

Indian Health Service

IHS Enterprise Architecture and Category Management

Andy Hazen and Garry Haun



What is Enterprise Architecture (EA)?

Enterprise architecture refers to the process of mapping events, interests, and goals, determining where they intersect.

It is a highly visual process that allows stakeholders to align business concepts with outcomes while encouraging transparency throughout the process.

Benefits:

- The ability to capture both tangible and intangible concepts and assets.
- EA helps create a standardized approach for acquiring technology and reducing the cost burden to the agency.



Enterprise Architecture and Category Management Vision and Goals

Vision

- Guide business partners and stakeholders towards smart technology decisions that solve business problems

Mission

- Promote quality health care delivery and sound business decisions by aligning technology investments to support IHS goals



Enterprise Architecture and Category Management Team Goals

- Support Health IT modernization with enterprise architecture analysis
- Establish Technology Governance to improve organizational performance
- Category Management as a strategic resource
- Influence technology decision making by providing data-driven analysis and services
- Increase EA visibility and credibility within the organization (business architecture contributions, relationship building)
- Remediation (assets needing to be fixed), End of Life (assets to be replaced), and Lifecycle Planning/Forecasting (assets in need to be addressed in the future).

What is Category Management (CM)?

Category Management - process of overseeing and maximizing the financial and operational value of a group of related commodities, products or services by identifying and monitoring total spend and consumption; keeping abreast of market shifts, new alternatives or inventions; forecasting market supply and demand; and continuously evaluating supplier performance to drive down cost, improve supplier performance, respond to changing business requirements and enhance stakeholder satisfaction.

Spend Management

- Understand what are we spending on, who is spending, when are they spending and how often, why are they spending, where is the usage and by how many people and/ or locations, who supports what we spend on, are there additional costs associated with the initial spend
- How much are we spending and how much does it cost to spend it

Strategic Alignment

- How does what we are spending align to our mission, vision, and goals

Category Management Continued

Vendor Management

- Who are we spending with (vendors, contractors), why are we spending with these vendors or contractors? How are they performing (ask the COR and PM)
- What contract(s) is in place? What are the key terms? What is the start and finish date of the contract? Is there an SLA in place? Should there be an SLA in place?
- How much of our budget are we spending? Does this make sense? Are we spending on the right thing, in the right place, at the right time?

Business Strategy

- Can we reduce cost and/or improve efficiency if we change our approach and strategy in how we spend?
- What strategies can be developed to improve

Technical Business Management (TBM) alignment with CPIC processes



10 Government-wide Categories

FACILITIES & CONSTRUCTION = \$81.2B LED BY GSA	PROFESSIONAL SERVICES = \$71.1B LED BY GSA	IT = \$56.7B LED BY GSA	MEDICAL = \$43.5B CO-LED BY DOD & VA	TRANSPORTATION & LOGISTICS = \$28.5B LED BY DOD
<ul style="list-style-type: none"> • Construction Related Materials • Construction Related Services • Facilities Purchase & Lease • Facility Related Materials • Facility Related Services 	<ul style="list-style-type: none"> • Business Admin Services • Financial Services • Legal Services • Management & Advisory Services • Marketing & Public Relations • Research & Development • Social Services • Technical & Engineering Services 	<ul style="list-style-type: none"> • IT Software • IT Hardware • IT Consulting • IT Security • IT Outsourcing • Telecommunications 	<ul style="list-style-type: none"> • Drugs & Pharmaceutical Products • Healthcare Services • Medical Equipment, Accessories, & Supplies 	<ul style="list-style-type: none"> • Fuels • Logistics Support Services • Motor Vehicles (non-combat) • Package Delivery & Packaging • Transportation Equipment • Transportation of Things
INDUSTRIAL PRODUCTS & SERVICES = \$11.1B LED BY GSA	TRAVEL = \$7.5B LED BY GSA	SECURITY & PROTECTION = \$5.4B LED BY DHS	HUMAN CAPITAL = \$4.5B LED BY OPM	OFFICE MANAGEMENT = \$2.3B LED BY GSA
<ul style="list-style-type: none"> • Basic Materials • Fire / Rescue / Safety / Environmental Protection Equipment • Hardware & Tools • Industrial Products Install / Maintenance / Repair • Machinery & Components • Oils, Lubricants, & Waxes • Test & Measurement Supplies 	<ul style="list-style-type: none"> • Employee Relocation • Lodging • Passenger Travel • Travel Agency & Misc. Services 	<ul style="list-style-type: none"> • Ammunition • Protective Apparel & Equipment • Security Animals & Related Services • Security Services • Security Systems • Weapons 	<ul style="list-style-type: none"> • Compensation & Benefits • Employee Relations • Human Capital Evaluation • Strategy, Policies, & Ops Planning • Talen Acquisition • Talent Development 	<ul style="list-style-type: none"> • Furniture • Office Management Products • Office Management Services

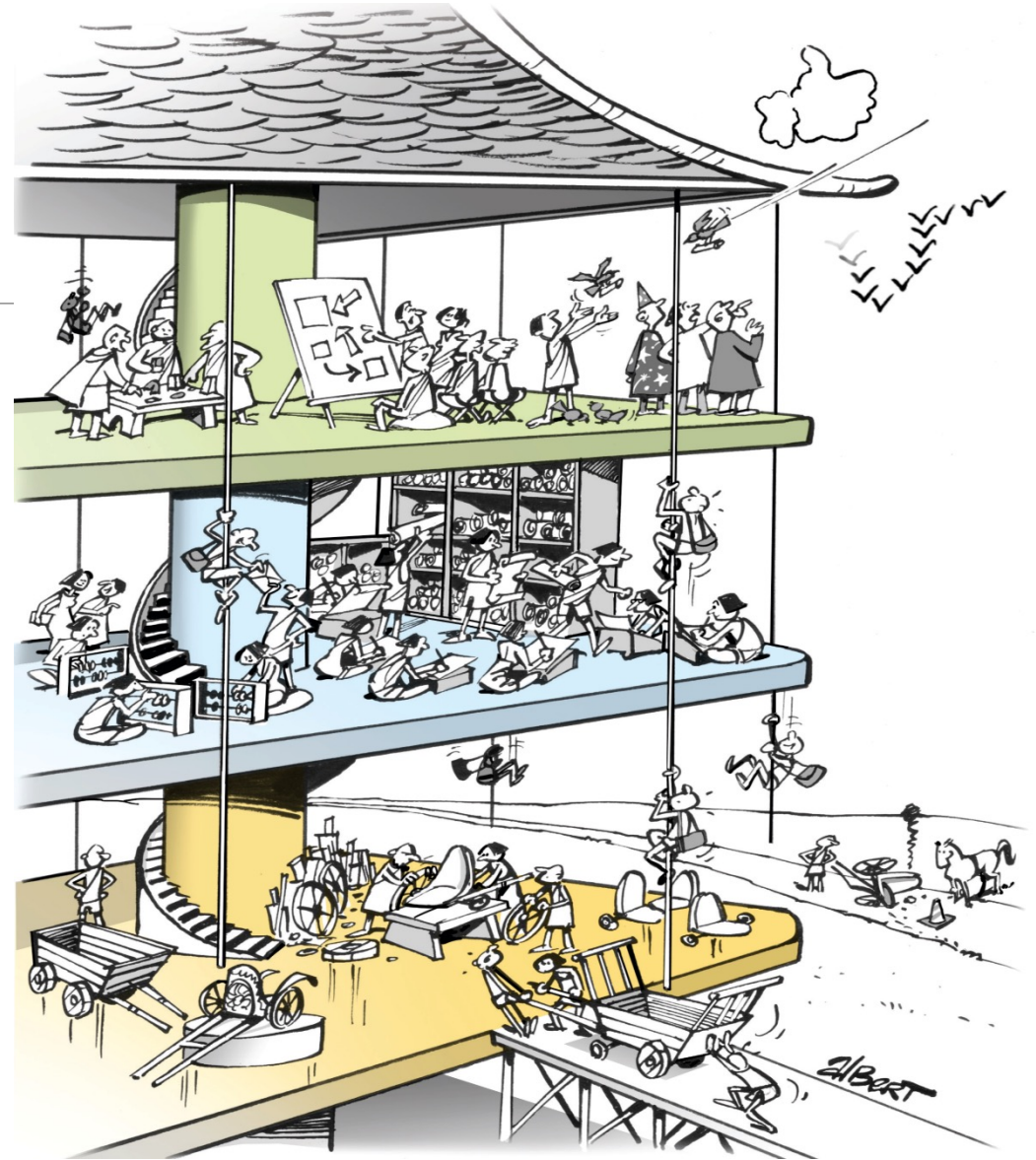
EA / CM Playbook

Lifecycle Management – annual planning

Assist with intake processing of new projects

Assisted & Supporting Services

- Gap Analysis
- Identify Emerging Technologies
- Risk Assessment Input
- Impact Assessment
- Analysis of Alternatives
- Current State Technical Analysis
- Spend Under Management



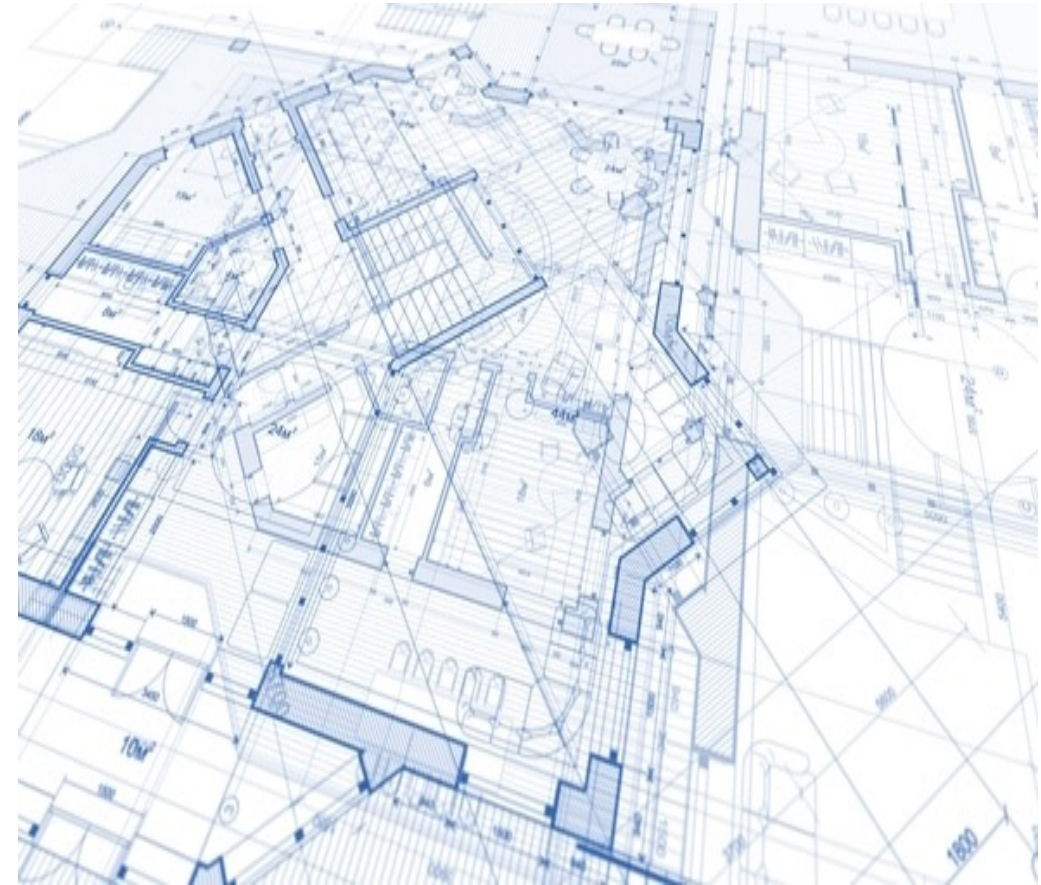
EA / CM Playbook - Cont.

Assisted & Supporting Services (Cont.)

- Capabilities Assessment
- Annual Lifecycle Planning Analysis – e.g., cloud analysis
- Infrastructure Analysis – e.g., cloud analysis
- Migration Planning – e.g., cloud
- Acquisition Lifecycle Support – review/inform requirements, provide standards

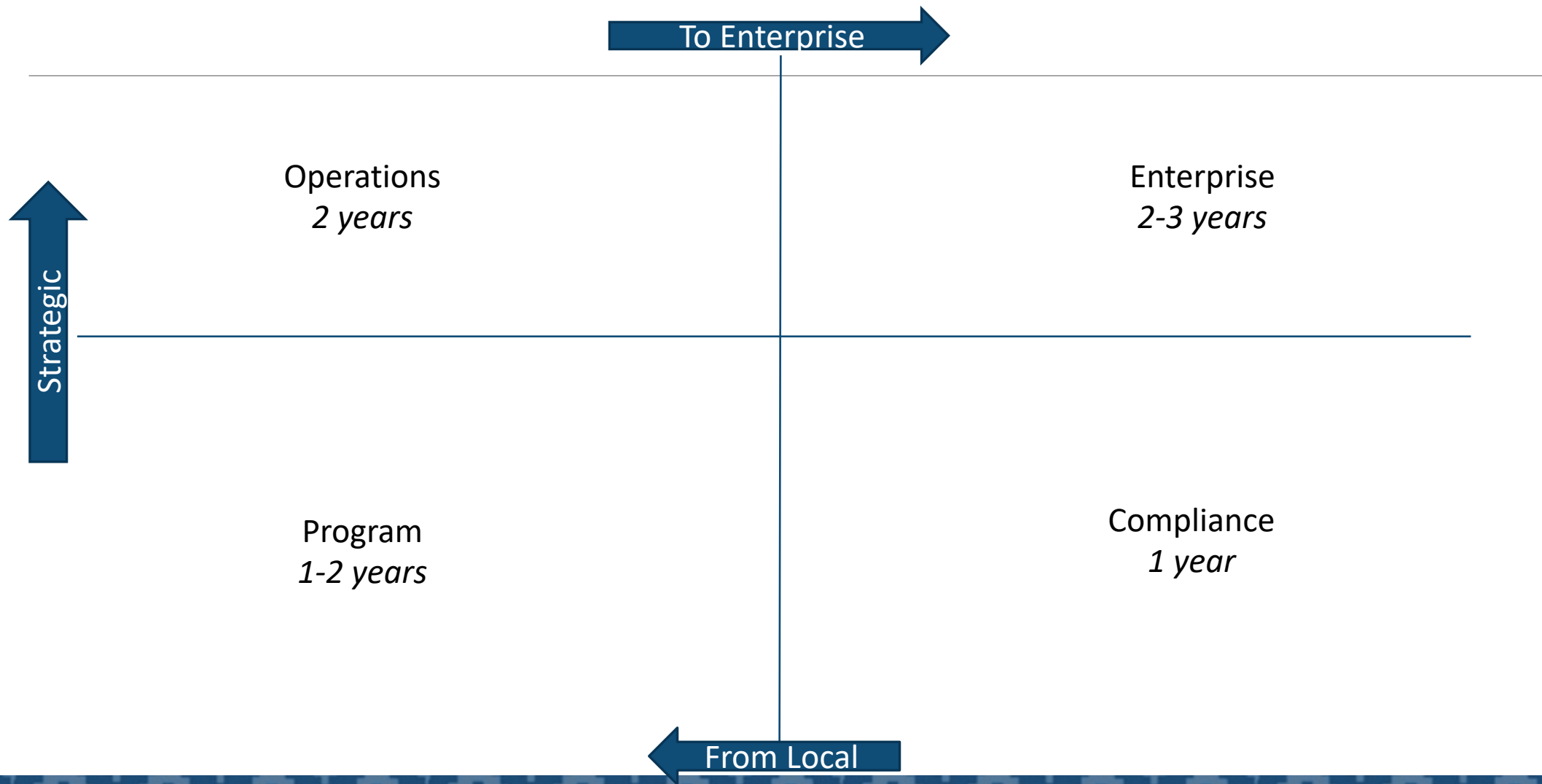
Work Products

- Lifecycle Management Policy – supports lifecycle management
- Documented Processes for governance (in conjunction with CPIC)
- Data management policy
- EA Work Tracker
- Whitelists – HW/SW inventory, guidelines





Enterprise Architecture and Category Management maturity planning





Enterprise Architecture and Category Management maturity planning



- | | |
|---|--|
| <ul style="list-style-type: none">• Intake Process to identify business needs• IT Infrastructure Roadmap• Streamlined Acquisition approval process (target architecture, reference architecture, category management)• EA Work Tracker | <ul style="list-style-type: none">• EA Roadmap (with IT components)• End-to-End process – intake to maintenance, then EOL• Reduce risk to enterprise through governance (includes EA metrics)• Emerging Technologies Roadmap |
| <ul style="list-style-type: none">• Reference architecture (products, whitelist)• Target architecture• Technology Governance<ul style="list-style-type: none">• Technology Business Management (TBM), Capital Planning and Investment Control (CPIC), IT investments, security, credentialing, supply chain risk management, category management, helpdesk, end user training, migration planning• Request for Proposal (RFP)/Request For Information (RFI) Review and Standardization• Identify emerging technologies• Intake process for Category Management | <ul style="list-style-type: none">• Modify Technology standards/guidelines and templates (EA Content)• IT Inventory IT Operations (ITOPS), End of Life (EOL)• Hardware (HW)/Software (SW) Whitelist approved for IHS use<ul style="list-style-type: none">• Includes biomed, ancillary services• Technical specifications• Governance for maintaining current systems/environment<ul style="list-style-type: none">• Current Electronic Medical Record (EMR), data gov for medical records, change/configuration management• New Electronic Health Record (EHR) rollout |



FLEXera

Inform IT. Transform IT.™

flexera.com

Getting started with Flexera

Flexera

Flexera delivers SaaS-based IT management solutions that can enable IHS OIT to accelerate digital transformation and multiply the value of our technology investments with unparalleled visibility into complex hybrid ecosystems. It can help transform our IT with tools that deliver the actionable intelligence to effectively manage, govern and optimize our hybrid IT environment.

- Anyone with a D1 (IHS Domain) account can request access
- Pulls data from existing scanning tool (BigFix)
 - More data sources can be added and are planned
 - Would like to test with an Area using System Center Configuration Manager (SCCM)
 - BigFix data refreshed on the first Friday of the month
- Data is "agency wide data" but can be sorted
- Has built in reports or the user can build reports

Login page

Flexera | USER CONSOLE

User Console

User Name

Password

LOG IN

Landing page

The screenshot shows the Flexera User Console interface. At the top, there is a browser window with the URL <https://flexera.ihs.gov/bdna/ux/index>. The page header includes the Flexera logo, "USER CONSOLE", a search bar, a dropdown menu set to "Everything", and user information for "ghaun".

The main content area is divided into two sections:

- Recent Reports:** A grid of four report cards. Each card has a title, a description, and a status bar. The reports are:
 - HW EOL no Virtual:** HW EOL of non-virtual systems. Status: PRIVATE, GHAUN.
 - Windows Migration Desktop Readiness:** Compatibility of desktop hardware and software with various Microsoft desktop operating systems. Status: PUBLIC, BDNA.
 - Top Software Manufacturers:** Top software manufacturers by total installs. Status: PUBLIC, BDNA.
 - Hardware Summary:** Dashboard showing relevant summary views of hardware in the inventory. Status: PUBLIC, BDNA.
- Overview:** A summary section with two main categories:
 - Normalized Software:**

Manufacturers	Releases	Installs
947	5,992	858,558
 - Normalized Hardware:**

Manufacturers	Models	Deployed
21	477	24,854

At the bottom, it states "Powered by Technopedia" and provides overall statistics:

Manufacturers	Software	Hardware
104,788	1,952,475	3,388,443

Use Cases

Use case #1

To prepare for budget requests for upcoming year, the IT Manager at the IHS Claremore Hospital has been asked to determine how many laptops will be EOL and need to be replaced in FY25.

First step, start by picking from IT Assets then develop a report using the Report Builder on the landing page.

Built in reports

The screenshot shows the Flexera User Console interface. At the top, there's a browser window with the URL `https://flexera.ihs.gov/bdna/ux/index#/reports`. The page header includes the Flexera logo, 'USER CONSOLE', and navigation links for 'Browse' and 'Reports'. A search bar contains the text 'Search' and a filter dropdown is set to 'Everything'. Below the header, the main section is titled 'Report Management' with the subtitle 'Browse, view and share reports'. There are buttons for 'CREATE', 'All', 'Private', 'Public', and 'Shared', along with a 'Filter Name' input field. Two report cards are visible, each with an 'Analyzer' icon, a title, a description, a user name, a privacy setting, and a timestamp. Action buttons for 'Delete', 'Share', and 'Pin' are located to the right of each report card.

Report Management
Browse, view and share reports

CREATE All Private Public Shared Filter Name

Sort Save Sorts

	HW EOL no Virtual HW EOL of non-virtual systems ghaun Private 2023-07-27T15:07:16.253	Delete Share Pin
	Chinese software mrives Private 2023-07-07T09:49:51.193	Delete Share Pin

Data source selection

The screenshot displays the Flexera User Console interface. A modal dialog titled "Select Data Source" is open in the center. The dialog contains the following text: "Specify which cube you want to use for analysis. This will determine which fields are available." Below this text, under the heading "Cubes:", there is a list of data sources. The first item, "Normalize: IT Assets", is highlighted. Other items in the list include "Normalize: IT Security", "Technopedia: Manufacturer", "Technopedia: Software", "Technopedia: Software Security", "Technopedia: Software Windows Readiness", and "Technopedia: Hardware". At the bottom of the dialog are "Cancel" and "Create" buttons.

The background interface shows the "Report Management" section. It includes a "CREATE" button, a filter for "All" reports, and a list of reports. The visible reports are:

- HW EOL no Virtual**: HW EOL of non-virtual systems. Created by ghaun, Private.
- Chinese software**: Created by mrives, Private, timestamp 2023-07-07T09:49:51.193.
- Software EOL**: Created by ahazen, Private, timestamp 2023-07-07T09:46:08.007.

Each report card includes an "Analyzer" icon, a "Delete" button, a "Share" button, and a "Pin" button. The top navigation bar shows "Flexera | USER CONSOLE", "Browse", "Reports", and a user profile for "ghaun".

Report builder

The screenshot shows the Flexera User Console Report Builder interface. The browser address bar displays the URL: flexera.ihs.gov/bdna/ux/index#/analyze/report?report_type=report&datasource=Normalize:%20IT%20Assets&is_analyzer=1&gourl=%2Fbdna%2Fapi%2Frepos%2Fxanalyzer%2Fedi... The page header includes the Flexera logo, 'USER CONSOLE', a search bar, and navigation links for 'Browse', 'Reports', and 'mrives'. The main interface is divided into three sections: 'Available fields (305) for: IT Assets' on the left, a 'Layout' panel in the middle, and a 'Table' visualization area on the right. The 'Available fields' list includes categories like CPU, CPU Licensing, Flexera Software ARL, and Hardware. The 'Layout' panel has three zones: 'Rows' (Drop Level Here *), 'Columns' (Drop Level Here *), and 'Measures' (Drop Measure Here *). The 'Table' area contains a grid icon and the text: 'Drag an available field to the required layout zones. (Marked with an asterisk in the layout panel.)' A 'Report Options...' button is located at the bottom of the layout panel. A 'Help' button is in the bottom right corner.

Flexera User Console

flexera.ihs.gov/bdna/ux/index#/analyze/report?report_type=report&datasource=Normalize:%20IT%20Assets&is_analyzer=1&gourl=%2Fbdna%2Fapi%2Frepos%2Fxanalyzer%2Fedi...

IHS.GOV IHS Intranet HHS AMS EANow Sign In - Zoom SN - Support

Other bookmarks

FLEXERA | USER CONSOLE

Search

Everything

Browse Reports mrives

Available fields (305) for: IT Assets

Find: View

CPU

- CPU Clock Rate
- CPU Cores
- CPU ISA Bit Mode
- CPU Number of thread...
- CPU Is Threaded?
- CPU Manufacturer (1)
- CPU Model (1)
- CPU Licensing
- CPU IBM PVU per core
- CPU Maximum Sockets
- Flexera Software ARL
- ARL ID
- Classification
- Edition
- Is Primary ARL ID?
- Is Primary SW Release I...
- Name
- Product
- Publisher
- Version
- Hardware
- HW Category
- HW Subcategory
- HW ID
- HW Max CPU sockets

Layout

Rows

Drop Level Here *

Columns

Drop Level Here *

Measures

Drop Measure Here *

Properties

Report Options...

Report

No Filters

Unsaved Report

Table

Drag an available field to the required layout zones.
(Marked with an asterisk in the layout panel.)

Need help getting started? Help

Drag N Drop

The screenshot displays the Flexera User Console interface. At the top, there is a search bar and navigation tabs for 'Browse' and 'Reports'. The main workspace is divided into several sections:

- Available fields (305) for: IT Assets:** A list of fields is shown, including 'Hardware Lifecycle (Calcula...)', 'Operating System Lifecycle ...', and 'Software Lifecycle (Calculat...)'.
- Layout:** A section for configuring the report layout, including 'Rows' and 'Columns'.
- Measures:** A section for adding measures to the report.
- Report Options:** A button to access report options.
- Report Builder:** A central area for building the report, showing 'No Filters' and 'Unsaved Report'. It includes a 'View As' dropdown and a 'Rows: 10 Cols: 0' indicator.
- Hardware Subcategory List:** A list of hardware subcategories is shown, including 'Desktops', 'Direct Attached Storage (DAS)', 'Network Attached Storage (NA...)', 'Notebooks', 'Point of Sale (POS)', 'Servers', 'Unclassified Storage', 'Virtual Machines', and 'Workstations'.

Add each selection

The screenshot shows the Flexera User Console interface. The top navigation bar includes the Flexera logo, 'USER CONSOLE', a search bar, and a dropdown menu set to 'Everything'. The main content area is divided into three sections:

- Available fields (305) for: IT Assets:** A list of fields is shown, with 'eol' selected in the search box. The list includes categories like Hardware Lifecycle, Operating System Lifecycle, and Software Lifecycle.
- Layout:** A section for configuring the report's structure. It has three sub-sections:
 - Rows:** 'HW Subcategory' and 'HW EOL Year (calc.)' are selected and highlighted in yellow. A 'Drop Level Here' button is below.
 - Columns:** A 'Drop Level Here' button is present.
 - Measures:** A 'Drop Measure Here' button is present.
- Report:** The main report area, titled 'Unsaved Report', shows 'No Filters' and 'Rows: 63 Cols: 0'. It contains a table with the following data:

HW Subcategory	HW EOL Year (calc.)
-	-
Desktops	-
	2007
	2012
	2014
	2015
	2017
	2018
	2019
	2020
	2021
	2022
	2023
	2024
2025	
2027	
2999	

Filtering to narrow results

The screenshot displays the Flexera User Console interface. A modal dialog titled "Filter on HW Subcategory" is open, allowing users to refine their search results. The dialog includes the following elements:

- Filter Type:** Two radio buttons are present: "Select from a list" (which is selected) and "Match a specific string".
- Parameter Name:** Two input fields are provided for defining the filter parameter.
- Find Button:** A blue button labeled "Find" is used to execute the search.
- Currently:** A dropdown menu is set to "Included".
- Available Options:** A list of 10 hardware subcategories is shown on the left, including Desktops, Direct Attached Storage (DAS), Network Attached Storage (NAS), Notebooks, Point of Sale (POS), Servers, Unclassified Storage, Virtual Machines, and Workstations. The "Workstations" option is currently highlighted.
- Selected Options:** A list on the right shows the items currently selected for the filter: Desktops, Notebooks, and Workstations. Each item is preceded by a green checkmark.
- Status:** The dialog indicates "Showing all 10 values" on the left and "3 values selected" on the right.
- Navigation:** Navigation arrows (left and right) are used to move items between the available and selected lists.
- Buttons:** "OK" and "Cancel" buttons are located at the bottom right of the dialog.

The background interface shows a report configuration area with a sidebar of available fields (305) for "IT Assets", a search bar, and navigation menus for "Browse" and "Reports". The user's name "ghaun" is visible in the top right corner.

Filtered to workstations with EOL dates

The screenshot shows the Flexera User Console interface. The top navigation bar includes the Flexera logo, 'USER CONSOLE', a search bar, and a dropdown menu set to 'Everything'. The main content area is divided into several sections:

- Available fields (305) for: IT Assets:** A search box contains 'eol'. Below it are categories like 'Hardware Lifecycle (Calculat...)', 'Operating System Lifecycle ...', and 'Software Lifecycle (Calculat...)' with various calculated fields.
- Layout:** A 'Rows' section has 'HW Subcategory' and 'HW EOL Year (calc.)' selected. A 'Columns' section has 'Drop Level Here'.
- Measures:** A 'Drop Measure Here' button.
- Properties:** A 'Report Options...' button.
- Report:** A '1 Filter' section shows 'HW Subcategory includes Desktops, Notebooks and Workstations'. The report title is 'Unsaved Report' and it shows 'Rows: 40 Cols: 0'.
- Table:** A table with two columns: 'HW Subcateg...' and 'HW EOL Year (calc.)'. The table shows 'Desktops' with EOL years from 2007 to 2027, and a final row with a dash.

HW Subcateg...	HW EOL Year (calc.)
-	-
Desktops	2007
	2012
	2014
	2015
	2017
	2018
	2019
	2020
	2021
	2022
	2023
2024	
2025	
2027	
2999	
-	-

Filtering with EOL dates between 2007-2015

The screenshot shows the Flexera User Console interface. At the top, there is a search bar and navigation menus. The main area displays a report configuration for 'IT Assets' with 2 filters applied. A modal dialog titled 'Filter on HW EOL Year (calc.)' is open, showing options to filter by time period, list, or range. The 'Select a range' option is selected, and the range is set to 'Between (and incl.)' from 2007 to 2025. The background shows a table with columns for 'HW Subcategory' and 'HW EOL Year (calc.)'.

Available fields (305) for: IT Assets

Find: View

Layout

Rows

Columns

Measures

Properties

Report Options...

Report

2 Filters

Unsaved Report

Rows: 29 Cols: 0

HW Subcategory

HW EOL Year (calc.)

Filter on HW EOL Year (calc.)

- Choose a commonly used time period
- Select from a list
- Select a range

Parameter Name:

HW EOL Year (calc.) is:

Between (and incl.) 2007 and 2025

(Select from date picker)

Help

OK Cancel

HW Subcategory	HW EOL Year (calc.)
	2007
	2025
	2017
	2018
	2019
	2020

Refined list based on filtering

The screenshot shows the Flexera User Console interface. The top navigation bar includes the Flexera logo, 'USER CONSOLE', a search bar, and a dropdown menu set to 'Everything'. The main content area is divided into several sections:

- Available fields (305) for: IT Assets:** A list of fields is shown, including CPU-related metrics, CPU Licensing, Flexera Software ARL, and other hardware details.
- Layout:** A section for configuring the report's structure, with 'Rows' containing 'HW Subcategory' and 'HW EOL Year (calc.)', and 'Columns' and 'Measures' sections.
- Report:** A section for report configuration, showing '2 Filters' and 'Unsaved Report'. The filters are:
 - HW EOL Year (calc.) is between (and includes) 2007 and 2025
 - HW Subcategory includes Desktops, Notebooks and Workstations
- Table:** A table displaying the filtered data. The columns are 'HW Subcategory' and 'HW EOL Year (calc.)'. The data shows 'Desktops' with EOL years from 2007 to 2020.

HW Subcategory	HW EOL Year (calc.)
Desktops	2007
	2012
	2014
	2015
	2017
	2018
	2019
	2020
	2021
	2022
	2023
	2024
	2025
	2017
2018	
2019	
2020	

Add System Hostname via "FIND"

Flexera | USER CONSOLE

Search

Everything

Browse Reports ghaun

Available fields (305) for: IT Assets

Find: host View

System

- SYS Hostname
- SYS Is Virtual Host?

Layout

Rows

- HW Subcategory
- HW EOL Year (calc.)

Drop Level Here

Columns

Drop Level Here

Measures

Drop Measure Here

Properties

Report Options...

Report

2 Filters

Unsaved Report

View As: Table

Rows: 29 Cols: 0

- HW EOL Year (calc.) is between (and includes) 2007 and 2025
- HW Subcategory includes Desktops, Notebooks and Workstations

HW Subcategory	HW EOL Year (calc.)
Desktops	2007
	2012
	2014
	2015
	2017
	2018
	2019
	2020
	2021
	2022
	2023
	2024
	2025
	2017
	2018
	2019
	2020

Drag & Drop SYS Hostname

The screenshot shows the Flexera User Console interface. The top navigation bar includes the Flexera logo, 'USER CONSOLE', a search bar, and a dropdown menu set to 'Everything'. The main content area is divided into three sections:

- Left Panel:** 'Available fields (305) for: IT Assets'. Under the 'System' category, 'SYS Hostname' is selected. A 'Find: host' search box is visible.
- Middle Panel:** 'Layout' section. Under 'Rows', 'HW Subcategory', 'HW EOL Year (calc.)', and 'SYS Hostname' are selected. 'Drop Level Here' buttons are present for each.
- Right Panel:** 'Report' section. It shows '2 Filters':
 - 'HW EOL Year (calc.) is between (and includes) 2007 and 2025'
 - 'HW Subcategory includes Desktops, Notebooks and Workstations'The report is titled 'Unsaved Report' and shows 'Rows: 666 out of 3064' and 'Cols: 0'. Below the filters is a data table:

HW Subcate...	HW EOL Year (calc.)	SYS Hostname
	2007	ABROHC-1492L88
		ABROHC-1492L8R
	2012	PORBAY-7ADMIN2
	2014	AIDC-PRINT
		ALBAIDC-53PAN
		ALBAIDC-5326986
		ALBASU-5327036
		ALBASU-5327060
	2015	BEMCSL-LAB130
		BIL-OEH-CH
		PORFTH-6444720
		PORFTH-6444721
		PORFTH-6446423
	2017	PORBAY-7DENTAL2
		PORBAY-PC-0044
		ABRCTC-14899
		ABRMCL-4554453

Refined list with hostnames

The screenshot shows the Flexera User Console interface. At the top, there is a search bar with the text "Search" and a dropdown menu set to "Everything". The user's name "ghaun" is visible in the top right corner. The main content area displays a report titled "Filter on SYS Hostname". The report shows a table with 666 rows out of 11133 and 0 columns. A dialog box is open over the report, allowing the user to filter the data. The dialog has two radio buttons: "Select from a list" (unselected) and "Match a specific string" (selected). The "Parameter Name" field is set to "Oklahoma". The "SYS Hostname" dropdown is set to "Contains", and the input field contains "okccla". There are "OK" and "Cancel" buttons at the bottom right of the dialog. The background shows a sidebar with "Available fields (305) for: IT Assets" and a "System" section with "SYS Hostname" and "SYS Is Virtual Host?".

Refined list by location based on hostname naming

The screenshot displays the Flexera User Console interface. The main report area shows a table with the following data:

HW Subcategory	HW EOL Year (calc.)	SYS Hostname
Desktops	2020	OKCCLA-50616...
		OKCCLA-50618...
		OKCCLA-50619...
		OKCCLA-50619...
		OKCCLA-50619...
		OKCCLA-50619...
	2021	OKCCLA-50619...
		OKCCLA-50619...
		OKCCLA-50619...
		OKCCLA-50619...
		OKCCLA-50619...
		OKCCLA-PIV
Notebooks	2020	OKCCLA-94241...
		OKCCLA-50683...
		OKCCLA-50683...
		OKCCLA-50683...
		OKCCLA-50683...
		OKCCLA-50683...
		OKCCLA-50683...
		OKCCLA-50683...
		OKCCLA-50683...
		OKCCLA-50684...
		OKCCLA-50732...
		OKCCLA-50732...

Refined list by location

The screenshot shows the Flexera User Console interface. The top navigation bar includes the Flexera logo, 'USER CONSOLE', a search bar, and a dropdown menu set to 'Everything'. The main content area is divided into three sections: a left-hand pane for field selection, a central layout configuration pane, and a main report area.

Left-hand pane: Shows 'Available fields (305) for: IT Assets'. A search box contains 'host'. Under the 'System' category, 'SYS Hostname' and 'SYS Is Virtual Host?' are listed.

Layout configuration pane: Under the 'Rows' section, 'HW Subcategory', 'HW EOL Year (calc.)', and 'SYS Hostname' are selected. Under 'Columns', there is a 'Drop Level Here' button. Under 'Measures', there is a 'Drop Measure Here' button.

Main report area: Displays a table with 32 rows and 0 columns. The table has three columns: 'HW Subcate...', 'HW EOL Year (calc.)', and 'SYS Hostname'. The data is filtered by '3 Filters':

- HW EOL Year (calc.) is between (and includes) 2007 and 2025
- HW Subcategory includes Desktops, Notebooks and Workstations
- SYS Hostname contains OKCCLA

The table shows data for 'Desktops' with EOL years 2020, 2021, and 2024. The 'SYS Hostname' column contains various identifiers, including 'OKCCLA-50616...', 'OKCCLA-50618...', 'OKCCLA-50619...', 'OKCCLA-PIV', 'OKCCLA-94241...', and 'OKCCLA-50683...'.

Use case #2

The Oklahoma Area needs to update all workstations to a version of .NET later than 4.5. Using report builder, they screen for old versions.

List of .NET versions

The screenshot shows the Flexera User Console interface. The top navigation bar includes the Flexera logo, 'USER CONSOLE', a search bar, and a dropdown menu set to 'Everything'. The main content area is divided into three sections:

- Left Panel:** A list of available fields for 'IT Assets'. The 'Find' field contains 'version'. Under the 'Software' category, 'SW Version' is selected.
- Middle Panel:** A 'Layout' section with 'Rows' containing 'SW Manufacturer', 'SW Name', and 'SW Version'. The 'Columns' section is empty.
- Right Panel:** A report titled 'Unsaved Report' with 2 filters: 'SW Manufacturer includes Microsoft' and 'SW Name includes .NET Framework'. Below the filters is a table showing the results.

SW Manufac...	SW Name	SW Version
		1.1
		2.0
		3.0
		3.5
		4.0
		4.0
		4.5
Microsoft	.NET Framewo...	4.5.1
		4.5.2
		4.6.1
		4.6.2
		4.7
		4.7.1
		4.7.2
		4.8

Filtering for .NET versions

The screenshot shows the Flexera User Console interface with a 'Filter on SW Version' dialog box open. The dialog has two radio buttons: 'Select from a list' (selected) and 'Match a specific string'. Below these are input fields for 'Parameter Name' and a 'Find' button. A list of software versions is shown on the left, with six versions selected and highlighted in green. On the right, a 'Currently:' dropdown is set to 'Included', and a list of the selected versions is displayed with checkmarks. The status at the bottom indicates 'Showing all 15 values' and '6 values selected'.

Available Versions	Selected Versions
1.1	✓ 1.1
2.0	✓ 2.0
3.0	✓ 3.0
3.5	✓ 3.5
4.0	✓ 4.0
4.0	✓ 4.0
4.5	
4.5.1	
4.5.2	
4.6.1	
4.6.2	

List of .NET versions older than 4.5

The screenshot shows the Flexera User Console interface. The top navigation bar includes the Flexera logo, 'USER CONSOLE', a search bar, and a user profile 'ghaun'. The main content area is divided into several sections:

- Available fields (305) for: IT Assets:** A list of fields is shown, including 'Operating System', 'Operating System Lifecycle...', 'Software', and 'Software Windows Readiness'. The 'SW Version' field is selected.
- Layout:** The 'Rows' section shows 'SW Manufacturer', 'SW Name', and 'SW Version' selected. The 'Columns' section is empty.
- Report:** The report is titled 'Unsaved Report' and shows 3 filters:
 - SW Manufacturer includes Microsoft
 - SW Name includes .NET Framework
 - SW Version includes 6 values
- Table:** A table displays the results of the report, showing the SW Manufacturer, SW Name, and SW Version for each entry.

SW Manufac...	SW Name	SW Version
		1.1
		2.0
Microsoft	.NET Framewo...	3.0
		3.5
		4.0
		4.0

Using Report builder from previous, refined list by name prefix

The screenshot shows the Flexera User Console interface. The browser address bar displays the URL: `flexera.ihs.gov/bdna/ux/index#/analyze/report?report_type=report&datasource=Normalize:%20IT%20Assets&is_analyzer=1&gourl=%2Fbdna%2Fapi%2Frepos%2Fxanalyzer%2Ffedi...`. The page header includes the Flexera logo, a search bar, and navigation links for 'Browse', 'Reports', and a user profile icon labeled 'mrlves'.

The main interface is divided into several sections:

- Available fields (305) for: IT Assets:** A list of fields on the left, including CPU, CPU Licensing, and Hardware categories.
- Layout:** A central area with 'Rows' and 'Columns' sections. The 'Rows' section has dropdowns for 'HW Subcategory', 'HW EOL Year (calc.)', and 'SYS Hostname'. The 'Columns' section has a 'Drop Level Here' button.
- Measures:** A section with a 'Drop Measure Here' button.
- Report:** A section with a '2 Filters' indicator and a 'Report' dropdown menu.
- Filter Dialog:** A modal window titled 'Filter on SYS Hostname' is open. It has two radio buttons: 'Select from a list' (unselected) and 'Match a specific string' (selected). Below this, there is a 'Parameter Name:' field containing 'Oklahoma'. Underneath, there is a 'SYS Hostname' dropdown set to 'Contains' and a text input field containing 'ok'. There is a link 'Add another value' and 'OK' and 'Cancel' buttons at the bottom.
- Table:** A table with columns for '2017' and 'SYS Hostname'. The table contains several rows of data, including 'PORBAY-7DENTAL2', 'PORBAY-PC-0044', 'ABRCTC-14899', 'ABRMCL-4554453', 'ABRMCL-4559243', 'ABRWBH-MEDPAC', 'ALBSF-5329239', 'BAY-7PHARMACY', 'BEMRDL-4630843', 'CH12OCULD3B10', 'CH12OCULD3B38', 'CH12OCULD3B43', 'CH12OCULDNURS1', and 'CH12OCULDNURS2'.

Result

The screenshot shows the Flexera User Console interface. At the top, there is a navigation bar with the Flexera logo, 'USER CONSOLE', a search bar, and a dropdown menu set to 'Everything'. The main content area is divided into several sections:

- Left Panel:** 'Available fields (305) for: IT Assets'. A search box contains 'host'. Under the 'System' category, 'SYS Hostname' and 'SYS Is Virtual Host?' are listed.
- Layout Panel:** 'Rows' section contains 'SW Manufacturer', 'SW Name', 'SW Version', and 'SYS Hostname'. 'Columns' and 'Measures' sections are empty.
- Report Panel:** '4 Filters' are applied: 'SW Manufacturer includes Microsoft', 'SW Name includes .NET Framework', 'SW Version includes 6 values', and 'SYS Hostname contains OK'. The report is titled 'Unsaved Report' and shows 'Rows: 15 Cols: 0'.
- Table:** A table with columns 'SW Manufacturer', 'SW Name', 'SW Version', and 'SYS Hostname'. The data shows 15 rows of results for Microsoft .NET Framework 1.1 software on various hosts.

SW Manufacturer	SW Name	SW Version	SYS Hostname
			OKCCNT-5072526
			OKCLAW-64152
			OKCLAW-64714
			OKCLAW-64715
			OKCLAW-64717
			OKCLAW-64718
			OKCLAW-64719
Microsoft	.NET Framework...	1.1	OKCLAW-64720
			OKCLAW-64721
			OKCLAW-64722
			OKCLAW-64723
			OKCLAW-67705
			OKCLAW-68579
			OKCLAW-AUD676...
			OKCNTHS-3075

Use Case #3

To be compatible with the new EHR, all workstations need to be on Google Chrome, V 85 or newer.

Using the Report Builder, the deployment team creates a list of all workstations that need to be updated.

Built list with SW Mfg, SW Name, SW Version

Flexera | USER CONSOLE

Search

Everything

Browse Reports ghaun

Available fields (305) for: IT Assets

Find: hostname View

System

SYS Hostname

Layout

Rows

SW Manufacturer

SW Name

SW Market Version

Drop Level Here

Columns

Drop Level Here

Measures

Drop Measure Here

Properties

Report Options...

Report

Unsaved Report

2 Filters

SW Manufacturer includes Google

SW Name includes Chrome

View As: Table

Rows: 43 Cols: 0

SW Manufac...	SW Name	SW Market Version
		-
		1.0
		100
		101
		102
		103
		104
		105
		106
		107
		108
		109
		110
		111
		112
		113
		114

Refined list to unwanted versions

The screenshot shows the Flexera User Console interface. The top navigation bar includes the Flexera logo, 'USER CONSOLE', a search bar, and a dropdown menu set to 'Everything'. The main content area is divided into three sections: a left sidebar for field selection, a central layout configuration area, and a right-hand report viewer.

Left Sidebar: Shows 'Available fields (305) for: IT Assets'. Under the 'System' category, 'SYS Hostname' is selected.

Layout Configuration: Under the 'Layout' section, 'Rows' are configured with 'SW Manufacturer', 'SW Name', and 'SW Market Version'. 'Columns' and 'Measures' sections are currently empty.

Report Viewer: Displays a report titled 'Unsaved Report' with 12 rows and 0 columns. It shows 3 filters:

- SW Manufacturer includes Google
- SW Name includes Chrome
- SW Market Version excludes 31 values

The report table has the following data:

SW Manufac...	SW Name	SW Market Version
		-
		1.0
		49.0
		61
		70
		73
Google	Chrome	76
		79
		80
		81
		83
		84

Built list and added hostname

The screenshot shows the Flexera User Console interface. The top navigation bar includes the Flexera logo, 'USER CONSOLE', a search bar, and a dropdown menu set to 'Everything'. The main content area is divided into several sections:

- Left Panel:** 'Available fields (305) for: IT Assets'. A search box contains 'hostname'. Under the 'System' category, 'SYS Hostname' is selected.
- Layout Panel:** 'Rows' section has 'SW Manufacturer', 'SW Name', 'SW Market Version', and 'SYS Hostname' selected. 'Columns' and 'Measures' sections are empty.
- Report Panel:** '3 Filters' are applied: 'SW Manufacturer includes Google', 'SW Name includes Chrome', and 'SW Market Version excludes 31 values'. The report is titled 'Unsaved Report' and shows 'Rows: 35 Cols: 0'.
- Data Table:** A table with columns 'SW Manufac...', 'SW Name', 'SW Market Version', and 'SYS Hostname'. The 'SYS Hostname' column contains a list of identifiers.

SW Manufac...	SW Name	SW Market Version	SYS Hostname
			ABRBCH-4566025
			ABRFTN-00421
			ABRSFOVM2BCH
			ABRSFOVM2FLD
			ABRSFOVM2FTN
			ABRSFOVM2FYH
			ABRSFOVM2LBR
			ABRSFOVM2PRH
			ABRSFOVM2RBH
			ABRSFOVM2RCH
			ABRSFOVM2SDU
			ABRSFOVM2TRT
			ABRSFOVM2WAG
		1.0	ALBASU-5333708
		49.0	PORFTHD1FILE
		61	PHXPIHRDS3



Contact Information – EA/CM Team

➤ Director of DEGA

- Mark Rives, DSc Mark.Rives@ihs.gov

➤ Enterprise Architecture

- Garry Haun Garry.Haun@ihs.gov

➤ Category Management

- Andy Hazen Andy.Hazen@ihs.gov

➤ Group Email

- IHSEnterpriseArchitecture@ihs.gov

