

Appendix – Reference Material

Analysis Methodology Details

Review of the Gartner Framework for Service Evaluation

Overview of Evaluation Criteria – Ability to Execute

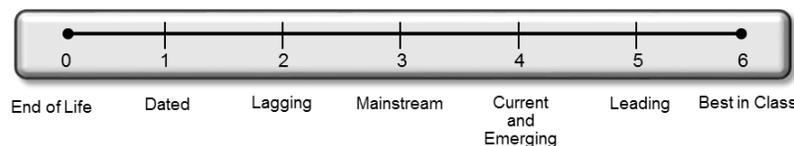
Ability to Execute – Definition

Ability to Execute – Scoring

Design and Architecture

To what extent does the service design and architecture

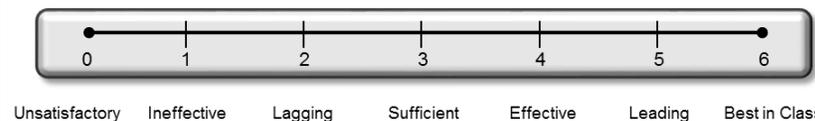
- align to industry standards and best practices,
- enable stability, performance, supportability & scalability
- align with longer term industry trends for continued viability?



Delivery Effectiveness

To what extent are service delivery

- processes defined, responsive, predictable, and transparent, with
- performance metrics established, meaningful, tracked, achieved and reported on?



Staffing and Funding

To what extent is the service

- staffed with right skills, depth and technology/ leadership focus, and
- provided with the level of funding required to sustain and refresh the service over multiple funding cycles?



Review of the Gartner Framework for Service Evaluation

Rating Detail for Ability to Execute – Design and Architecture

Definition	Rating Scale – Rating Explanation
Design and Architecture	
<p>To what extent does the service design and architecture</p> <ul style="list-style-type: none"> align to industry standards and best practices, enable stability, performance, supportability & scalability align with longer term industry trends for continued viability? 	<p>6 – Best in Class: visionary solution on the leading edge of technology; sets the bar for others to emulate; fully optimized</p> <p>5 – Leading: incorporates leading industry trends and recognized innovative technologies and practices, stable and sustainable</p> <p>4 – Current and Emerging: aligns with current industry practices/trends, stable and sustainable</p> <p>3 – Mainstream: aligns to most industry practices; still stable but may need to be refreshed</p> <p>2 – Lagging: falling behind industry standards/common practices, some stability and/or sustainability issues</p> <p>1 – Dated: substantially behind industry standards, significant stability, sustainability and/or long-term viability concerns</p> <p>0 – End of Life: out of date architecture, limited viability, no easy/clear path forward to upgrade capabilities</p>

Review of the Gartner Framework for Service Evaluation

Rating Detail for Ability to Execute – Delivery Effectiveness

Definition	Rating Scale – Rating Explanation
Delivery Effectiveness	
<p>To what extent are service delivery</p> <ul style="list-style-type: none"> • processes defined, responsive, predictable, and transparent, with • performance metrics established, meaningful, tracked, achieved and reported on? 	<p>6 – Best in Class: High ISO/ITIL maturity with very high level of automation with continuous automation discipline</p> <p>5 – Leading: processes are continuously evaluated and optimized, responsive, predictable and transparent. Advanced level of process automation for routine activities such as provisioning</p> <p>4 – Effective: well developed standardized processes followed, customer expectations consistently met (for responsiveness and performance), performance targets are consistently reported and meaningful to customers and includes basic process workflow</p> <p>3 – Sufficient: standardized processes defined and widely followed with results that are generally meeting customer performance requirements, performance targets consistently reported but may not be meaningful to customers</p> <p>2 – Lagging: unstructured/informal processes generally followed; inconsistent results versus documented customer needs, performance targets may be tracked but inconsistently reported or not meaningful to customers</p> <p>1 – Ineffective: a variety of ad hoc processes/tools are in place, performance targets not fully defined or tracked</p> <p>0 – Unsatisfactory: processes not defined and controls not in place, performance targets not defined or tracked</p>

Review of the Gartner Framework for Service Evaluation

Rating Detail for Ability to Execute – Staffing and Funding

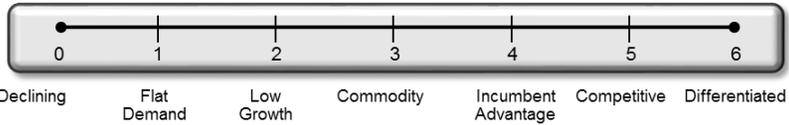
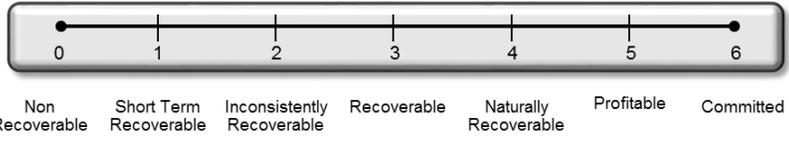
Definition	Rating Scale and Explanation
Staffing and Funding	
<p>To what extent is the service</p> <ul style="list-style-type: none"> staffed with right skills, depth and technology/ leadership focus, and provided with the level of funding required to sustain and refresh the service over multiple funding cycles? 	<p>6 – Best in Class: staffing and funding that enables optimized operations while also pursuing new service features and additional ways to add value</p> <p>5 – Optimizing: staffing and funding that enables sustained operations while also pursuing efficiency gains through automation</p> <p>4 – Sustainable: staffing and funding sufficient to maintain service, refresh aging components, and modernize/ improve service over time. Full complement of resources and critical skills sets</p> <p>3 – Sufficient: staffing and funding sufficient to maintain current capability level and refresh critical components before they reach end of service. Sufficient staffing such that attrition of key resources does not put service operations at risk</p> <p>2 – Lagging: lacking staffing or funding to make improvements to improve stability or address key customer needs. Limited resources with some critical capabilities reliant on 1-2 key individuals. Components refreshed only when end of life is reached</p> <p>1 – Unsustainable: lacking staffing or funding to replace failing or out of date components; dependent on specific individuals for critical, hard to find skills or institutional knowledge</p> <p>0 – Unstable: lacking critical skills and funding to maintain current operations at service levels acceptable to the customer</p>

Review of the Gartner Framework for Service Evaluation

Overview of Evaluation Criteria – Value Generation

Value Generation – Definition

Value Generation – Scoring

Customer Value	Customer Value
<p>To what extent do customers</p> <ul style="list-style-type: none"> consider the service a fit to their needs, perceive value compared to internal & external options demand more of the service and/or consider transitioning away as risky/undesirable? 	 <p>0 1 2 3 4 5 6</p> <p>Declining Flat Demand Low Growth Commodity Incumbent Advantage Competitive Differentiated</p>
<p>To what extent can the service be delivered at a price that is</p> <ul style="list-style-type: none"> market-competitive, reasonable vs. industry benchmarks and/or appropriate given the value added, while remaining recoverable over the short & long-term (i.e., does not cause future quality/cost/transition risk)? 	 <p>0 1 2 3 4 5 6</p> <p>Non Recoverable Short Term Recoverable Inconsistently Recoverable Recoverable Naturally Recoverable Profitable Committed</p>
<p>To what extent does the service</p> <ul style="list-style-type: none"> fit a shared service delivery model (economies of scale, common requirements, etc.), enable a state priority through centralized control, and/or align to legislative vision for the agency (RCW alignment)? 	 <p>0 1 2 3 4 5 6</p> <p>Diversion Non-Strategic Dedicated Service Strategically Aligned Shared Service Leveraged Service Statewide Service</p>

Review of the Gartner Framework for Service Evaluation

Rating Detail for Value Generation – Customer Value

Definition	Rating Explanation
Customer Value	
<p>To what extent do customers</p> <ul style="list-style-type: none"> consider the service a fit to their needs, perceive value compared to internal & external options, demand more of the service and/or, consider transitioning away as risky and/or undesirable? 	<p>6 – Differentiated: Most customers perceive this service to be the superior option compared to internal/external alternatives. The service meets technical and customer service requirements</p> <p>5 – Competitive: Most customers perceive this service to be about equal to internal/external alternatives and will likely choose to use it so long as service experience continues to be acceptable, contracting/onboarding is easy and cost remains competitive</p> <p>4 – Incumbent Advantage: Service is perceived as a reasonable option by most customers even though it may not meet all requirements; customers may perceive high cost, risk or effort associated with transitioning away from the service; or customers are mandated to use this service</p> <p>3 – Commodity: Service is perceived as a reasonable option by most customers. Some customers believe that outsourced or internally sourced options are preferable</p> <p>2 – Low Growth: Limited net new demand for the service because some customers do not perceive the service as reasonable when compared to alternatives</p> <p>1 – Flat Demand: Demand for the service is stagnant. Key customers have stated intention to hold at their current footprint, allow for organic growth, or begin to transition away from the service</p> <p>0 – Declining: Key customers have stated their intention to transition away from the service due to the availability of lower price and/or higher quality alternatives in the marketplace</p>

Review of the Gartner Framework for Service Evaluation

Rating Detail for Value Generation – Economic Value

Definition	Rating Explanation
Economic Value	
<p>To what extent can the service be delivered at a price that is</p> <ul style="list-style-type: none"> market-competitive, reasonable vs. industry benchmarks and/or appropriate given the value added by WaTech, while remaining recoverable over the short & long-term (i.e., does not cause future quality/cost/transition risk)? 	<p>6 – Committed: State is bound to subsidizing delivery due to previous investments, transitioning away from the service would be more costly (agency non-adoption incurs extra cost to the state)</p> <p>5 – Profitable: Service can be priced at a premium due to high valued delivered, limited customer/State options, extreme level of efficiency or critical assets leverage</p> <p>4 – Naturally Recoverable: WaTech is able to price the service for full recoverability, including refresh/replacement of components and evolution of components over multiple biennia</p> <p>3 – Recoverable: WaTech is able to demonstrate through independent (i.e., not WaTech commissioned) benchmarks that costs are in line with an “apples to apples” comparison with alternatives</p> <p>2 – Inconsistently Recoverable: Generally recoverable but sometimes requires funding infusions to cover unexpected variation in revenue or expenses</p> <p>1 – Short Term Recoverable: WaTech is able to demonstrate through independent (i.e., not WaTech commissioned) benchmarks that costs are in line with an “apples to apples” comparison with alternatives, but costs can only be kept within range of benchmarks through understaffing and deferred maintenance and capital investment</p> <p>0 – Non Recoverable: Not possible to make this service recoverable even in the short run</p>

Review of the Gartner Framework for Service Evaluation

Rating Detail for Value Generation – Strategic Value

Definition	Rating Explanation
Strategic Value	
<p>To what extent does the service</p> <ul style="list-style-type: none"> fit a shared service delivery model (economies of scale, common requirements, etc.), enable a state priority through centralized control, and/or align to legislative vision for the agency (RCW alignment)? 	<p>6 – Statewide Service: mandated as an essential service</p> <p>5 – Leveraged Service: a strategically aligned shared service which leverages a common asset or capability that agencies cannot create or sustain on their own</p> <p>4 – Shared Service: A strategically aligned service which has a common set of requirements which allow it to be delivered centrally with economies of scale</p> <p>3 – Strategically Aligned: Not a leveraged or shared service, but closely aligned with documented and accepted State/WaTech strategic priorities</p> <p>2 – Dedicated Service: Service is specific to a small set of critical customers (or only one), and the customer(s) or the State believes that WaTech must provide the service. As no economies of scale are expected, the State/customers may be willing to pay a premium for this service</p> <p>1 – Non-Strategic: Service does not align with the shared delivery model, State/WaTech strategic priorities, legislative charter, but which does not divert resources and funding away from the core mission</p> <p>0 – Diversion: A non-strategic service which does not have a compelling customer/business/economic case justifying consumption of agency resources that could otherwise be redeployed to a strategic service.</p>

List of Acronyms

AAD – Azure Active Directory
ACCT – Financial Reports
ADFS – Active Directory Federation Services
AFRS – Agency Financial Reporting System
AP – Access Point
AR – Enterprise Accounts Receivable System
ASM – Application Security Management
BATS – Bill Analysis and Tracking System
BDS – Budget Development System
BYOD – Bring Your Own Device
CAMS – Capital Asset Management System
CAS – Cost Allocation System
Centrex – Telephony Central Exchange
CERT – Computer Emergency Readiness Team
CFN - Campus Fiber Network
CICS – Customer Information Control System
CIM – Compensation Impact Model
COLO – Data Center Colocation Services
CPU – Central Processor Units
CRL - Certificate Revocation List
CRMS - Constituent Relationship Management System
CTS – Consolidated Technology Services
DCI – Data Center Interconnect
DCIM - Data Center Infrastructure Management
DF – Disclosure Forms Application
DH – Data Hall
DHCP – Dynamic Host Configuration Language
DIA –Direct Internet Access
DIS – Department of Information Services
DLP – Data Loss Prevention
DR/BC - Disaster Recovery / Business Continuity
DWDM – Dense Wavelength Division Multiplexing
EAD – Enterprise Active Directory
EADSC - Enterprise Active Directory Steering Committee
EOS – Enterprise Output Solution
EPO – Enterprise Program Office
EPS – Events Per Second
ERP – Enterprise Resource Planning
ESS – Employee Self Service
FAD – Forest Application Developers
FFS – Fee-for-Service
FNS – Fiscal Note System
FOOB - Facility Out-of-Band

FRG – Forest Resource Group
FTE – Full Time Equivalent
FW – Firewall
FY – Fiscal Year
GB – Gigabyte
GJXDM – Global Justice XML Data Model
HRMS – Human Resource Management System
IDS – Intrusion Detection System
IGN – Inter-Governmental Network
IP – Internet Protocol
IPAM – Internet Protocol Address Management
IPS – Intrusion Protection System
IVR – Interactive Voice Response
JV – Journal Voucher process
LAN – Local Area Network
LD – Long Distance
LDoS – Last Day of Support.
LMR – Land Mobile Radio
LTE – Long-Term Evolution
MAC – Moves, Adds, and Changes
MAN – Metropolitan Area Network
MDM – Mobile Device Management
MEP – Manufacturing Extension Partnership
MIM – Microsoft Identity Manager
MPLS – Multiprotocol Label Switching
MPS – Malware Protection System
MRC – Monthly Recurring Charge
MS – Microsoft
MSA – Master Services Agreement
MSSP – Managed Security Services Provider
MTTR – Mean Time to Repair
MVS – Medium voltage substations
NAS – Network Attached Storage
NLT – No Later Than (represents the last day of support, end-of-life date, and/or
NOC – Network Operations Center
NPS – Net Promoter System
NRC – Non-Recurring Charge
NSD – Network Services Division
NSX – VMware software defined networking tool
NTIA – National Telecommunication and Information Administration
O&M – Operations and Maintenance
OCIO – Office of the CIO
OCS – Office of Cybersecurity
OCSP – Online Certificate Status Protocol
OFM – Office of Financial Management

OOB – Out-of-Band
OSS – Operations Support Systems
OTV – Overlay Transport Virtualization
OWA – Outlook Web Application
PAM –Privileged Access Management
PBX – Private Branch Exchange
PDU – Power Distribution Unit
PE/CE – Provider and Customer Edge
PGN – Public-facing Government Network
PoE – Power over Ethernet
PSE – Puget Sound Energy
PSTN – Public Switched Telephone Network
PUE – Power Usage Effectiveness
QDC – Quincy Data Center
RAM – Random Access Memory
RCW – Revised Code of Washington
RFI – Request for Information
RFP – Request for Proposal
RFQ – Request for Quote
RJE – Remote Job Entry
RPM – Results through Performance Management System
SaaS – Software as a Service
SAN – Storage Area Network
SAW – Secure Access Washington
SBS – Server Backup Services
SCCM – System Center Configuration Manager
SDC – State Data Center
SEAP – SAW Enabled Agency Portal
SGN - State Government Network
SIEM – Security Information and Event Management
SIP – Session Initiation Protocol
SLA – Service Level Agreement
SLD – Switched Long Distance
SLO – Service Level Objective
SMON – State Metropolitan Optical Network
SOA – Service Oriented Architecture
SOC – Security Operation Center
SPS – Salary Projection System
SQL – Structured Query Language
SSE – Shared Services Email
SSL – Secure Sockets Layer
SVPS – Statewide Vendor/Payee Services
TALS – The Allotment System
TDM – Time Division Multiplexors
TEMS – Travel and Expense Management System

TMS – Time Management System
TOS – Terms of Service
TSB – Technology Services Board
UHP – Ultra High Performance
UPS – Uninterruptible Power Supply
UX – User Experience
VA – Vulnerability Assessment
VDA – Virtual Delivery Agent
VESDA – Very Early Smoke Detection and Alarm
VLAN – Virtual Local Area Networks.
VM – Virtual Machine
VMDK – Virtual Machine Disk
VoIP – Voice over IP
VPN – Virtual Private Network
vRealize – VMware benchmarking and billing tool
VRF – Virtual Routing and Forwarding
VRS – Version Reporting System
vSAN – VMware Storage Area Network virtualization tool
WAN – Wide Area Network
WWA – Washington Work Force Analytics

List of Participating Agencies (Interviews and Focus Groups)

Gartner worked with WaTech to ensure broad and representative agency participation in the project. As a first step Gartner attended a CIO Forum meeting in order to request volunteers, and then worked with WaTech to create a list of agencies of various sizes, and types, to invite. Twenty four agencies elected to participate in the interviews and focus groups.

Interviews targeted CIO/ IT Director level participants, though agency IT leadership often elected to pull in additional managers, both technical and business, to provide further feedback during interview sessions. Focus groups targeted the participation of Technical Managers with strong understanding of the current services; but several CIOs and their delegates also attended.

Table 1. List of Agencies Participating in Interviews and Focus Groups

#	Agency	#	Agency
1	ACB	13	DSHS
2	AG	14	DVA
3	COM	15	ECY
4	DAHP	16	ESD
5	DEL	17	L&I
6	DES	18	OIC
7	DFI	19	OFM
8	DNR	20	SAO
9	DOC	21	SEC
10	DOH	22	WIPP
11	DOL	23	WSDOT
12	DRS	24	WSP