

CIO and CBO
IT Procurement Managers
Unit IT Purchasers

Supporting Frontline IT Purchasing in the Cloud Era

Getting Visibility into Unit Tech Buying and Driving Use of Central IT Vendor Evaluation Expertise

Study in Brief

This report profiles the purchase policy changes, vendor RFI policies, and central organization roles that innovative institutions are using to prevent license and functionality duplication, security risks, and bad contracts in today's hyper-decentralized, "consumerized" market for higher education apps and SaaS.

10 Ways to Use This Research

- Educating Campus Leaders about Costs of Uncoordinated SaaS Buying
- Educating Frontline Units about Need for IT Purchase Evaluation Support
- Complexity-Reduction and License Duplication Initiatives
- · Resetting Unit IT Purchase Authority Limits
- eProcurement System Consolidation Planning

- eProcurement System Access Policy-Setting
- · Updating Vendor RFI Requirements
- Standardizing Vendor SLA and Master Contract Terms
- Structuring Dedicated IT Contract Specialist Role
- Setting Policies and Turnaround-Time Goals for IT Contract Review

Staying Afloat in the Cloudware Deluge

How Can IT Add Consultative Value and Prevent Digital Sprawl?

"Consumerization" of IT Reviving Age-Old Rogue Purchasing Challenges

Mutually reinforcing technology trends are shifting purchasing activity and vendor evaluation away from central IT experts, and towards frontline campus units, who often make sub-optimal choices that waste budget dollars on duplicated functionality, introduce security risks, and present business interoperability frictions. CIOs see no end in sight to these trends; if anything they're accelerating, and requiring recalibration of IT procurement support practices.



 An explosion in the inventory of Apps and SaaS purpose-built for higher education has left nearly every unit with a choice of cloudware options for their function.



 Vendors are directly marketing solutions to end users, so while CIOs would always be at the table when evaluating back-office systems of record, this is not so for web and cloud systems of engagement.



 Units mistake low purchase prices for overall TCO, and believe that involving IT in evaluation is optional since SaaS purchases can be funded through local budgets, understood as "their money".



 The "Amazon Spillover" Effect means that experience with cloud technologies in private life causes campus purchasers to overestimate their own technology savvy, and underestimate the complexity of integrating new services with other applications and datasets critical to ROI realizations.

Exploding SaaS Options Raise Specter of Digital Sprawl



2,800+ Applications

Available in the Salesforce AppExchange



150+ Higher Education SaaS Vendors

Marketing software directly to end users on campus



50% of Integration Flows

Now introduced by front-line units

Finding Middle Ground

CIOs Caught Between "Dr. No" and "Anything Goes"

The rise in frontline purchasing is reanimating the age-old quandary of how IT can improve academic and staff decision-making without being seen as obstructionist.

"Anything Goes" purchasing—where 50%+ of app and SaaS acquisitions occur without meaningful IT involvement—often results in immediate waste from license duplication and failure to negotiate volume discounts, as well as longer-term risks to security and privacy.

But "Dr. No" intervention presents downsides as well: apart from perceptions of infringing on unit autonomy, IT leaders trying to consult in every purchase evaluation are seeing long queues and unsustainable workloads amassing.

Vendor Evaluation: A Growing Time Sink



20-30% of CIO Time

Spent on SaaS and application evaluation



200-500 Contracts

Signed across the institution yearly



A quarter of my week goes to vendor assessment. In a year, it might be 100%."

CIO, Public Research University

Looking for Frontier Practice



How are IT groups scaling vendor evaluations without slowing decision cycles?

Members asked the Forum to find promising, replicable approaches to consultation as a value-added "give" to units rather than procedural speed bump. From more than 100 interviews with CIOs and IT procurement leaders, four scalable strategies emerged.

This study is based on understanding gained from diverse higher education IT leaders. We are grateful to interviewees for sharing institutional insights and benchmarking practice. We have abstracted the institutional insights to make them more generalizable for colleges and universities with different missions and budgets, but the Forum's work is as ever grounded in the proven innovations of progressive practitioners.

Featured Institutions—With Sincere Appreciation



Klara Jelinkova VP for IT and CIO

Brian Soika

Director of Procurement Services

Carnegie Mellon University

David Baisley
Interim CIO



Christopher Waters

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What the Best Are Doing

Scaling expertise in technology procurement demands careful allocation of limited IT resources across a wide user base. To maximize IT's impact, the best are limiting purchasing authority and driving contracts through discoverable channels, while creating dedicated resources to insert "light-touch" technology expertise directly into end users' procurement processes.

Getting Visibility Into Frontline IT Buying



Purchase Authority Resets

Creating Fewer, Smarter Frontline Purchasers While Maintaining Unit Autonomy

IT and procurement temporarily "zero-out" frontline faculty and staff purchasing privileges, asking department chairs to re-nominate a smaller number of authorized buyers, with higher purchase limits, that IT can engage and educate more closely in vendor evaluations.



100% eProcurement Usage Campaigns

Improving Visibility by Driving Evaluations to "Discoverable" Channels

Conceding that IT mandates are culturally difficult and to be used sparingly, driving frontline adoption of eProcurement is worth it: Step-function improvements in identifying and influencing IT purchasing are achieved when institutions concurrently make eProcurement the preferred option and shut down rogue purchase channels.

Getting Units to Use IT Vendor Evaluation Expertise



Comprehensive Vendor RFIs

Helping Frontline Purchasers Realize How Much IT They Don't Know

Central IT standardizes an extensive list of RFI elements incorporating often-overlooked interoperability, security and compliance issues, and educates frontline buyers about the importance of front-loading RFIs early in the evaluation process. Making transparent all the vendor information that ultimately must be collected encourages purchasers to involve IT experts early in the evaluation stages.



Dedicated IT Contract Reviewer

Professionalizing and Scaling Contract Oversight without Bureaucratic Delays

A handful of institutions are elevating a professional IT purchaser who's "seen it all" to devote 100% of their time to fast-cycle review of IT (especially SaaS) contracts for security, technical risk and service-level agreement clarity. Even small IT groups at liberal arts colleges are seeing significant ROI from expert oversight—the position pays for itself through avoided price and risk mistakes on a relatively modest volume.

Purchase Authority Resets

Creating Fewer, Smarter Frontline Purchasers While Maintaining Unit Autonomy



Practice in Brief

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Implementation Steps

- IT and procurement pre-determine higher purchase authority limits for authorized frontline buyers; no fixed rule here but practitioners recommend at least \$3,000 or doubling existing limit. Rationale is to convince unit and department heads that only individuals knowledgeable about procurement processes can effectively steward funds
- Department chairs and unit managers notified that current, anyone-can-buy-if-you-have-budget privileges will be temporarily suspended as the new limits phased in
- Managers required to resubmit a roster of authorized buyers with the new, higher limits, who
 pledge to go through procurement process trainings. Managers have the right to re-nominate
 100% of their staff if desired to preserve local autonomy, but in practice voluntary reductions in
 number of authorized buyers of 70-80% seen
- IT and procurement shift emphasis from "road show and brown bag" trainings to focused meetings with smaller slate of authorized buyers to review procurement procedures, highlight value-add of central IT review, train on eProcurement system features

Benefits to Institution

- Fewer, better-trained frontline buyers
- Simplified discovery of IT purchase activity



Resetting authorities, if you manage the communications respectfully, has the best of both worlds: there's full retention of department autonomy. Chairs can authorize anyone they want. But it's a moment for reflection, and the chairs ask 'who are the right people to trust with budget dollars?' Almost always there's significant streamlining of purchasers that IT can build relationships with. So procurement gets simplified without being seen as central IT red tape."

Brian Soika, Director of Procurement Services Rice University

100% eProcurement Usage Campaign

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Implementation Steps

- Conduct time audits for paper contract reviewers—both centrally and in individual departments identifying how much processing time is spent per contract, and converting to an institutional cost using salary data
- Identify departments and units that rely heavily on their own procurement "systems" (through conversation, through identification of departments underrepresented in eProcurement systems)
- Prepare presentations identifying the added overhead costs and opportunity costs using data tailored to each department (e.g., for Chemistry, compare list price of Erlenmeyer flasks with oncontract price)
- Notify contracted vendors that off-contract orders made with purchasing cards will no longer be honored, insisting they only accept POs that come through the eProcurement system
- Alert bank issuing p-cards of the names of vendors on your new "no-buy" list and request the bank block p-card purchases with those vendors as an added layer of protection

Benefits to Institution

- Central IT visibility into frontline tech evaluations
- >> Increased on-contract purchasing
- » Reduced license duplication



We'd wanted a single eProcurement system for a while for all the usual reasons, but the explosion in cloudware purchasing made consolidating urgent. Nothing else gives as good a view of where spend was going, so we could get a handle on integration workload."

Klara Jelinkova, VP for IT
Rice University

Comprehensive Vendor RFIs

Helping Frontline Purchasers Realize How Much They Don't Know



Practice in Brief

Central IT standardizes an extensive list of RFI elements incorporating often-overlooked interoperability, security and compliance issues, and educates frontline buyers about the importance of front-loading RFIs early in the evaluation process. Making transparent all the vendor information that ultimately must be collected encourages purchasers to involve IT experts early in the evaluation stages.

Implementation Steps

- Central IT reviews past IT purchases to standardize 100+ RFI elements reflecting general and institution-specific integration and risk concerns, structured as objective, yes/no questions
- RFI document used in every campus unit, for every vendor evaluation, to enable fast comparability of product and SaaS alternatives
- IT reviews questionnaires looking for missing vendor capabilities or divergences from institutional architecture policies and consults with campus purchaser in advance about costs and risks of exceptions
- Multi-channel end-user education: vendor RFIs prominently positioned on IT website, eProcurement system forms, with primers explaining the downstream security, integration cost, and functionality lapses that occur if requested information not confirmed

Benefits to Institution

- Increased utilization of central IT expertise early in vendor evaluation
- » Reduced overall time-to-contract
- Reduced "unplanned, unbudgeted" integration effort



This isn't introducing red tape—eventually, we **have** to get all the details in the RFI. By frontloading and standardizing it, and requesting information in ways that make comparisons easier, evaluations ultimately go faster, and we're really able to add value to the campus by helping them understand the downstream effects of their choices before the contract is signed."

David Baisley, CIO
Carnegie Mellon University

WANT TO KNOW MORE?
Access the Practice Implementation Intensive at eab.com/itf/comprehensiveRFI



RFI Categories

Contracting

Business

Continuity

Disaster

Recovery

Comprehensive Vendor RFI Questions

Contracting **Data Rights** Are ownership rights to all data, inputs and outputs retained by Carnegie Mellon? Are these rights retained even through a provider acquisition or bankruptcy event? Vendor In the event of imminent bankruptcy, will you provide **Insolvency** 90 days for customers to get their data out of the system and migrate applications? Is a documented data sanitization process in place for **Ouality Assurance** disposal or retirement of storage devices? Does the process adhere to DoD 5220.22-M and/or NIST SP

Yes/No Questions

Intelligence

IT can identify potential red flags with negative answers, and follow up to clarify requirements

Getting Actionable

Q Al

Best Practice SLA Terms

Vendors asked to meet industry best practice or institutional standards

Systems Support

Network

Operational	Security		
Operational	Encryption	Do you encrypt customer data during transmission across network boundaries? If so, please explain what encryption techniques are employed and how encryption keys are managed.	
Security ->	Logging	Do you log electronic access to customer data? If so, please explain to what degree logging is employed, the retention period for those logs, and how logs are protected.	
Identity Management	Policies and Procedures	Do you conform with a specific industry standard security framework, such as ISO 27001 or NIST Special Publication 800-53? If so, please provide evidence of how your organization conformance. If no, please indicate how you satisfy the Guidelines for Data Protection relative to Restricted data. For details, see: http://www.cmu.edu/iso/governance/guidelines/data-protection/	
Accessibility	Intrusion Monitoring	Do you employ network-based intrusion detection or prevention? If so, please explain.	



Up-to-Date Policies and Regulations

University standards, policies and regulations included in all vendor requests

IT Directors Write Questions for Their Domain

Subject matter experts from within IT are responsible for writing and signing off on the various focus areas of the RFI, and update their sections regularly to reflect evolving institutional needs and compliance.



Discrete questions and requests for vendor information

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Implementation Steps

- IT and procurement identify individual experienced in both IT systems and contract language for specialized role; reviewers observed in research more often systems administrators with vendor experience than procurement specialists with tech fluency
- Introduce new field in contract approval cover sheets requiring purchaser to indicate if contract involves any IT goods or services; all tech-applicable contracts routed to dedicated reviewer for fast-cycle due diligence
- Reviewer analyzes contract for classic pricing, service agreement and data security missteps, promising initial review within 2-3 days to ensure oversight doesn't delay deal and tech deployment
- · Reviewer takes over and finalizes renegotiation of disputed terms on behalf of purchaser

Benefits to Institution

- Economies of intellect: reviewer becomes "human library" of contracts terms
- » Reduced spend on license duplication and "retail" pricing
- Prevents non-compliant sharing or storage of protected data



We're not the biggest IT shop, but it became apparent that so many purchases have an IT component these days that we could keep an FTE fully engaged, and that the expertise they'd accumulate would save us so much money and effort on the back end by avoiding mistakes on the front end."

Christopher Waters, CIO Elon University



WANT TO KNOW MORE?

Access the Practice Implementation Intensive at

eab.com/itf/contractreviewer



All IT-Related Purchases Routed to Dedicated Contract Reviewer

FLON UNIVERSITY CONTRACT APPROVAL COVER SHEET Complete all sections. Incomplete forms will be returned unprocessed. While University faculty/staff may sign this cover sheet to indicate concurrence with contract terms, only certain designated officials of the University may officially sign the contract on behalf of the University. 1. Initiating Department: 2. Contract Initiator: Phone: Email: 3. Does this contract involve <u>any</u> technology related goods or services? Yes If yes, approval of Sr. Business Analyst – Campus Technology Support must be obtained. 4. Does this contract involve furniture, construction or renovation? Yes If yes, approval of the University Architect and SVP Business, Finance & Technology must be obtained. 5. Contract Dates: Start Date **End Date** 6. Description of Contract:

Associate CIO



Sr. Business Analyst Campus Technology Support

- 10+ years in university IT
- · Associate Director, no direct reports
- · Legal expertise in vendor contracting
- · 100% dedicated to contract review

Where Specialists Prevent Mistakes



SLAs for uptime and availability



Disaster recovery



Data storage locations and compliance



Third-party access rights

High Volumes (Even At Smaller Schools) without Delays

200+

Contracts
evaluated by
the analyst per
year

5-6

Contracts submitted through procurement per week 2-Day

Initial turnaround for "green light" or time estimate for further review

Representative Contracting "Wins"



Eliminated auto-renews



Corrected math errors in vendor's favor



TCO of extra site servers for unlimited seat license options



An extra benefit besides avoiding duplication and risk is budget transparency. I see every contract coming down the pipe in the next 6 months ahead of the budget. I know how much extra resources we'll need, and it's much easier to make the case.

Christopher Waters, CIO

Elon University





Discussion Guide Supporting Frontline IT Purchasing in the Cloud Era

Using this Report to Speed Consensus for Change

The Forum's happiest members use our research as an occasion to convene IT and campus leaders to review best-practice lessons from innovative higher education institutions, and deliberate about the need to revisit policies, implement new processes, reallocate staff and budget dollars, or advance task force and strategic plan goals.

Forum reports will now feature self-evaluation diagnostics and discussion guides that IT leaders can use as a backbone for focused working sessions at staff and task force meetings. We recommend that members distribute the report to the relevant stakeholders as prereading to establish a common vocabulary and fact base, then spending 60 minutes going through the diagnostics and discussion questions to decide whether policy course-correction or resource re-allocations make sense. Forum staff would be delighted to facilitate such discussions live on your campus or on a private webconference as helpful.

Creating a One-Hour IT Team Working Session

- · Send report to IT leadership or procurement task force and committees for pre-reading
- · Convene group to discuss diagnostic questions and assess need for adopting profiled practices
- Contact IT Forum for implementation support:
 - > Unmetered consultation with Forum researchers
 - Networking contact with profiled institutions
 - > Model policy and process templates

Purchase Authority Resets

To discourage sub-optimal purchases and focus line education and vendor evaluation support effort, some colleges and universities are simultaneously raising frontline purchase limits for IT and department heads and unit managers to appoint a smaller number of more sophisticated "authorized" buyers. Practitioners believe these measures preserve the spirit and letter of local autonomy, while increasing the visibility of IT purchasing and line awareness of often-overlooked cost and risk considerations.



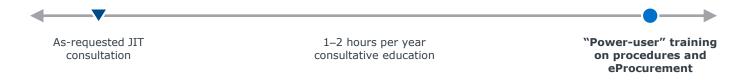
1) What is our lowest current frontline purchase authority limit? Are these too high or low?



2) How broad are frontline academic and business unit purchase privileges?



3) What is our target level of frontline buyer education effort?

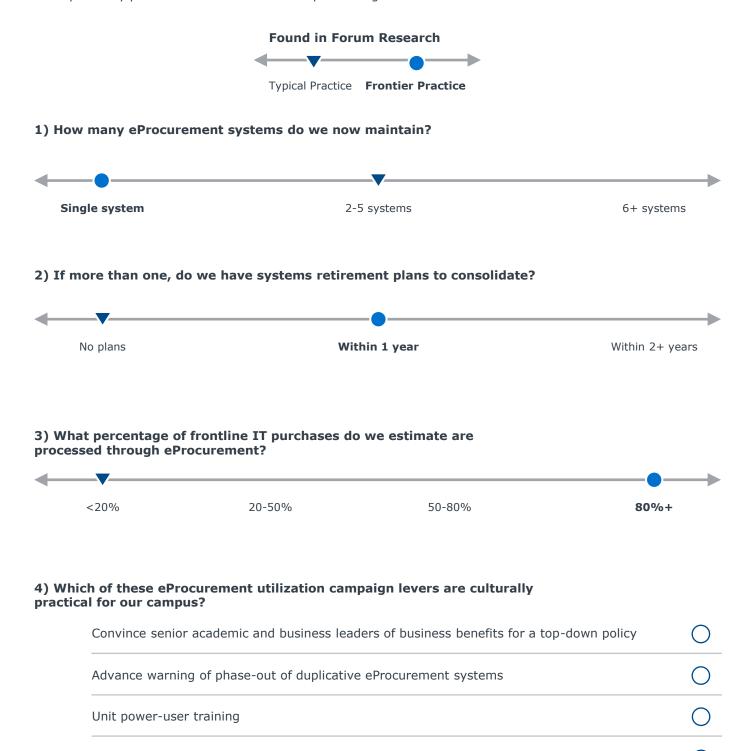


4) How much do we need to streamline authorized purchaser list to achieve education targets?



100% eProcurement Usage Campaigns

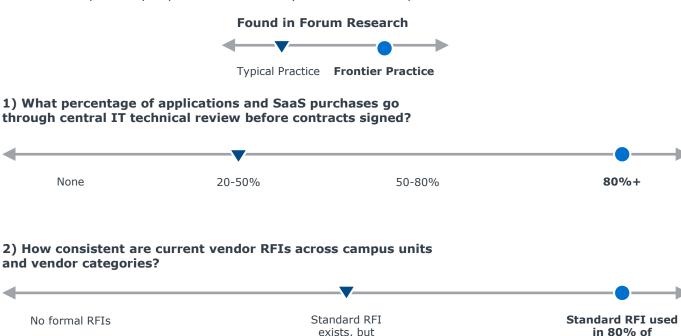
Many institutions are striving to consolidate within a single eProcurement system for all university purchasing (including IT) with the ambitious goal of 100% of buys mediated through the system, with benefits to the "discoverability" of IT purchases and the chance to pre-empt license duplication and interoperability problems from uncoordinated purchasing.



"Rogue purchasing" reports sent to deans and unit managers

Comprehensive Vendor RFIs

Accepting that frontline IT purchasing will likely increase, some institutions are using standardized vendor information capture forms to ensure the right technical considerations are front-of-mind for units making purchases. As well as driving frontline buyers to seek IT expertise voluntarily, practitioners are seeing 25% reductions in project implementation times by allowing units to outsource technical information capture to prospective vendors early in the evaluation process.



inconsistently used

purchases

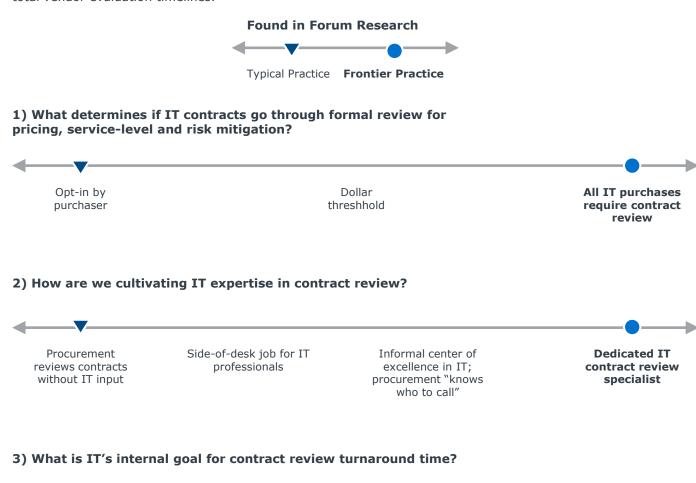
3) Where are our vendor RFIs failing to capture the right information at the right time?

ight time:	Too Vague	Too Late in the Process	Too Difficult for Users
CONTRACTS Standards, expectations, sub-contracting	0	0	0
BUSINESS CONTINUITY Vendor practices and policies	\bigcirc	\bigcirc	\circ
DISASTER RECOVERY Vendor practices and policies	0	0	0
SYSTEMS SUPPORT Implementation and maintenance guidance	0	0	0
OPERATIONAL Support availability and standards	\circ	\circ	0
SECURITY Compliance policies and technical standards	\circ	\circ	0
ACCESSIBILITY Federal and local regulation compliance	0	0	0
IDENTITY MANAGEMENT SSO technical standards	0	0	0
NETWORK Bandwidth requirements	0	\circ	0

No formal goal

Dedicated IT Contract Reviewer

Recognizing that volumes of frontline IT purchases are increasing, even smaller institutions are seeing favorable economics and campus partner service by creating a dedicated contract specialist who can spot check 100% of contracts for the most common pricing and data risk missteps, without adding to total vendor evaluation timelines.



2-3 weeks

2-3 days

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