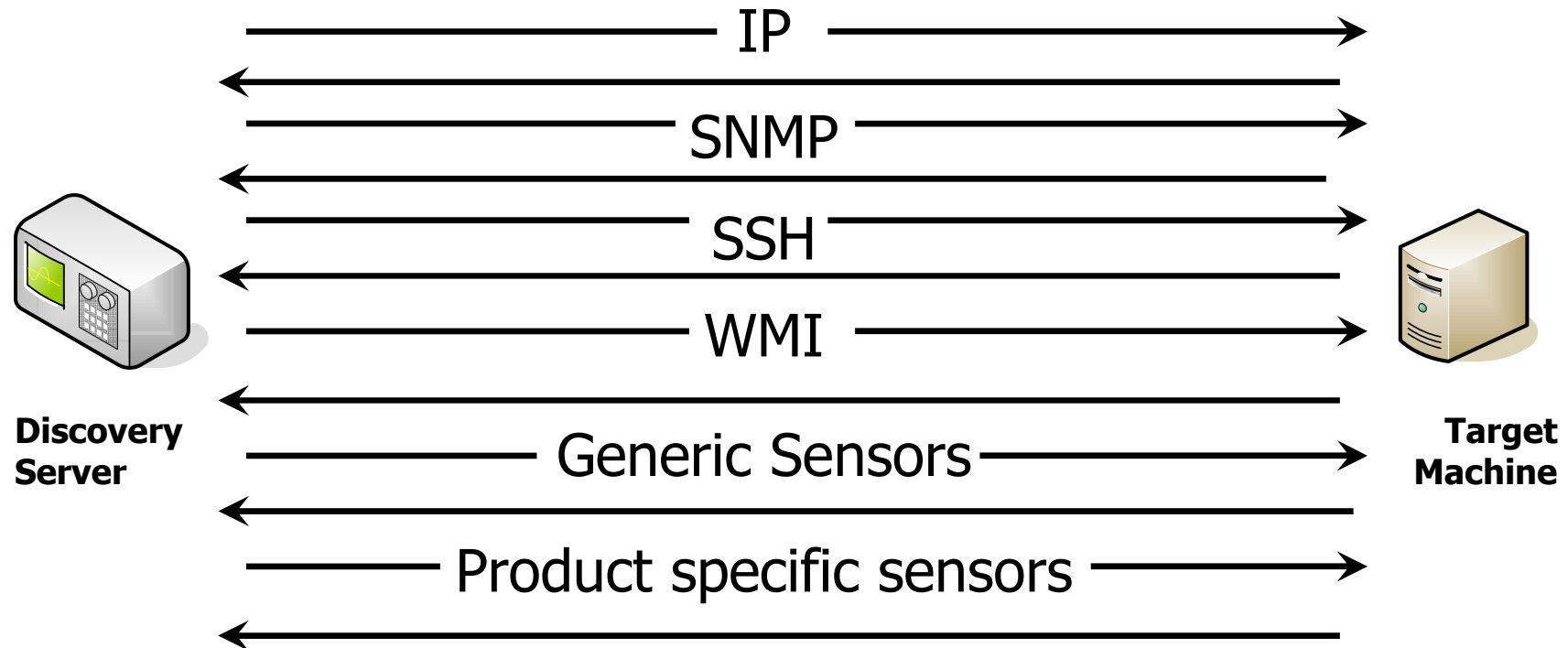
The state of the discovery union



Agent based vs. Agent-less



Agent-less discovery

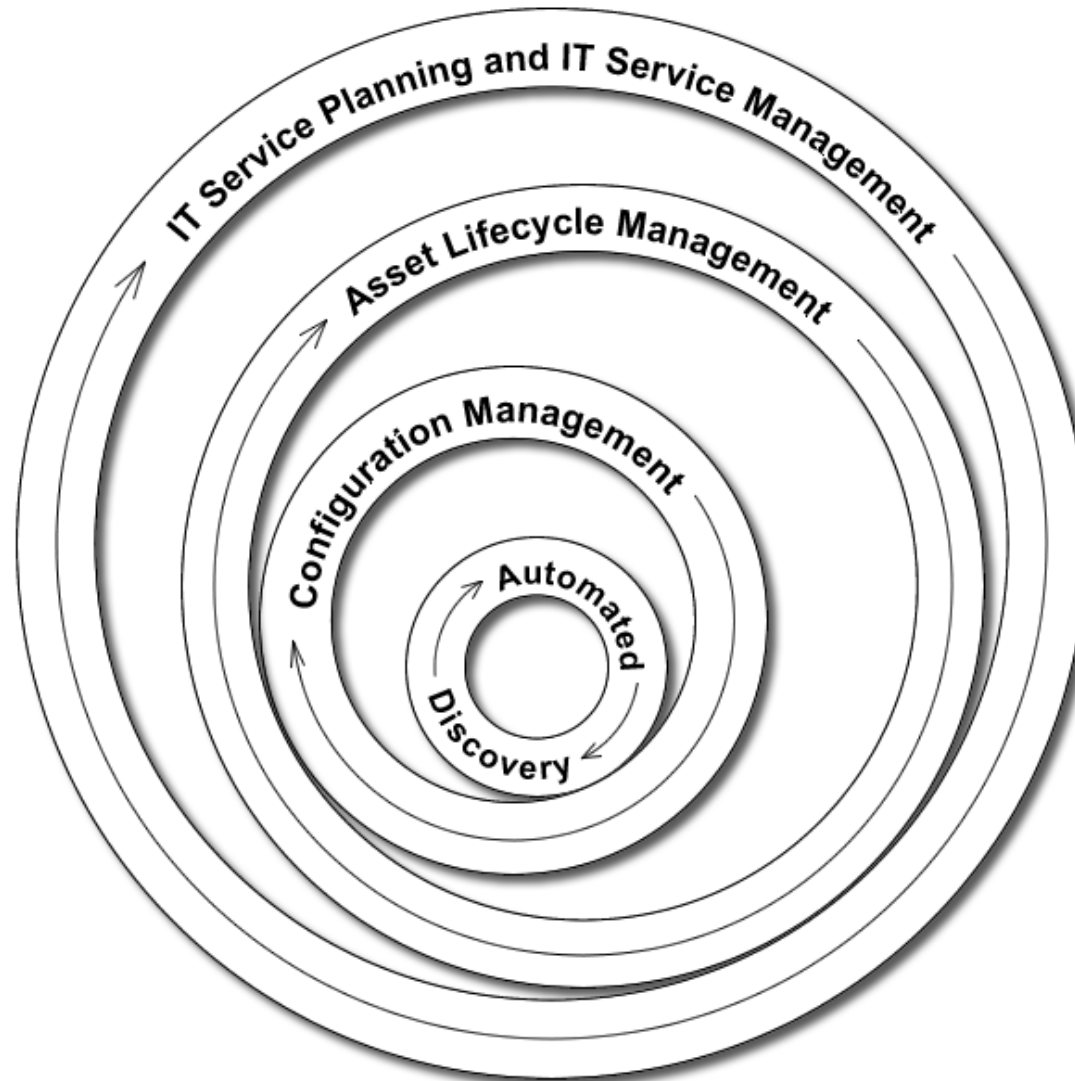


For each discovered device there will be between 12 and 30 interactions between the discovery server and the target machine

And the
winner
is...



Automated discovery and configuration management





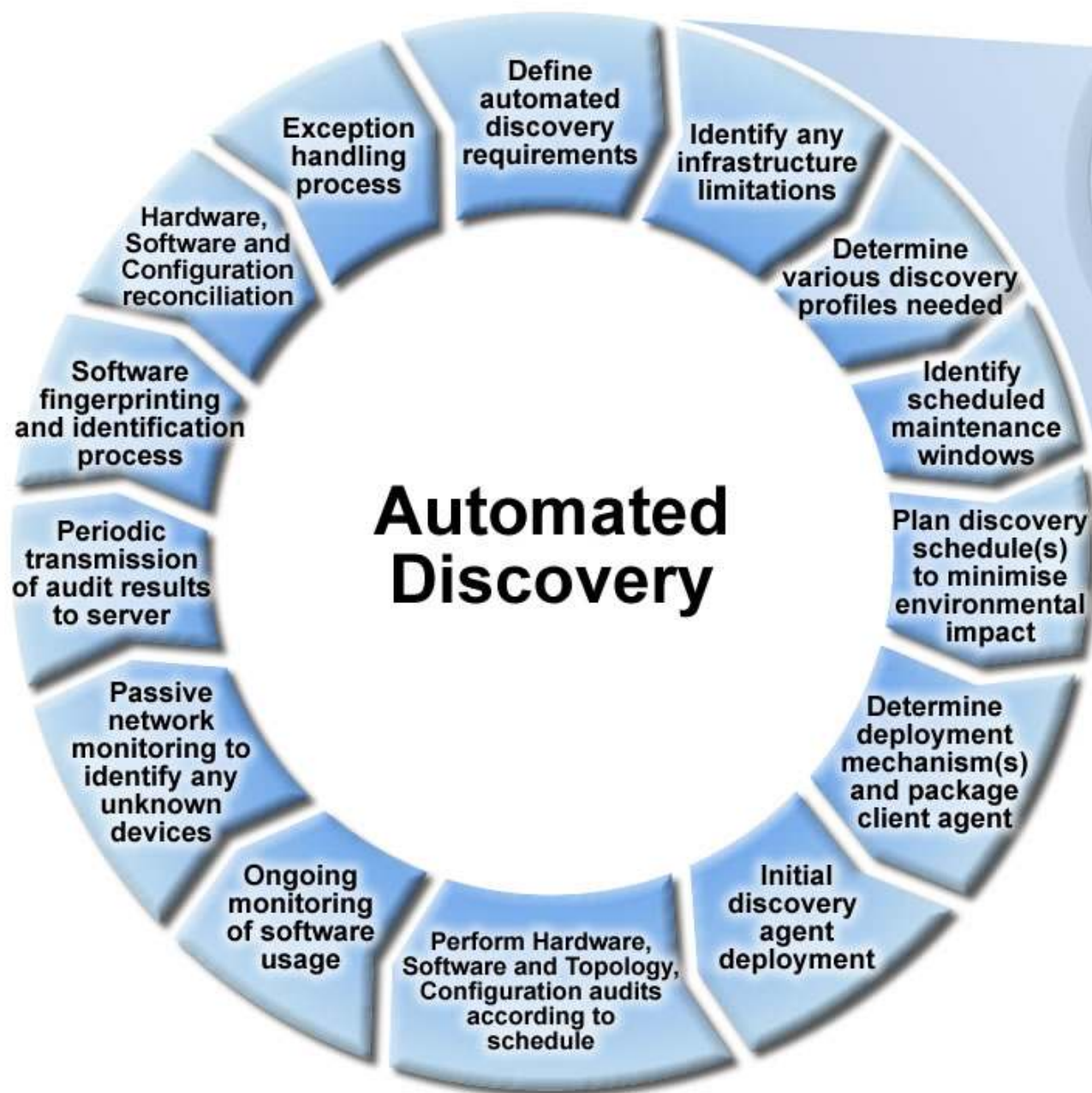
Automated Discovery: The process of finding What? & Where?

Process Goals:

- Identify and record all IT assets in the infrastructure
- Proactively track configuration changes
- Determining physical location of IT assets
- Monitor software deployment and usage



Non-intrusive, low network impacting, monitoring and auditing process to identify and record detailed IT asset information. Proactively audits IT assets to track all software installed, and associated usage profiles, to help enable license compliance management



Common issues related to Discovery

- No longer sufficient to know what you have, you now need to know where it is, what it's doing, how it's configured...
- Volume of assets / CI's and number of platforms to support constantly increasing
- Automatically collected data is not always 100% accurate
- Disconnected clients and machines with poor network access (Secured network segments, DMZs etc)
- Business requirements to track more and more detail
- Excessive network bandwidth usage by discovery agents
- Consolidation of existing discovery infrastructure to build a single view of the world

Discovery and Configuration Mgt

- CMDB / CMS population
- Reconciliation
- Using discovery data
- Chickens and eggs...

Should automated discovery
inject data directly into the
CMDB / CMS?



Trusted sources and trust



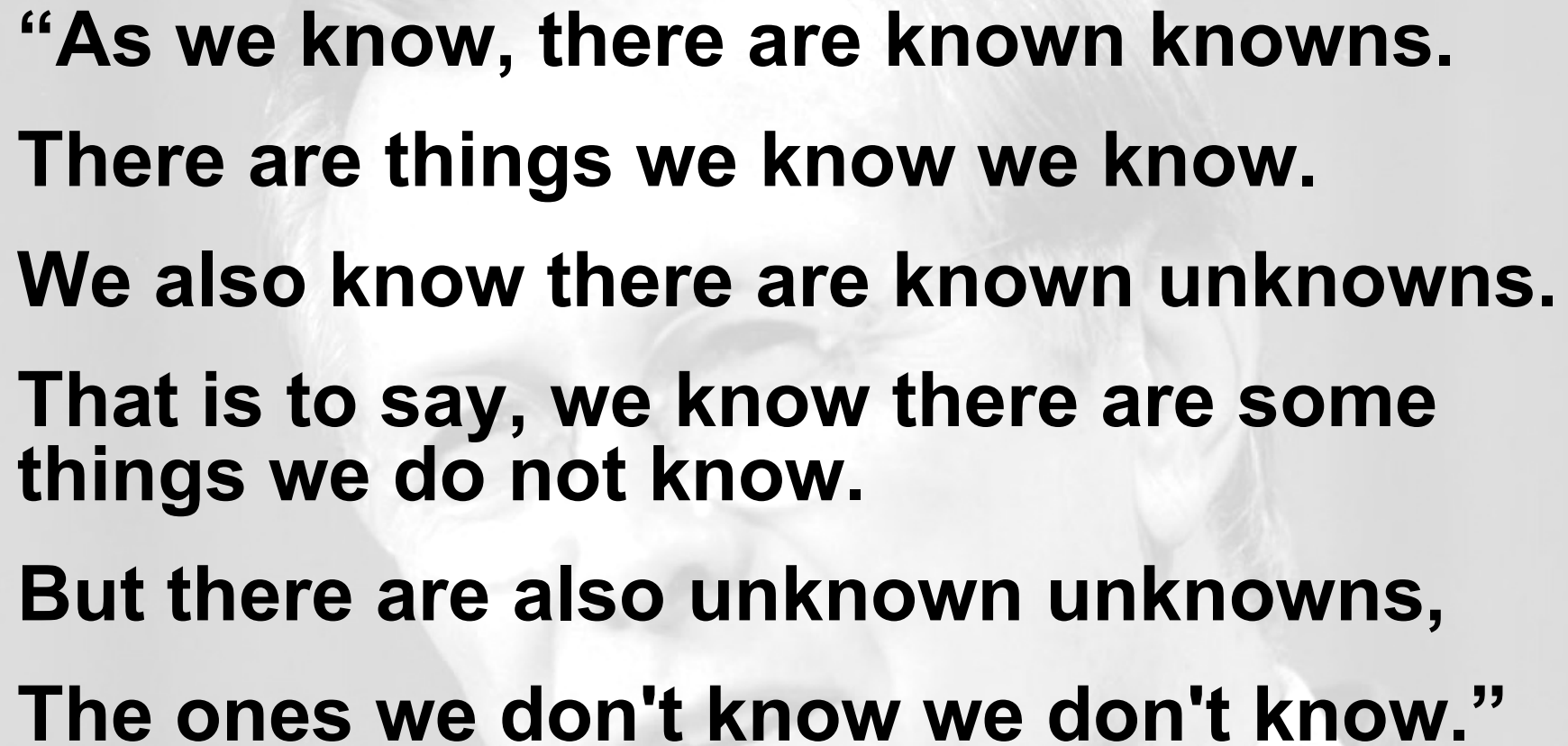
Segmented CMS

- Approved / Authorised view
 - What we believe we have
- Detailed configuration view
 - Enhanced / Extended view of approved view
- Discovered view(s)
 - Temporary data stores prior to reconciliation, data promotion and exception handling
- Aspirational view
 - “Blue sky” vision of where you’d like to be...

Reconciliation



Reconcile: to make, apparently conflicting things, compatible or consistent with each other



**“As we know, there are known knowns.
There are things we know we know.
We also know there are known unknowns.
That is to say, we know there are some
things we do not know.
But there are also unknown unknowns,
The ones we don't know we don't know.”**

US Secretary of Defense, Donald Rumsfeld - 2002

Exception handling



Exceptions may be handled in a variety of ways:

- Incidents
- Changes
- Inventory amendments
- CMDB / CMS updates
- Purchase requisitions
- Investigations

Reasons to reconcile (Cont'd)

- Enhancement with financial and contractual information from an ERP system
- Comparison of the current situation against a predefined target situation after a planned series of changes / releases, in order to track progress
- Assignment of person related information against hardware data e.g. by reconciling application usage log against a list of machine specific IP addresses.
- Enhancement of discovery data with additional and/or more reliable technical data points from a specialist, or niche, discovery toolset

Using discovered data

- Incident Management
- Problem Management
- Change Management
- Configuration Management



Incident Management

- Provision of useful information to assist with the diagnostic process
 - Urban myth which needs debunking
- Identification of parts to be ordered to replace a failed component
 - Saves a trip to a machine to check the specification of the bit that is broken



Problem Management

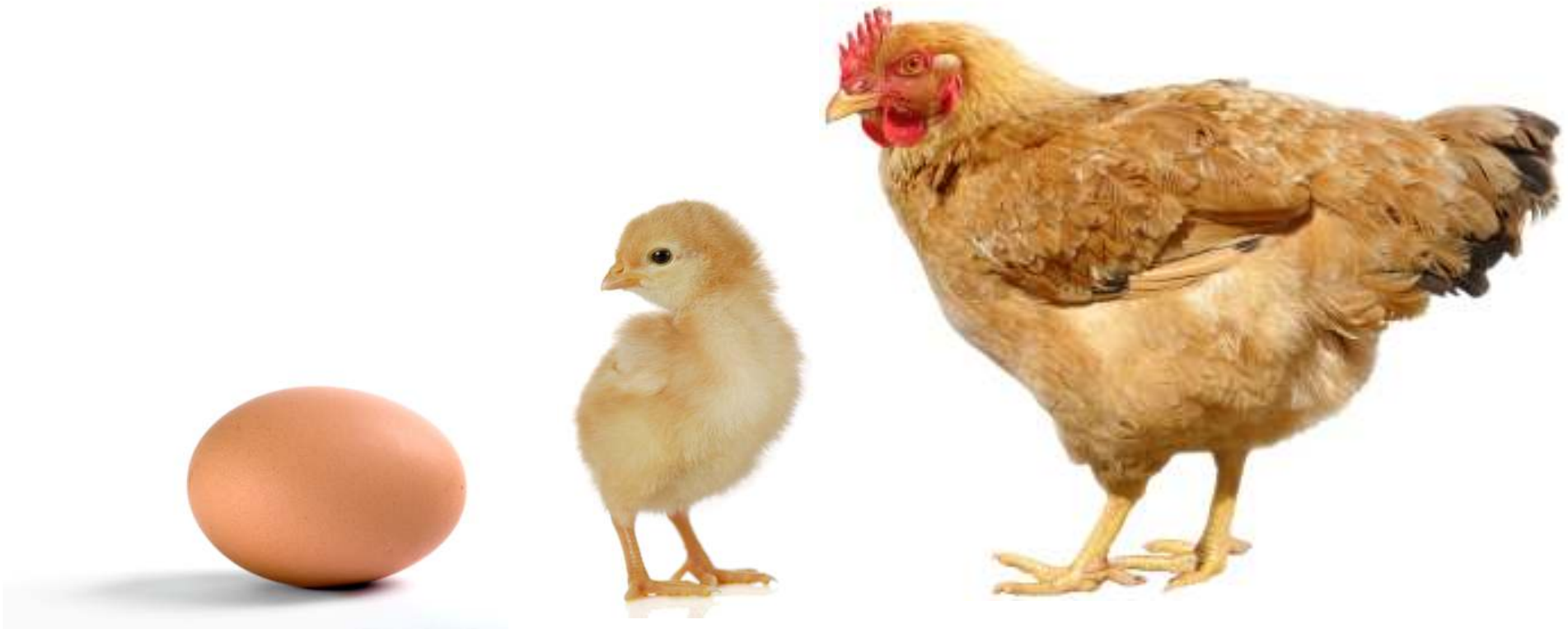
- Lots and lots of data (much of it superfluous) to slice, dice and dissect in an attempt to find underlying trends and causes
 - Needles, haystacks etc
- Identification of the culprit / prime suspect / scape goat



Change & Release Management

- Change / Release planning
 - Version base-lining
 - Candidate selection
 - Upgrade plans
 - Migration plans
- Change completion verification
- Release progress measurement

Which comes first? The Change
completion? CMDB / CMS update?
Or automated discovery reconciliation?



Configuration Management and Automated Discovery

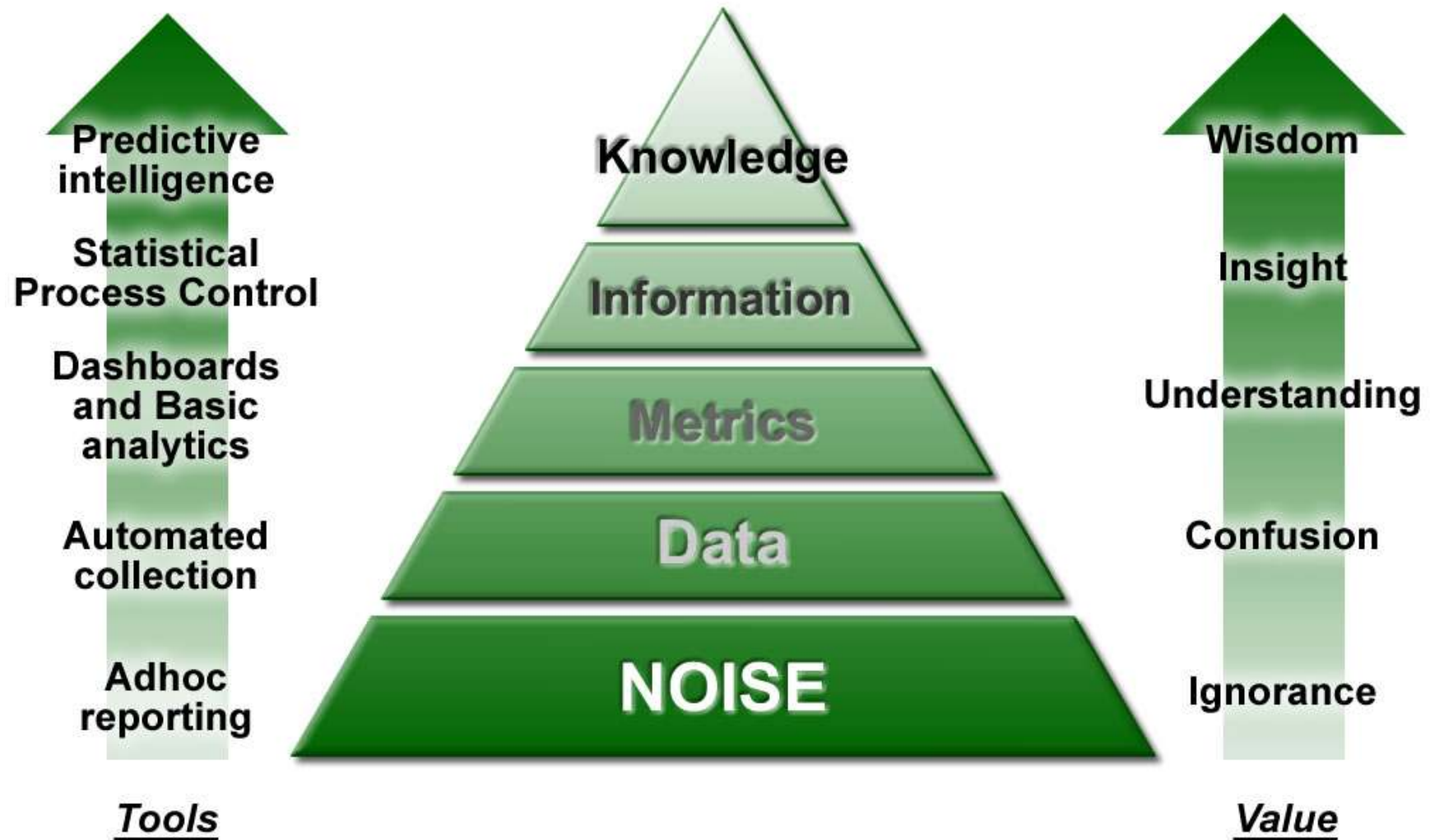
- Collection of raw configuration data
- Configuration data verification
- Tracking of configuration drift away from a defined baseline
- Periodic identification of devices that have gone AWOL

Discovery generates lots of data...



If you get data for “free”, does it
have any value?

The difference between data and information...



Don't confuse a screen full of
configuration data for “management”



What we covered... (I hope)

- Discovery – The truth is out there...
- Bursting a few bubbles
- Truth is always relative
- The current state of the discovery union
- Discovery and Configuration Management
- Discovery tools are just tools... And a fool with a tool is still a fool! (Albeit a slightly more dangerous one!)

Takeaways

- Automated discovery is just a tool
- Discovery data is just data
- Having lots of CI data might be nice but will it really help you?
- Data needs to be managed, analysed and used to deliver information and value
- Accurate and pertinent configuration information is needed to help drive most ITSM processes

**Thank
You!**





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