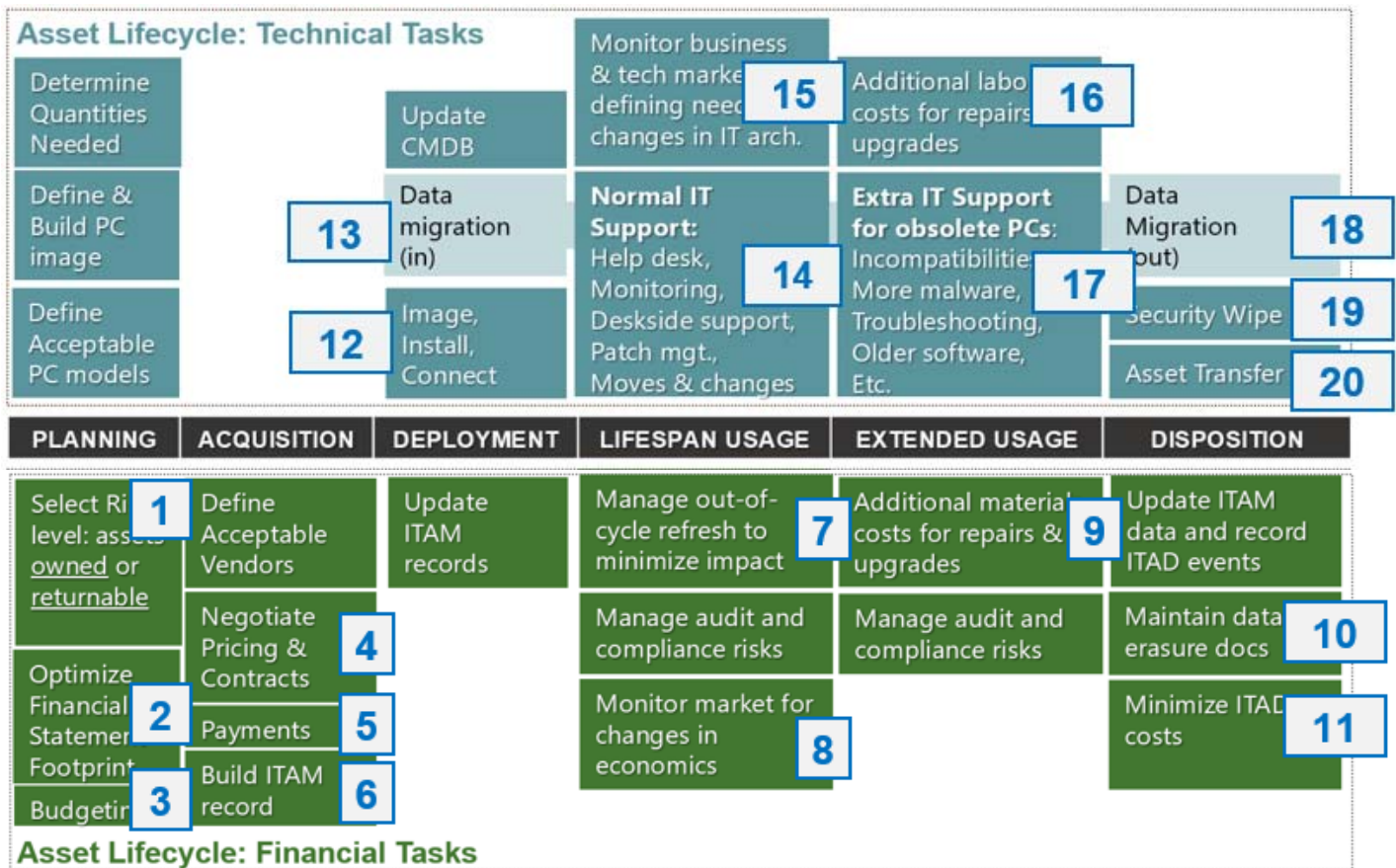


# Life Cycle Task Sheet:

## Where Lease Processes Help Reduce Cost and Risk

There are 20 points in the asset life cycle where effective use of lease financing processes and disciplined endpoint refresh can help reduce costs. These opportunities for cost improvement appear in both financial and technical asset life cycle tasks.



An understanding of these points—and how to size the savings opportunities—is key to exploiting lease finance as a financial and operational tool.

**A disciplined endpoint refresh strategy, when coupled with best-practice finance, can lower asset life cycle costs dramatically.**

# Life Cycle Task Sheet: Financial Tasks

PLANNING		ACQUISITION	DEPLOYMENT	LIFESPAN USAGE	EXTENDED USAGE	DISPOSITION		
Select Return level: assets owned or returnable	1	Define Acceptable Vendors	Update ITAM records	Manage out-of-cycle refresh to minimize impact	7	Additional material costs for repairs & upgrades	9	Update ITAM data and record ITAD events
Optimize Financial Statement Footprint	2	Negotiate Pricing & Contracts	4	Manage audit and compliance risks	Manage audit and compliance risks	Maintain data erasure docs	10	
Budgeting	3	Payments	5	Monitor market for changes in economics	8	Minimize ITAD costs	11	
		Build ITAM record	6					

Asset Lifecycle: Technical Tasks					
Determine Quantities Needed	Update CMDB	Monitor business & tech market for defining needed changes in IT arch.	Additional labor costs for repairs and upgrades		
Define & Build PC image	Data migration (in)	Normal IT Support: Help desk, Monitoring, Deskside support, Patch mgt., Moves & changes	Extra IT Support for obsolete PCs: Incompatibilities, More malware, Troubleshooting, Older software, Etc.	Data Migration (out)	
Define Acceptable PC models	Image, Install, Connect			Security Wipe	Asset Transfer

1: Returnable assets can be replaced without major financial impact or write-offs

2: Operating leases have the smallest footprint on the Balance Sheet (FASB), often 25% smaller than purchase via loan—and are not considered Debt in normal ratio calculations

3: Leasing uniquely allows for a more manageable budgeting process (expense impact is spread consistently year over year). Changes in technology can generally be 'smoothed' into general operating budgets. Many costs can be structured as either OPEX or CAPEX—to meet financing preferences or policies.

4: Independent lessors sometimes have visibility into street-level pricing and contracts, assisting in negotiating the best deals with suppliers.

5: Cash-out-the-door is typically less for leasing than buying (5-15%).

6: IT asset data records from multi-vendor independent lessors can save many labor hours of data entry, data reconciliation, and data quality re-work.

7: Purchased end-points are often depreciated over 3-5 years. Any out-of-cycle replacements—caused by many factors—requires write-downs in the financial statements, and forces unexpected cash out-flow (to buy the replacement). In a leasing scenario, these costs can be avoided—by simply rolling the old lease into the new one (for the new PC).

8: Occasionally, changes in the technology market create economic incentives to refresh a specific technology earlier than planned—due to remarketing upside. Lessors are continually monitoring this, in order to provide clients with opportunities to exploit such market conditions.

9: The out-of-warranty repairs and upgrades require materials—which have purchasing costs (typically on a spot-need basis, causing higher unit costs), process costs, and logistics management costs. All of these are avoided by replacing endpoints before the end of their lifespan.

10: In almost all industries today, air-tight records must be kept of data security. At disposition of an asset, this is critical and the documents that provide forensic-level and compliance-level proof of data erasure must be generated and maintained securely. Lessor services for this area include production of such records, often with the stronger attestation quality of an external, hands-off group.

11: In the past, many organizations performed their own economic recovery task—via resale of the used gear. The value of the used equipment was greater than the staff, process, and systems costs required to perform this task. However, IT analysts are now stating that the value recovered is no longer greater than the costs, so that the task now is not to generate 'profits' or even to 'break even', but rather to 'minimize the cost/loss'. Large scale independent lessors have the experience and trading networks to recover higher values from these assets. This can be leveraged by clients for lower lease payments.

# Life Cycle Task Sheet: Financial Tasks

## UNDERSTANDING AND SIZING THE OPPORTUNITY

1	Returnable assets can be replaced without major financial impact or write-offs	The majority of large IT projects fail and many are abandoned outright. Write-downs for the IT equipment in those projects can be reduced or eliminated with lease financing.
2	Operating leases have the smallest footprint on the Balance Sheet (FASB), often 25% smaller than purchase via loan—and are not considered Debt in normal ratio calculations	FASB requires operating lease payments to be less than 90% of the equipment invoice cost, and the Balance Sheet entries to be the PV of those payments at the client's IBR. This often makes the recorded amount 20-25% smaller than the entry for a purchase via loan. For example, a \$1000 asset might equal \$875-890 in lease payments, and \$750 in PV.
3	Leasing uniquely allows for a more manageable budgeting process (expense impact is spread consistently year over year). Changes in technology can generally be 'smoothed' into general operating budgets. Many costs can be structured as either OPEX or CAPEX—to meet financing preferences or policies.	Leases can create predictable expense patterns for refreshes and can include services and other 'soft costs'. These time-based finance vehicles can be used to defer cash outflow, and can often be configured as either CAPEX or OPEX spend—for complying with corporate funding policy or preferences. For example, companies measured on EBITDA could outsource some internal services, roll those fees into an equipment lease, and the entire package be classified as CAPEX. Even out-of-cycle refreshes can be brought into these structures, often without any change in monthly payments—greatly enhancing predictability.
4	Independent lessors sometimes have visibility into street-level pricing and contracts, assisting in negotiating the best deals with suppliers.	Independent lessors see street-level pricing on all of the invoices they consider financing. This vantage point is unique and is not 'survey' or 'sample' based like many other datasets. Unlike OEM-based lessors (Captives), they share this data with clients, for better price negotiations.
5	Cash-out-the-door is typically less for leasing than buying (5-15%).	Most of the preferred equipment lease vehicles leverage the 'equity' investment on the part of the lessor, and for operating leases there is a minimum %. Both types of leases typically result in less cash outflow than with a purchase. Typical savings are in the 5-15% range.
6	IT asset data records from multi-vendor independent lessors can save many labor hours of data entry, data reconciliation, and data quality re-work.	IT or IT finance resources are typically used to manually enter incoming asset data into ITAM databases, and this data has to be accurate, timely, and reconciled with other similar entries. Data quality costs have ripple-down effects and so re-work is often required. When the data is coming from multiple sources (e.g. 5-10 captives), the different formats can create high costs. A single multi-vendor data file from an independent can displace hours/days of labor cost.
7	Purchased end-points are often depreciated over 3-5 years. Any out-of-cycle replacements—caused by many factors—requires write-downs in the financial statements, and forces unexpected cash outflow (to buy the replacement). In a leasing scenario, these costs can be avoided—by simply rolling the old lease into the new one (for the new PC).	Unplanned and out-of-cycle refreshes play havoc with the mandated depreciation cycles of purchasing and cash flow. For example, for 2000 endpoints, a 3-year refresh, 10% mid-cycle refresh, and \$800 unit cost, the book value write-down and extra interest cost of accelerated cash outflow is around \$30K per year—an equivalent of 37 extra systems per year. IDC estimated that 25% of installed endpoints are REPLACED out-of-cycle within the first 3 years of usage—which would make the costs in this example even higher.

## Life Cycle Task Sheet: Financial Tasks

### UNDERSTANDING AND SIZING THE OPPORTUNITY

8	<p>8: Occasionally, changes in the technology market create economic incentives to refresh a specific technology earlier than planned—due to remarketing upside. Lessors are continually monitoring this, in order to provide clients with opportunities to exploit such market conditions.</p>	<p>Occasionally, new product introductions by OEMs create a 'sell opportunity' in the middle of a refresh period. This can elevate product resale values in a secondary market, making it economically advantageous to the client and the lessor to refresh early—and harvest the increase in value. Watching for such opportunities is part of a lessor's business (while not normally part of a client's business) and they will approach the client with an opportunity to harvest the economic value of their assets.</p>
9	<p>9: The out-of-warranty repairs and upgrades require materials—which have purchasing costs (typically on a spot-need basis, causing higher unit costs), process costs, and logistics management costs. All of these are avoided by replacing endpoints before the end of their lifespan.</p>	<p>Handling out-of-warranty repair/upgrade requirements require either the purchase/management of spare parts (tying up capital) or procuring on an ad-hoc, as needed basis. This later approach is process-inefficient, and generally has higher spot-buy costs of 8-12%. Multiply this across a large base of aged endpoints, and the process and material costs can be excessive—and disruptive to the normal functions of the procurement group.</p>
10	<p>10: In almost all industries today, air-tight records must be kept of data security. At disposition of an asset, this is critical and the documents that provide forensic-level and compliance-level proof of data erasure must be generated and maintained securely. Lessor services for this area include production of such records, often with the stronger attestation quality of an external, hands-off group.</p>	<p>This is considered a compliance-risk issue, and as such it is a cost without an ROI. The process goal here is to generate these documents at the lowest possible unit cost, while maintain perfect accuracy and fully-defensible data gathering and protection practices. Generation of such reports by ITAD partners of independent lessors is typically bundled into a lease (keeping costs low), and is performed at economies of scale and economies of specialization that most client organizations cannot match. Cost savings in this arena would typically be in the \$10-25 range per endpoint.</p>
11	<p>In the past, many organizations performed their own economic recovery task—via resale of the used gear. The value of the used equipment was greater than the staff, process, and systems costs required to perform this task. However, IT analysts are now stating that the value recovered is no longer greater than the costs, so that the task now is not to generate 'profits' or even to 'break even', but rather to 'minimize the cost/loss'. Large scale independent lessors have the experience and trading networks to recover higher values from these assets. This can be leveraged by clients for lower lease payments.</p>	<p>Gartner Group has begun stating that Internal ITAD operations are no longer break-even, due to escalating disposition costs and shrinking resale values (ITAM's High-Risk Endgame: Getting IT Asset Disposition Right, Rob Schafer, presented at Gartner IT Financial, Procurement &amp; Asset Management Summit, September 2016.). For example, disposal costs have risen 250% since 2010: 2010 (\$130, RFG), 2012 (\$150, IDC), 2015 (\$300, IDC). The Robert Francis Group (RFG) has monitored resale values over the last 15 years and reports that even the best enterprise re-marketing efforts only achieve a maximum of 7% recovery--\$70 on a \$1000 asset. A \$70 inflow versus a \$300 cost is a losing proposition, and enterprises are turning to third-party disposal firms to reduce or eliminate this ITAD cost/lost. Specialists in trading networks—like large independent lessors—can get higher return values and can leverage the lower costs of the specialty ITAD services providers.</p>

# Life Cycle Task Sheet: Technical Tasks

Asset Lifecycle: Technical Tasks					
PLANNING	ACQUISITION	DEPLOYMENT	LIFESPAN USAGE	EXTENDED USAGE	DISPOSITION
Determine Quantities Needed		Update CMDB	Monitor business & tech market defining needs changes in IT arch.	Additional labor costs for repairs & upgrades	
Define & Build PC image	13	Data migration (in)	14	15	16
Define Acceptable PC models	12	Image, Install, Connect	Normal IT Support: Help desk, Monitoring, Patch mgt., Moves & changes	Extra IT Support for obsolete PCs: Incompatibilities, More malware, Troubleshooting, Older software, Etc.	17
					18
					19
					20
Select Risk level: assets <u>owned</u> or <u>returnable</u>	Define Acceptable Vendors	Update ITAM records	Manage out-of-cycle refresh to minimize impact	Additional materials costs for repairs & upgrades	Update ITAM data and record ITAD events
Optimize Financial Statement Footprint	Negotiate Pricing & Contracts		Manage audit and compliance risks	Manage audit and compliance risks	Maintain data erasure docs
Budgeting	Payments		Monitor market for changes in economics		Minimize ITAD costs
	Build ITAM record				

## Asset Lifecycle: Financial Tasks

**12:** Independent lessors offer services through partners for imaging, asset tagging, staging, delivery, and set-up. Economies of scale may provide cost savings for these tasks, bundling the services into a lease can provide cash-flow benefits, specialization can increase service quality, and internal staff can be either be re-assigned to higher value tasks or the level of staff adjusted downward.

**13:** Most PC deployments are to existing users, and after system setup, data from the previous PC has to be migrated to the new PC—so the user can resume working. Since this data is the 'output' of the IT asset DISPOSITION step, the same service partner can provide this—bundling into a time-spread lease.

**14:** IT support works most efficiently when asset information is available. The ITAM data feed from multi-vendor independent lessor provides important entitlement data into the CMDB, expediting any warranty claims (e.g. serial number data).

**15:** Occasionally, new technology emerges and/or changes in the technology needs of the organization create business incentives to refresh a specific technology earlier than planned. Technology-centric independent lessors monitor trends, in order to bring new ideas and options to their clients.

**16:** Endpoints past their normal lifespan of 3-4 years generate excessive costs. Out-of-warranty repairs and hardware upgrades required to keep/get an old unit operational require skilled labor, either from internal technicians or external service providers. These costs are eliminated when units are refreshed at the end of their normal lifespan.

**17:** IT support costs for aged units are excessive. Older units generate disproportionately higher calls for support, age-specific malware remediation, work-arounds for incompatibilities, etc. These higher costs are eliminated when units are refreshed on time.

**18:** Most PC deployments are to existing users, and data from the previous PC has to be migrated to the new PC. This data is the 'output' of the IT asset DISPOSITION step & the same service partner can provide this—bundled into a 3 year lease.

**19:** Independent lessors offer services through specialized partners for compliance-grade data wipe—including the often-overlooked area such as removable media, keyboard buffers, and printer memory. Economies of scale may provide cost savings for these tasks, bundling the services into a lease can provide cash-flow benefits, specialization can increase service quality, and internal staff can be either be re-assigned to higher value tasks or the level of staff adjusted downward.

**20:** Most assets are removed from the company site at end-of-usage, involving packaging and transportation elsewhere. To preserve any remaining economic value (reflected either in resale activity results or in lower lease payments), this step needs to be done at high quality. Independent lessors offer services through large specialized partners for this, as either part of a lease or as a standalone service.

# Life Cycle Task Sheet: Technical Tasks

## UNDERSTANDING AND SIZING THE OPPORTUNITY

12	<p>Independent lessors offer services through partners for imaging, asset tagging, staging, delivery, and set-up. Economies of scale may provide cost savings for these tasks, bundling the services into a lease can provide cash-flow benefits, specialization can increase service quality, and internal staff can be either be re-assigned to higher value tasks or the level of staff adjusted downward.</p>	<p>Economies of scale create imaging and asset tagging service cost in the \$30-\$50 range per endpoint (subject to a number of variables). Few enterprises can match this figure, with build numbers often running in the \$60 - \$150 range. This represents savings in the \$10 to \$120 range per unit.</p> <p>This cost is typically rolled into the leasing bundle which defers cash outflow for the service, while the service itself is provided up front.</p>
13	<p>Most PC deployments are to existing users, and after system setup, data from the previous PC has to be migrated to the new PC—so the user can resume working. Since this data is the 'output' of the IT asset DISPOSITION step, the same service partner can provide this—bundling into a time-spread lease.</p>	<p>Much data migration is handled centrally, with something like a backup-and-restore process. But in many cases, user-specific data (e.g. preferences, local-only data) much be discovered, backed up, and relocated. The most-efficient time to gather this data (and relay it) is at data-wipe time, and service providers can perform much of this work—at scale and with automation in hand.</p>
14	<p>IT support works most efficiently when asset information is available. The ITAM data feed from multi-vendor independent lessor provides important entitlement data into the CMDB, expediting any warranty claims (e.g. serial number data).</p>	<p>During the course of IT support during the normal lifespan of an endpoint, requests for support typically have to be validated and tested for entitlement. This is especially true for warranty support, which often requires data found mostly commonly in ITAM databases. If the ITAM data was brought in from a multi-vendor lessor, and filtered into the CMDB for IT service, then most of this entitlement and cost-center data would be immediately available.</p>
15	<p>Occasionally, new technology emerges and/or changes in the technology needs of the organization create business incentives to refresh a specific technology earlier than planned. Technology-centric independent lessors monitor trends, in order to bring new ideas and options to their clients.</p>	<p>It is a constant challenge for an IT organization to keep on top of technology trends and new technology options. Knowledge of these—technology that is working and that which is NOT working—is critical to the success of IT in supporting the organization. Watching these trends and emerging technology is part of a lessor's core business and they will approach the client with briefings and alerts about such. This helps reduce IT investment risk, and helps IT be aware of new options for when their internal business needs change.</p>
16	<p>Endpoints past their normal lifespan of 3-4 years generate excessive costs. Out-of-warranty repairs and hardware upgrades required to keep/get an old unit operational require skilled labor, either from internal technicians or external service providers. These costs are eliminated when units are refreshed at the end of their normal lifespan.</p>	<p>Handling out-of-warranty repair/upgrade requirements of out-of-date equipment requires skilled labor to troubleshoot, build technical parts/service requests, initiate the logistics, complete the physical install or repair, and update the CMDB. This is labor-intensive or a low-value result of keeping obsolete gear 'on life support'. Multiply this across a large base of aged endpoints, and the labor costs can be excessive—and disruptive to the normal functions of the IT support group.</p>

## Life Cycle Task Sheet: Technical Tasks

### UNDERSTANDING AND SIZING THE OPPORTUNITY

17	IT support costs for aged units are excessive. Older units generate disproportionately higher calls for support, age-specific malware remediation, work-arounds for incompatibilities, etc. These higher costs are eliminated when units are refreshed on time.	IT support costs—plus materials costs—are known to be excessive for out-of-date units. All TCO studies document how resource consumptive these units are, typically costs more than the entire acquisition/deployment expense of 1 or 2 new units! (See Huntington Technology Finance whitepapers on this point.)
18	Most PC deployments are to existing users, and data from the previous PC has to be migrated to the new PC. This data is the 'output' of the IT asset DISPOSITION step & the same service partner can provide this—bundled into a 3 year lease.	Much data migration is handled centrally, with something like a backup-and-restore process. But in many cases, user-specific data (e.g. preferences, local-only data) much be discovered, backed up, and relocated. The most-efficient time to gather this data (and relay it) is at data-wipe time, and service providers can perform much of this work—at scale and with automation in hand.
19	Independent lessors offer services through specialized partners for compliance-grade data wipe—including the often-overlooked area such as removable media, keyboard buffers, and printer memory. Economies of scale may provide cost savings for these tasks, bundling the services into a lease can provide cash-flow benefits, specialization can increase service quality, and internal staff can be either be re-assigned to higher value tasks or the level of staff adjusted downward.	Data wipe is a part of the cost of ITAD disposition processes, and is subject to the same economies of scale, specialization, and automation tools required by enterprise-grade vendors in that space. Data wipe services are typically offered at differing levels of intensity (e.g. N-pass wipe versus destruction) and for differing types of equipment (e.g. SSDs, HDDs, removable media). Of special importance to compliance, is their experience in locating little-known pockets of data, such as SD cards, keyboard memory, printer disk drives, and various other caches of non-volatile storage.
20	Most assets are removed from the company site at end-of-usage, involving packaging and transportation elsewhere. To preserve any remaining economic value (reflected either in resale activity results or in lower lease payments), this step needs to be done at high quality. Independent lessors offer services through large specialized partners for this, as either part of a lease or as a standalone service.	Removal logistics are part of the cost of ITAD disposition processes, and is subject to the same economies of scale, specialization, and automation tools required by enterprise-grade vendors in that space. Of special importance to residual economic value, is their experience in documenting the condition of the equipment and safe packaging/transport to ensure that no damage is incurred during this process.