

TEAMQUEST[®]
A HelpSystems Company

How to Drive Business Value with Capacity Management

www.helpsystems.com



Jeff Schultz
Product Specialist, TeamQuest

Executive buy-in

Benefits realization

Assessment

Roles and responsibilities

Strategy

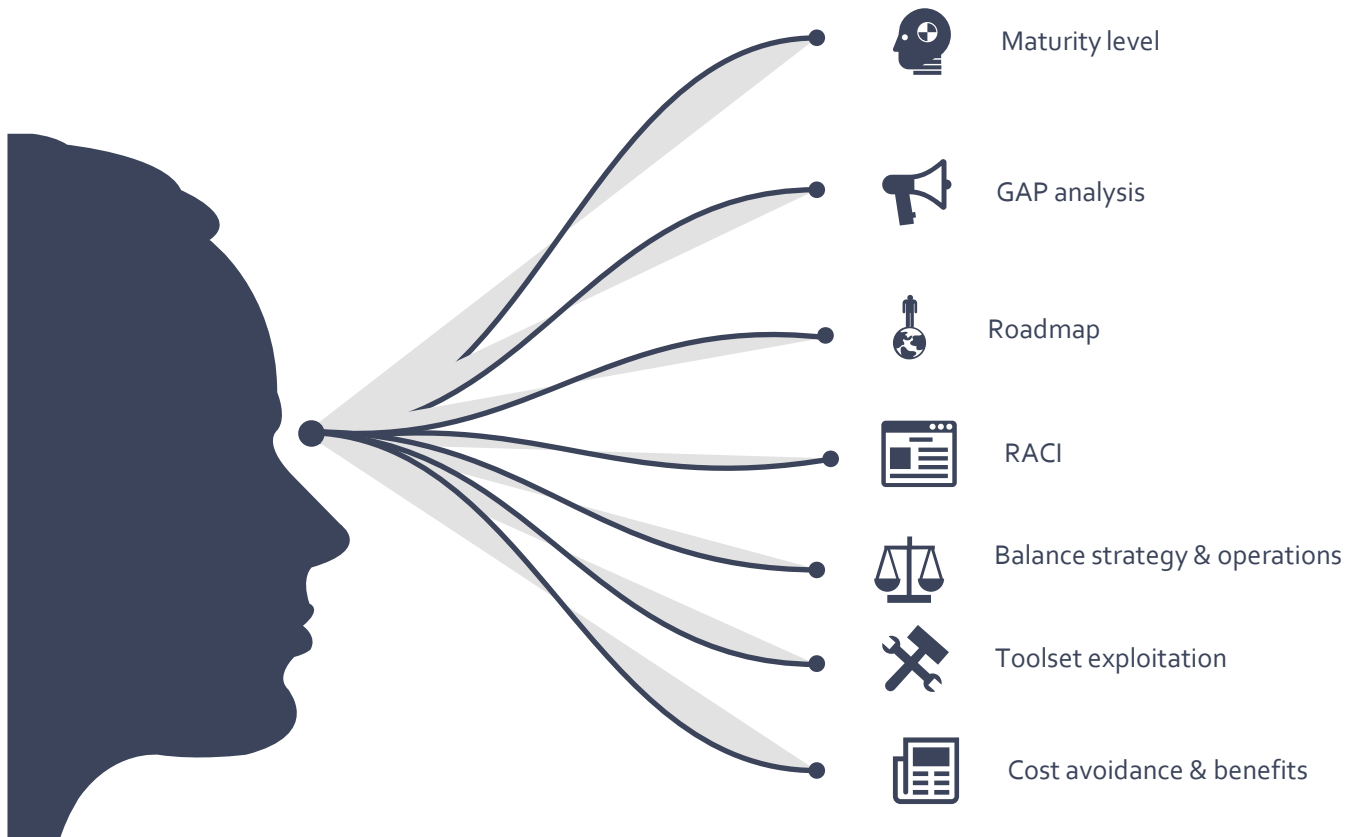
Toolset exploitation

Charge/show back model

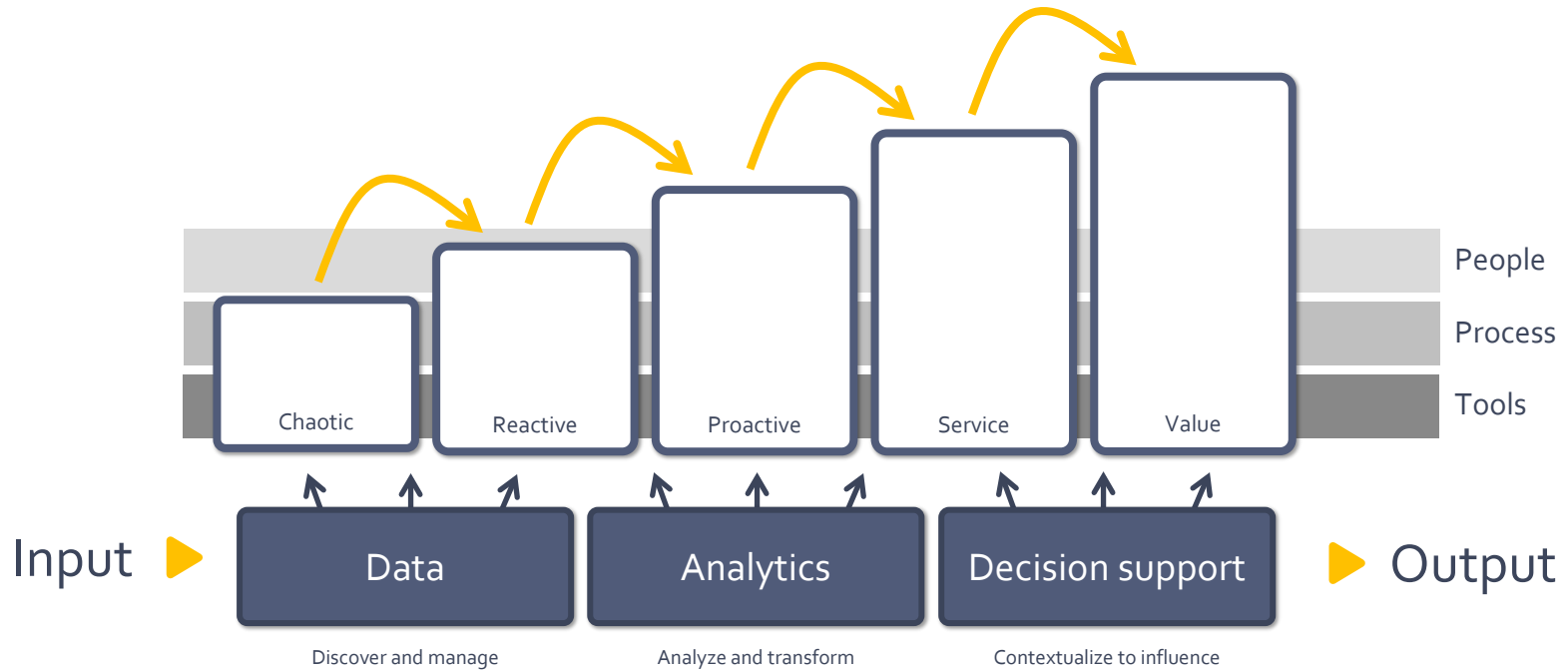
Demand management

Reporting

Assessment Feedback



IT Service Optimization





LEVEL 1.
CHAOTIC

- Ad hoc
- Notifications via user calls
- No centralized help desk
- No infrastructure management



LEVEL 2.
REACTIVE

- Component view
- Firefighting
- Alert & event monitoring
- Formalized incident reporting
- Siloed responsibility for technology



LEVEL 3.
PROACTIVE

- Workload view
- Predict, prevent performance problems
- Trending
- Availability management
- Standardized toolset across technologies



LEVEL 4.
SERVICE

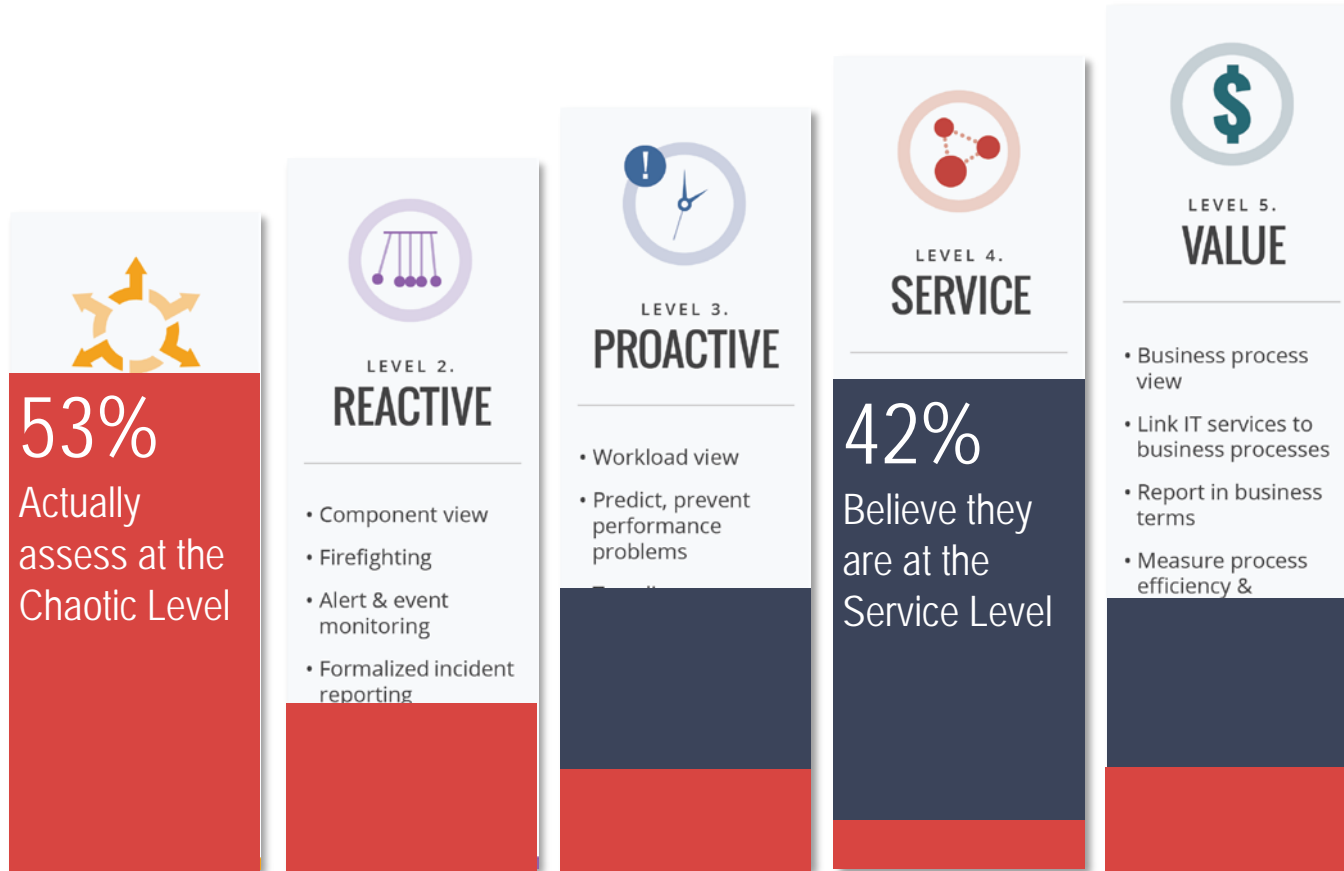
- Service view
- Monitor & report on services
- Service level agreements
- Scenario-based capacity planning
- Influence usage through chargeback



LEVEL 5.
VALUE

- Business process view
- Link IT services to business processes
- Report in business terms
- Measure process efficiency & effectiveness
- Weigh costs against benefits & risks
- Continuous service improvement

Actual Maturity Level



Each step along the way represents increased business value

Where are you?

Investment made in people, process, and technology

Use "Introducing the Gartner IT Infrastructure and Operations Maturity Model" (G00147962) for guidance

5

Business Partner: Business capacity planning

4

Service Aligned: IT service capacity planning

3

Proactive: Resource capacity planning

2

Committed: Historical analysis

1

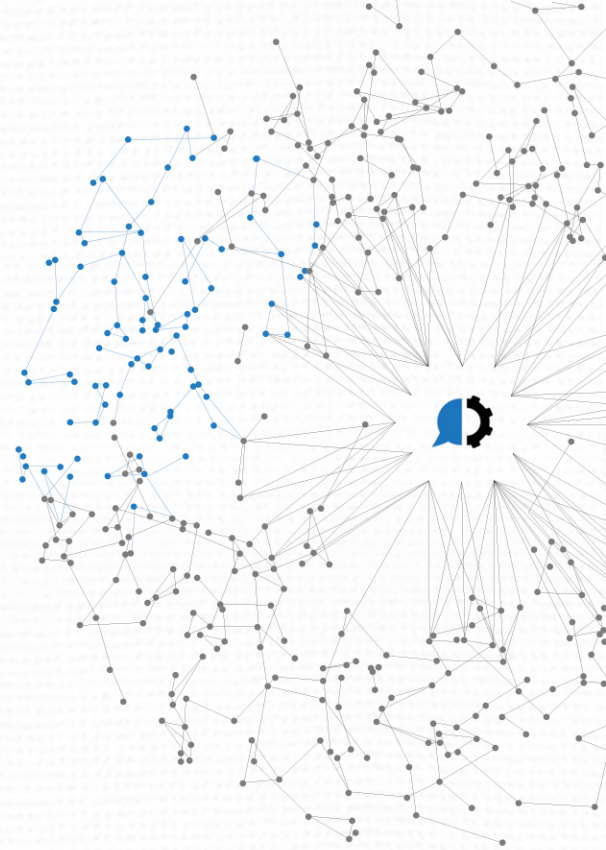
Reactive: Real-time monitoring

0

Chaos: Clueless



Defining a Capacity Management Roadmap



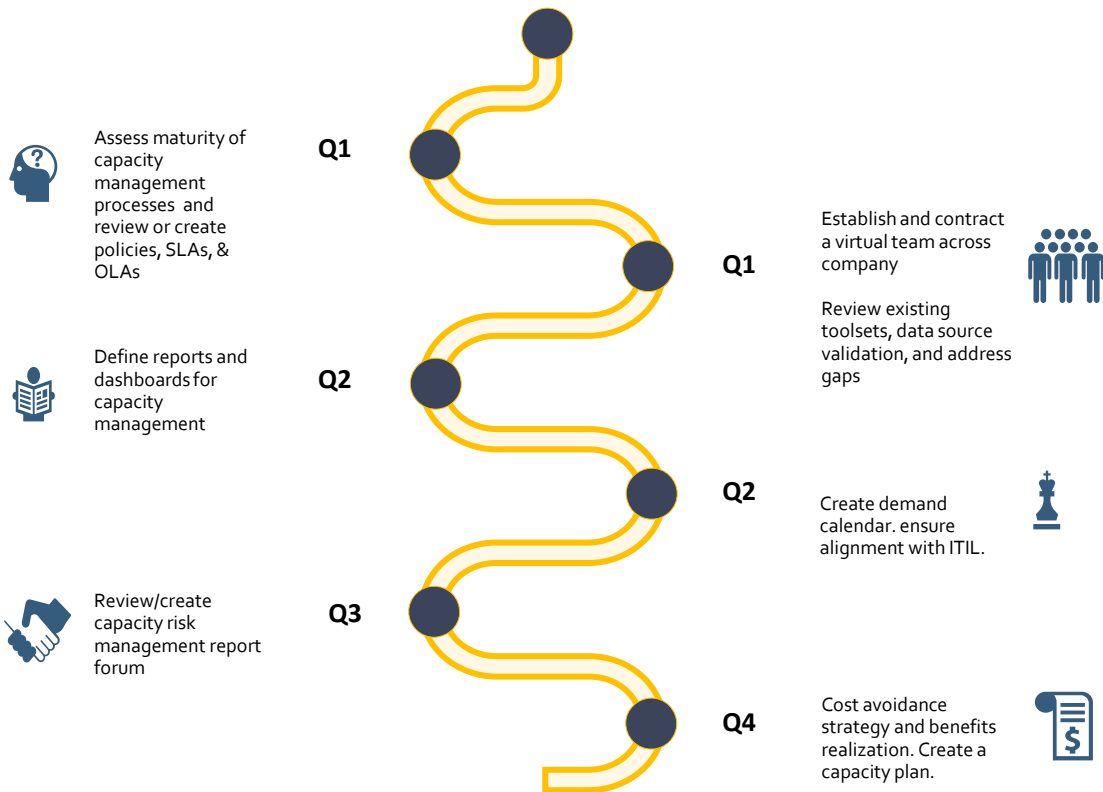
UP NEXT

- Value of capacity management questioned
- Communications within teams not aligned
- Capacity processes not documented
- Scope of capacity management not fully understood
- Capacity policy not supported by all concerned parties
- Roles and responsibilities (RACI) not created
- No visibility of future infrastructure (demand)
- No standardized format / template for monthly reporting
- No analysis from monthly capacity reports
- No virtual team established (capacity champions)
- Teams bypassing capacity management processes
- Weak CMDB (configuration management database)
- OLAs not aligned to capacity management

Assessment of policies, processes, and SLAs	Reporting at various levels	Planning and strategy	Cost avoidance	Demand management	Continuous service Improvement
<ul style="list-style-type: none">• Review current reports• Establish virtual operational team• Identify all data sources• Create RACI based upon policy and processes• Review SLA/OLA with service providers• Present to stakeholders	<ul style="list-style-type: none">• Create capacity dashboard• Amend monthly capacity reports• Validate data from service providers• Identify gaps in reporting• Review events, incidents, etc.• Exploit toolsets in environments• Do mature reporting	<ul style="list-style-type: none">• Address risk assessment• Create capacity plan (Ops & Strategic)• Assess reliability and availability improvements• Understand sources of capacity demand• Create a draft demand calendar• Align planning and operational growth	<ul style="list-style-type: none">• Review cost savings initiatives• Backup strategy• Choose archiving/data solutions• Reclaim storage• Review all POCs and clean up• Hit virtualization targets• Hit consolidation targets	<ul style="list-style-type: none">• Gather and analyze infrastructure demand• Create visibility of project demand• Attach cost to infrastructure required	<ul style="list-style-type: none">• Re-assess progress• Re-position• Create roadmap• Communicate yearly achievements• Review capacity plan

Timeframes are dependent on resources allocated and priorities attached to each subset.

Timeline



Capacity Planner

- Projects
- Demand calendar
- Architecture designs
- Unknown demand
- Trends
- Thresholds
- Reduce timeframes
- Improve availability

Environments

- Networks
- Mainframe
- Open systems
- Storage
- Databases
- EUC
- Datacentre
- Thresholds

Services

- Configuration
- Alerting
- SLAs
- Availability
- Monitoring
- Licensing

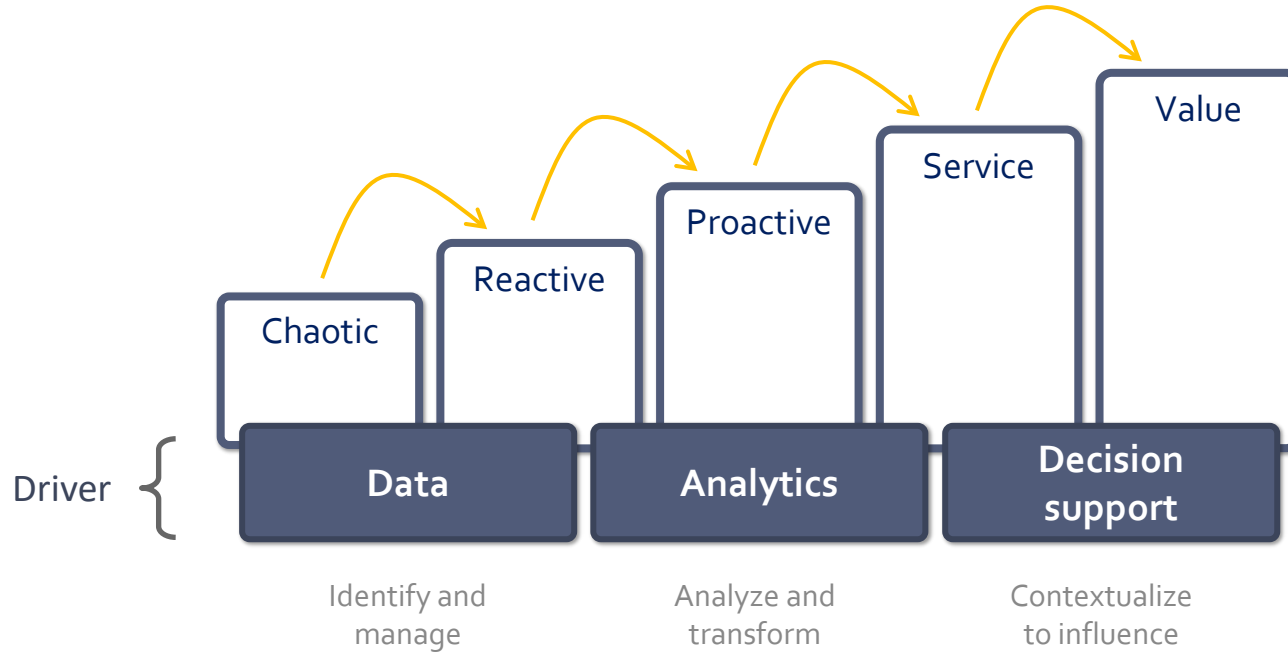
Reporting

- Monthly capacity reports
- Risk
- Licensing
- Cloud
- Incidents
- Monitoring
- Trending

Evaluation Criteria

- Manager of managers
- Infrastructure monitoring
- Off-shelf application plugins
- Availability reporting
- Service level management
- Integration with service desk
- Custom agents for integration and applications

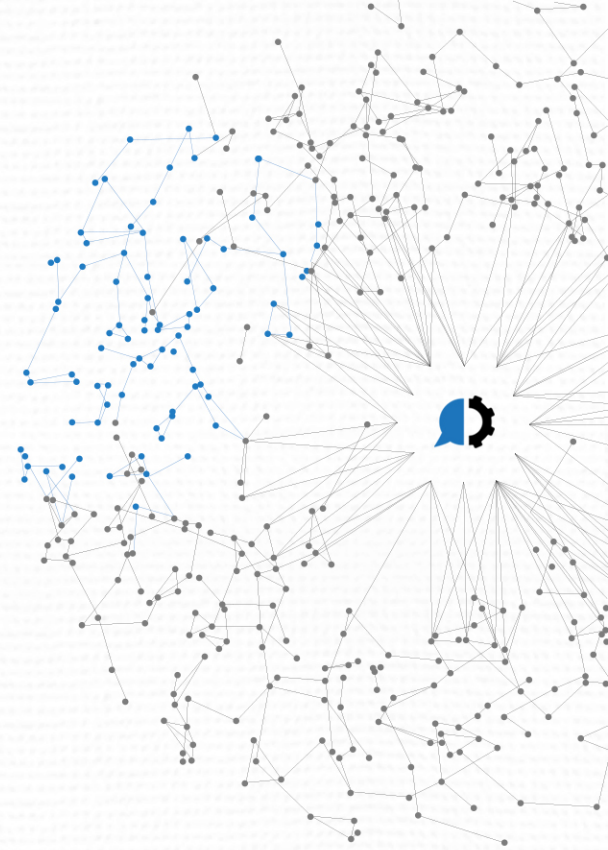
Toolset Drives Maturity



High Level Process	Process Component	Task Number	Task Description	Capacity Planning Manager	Capacity Planning Team	Competency (Service Provider)	Incident Manager	Problem Manager	Change Manager	Release Manager	Configuration Manager	Business / Client Representatives	CIO	Solution Architect	Domain Architect	Infrastructure Operations Manager	Service Line Storage	Service Line AIX	Service Line DCN	Service Line VN	Service Line EUC	Service Line Connectivity	Service Line Mainframe	Project Office		
Collect Capacity Data	Data Collection	17	Identify capacity metrics for collection	A	R	C					I		I	I	I	I	I	I	I	I	I	I	I			
		18	Identify if appropriate tools are available for these metrics	A	R	C								I	I	I	I	I	I	I	I	I	I	I		
		19	Motivate/Procure and obtain approval for respective tools	A	R	C								I	C	C	C	C	C	C	C	C	C	C	C	
		20	Maintain tools and procedures	A		R																				
		21	Run data collection and monitor metrics	A		R																				
		22	Validate data collection	A	R	R																				
		23	Summarise historic data	A	R	I												I	I	I	I	I	I	I	I	
		24	Define monitoring and reporting guidelines	A	R	I						I		I	I	I	I	I	I	I	I	I	I	I	I	
		25	Report on capacity and performance	A	R	R									I	I	I	I	I	I	I	I	I	I	I	
		26	Analyse current system data and reports	A	R	R												C	C	C	C	C	C	C	C	
Evaluate Current Usage	Evaluate Capacity Utilisation	26	Analyse current system data and reports	A	R	R											C	C	C	C	C	C	C	C		
		26	Conduct and attend capacity risk forum	A	R	R		I				I		I	I	I	I	R	R	R	R	R	R	R	R	
		27	Identify and resolve capacity issues/risks	A	R	R		I				I			C	C	C	R	R	R	R	R	R	R	R	
		28	Communicate to service level management	A	R	I								I	I	I	I	I	I	I	I	I	I	I	I	
		29	Gather an collect baseline data	A	R	R												C	C	C	C	C	C	C	C	
		30	Apply calibration (if applicable)	A	R																					
		31	Analyse baseline data for relevant peak periods	A	R																					
		32	Apply legacy and seasonal growth to baseline	A	R																					
		33	Apply new initiative requirements to baseline	A	R																					
		34	Verify growth with assumptions	A	R	C							C	I	C	C	C	C	C	C	C	C	C	C	C	C
Evaluate future resource requirements	Modelling and Analysis Phase	35	Document external factors affecting growth	A	R																					
		36	Analyze resource constraints and potential hot spots	A	R	R											I	R	R	R	R	R	R	R	R	
		37	Define minimum requirements	A	R	C							I	I	I	I	C	R	R	R	R	R	R	R	R	
		38	Ascertain tuning or optimisation potential	A	R	C									I	I	C	R	R	R	R	R	R	R	R	I



Strategic vs. Operational

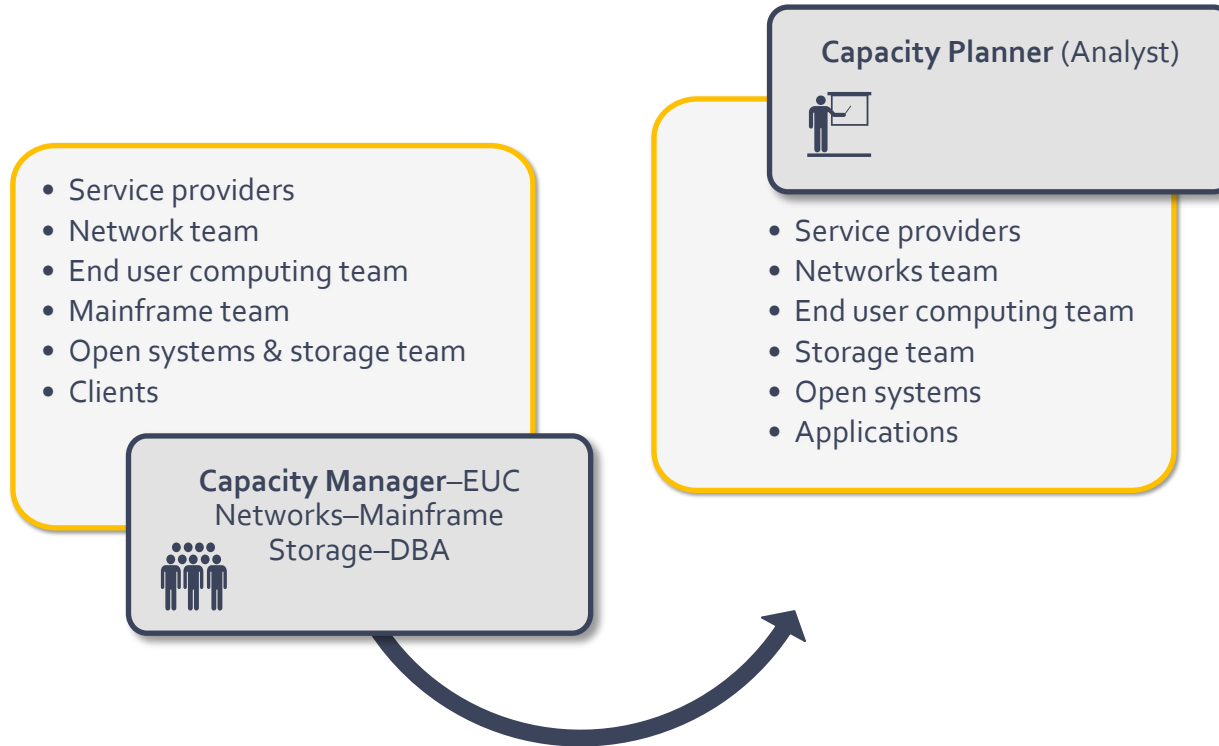


UP NEXT

Industry Standard vs. New ITIL Methodology

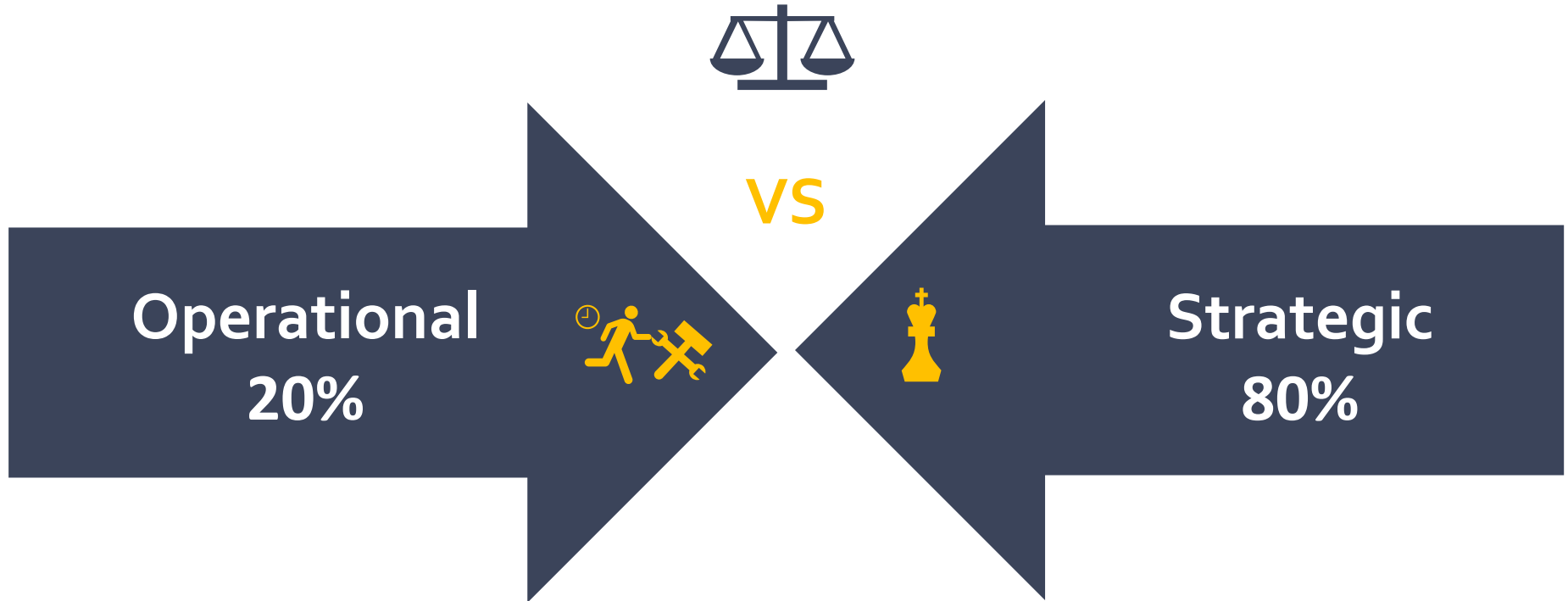
Operational

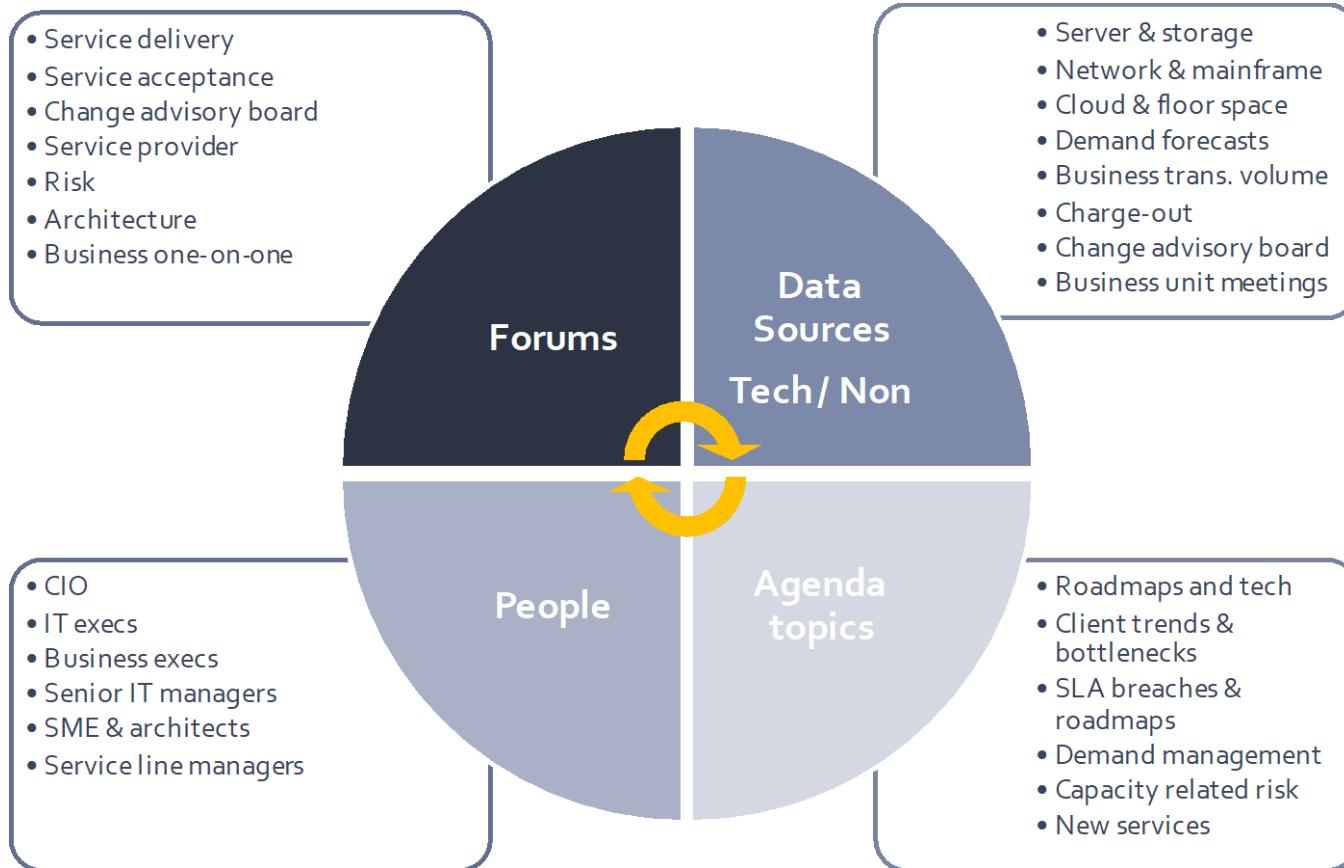
Application sizing
Real-time monitoring
Performance tuning
Reclamation targets
Gathering data

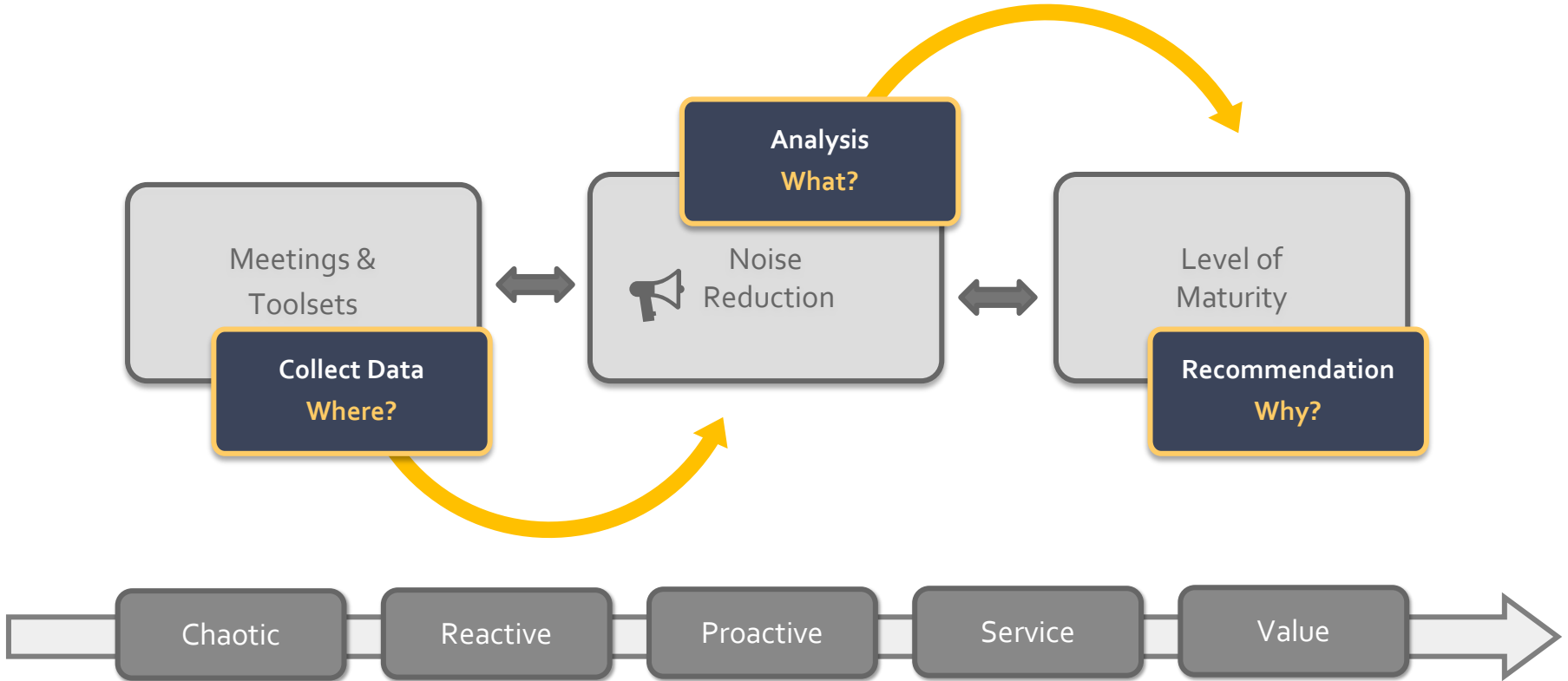


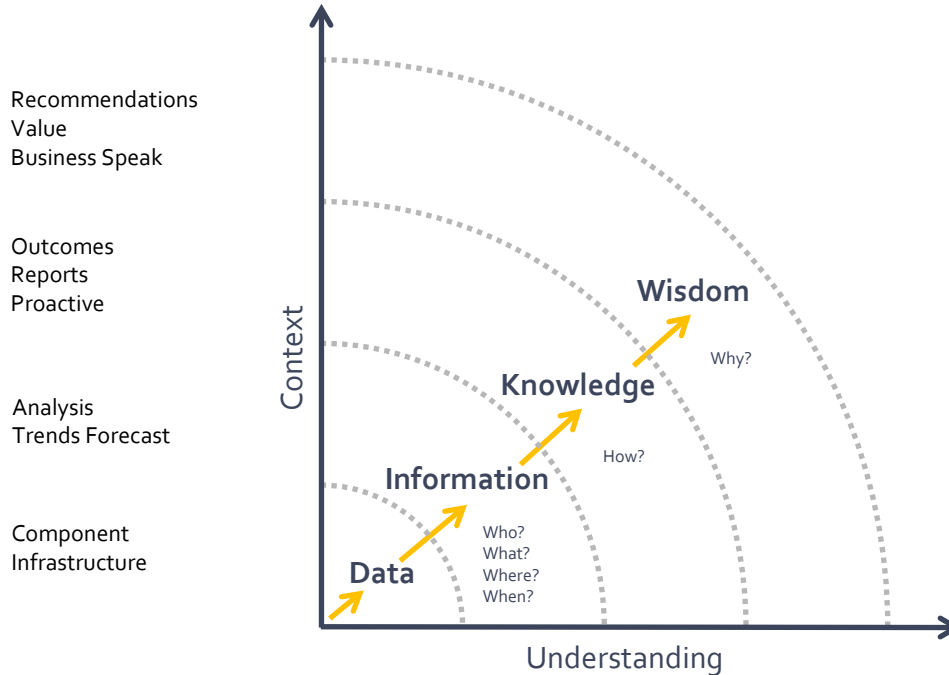
Strategic

Replacement strategy
Lifecycle management
Dashboard creation
Budget cycle input
Capacity procurement
Monthly MANCO reports





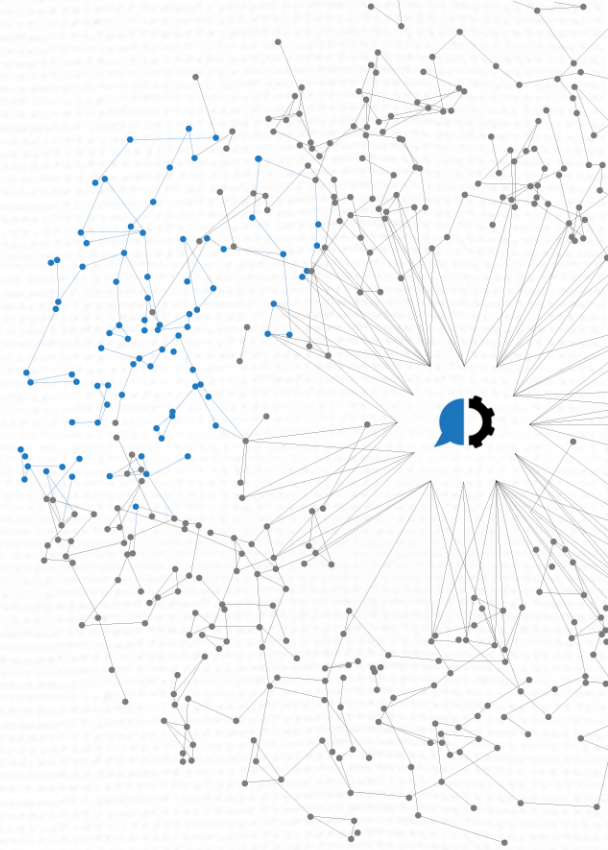




Artifacts of monitoring as a discipline in their organization



Creating Value and Realizing Savings



UP NEXT



Duplication and redundancy

Dormant or outdated assets

Wasteful consumption or demand

◀ Portfolio Management

◀ Lifecycle Management

◀ **Capacity Management**

Why Capacity Management?

Resilience

Proactive mitigation of risks
Replacement of man.
processes
Informed risk exposure



Efficiency


Defeat over-/under
provision.
Reclaim unused resources
Automated and unified tools
and processes



Agility

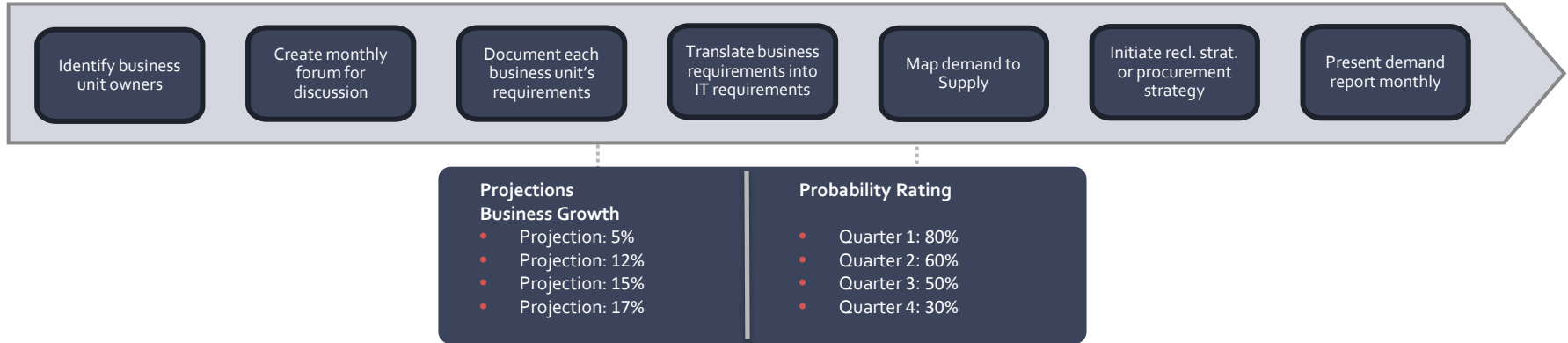
Clarity about current positions
Confidence in forecasting
abilities
Max. exploitation of
opportunities



- ▶ Self-service provisioning
 - ▶ Vendor estimates/recommendations taken at “face value”
 - ▶ Lack of sizing guidelines and reviews
 - ▶ Public cloud services treated like traditional on-premises resources
 - ▶ Virtual machines rarely returned or deleted after end of life
- 



- Use of standard configurations (S-M-L)
- Assessment of feasibility, challenge assumptions
- Increased customer engagement and active demand management

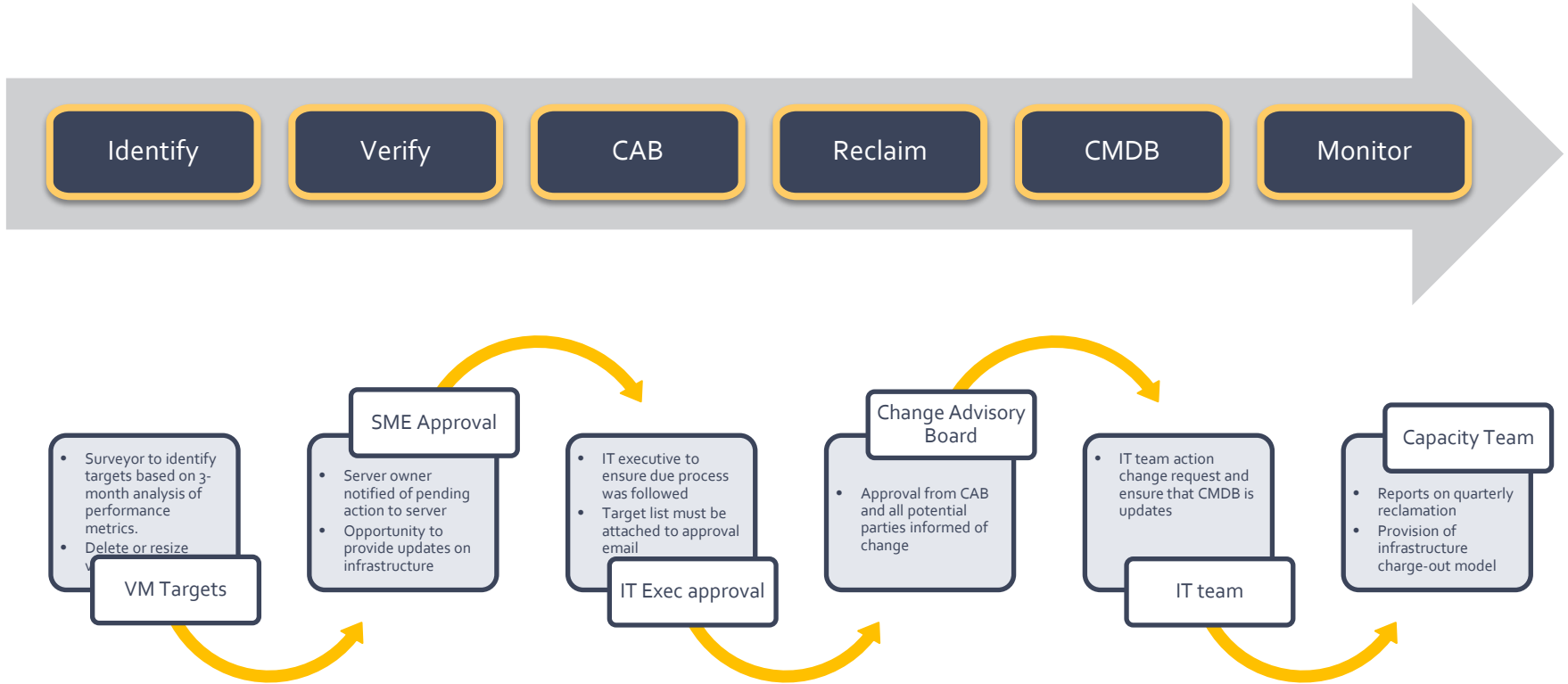


- Be present at monthly business meeting(s)
- Translate business into IT infrastructure requirements
- Present KNOWN growth, cater for unknown growth
- Understand 3–6 months demand (IT & business)
- Highlight demand at risk and dependencies



- Discovery of unused or over-provisioned assets
- Reclamation of resources supported by a formal policy
- Close the feedback-loop to improve future estimates

Process Flow for Reclamation

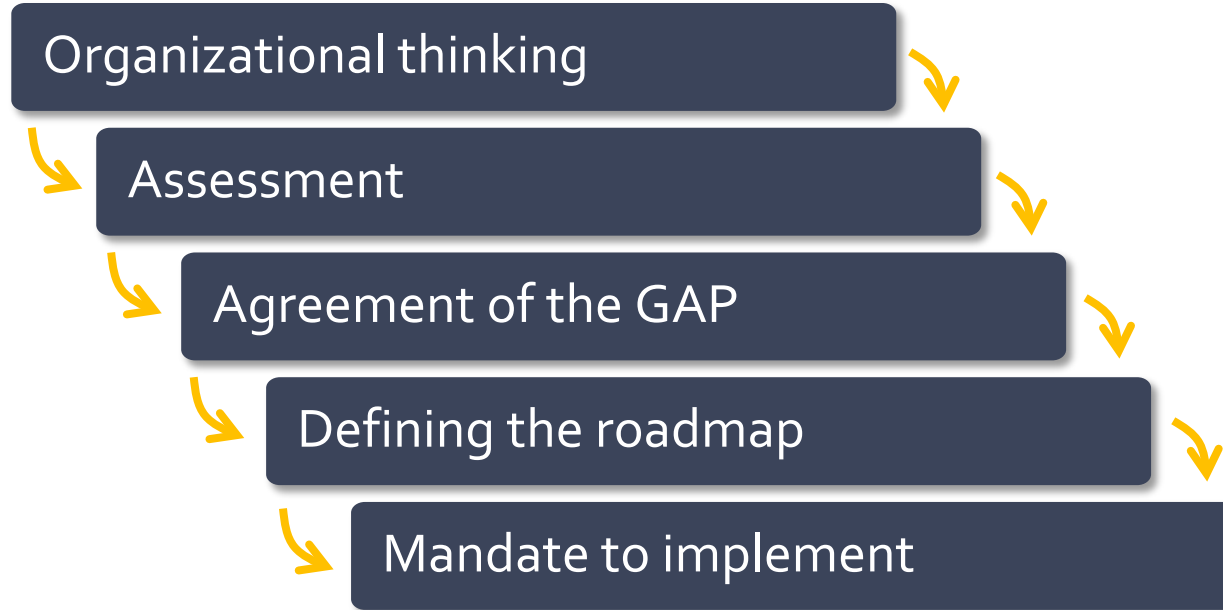


- **Activity-based costing:** Allocating cost in relationship to actual consumption will make consumers more thoughtful about how they request resources
- If charge-back is too hard to sell, start with show-back...



Charge-Back / Show-Back Reporting

Resource Name	Description - Service/App.	Allocated	Used	Free	Jan	Feb	Mar	Apr	May	USD per GB	USD per GB	
		GB	GB	GB						(un-utilized value)	(un-utilized value)	
											Monthly	Per Annum
FXDBN-SH-G-C:	Node G - NoSQL FX	900	6	894	1%	1%	1%	1%	1%	\$ 764,10	\$ 9 169,23	
VMJDEDEP1-SH-E:	JDE Deployment Server	932	187	745	20%	20%	20%	19%	20%	\$ 636,75	\$ 7 641,03	
VM0000IISACC-E:	IIS R Acceptance	466	5	461	2%	2%	1%	1%	1%	\$ 394,02	\$ 4 728,21	
VM0000IIS4-SH-C:	IIS Prod 4	466	10	456	3%	3%	2%	3%	2%	\$ 389,74	\$ 4 676,92	
VMJDEAPP3-SH-D:	JDE App Server	698	258	440	35%	35%	35%	37%	37%	\$ 376,07	\$ 4 512,82	
VM0000CS1-C:	BCX node - virt	466	47	419	9%	9%	9%	10%	10%	\$ 358,12	\$ 4 297,44	
VMDEV11-ES-C:	Dev - Ssafe	800	392	408	49%	49%	49%	47%	49%	\$ 348,72	\$ 4 184,62	
VM0000IIS-RT-D:	IIS Prod RT	466	79	387	12%	13%	16%	17%	17%	\$ 330,77	\$ 3 969,23	
STMP007SQLVDEV1-D:	SQLServer STMP	348	14	334	3%	3%	6%	5%	4%	\$ 285,47	\$ 3 425,64	
S0030115JAS-2-C:	JAS Print Server	466	163	303	35%	35%	35%	36%	35%	\$ 258,97	\$ 3 107,69	
VM0000IIS4-SH-2-C:	IIS Prod 4 F/O	466	163	303	36%	36%	36%	36%	35%	\$ 258,97	\$ 3 107,69	
S0200030667-SH-E:	App Node RT	388	85	303	21%	21%	20%	20%	22%	\$ 258,97	\$ 3 107,69	
S0200434422-SH-D:	App Node RT	400	108	292	26%	27%	27%	26%	27%	\$ 249,57	\$ 2 994,87	
S030042334-NTFS-D:	App Node RT	466	187	279	44%	44%	42%	44%	40%	\$ 238,46	\$ 2 861,54	
VM0001SQLV2-2-E:	SQLServer Acceptance	466	205	261	43%	57%	42%	43%	44%	\$ 223,08	\$ 2 676,92	
S036055060-SH-BU-C:	App Node BU	500	270	230	53%	53%	54%	54%	54%	\$ 196,58	\$ 2 358,97	
S03311044-D:	App Node RT - BB	550	347	203	61%	61%	62%	62%	63%	\$ 173,50	\$ 2 082,05	
VM000EAS-JAS-C:	Java Runtime	200	28	172	12%	13%	13%	13%	14%	\$ 147,01	\$ 1 764,10	





- ▶ Management buy-in
- ▶ Do an assessment
- ▶ People , process, and technology
- ▶ Strategic, not operational
- ▶ Short-term demand (3–6 months)
- ▶ Charge-out or show-back
- ▶ Reporting and benefits
- ▶ Be assertive
- ▶ More analysis and less noise