AE Initiative Business Case – Computer Bundles

Initiative Sponsorship and Ownership

Project Name:	Strategic Purchasing – Computer Bundles
Project Summary:	The objective of this project is to build out the computer hardware area within strategic purchasing (aka demand management) by specifically identifying campus-wide computer bundles to optimize purchasing. Identify a suite of no more than four (4) competitively priced standardized desktop and laptop computer bundles with a primary vendor for administrative use campus-wide. Maximize savings through implementation of strategies to consolidate vendors and require an articulated business need for purchase of non-bundle configurations.
Business Unit(s):	Vice Chancellor for Administration – Administrative Excellence
Business Process Owner(s):	UW-Madison Purchasing
Preliminary Cost Estimate:	$82K initial investment and $24K annual recurring cost
Preliminary Savings Estimate:	$4.3M over 5-years
Proposed Go-Live Date:	Estimated to be 17-33 weeks following initiation of implementation phase

Business Need or Opportunity

The University of Wisconsin- Madison campus spends a significant amount of money acquiring desktop and laptop computers for its faculty and staff: total estimated FY2011 spending on desktops and laptops was $8.7 million on approximately 7,500 computers, with $4.75 million and $3.95 million spent with Dell and Apple, respectively. UW-Madison Purchasing has established relationships and sales channels with a number of vendors as a means of optimizing savings (through preferred pricing, rebates, discounts etc.) for desktop and laptop purchases. However, there is little campus policy in place to require campus purchasers to use these vendor relationships and sales channels. Furthermore there are few standards in place to identify a common set of desktop and laptop computers that would be appropriate for the majority of administrative staff on campus. The combination of policies and lack of standards impacts the potential cost savings that could be achieved through these preferred vendor relationships. It is believed that the establishment of a select number of desktop and laptop bundles, available through a reduced number of sales channels, with enforced policies for the purchase of these bundles, will allow the campus to maximize cost savings on computer bundle purchases.

While the primary driver behind the Computer Bundling initiative is to optimize cost savings for desktop and laptop purchases, there are also additional drivers/benefits to the initiative. Streamlining the desktop/laptop purchasing process will result in fewer resources required for bundle selection and "price shopping." Seeking input from all stakeholders regarding the standardized bundle configuration allows the campus to purchase the appropriate bundle – based on the performance and functions that are expected. Having policies and enforcement in place helps to both guide purchases of bundles and also allow for exceptions when appropriate.

At the outset of the team's work, the scope of Computer Bundling initiative was limited to administrative computing. However, based on feedback obtained from various stakeholders, the team believes that the inability to accurately

define administrative computing unnecessarily limited the potential adoption of bundle purchases on campus. Further feedback from the stakeholders indicated that a higher adoption rate could be achieved by making the computer purchasing process as straightforward as possible. To that end the team has expanded the scope of its recommendations to make the selected bundles and attendant purchasing processes and options as comprehensive and broadly applicable as possible and accounted for unique circumstances or computing needs by modifying the anticipated adoption rates.

It will be critical for the implementation team to determine standard desktop and laptop bundles for faculty and staff that allow them to perform required job functions. This approach seeks to "maximize the size of the tent" for bundle adoption in the context of computer bundle purchases, and will furthermore define the criteria whereby exemptions can be granted to the policies that are established around bundle purchases.

Alternatives Considered

- Two equivalent computer bundle vendors

  The campus currently has relationships with two primary vendors (Dell and Apple) that could be considered to provide campus bundles. Initially, the team considered a recommendation where both vendors would be equally engaged to offer bundles to the campus, with Apple being included primarily due to the preference of many users towards that platform. However, after considering the computing functions that are performed on campus, it was apparent that both Dell and Apple products can perform each of the necessary functions and the savings potential available through consolidating to primarily Dell desktops and laptops outweighed the benefits of increased choice across Dell similarly configured Apple products. Based on the cost savings potential, the team repositioned this alternative and instead suggests that both vendors provide bundles to the campus – but that Dell computer bundles are always considered the primary choice and that a formal exemption would be required stating why Dell would not meet requirements before consideration of a selected Apple "bundle".

- Desktop & End Point Management

  During stakeholder engagement, the team received feedback that, while computer bundling offers campus the potential for significant savings, those savings would be dwarfed by the savings that could be realized by moving towards a managed desktop environment for the campus. A managed desktop environment standardizes (and typically centralizes) the support and maintenance of organizational IT assets, which, on a large scale, leads to lower costs over the entire life cycle of the asset.

  While the team recognizes that desktop management (DM) presents an opportunity for significant costs savings, it also realizes that would require a significant investment in front-end infrastructure and cultural modifications. Therefore, team recommends that the university conduct a further study of DM, with the foreknowledge that implementing a standardized computer bundles will provide a more standardized platform upon which any DM initiative may advance.

- Virtual Desktop Infrastructure (VDI)

  VDI represents another step in the progression of IT asset management. VDI moves beyond DM to an environment where desktops and laptops are replaced by inexpensive appliances that access their storage, memory and applications from central services.

  Similar to the challenges identified with DM, the team recognizes that, while VDI presents an opportunity for significant costs savings, it also requires a significant investment in infrastructure and change management efforts relating to cultural considerations. Additionally, while there is a level of adoption of this technology across campus, the current infrastructure is not yet at a scale and maturity level sufficient to support enterprise-

wide VDI. The team recommends that the campus's experiences with VDI be monitored and the CIO charters a comprehensive review at an appropriate point in the future.

Proposed Solution Description

Scope

Proposed Solution:

The computer bundles project team recommends the following solutions be implemented:

- A primary vendor for computer purchases offering a set of 4 desktop and laptop standard bundle configurations, 2 each respectively, with the following considerations:
    - It will be important for the implementation team to consider the differentiation between the bundle configuration options as described via marketing (i.e. related to power, size, etc. and which groups on campus are the ideal users of each); for the purpose of this business case, in order to limit the impact of bundle names on perception we have labeled the two levels as "Legends" and "Leaders."
    - The 2 desktop bundles offered by the primary vendor will be non-monitor bundles with the "upgrade" option to purchase a standardized/negotiated monitor (with consideration of different warranty models for non-bundle monitor purchases)
    - The computer bundles team believes that allowing any customization of the UW standard bundle configurations will complicate the implementation and reduce savings potential (both by price and ordering/timing efficiencies). The implementation team will need to determine if users will be able to customize bundles for common additions, such as adding more memory or choosing a different storage device.
        - There is an expectation that the majority of campus can (and will) purchase a PC bundle. This is a new expectation. The PC platform will usually suffice. When it does not: The dean/director will approve the use of the Mac platform (self-waive at School/College level), and the expectation is that the end-user will choose from a list of bundles available from Apple (2 desktops and 2 laptops for secondary vendor).
    - Deans/directors will receive regular reports (quarterly?) to understand their unit's purchases on both primary and non-primary computer hardware vendors, as determined by the implementation team
    - In addition department/division heads will be supplied with the tools to hold them accountable for their own spend and resource stewardship. The tool will allow them to see the Dell vs. Apple price differentiation and the potential savings if XX% of total computers are purchased on-bundle against realized savings. This tool will also provide deans/management easy metrics for compliance oversight.
    - The team acknowledges that the total cost of oversight is out of scope but should be explored further down the road.
    - 2 desktop bundles and 2 laptop bundles will be offered by the secondary vendor (Apple), and may only be purchased in accordance with the above process, when the PC bundles do not suffice (exception) and approval has been granted (i.e. Apple bundles will not be available/promoted to all). See the *Proposed Policy Framework* section below for further detail regarding the exception management process.
        - If a separate monitor is required to be purchased; the expectation is that the monitor will be chosen from the standardized, negotiated options with the primary PC vendor
    - Bundles will include both laptops and desktops, with the understanding that laptops may require more change management and communication for successful implementation and stakeholder buy-in
    - Standard lifecycle warranty will be based on the purchase (e.g. The UW standard lifecycle is 4 years, but if an end-user is granted an exception to purchase an Apple, the lifecycle requirement for that machine is 5 years, since it is expected to last longer)
- A technical advisory group will be established and charged with the responsibility for identifying and creating the correct bundle configurations The technical advisory group will:

    - Be formed in the implementation phase, and should include representation from major stakeholder groups
    - Identify computer needs with the support of campus users
    - Identify standard bundles that meet those needs and create the standard configurations
    - Identify warranty/lifecycle standards
    - Provide input to Business Process Owner (BPO) on negotiations with vendors and on potential negotiation of standardized peripherals (e.g. monitors)
    - Regularly review the computing requirements and current technology standards with BPO for negotiations with vendors (e.g. semi-annually or quarterly)
    - Review existing contracts in comparison to other opportunities on a periodic basis (keeping in mind the total cost of ownership such as rebates, e-Commerce conversion costs, support capabilities, and other UW benefits)
    - Track metrics and review data regarding campus purchases on a regular basis to inform configuration decisions
    - Assist in validating and defining metrics that will be used to measure the success of the bundle program
    - Periodically survey campus users regarding use and satisfaction of bundles
- The computer bundles program communication and implementation plans avoid the term "administrative" computing as much as possible so as to:
    - Make the tent bigger; the computer bundles project team believes there is potential for a higher adoption rate if campus communications abstain from defining the initiative as "administrative," as this is difficult to define and could ultimately make it easier for people to "opt out" (e.g. faculty doing administrative work)
    - Streamline and simplify the communication and implementation process, emphasizing that the identified bundles will work for the majority of campus, rather than applying terminology that is restrictive by administrative and research personnel
    - Facilitate top-down communication of expectations and bundles program
- The implementation team will establish metrics for all levels of oversight and exception management process. Metrics that should be considered include:
    - Capturing more purchasing data from non-MDS/DoIT purchasing sources
    - Including a "bundle identifier" in captured vendor purchase data
    - Establishing metrics on deviation from bundles
    - Making data on computer spend available to identified department chairs/directors/deans, allowing them to make improved financial decisions
    - Reference *Criteria for Measuring Success* section below for additional detail
- Development of a unified store front for vendors
    - Enhance the "Dell Landing Page" (on MDS) to feature the bundles, with a BUY DELL link featured at the top of the page. Further enforcement will be achieved by making it more difficult to find other links
    - Enhance the "Apple Landing Page" (with DoIT Tech Store) to feature the bundles (for people who have been given approval). Further enforcement will be achieved by making it more difficult to find other links.
    - Consolidate sign on and purchasing credentials between MDS and DoIT Tech Store
- Consider the subsequent phases/teams necessary to evaluate UW desktop management and/or VDI potential as noted in the *Alternatives Considered* section above.

In addition to the proposed solutions mentioned above, the implementation team should take into account the framework and recommendations that are noted in *Appendix 1 – Strategic Purchasing Appendix*, as compiled by the four Administrative Excellence strategic purchasing teams.

Proposed Policy Framework:

The project team recommends the following framework be considered in development of policy language:

- To whom does it apply

    - Individuals who are making institutional purchases of desktops, laptops, and monitors, not personal computer purchases (i.e. University-provided computer)
    - There is an expectation that end-users will buy a PC bundle, unless approval is granted via the exception management process; the majority of university computer purchases should be these bundles
- Purchase method/sales channels
    - Expectation that purchasers/end-users will use MDS or the DoIT Tech Store for computer purchases, and they will not make p-card purchases at alternate vendors for desktops, laptops, and monitors
    - Any customization will start with the 4 standard configurations[to be reviewed by the team 4/19]
- Penalties/implications for non-compliance (enforcement)
    - Make it harder to do the wrong thing (i.e. customization)
    - Responsibility for oversight needs to be distributed and occur at multiple levels (e.g. VCA, Business Process Owner, Dean's Office/Department leadership, etc.), rather than falling solely on a central unit
    - "Oversight" includes:
        - Pre-approval of exceptions
        - Monitoring/measuring exceptions and compliance in purchasing bundles
        - Reporting compliance (statistical review); facilitated with metrics provided by purchasing
- Exception Management
    - Approval to purchase Apple (non-PC) bundles is standardized, but secondary to PC bundle
    - Approval to purchase non-bundles is difficult/stringent
- Lifecycle Requirements, Replacement Programs
    - Recommend best practice for computer lifecycle that is aligned with warranty
    - Standardize minimum lifecycle for the entire campus
- Ownership
    - Computers purchased with institutional funds remain the property of the University
    - Clarification on ownership of computers purchased with research funds should be included
- Support/Repair
    - Recommend best practice for computer support/repair (warranty)
    - Clarification of preferred vendors/practices for support/repair

Proposed Milestones and Timing

Milestone	Timing / Date
• Identify individuals to be on implementation team and team member responsibilities/roles • Schedule initial team meeting	3-4 weeks
• Develop detailed implementation plan • Identify individuals to be on Technical Advisory Committee	1-2 weeks
• Finalize implementation action plan	1-2 weeks
• Additional data gathering/analysis by Technical Advisory Committee to identify UW standard bundle configurations • Set up initial meeting with vendors to discuss vendor capabilities in assisting with implementation of computer bundles program	3-6 weeks
• Prepare initial negotiation materials (standard bundle configuration requirements, initial communication letter, etc.) • Send initial negotiation materials to vendor and allow time for vendor preparation of proposal response	2-3 weeks
• Receive and analyze vendor's initial proposal • Determine proposal improvement targets and prepare team for round one negotiation • Draft Memorandum Of Terms document and conduct round one negotiation	1-2 weeks
• Conduct subsequent rounds of negotiation and dialogue with vendor as necessary	1-4 weeks (as needed)
• Finalize agreement pricing and business terms	1-2 weeks
• Develop communication plan and change management plan • Modification to and testing of UW sales channel platforms (MDS/DoIT)	3-6 weeks

• Develop policy/procedure for purchase of computers, "how to" guides, etc.	
• Finalize policy/procedure for purchase of computers • Finalize communication plan and change management plan	1-2 weeks
• "Go Live" of Proposed Solution	17-33 weeks after initiation

***Initiation of key milestones noted above is dependent upon related dependencies/constraints as noted in* Appendix 1 – Strategic Purchasing Appendix.

Alignment with Strategy

This solution will align with many of the current UW strategic priorities and initiatives, as well as those strategies as identified by institution functional areas.

Applicable Strategic Objectives	Alignment with Strategy
University Strategy – For Wisconsin and the World, Campus Strategic Framework (2009-2014)	
• Be responsible stewards of our resources • Align resources with priorities • Make our administration more effective, efficient, and flexible	• Standardization and adoption of computer bundles saves financial resources for the campus • A collaborative effort with the entire campus on bundle selection aligns priorities with the tools required to execute • A standardized bundle offering advances efficiencies in the support of IT systems across campus
Institutional IT Strategy – IT Strategic Plan (2010-2014)	
Guiding Principles: • Leverage enterprise infrastructure and avoid unnecessary replication of infrastructure and services • Maximize transparency across the campus • Work toward green computing strategies	• Positioning of DoIT and MDS as single sales channels utilizes enterprise infrastructure • Channeling computer bundle sales through enterprise sales channels reduces rogue purchases and increases the transparency of computer purchasing on campus • Standardization of computer bundles results in more consistent and less costly IT support services • Green IT (Efficiency of Computer & Power Savings) – a consideration for computer energy efficiency in the bundle selection is a significant step towards Green IT
Functional Area Strategy – VCA Strategic Plan (2009-2014)	

• **Resource Stewardship**: Improve services and clearly demonstrate to campus customers and the public that resources are used responsibly by:
  • Improving process efficiencies in order to enhance services and responsiveness to campus customers as well as identify cost savings and improve the institution's financial performance.
  • Sharing services across VCA units and with VCA partners to increase collaboration, reduce redundancy and duplication, and free up resources for reallocation.
	• Simplifying the computer bundling purchasing process leads to greater efficiencies across campus
	• Ease of use for purchasers to efficiently acquire their systems will result in cost savings
	• Reduced time spent researching systems will result in cost savings
	• Right-size purchases for the end user, significantly reducing over- and under-purchasing of computer hardware
	• Standardized computer bundles allow for more efficient and shared support services

Customer Readiness

Based on the team's stakeholder engagements a number of concerns about customer readiness were identified. However, it should be noted that many of the concerns shared by some stakeholders were not shared by others – a reflection of the diversity of the organization. The following are the key takeaways from the listening sessions and survey that the team conducted – these takeaways indicate varying degrees of customer readiness and methods of mitigation:

- Culture and purchasing habits differ by department, indicating that communication of the bundles program must be well thought out to enhance change management and user adoption
    - Supported brands/vendors vary across campus; however, survey respondents noted Dell and Apple are the most commonly supported brands/vendors
    - The majority of survey respondents (60%) indicated that IT Support determines which type of computer and computer specifications is ultimately purchased; however, several respondents cited that purchasing is a collaborative process between faculty, administrative staff, and IT support, with faculty preferences being the deciding factor
    - Replacement cycles for computers vary widely across survey respondents; however, approximately70% of survey respondents indicated they replace their computers every 3 years or more
- Purchasing drivers vary by department, but price, technology/performance, and vendor relationship seem to be the most important factors across all units
    - Nearly half of survey respondents ranked quality, specifications, and performance as the most important criteria when selecting and/or purchasing a computer
- Communication/change management for the program should clearly demonstrate savings to campus, articulate the benefits of the program to the institution as a whole and the costs that departmental optimization has on institutional efficiency (i.e. decreased purchasing power/leverage), and address campus concerns (e.g. desire for flexibility, concern with limited choice)
    - People want to see they are saving money
    - Heavy price shopping currently done – even by support in departments; lack of understanding of both the direct and opportunity cost implications for price searching
    - The role of this approach in demonstrating the cost to the institution to "saving" local dollars ("My" money versus "university" money)
- Bundle offerings will enhance workflow for purchasing/IT support; as long as the options and pricing are favorable
    - Importance in communicating benefits other than just price (i.e. the total cost of ownership) to campus during change management/communication process
- Bundles should be made easy and convenient to purchase
    - In general, participants were receptive to the idea of a bundles program, but expect it be easy to use
    - Offer enhanced web support for orders or repairs, as individuals have indicated that they don't want to have to talk to the vendor all the time
    - There is currently confusion regarding how to purchase Dell (MDS versus "DoIT website" versus something else), indicating a need for improved communication and "how to buy guide"; several survey respondents indicated they are unaware of MDS and its purpose
    - It would be beneficial to have a "minimum" University standard so as to help people who don't know what they should purchase and guidelines for what the "lowest" UW standard of quality would be; some would purchase lower quality machines because they are cheaper

- Survey results indicated that UW computer sales channels need to be made easy for people to use, as a large number of survey respondents do not look to MDS first when making computer purchases citing concerns with product offerings, pricing, and/or ease of purchase
- Survey respondents identified easier purchasing, streamlined ordering, and better communication as meaningful improvements to the UW sales channels and purchasing process

- Much support on purchasing side for the idea of bundling – where because of an enhanced vendor relationship, pricing/discounts are consistent for the period of the contract, and do not require large bulk purchases by all users
  - Generally, survey respondents feel that UW computer sales channels do not offer the best pricing and 71% of survey respondents feel that improved pricing via UW sales channels would be a meaningful improvement
- Laptop bundles will require greater change management and communication consideration for effective implementation
  - Wider set of requirements indicated for laptops than desktops
  - Greater "personal" feel with laptops which may increase resistance to bundle program
- Faculty may opt to purchase the offered UW bundles; however, current culture allows faculty to purchase whatever they wish
- Refresh cycle – most listening session participants indicated a need for continuous assessment of bundle offerings and refreshing as necessary (preference for quarterly versus annually were given, however, the main point was that they not become stale, so if the same configuration from 3 months ago is still current and well-priced, then it could remain the bundle for the next period)
- Need for clearly defined and measurable exceptions to be communicated and monitored.
  - Ergonomics should be an exception (e.g. keyboards)
  - Faculty as a group should be an exception
  - Articulated business need as an exception
  - "I can get it cheaper from someplace else" – This should not be an exception
  - Difficult to know what people will use their computer for; hard to define "administrative"

Impact

Anticipated Benefits

Improvements in Productivity/Efficiency: The process to order will be faster, with fewer variables to consider, which will reduce the amount of time spent purchasing computers by department end-users and purchasing/administrative staff involved in the purchase process. It is expected that there will be a decrease in "price shopping" among end users, as the new policy directs them to use the same purchasing procedure/process. This will result in increased time/productivity efficiencies. Furthermore, the service by IT staff, including the purchase of spare parts, will be more efficient and less costly with fewer models/vendors required for support.

Reduce Costs: As demonstrated in the financial model, there is expected cost savings of $3.6M with the implementation of a computer bundles program. These cost savings reflect "right-sizing" of campus computer purchases; vendor consolidation savings via implementation of a bundles program which directs users to one primary PC vendor; potential pricing improvements negotiated with the primary vendor; and implementation of a standard minimum UW replacement cycle. There would be additional cost savings related to the increased time/productivity efficiencies noted above, which the project team estimates to be $0.5M. The estimated savings achievable can increase significantly with small increases in campus participation. Similarly, adjustments to replacement cycle minimums will achieve higher savings. Cost savings related to warranty/support and monitors were not included in the financial model analysis due to

the complexity. However, the project team anticipates additional savings would be realized from further investigation of these areas.

Engaging Employees: The development of a "technical advisory committee" comprised of staff representatives of various institutional units will help to engage employees as staff representatives will be organized to determine necessary standard bundle configurations that reflect campus needs.

Improve Service/Product Quality: The service provided to campus will be enhanced by increased communication of procedures and expected purchasing processes. Similarly, the "right-sizing" of computer purchases, coupled with improved pricing will enhance the product quality for the institution as a whole, as well as improve the UW vendor relationship.

Mitigate Compliance Risk: Making the purchasing process easier will foster increased compliance, as this will result in more users adopting the suggested policies and procedures without enforcement. Training and communication will serve to enforce the need for using the recommended UW standard bundles, and the need to follow the expected procedures. Finally, distributed oversight and established exception management will assist with enforcement of new expectations.

Stakeholders Impacted

The team acknowledges that the introduction of the recommended solutions will affect various stakeholder groups. These impacts are described below.

Internal Stakeholder Group	Impact
UW-Madison Purchasing	• Development/generation/distribution of metrics • Some level of oversight • Vendor negotiations • Standard procedure development for exception process • Policy development • Storefront updates/layouts • Ex-officio with Technical Advisory Committee
Computer End-Users *(power, support, strategy, percent administrative vs. non-administrative)*	• Will have limited choices but reduced cost for products purchased • Potential for improved system due to "right-sizing" • Computer research will be performed for them
Business Offices (i.e. people that purchase the computer)	• Will provide some level of oversight for compliance • Purchasing process should be better understood and thus easier to execute • Will have involvement in Technical Advisory Group • Education/training • Analysis of metrics
Computer Support Staff	• Will provide some level of oversight for compliance • Will save time in researching the products purchased • Will save time in supporting the products purchased • Will have involvement in Technical Advisory Group • Education/training • Analysis of metrics
Deans/Directors/Departmental Administrators	• Will provide some level of oversight for compliance • Will be involved in the development of metrics • Will be involved in exception policy

Internal Stakeholder Group	Impact
Steering Committee/Executive Leadership	• Will provide some level of oversight for compliance • Will need to support the initiative at the executive level
Division of Information Technology (DoIT)	• Will have involvement in Technical Advisory Group • Education/training • Modifications to DoIT
Materials Distribution Services (MDS)	• Will have involvement in Technical Advisory Group • Modifications to MDS Portal

External Stakeholder Group	Impact
Vendors (e.g. Dell, Apple, HP, etc.)	• Will be involved in vendor negotiations • Will assist in the development of standard bundles • Will assist in the discovery of new bundles that meet the needs of the campus

Impact on Other Initiatives

There are several initiatives underway which may have synergies with the proposed solution contained in this document; however, some initiatives may also be challenged and/or enhanced by this proposed solution.

Initiative	Impact
Other Administrative Excellence Teams: • Strategic Purchasing teams • Resource Allocation team • Policy team	• Numerous inter-dependencies between the computer bundles team and the other three Administrative Excellence strategic purchasing teams exists; implementation timelines, communication, change management, and required resources must all be considered in conjunction with the other three initiatives so as to maintain consistency • A UW framework for spend management/procurement will enhance the rollout of identified strategic purchasing recommendations • The Resource Allocation team will help to address the challenge of institutional versus departmental resource stewardship, and may inform the related incentives/disincentives for compliance with this suggested solution; the Administrative Excellence initiatives will help to convey the need for institutional resource stewardship and the related cultural changes and expectations. The Resource Allocation team may also help to answer the question regarding MDS funding, which is currently funded through e-Commerce vendor rebates (5.5% with Dell) • The outcome of the Policy team will help with implementation of institution-wide standard procedures and adoption of policy
MDS e-Commerce Technology/eProcurement Initiatives	• Current initiatives to update the MDS e-Commerce tool will impact the ability to implement the proposed solution • Noted dependencies/constraints from this document should be used to contribute to the UW technology framework/plan and help to inform the required technology platform
UW Purchasing Initiatives	• Current contracting and vendor initiatives/approaches may change and/or be enhanced as a result of this proposed solution
IT Initiatives	• There may be some impact on any current departmental projects related to desktop management and/or current bundling programs as offered by AIMS, RADS, and other departments/divisions

Project Success Factors

Change Management Plan

A thoughtful and well-executed change management plan is critical to the success of the Computer Bundles initiative. All strategic purchasing initiatives will face a substantial cultural hurdle in that any standardization of product selection or purchase will be perceived by many as a limitation on flexibility and autonomy. This culture is deep-rooted and must be countered within the change management plan. The Computer Bundles team recommends the following strategies be incorporated into the plan:

Communication / Marketing:

- Effective communications that inform all identified stakeholders of the reasons for the initiative (goal, process, why?), the benefits of successful implementation (what is in it for us and for you) as well as the details of the program (when? where? who is involved? how much will it cost? etc.)
- There is an essential need for top-down communication and participation in the campus-wide initiative in order to generate effective buy-in campus-wide
- Current purchasing habits indicate that "unofficial" purchases of computer bundles already occur on campus. The change management plan should mention this practice and its success as a counter to the argument that a bundles program "can't work." When presented to campus, this should be framed as "this is something campus is generally doing, however there is now a expectation that UW-Madison, as an institution, will formally adopt a computer bundling program"
- There should be a focus on how bundles can lower the cost for **all** of campus (see financial model for estimate on savings.) The culture of the organization is to focus on savings at a sub-organization level and there will be pushback from some parts of the organization that bundles will not result in appreciable amounts of savings. The change management plan must focus attention on the institution as a whole – and how standardization has other impacts (support, ease of use) beyond the cost savings realized by one particular campus entity
- Steer clear of limiting this initiative to administrative computing. The term is not definable and has the potential to be an "easy out" for an exemption to the program. Focus instead on the benefits of the program (ease of purchase, "right-sizing" of systems, professional research into bundles) rather than segmenting the campus population. Set an expectation that the entire campus should look towards a computer bundle first before selecting an alternate system
- Communicate that a "technology advisory committee" comprised of professional staff which represent the entire campus will be created and involved in the research and selection of appropriate computer bundles
- Provide a communication channel for ongoing stakeholder feedback to ensure there is an outlet for stakeholder concerns to be heard; while it will not be possible to address all concerns, ongoing feedback will help with user adoption

Education / Training:

- Devise an effective education, training and/or skills upgrading scheme for the organization. Include business office and IT staff from across the organization in this training
- Provide personal counseling (if required) to alleviate any change related fears (e.g. common fears may include decrease in product quality in order to save money, established bundles will not satisfy campus needs/requirements, etc.)

Implementation:

- Create a timeline for implementation that will define goals and objective measures of success; monitor assumptions, risks, dependencies, costs, return on investment, and cultural issues affecting the progress of the associated work
- Re-evaluate the implementation and fine-tune as required
- Develop a set of metrics to track adoption and institute various levels of oversight to analyze and act on the adoption rate

- Establish a standing "technical advisory committee" to re-evaluate bundles on a regular basis (as noted in the *Proposed Solution Description* section)

Dependencies or Constraints

The following dependencies and/or constraints were identified as required outputs that the proposed solution is dependent upon; several additional dependencies and/or constraints are outlined in *Appendix 1 – Strategic Purchasing Appendix*.

- The Computer Bundles team believes that there will some level of adoption of the program. However, the amount of savings to be realized is wholly dependent on the percentage of adoption by the campus. The effectiveness of the message about the program not being only an "administrative computing" initiative will have a major influence on adoption rate
- The success of the program is dependent on picking the appropriate bundle configurations and managing predetermined intervals for keeping the bundles current as well as identifying resources to do the research to keep the bundles correct and identify bundle specifications that best meet campus needs
- Adjustment of a campus mindset regarding institutional versus departmental priorities is a key dependency. The culture needs to be adjusted to optimize at the institutional level, rather than departmentally as is the current norm
- Success is dependent on vendor negotiation. The Business Process Owners will need to work with vendors to negotiate computer bundle offerings that provide the best value to the institution; improved pricing via negotiations should be available to all users on campus, and use of negotiated contracts and compliance with purchasing expectations will be enforced comprehensively in order to maintain beneficial supplier relationships and continue to increase UW's leverage of spending.

Assumptions

Several assumptions were made in support of the proposed solution as described in this document:

- Bundling will be identified for two vendors
- The overall spend on desktop and laptop systems will be reduced when the computer bundles program is put in place
- A campus team can identify a few computer bundles that can be used by a large number of campus users (not limited to administrative functions)
- There are not a large number of valid reasons why departments need to buy a variety of computers.
- Business Process Owner will continually revisit bundle configurations on a periodic basis with the vendor to ensure pricing is consistent across campus and bundles reflect campus needs
- The current MDS/DoIT Dell rebate remains the same.
- Bundling will meet current or standardized replacement cycle needs.
- Bundle selection criteria will take green initiatives into account.
- The computer bundles program will provide the best overall value (from a price, support, and quality perspective) to the **institution** as a whole (not departmental optimization)
- The team acknowledges the possibility that departments who end up adopting the bundles may potentially see their costs go up (due to prior relationships with vendors). However, the team believes that these costs will be offset by reduced support and maintenance efficiencies that are realized by bundle standardization

Dell Data	Apple Data	Total	Description
$889	$1,181		Steady State Price Point on "Legends" Desktop Bundles
$557	$725		Steady State Price Point on "Leaders" Desktop Bundles
$1,263	$1,828		Steady State Price Point on "Legends" Laptop Bundles
$1,415	$1,176		Steady State Price Point on "Leaders" Laptop Bundles
3	3		Current State Desktop Lifecycle
3	3		Future State Desktop Lifecycle
3	3		Current State Laptop Lifecycle
3	3		Future State Laptop Lifecycle
36%	50%	**42%**	Percent of Computers Purchased as Administration (Program Code Only)
61%	62%	**62%**	Percent of Computers Purchased as Administration (Program Code High Estimate)
80%	80%	**80%**	Est. Percent of Computers Purchased as Administration (80%)
		80%	Participation Rate (average of estimated administrative computers and program code/high estimate)
		20%	Exception rate (1 - participation rate)
32%	0%		Current St. Wtd. Average Discount Desktop (off full list price) (e.g. all comp are already have a discount)
27%	0%		Current St. Wtd. Avg Discount Laptop (off full list price) (e.g. all comp are already have a discount)
36%	0%		Future State Weighted Average Discount Desktop (Low) (off full list price)
39%	0%		Future State Weighted Average Discount Desktop (High) (off full list price)
31%	0%		Future State Weighted Average Discount Laptop (Low) (off full list price)
34%	0%		Future State Weighted Average Discount Laptop (High) (off full list price)
		3%	Annual Computer Purchase Growth Rate
low	high	average	
5%	10%	**7.5%**	Vendor Consolidation Savings Desktop (to calculate addl. savings on already discounted computers)
6%	10%	**8.0%**	Vendor Consolidation Savings Laptop (to calculate addl. savings on already discounted computers)
		3,471	annualized orders
		65	est. Labor Average Labor Cost
		20%	Macintosh -> PC conversion rate under exception tracking plan

Project Risks

Various risks exist with regards to implementing the proposed solution, and must be considered in determining the viability of implementation.

Category Description	Associated Project Risks
Policy/Process Enforcement	▪ Policy doesn't get enforced. ▪ Maverick spending with non-contracted vendors can't be captured well in data.
Bundle Program Implementation	▪ There are a large number of valid reasons why departments need to buy a variety of computers, thus minimizing the savings that can be derived from bundling. ▪ Campus cannot find consensus on what the bundles should be. ▪ Departments already using a primary vendor model may have their departmental policy weakened if bundles from two different vendors are available. For example, AIMS may encounter administrative customers who demand to have Apple Air Books. ▪ The implementation group is not able to negotiate better savings with the metrics (RAM, CPU, HD sizes, etc…) they were given.
User Behavior	▪ The discounts are not steep enough to create incentives to encourage departments to buy bundles instead of buying from other vendors. ▪ Although bundling may lower the initial cost of buying a desktop or laptop, there are factors unforeseen that cause the total cost of ownership to go up. For example, after the initial purchase departments may buy extra memory, hard drives, monitors, laptop docking stations, etc… ▪ Adoption of laptop bundles will most likely encounter greater resistance than desktop bundles, because of the wider set of requirements for laptops than desktops, and the personal nature that distinguish laptop models (travel weight, keyboard size, screen size, etc…).
Solution Analysis	▪ Overall spend does not go down because of many factors, such as by reinvesting savings in additional computers, replacing computers more frequently, or departments minimizing bundling savings by replacing desktops for more expensive laptops. ▪ May encounter push-back that we could realize bigger savings from a primary vendor. ▪ Cost can impact rebate received from vendor (MDS/DoIT). ▪ Administrative computer usage is an estimate. Reliable data does not exist that can be used to differentiate between instructional/research computing and administrative computing. ▪ Reliable support costs for Apple purchases were not available to factor into the financial model. There is evidence that departments and schools with strong centralized IT may see a savings under a primary vendor model, and yet there is also data that suggests that the Total Ownership Cost (ToC) is cheaper in less centrally managed IT departments who primarily use Apple computers.

Criteria for Measuring Success

The following criteria should be used to evaluate the success of the proposed solution, monitor progress, and inform future projects.

Financial/Operational Performance & Costs Reduced/Avoided

- Require vendors include a UW bundle "identifier" on all purchases/invoices to note when a bundle is purchased for greater easy and accuracy of future data analysis

- Measure UW spending with selected vendor(s) on UW standard bundles at various intervals following implementation (e.g. 6 months, 12 months, etc.) to identify costs reduced/avoided via strategic purchasing strategies; correlation of spending on desktops and laptops across campus units before and after bundling goes into effect
- Request line item purchase history reports be submitted to UW by primary vendor(s) on a periodic basis (e.g. quarterly, semi-annually, annually, etc.) such that UW can analyze campus purchasing habits and better understand purchasing on computers on an ongoing and consistent basis
- Total UW spending with computer hardware vendors (both Accounts Payable and P-Card totals) in 12 months prior to implementation of proposed solution compared to total UW spending from the same sources at various intervals following implementation (e.g. 6 months, 12 months, etc.) to gauge differences in total spending on commodity and any increase/decrease in purchasing that may improve financial/operational performance (e.g. increases/decreases in maverick spending)
- Measurement of efficiencies/cost reduction in support-related activities after the bundles program is implemented via surveys/targeted stakeholder discussions to understand time spent ordering

User Acceptance

- Total UW spending with computer hardware vendors (both Accounts Payable and P-Card totals) in 12 months prior to implementation of proposed solution compared to total UW spending from the same sources at various intervals following implementation (e.g. 6 months, 12 months, etc.) to gauge user behavior changes and adoption of bundles program, and to understand increased use of contracted vendors and adoption of recommended policy/procedure changes (decreased maverick spending)
- Periodic user surveys to measure customer satisfaction regarding communication of UW standard bundles, pricing, and policy/procedure, as well as to determine if training, communication, and product selection meet campus needs
- Periodic (e.g. quarterly, semi-annually, annually, etc.) review of bundle configurations by "technical advisory committee" in conjunction with above-mentioned Financial & Operational metrics to confirm bundle use, incorporation of campus needs, and changing technological environment and replace/update bundle suite as needed
- Measure computer replacement activity in comparison to established computer lifecycle/replacement policies

Tracking to Schedule

- Comparison of achieved implementation milestones to identified milestones and timing from initial implementation plan finalized at the start of the implementation phase to understand ability to track to schedule

Supporting Documents

The following documents are attached to this business case in support of the proposed solution and related analysis:

- **Appendix 1**: Administrative Excellence Strategic Purchasing Appendix
- **Appendix 2**: Computer Bundles Financial Model Workbook
- **Appendix 3**: UW Purchasing History Analysis – Dell and Apple data analysis workbooks, HP data summary
- **Appendix 4**: Listening Session notes and key takeaways
- **Appendix 5**: Survey Results and analysis
- **Appendix 6**: Policy Research/Benchmarking

Signoffs

Advisory Committee	*Fully endorsed by Advisory Committee*
Steering Committee	*Approved April 26, 2012*

Report on Data

Metadata

The following data was collected in support of the analysis conducted by the project team:

- **Data Sources & Structures**

Data Item	Data Source Description	Data Structure	
Dell Line Item Purchase Data ("Dell_Desktop_Notebook_Purchases_xlsb")	▪ UW-Madison Dell line item purchase history for period of 6/1/2011 – 12/16/2011 ▪ Data reflects all desktop and laptop purchases ▪ Data collected by Dell and provided to UW-Madison	▪ Customer_Num ▪ Po_Num ▪ Dell_Purchase_ID ▪ Order_Num ▪ Tie_Num ▪ Invoice_Num ▪ Inv_Date ▪ Order_Qty ▪ Report_Line_Qty ▪ Report_Line_Total ▪ Category ▪ Sub_Category ▪ Item ▪ Item_Description ▪ Ship_Address_1 ▪ Ship_Address_2	▪ Ship_City ▪ Ship_State ▪ Ship_Zip ▪ Bill_to_Company ▪ Bill_Address_1 ▪ Bill_Address_2 ▪ Bill_City ▪ Bill-State ▪ Bill_Zip ▪ UW_Item_Unit_Price ▪ Item_List_Price ▪ Extended_UW_Price ▪ Extended_List_Price ▪ System_Qty ▪ Discount_Percent ▪ Sales_Contract_Code
Apple DoIT Line Item Sales Data ("Apple data.xlsx")	▪ UW-Madison Apple line item DoIT sales purchase history for departmental purchases for period of 6/1/2011 – 12/16/2011 ▪ Data reflects all Apple purchases ▪ Data collected by Brian Kishter	▪ Order Number ▪ Line Number ▪ Item Number ▪ Item Description ▪ Planner Code ▪ Qty ▪ Unit Selling Price ▪ Total Selling Price ▪ Line Type ▪ Category 1 ▪ Category 2 ▪ Category 3	▪ Cust Num ▪ Cust Name ▪ Ordered Date ▪ Planner Code 1 ▪ DOIT No. ▪ Fund ▪ Program ▪ Div Dept ▪ Account ▪ Project ▪ Ordered By
Dell Quote to Order ("2011_Dell_Quote_2_Orders_2011_01_13.xlsx")	▪ Calendar year 2011 UW-Madison line item data from MDS Great Plains SQL Server Data ▪ Data reflects invoices with a supplier part ID starting with "Q:" which were invoiced in calendar year 2011 ▪ Data collected by Steve Carrola	▪ InvoiceNum ▪ Stock Number ▪ Item Description ▪ Unit Price ▪ Quantity ▪ ReqDate ▪ Extended Price	
Dell FY2010 Program ("Dell_FY2010_at_MDS_by_program.xlsx")	▪ FY2010 UW-Madison line item data from WISDM detailed accounting view for all General Ledger transactions ▪ Data reflects invoices with reference field identified as "Dell" for FY2010 that	▪ Monetary Amt ▪ Fund ▪ Dept ▪ Project/Grant ▪ Prog	▪ Vchr ID ▪ Acct Period ▪ Jrnl Date ▪ Line No ▪ Jrnl Line Ref

Data Item	Data Source Description	Data Structure	
	may have been reallocated using PAT ▪ Data collected by Steve Carrola	▪ Fiscal Yr ▪ Acct ▪ PO	▪ GL Jrnl ID ▪ Invoice No
Hewlett Packard Purchasing History Summary ("Hewlett Packard Spend Analysis.docx")	▪ Calendar year 2010 Hewlett Packard spending based on transactional information (purchase orders), and calendar year 2011 purchasing card expenditures to understand product purchases with HP ▪ Data collected by Lori Voss	▪ Calendar Year ▪ Number of POs ▪ Spend	

- **Metrics for Future-State Reporting & Analysis:** As detailed in the *Criteria for Measuring Success* section, there are several metrics that can be used for future state reporting and analysis. In order for the above-mentioned metrics to be useful the following should be considered for implementation:
  - Periodic review of standard bundle configurations (e.g. quarterly, semi-annually, annually, etc.); a formal review by the "technical advisory committee," and subsequently with the contracted vendor(s), to measure bundle use, campus needs, and the changing technology should be conducted to replace/update the standard configurations as needed
  - Creation of a standard report for use in soliciting reports from vendor(s) and identification of primary data fields for analysis such that ongoing analysis can be conducted with a streamlined approach
  - Require vendors include a UW bundle "identifier" on all purchases/invoices to note when a bundle is purchased for greater easy and accuracy of future data analysis

- **Issues / Concerns with Data Collections:**
  - Continued timeliness of vendor-provided data reports can impact UW ability to analyze trends
  - Lack of campus wide purchasing history data for non-MDS/DoIT vendors prevents full analysis of computer hardware spending and impacts the ability to analyze data consistently across campus

Data Accuracy

- **Data Accuracy / Data Reliability:**
  - Dell vendor data – data accuracy and confidence in data is reliant on Dell providing UW-Madison with accurate data; the team will validate data from random invoice and list price checks, and will assume that the data is accurate as presented to UW-Madison
  - Apple DoIT sales data – custom quote to order purchase detail is not as comprehensive in dataset as product purchases direct from DoIT in-store offerings; however, we believe the item descriptions available to be accurate
  - Variation within dates – validation of the time period used for various datasets (invoice date versus paid date) for accurate comparison of purchases

- **Common Data Definitions:**
  - The team is able to obtain the distribution of desktop/laptop spending versus all other spend with both of the vendors
  - Supplier part IDs/item descriptions provide the team with a common understanding of the specifications/configurations of individual purchases for purchase comparison within Dell purchases and Apple purchases, respectively; however, these part IDs cannot be compared across manufacturers

Data Recommendations

The team recommends the following items to improve the suitability, availability, accuracy, and commonality of data for computer purchases:

- Recommend that implementation phase negotiations with the vendor request the inclusion of a UW-Madison bundle identifier for all invoices to note when a bundle is purchased for greater ease/accuracy of future data analysis
- Similarly, a similar identifier should be created for negotiated monitor add-ons
- Increased campus-wide collection of purchasing data for computer hardware products

Resource Plan

The computer bundles team has identified the following resources are required to implement the proposed solution. The team anticipates that 8 individuals will be needed to be involved in the implementation for approximately 16 hours per week, for 12 weeks in total.

Campus Unit/Department	Anticipated Role/Responsibility
UW Purchasing	• Development/generation/analysis/distribution of metrics and metrics reports • Standard procedure development for exception process • Some level of oversight in exception management • Vendor negotiations • Policy development • Storefront updates/layouts • Ex-officio with Technical Advisory Committee
DoIT	• Tech Store sales channel modifications • Vendor negotiations • Ex-officio with Technical Advisory Committee
CIO Office	• Policy development • Some level of oversight in exception management
Technical Advisory Committee	• Development of configurations • Input to Purchasing/DoIT for vendor negotiations
Administrative Excellence/OQI Staff	• Metric development • Policy framework/development assistance • Facilitation • Change management assistance
Executive Management (Deans/Directors/Chairs as well as Steering Committee/Advisory Committee)	• Will need to have some level of involvement in kicking-off the implementation of this initiative
Department Level (IT Support and Business Office)	• Exception process • Analysis of metrics reports • Education/training

**Appendix 1 – Strategic Purchasing Appendix* framework across all AE strategic purchasing teams should be considered for resource considerations.

Proposed Funding

See *Appendix 1 – Strategic Purchasing Appendix*.