

June 26-27
2013

**Grossmont-
Cuyamaca
Community
College
District**

Business Process Analysis:

Purchasing Process

with Strata Information Group



Workshop Outline

As part of the evaluation and preparation for an integrated ERP, Grossmont-Cuyamaca Community College District (GCCCD) is working with Strata Information Group (SIG) to analyze and improve the underlying processes. This analysis yields two primary outputs: 1) requirements for the ERP, and 2) ideal process maps to be used to set the trajectory for the implementation of the new system and processes. The objectives are to develop better processes and to take full advantage of technology.

To meet the objectives, a Business Process Analysis (BPA) workshop was conducted to examine the purchasing processes at GCCCD. The objectives of the workshops included the following:

- Review the principles of Business Process Analysis (BPA)
- Map the existing processes
- Analyze the process maps and identify obstacles and potential opportunities for improvement
- Design new processes that enhance service, reduce steps, and take full advantage of technology
- Set the trajectory toward the “ideal” process

Participants represented a wide range of academic and administrative departments, Business Services, Purchasing, Accounting, and IT. Grossmont College, Cuyamaca College, and the District were all well represented. Kari Blinn, from SIG, facilitated the workshops. Participants were engaged and candid. They articulated the issues with the current processes – and generated many opportunities for improvement. This document contains the contents and outcomes of the groups’ efforts.

Purpose of the BPA Workshop

Excerpt from invitation from Chancellor Miles

We are moving forward with the implementation of the Master Plans for the Colleges and the District. As part of this important undertaking, we need to review our current technology environment to assess how well our systems are serving students, faculty and staff.

The 2012-2017 IT Plan calls for improving these functions and services through better integration between systems and, in particular, evaluating the current efficacy of processes and the potential for implementing a fully integrated Enterprise Resource Plan (ERP) system providing comprehensive services.

I invite you to participate in a Purchasing System Business Process Analysis (BPA) Workshop to consider the current status of our purchasing processes and develop an ideal process that will be important in planning the direction of our future technology. This BPA is a very important step in improving services and for better utilizing our existing resources, especially our most valuable one - Human Resources. We have used the BPA process several times before and it has been very beneficial. The process for the BPA will follow these general steps:

- § Map the existing process*
- § Identify opportunities and obstacles*
- § Make recommendations for an improved process*

I would very much appreciate your participation in this process and the future improvements discussions because of your expertise, involvement and credibility regarding the Purchasing process. Your insights and recommendations are critical as we move ahead.

Some of the key goals for our Purchasing processes are:

- § *Improving services to students, faculty, staff and vendors.*
- § *Purchasing department users web functionality to provide self-service.*
- § *Faster and more efficient purchasing system.*
- § *Integration between systems.*
- § *Improved workflow and routing of approvals.*
- § *Better reporting, analysis and access to consistent information.*
- § *Improved overall system performance and reliability.*

Process Themes/Issues

Process mapping is a technique used to visualize and to correct process problems. The group reviewed the following symptoms:

- Choke points – when all paths lead to a single person
- Layering – adding automated steps on top of paper steps
- End runs – disregarding the established process entirely
- Shadow systems – entering the same data in multiple locations – e.g. Excel, Access
- Unintended consequences “downstream”
- Not scalable – process breaks under increased volume
- Focused on symptoms rather than roots
- Paper – long, opaque, sequential, inefficient

Observations

During the workshops, participants identified issues with the current processes. Themes included the following:

- Process is long
 - Too many steps – many hand-offs
 - Paper-driven – lost, delayed documents
 - Layered – partial electronic process on top of paper process
 - Manual, handwritten
 - Checking and re-checking
 - Lack of clarity and consistency
 - Lots of room for error
- Technology not integrated
 - No single system of record – using IFAS, Excel, paper
 - Process not transparent – can’t “see” where a PO is in the process
 - Not fully utilizing functionality

Top Opportunities

Over the course of the workshop, participants identified many opportunities for process improvement. At the end of the session, they participated in an anonymous weighted voting exercise. Each participant was given ten “votes.” An individual could place all her votes on a single opportunity or spread her votes among several. This allows the group to identify which opportunities participants deem most important for the Colleges and the District. It also reveals emerging consensus around specific items. The results are listed below:

# of Votes	Opportunities
61	Shorten PR approval process <ul style="list-style-type: none"> • Give department deans and directors responsibility for budgets • Reduce layers of required signatures • Establish thresholds – e.g. if less than \$5000, department head approves
32	Make improvements in the short-term by utilizing capabilities of current system
25	Eliminate paper from the process – e.g. upload quotes, e-mail POs to vendors
12	Provide education for vendors, departments, deans and directors
10	Develop effective, targeted controls – e.g. exception reporting, random sampling
6	Give department heads authority to move funds within specified accounts
6	Standardize purchasing processes
6	Ensure all information – including documents and approvals – is in one place
5	Deploy an integrated ERP
5	Provide larger e-mail capacity
3	Auto-e-mail departments with changes – e.g. Purchasing finds better price
2	Make it easier to see changes in the system
2	Provide access anywhere any time
2	Provide better tools and reporting capabilities
1	Stop “enabling” steps – i.e. if object code incorrect, return it to department; if vendor submits invoice without PO#, return it to the vendor
1	Hold department directors and deans accountable

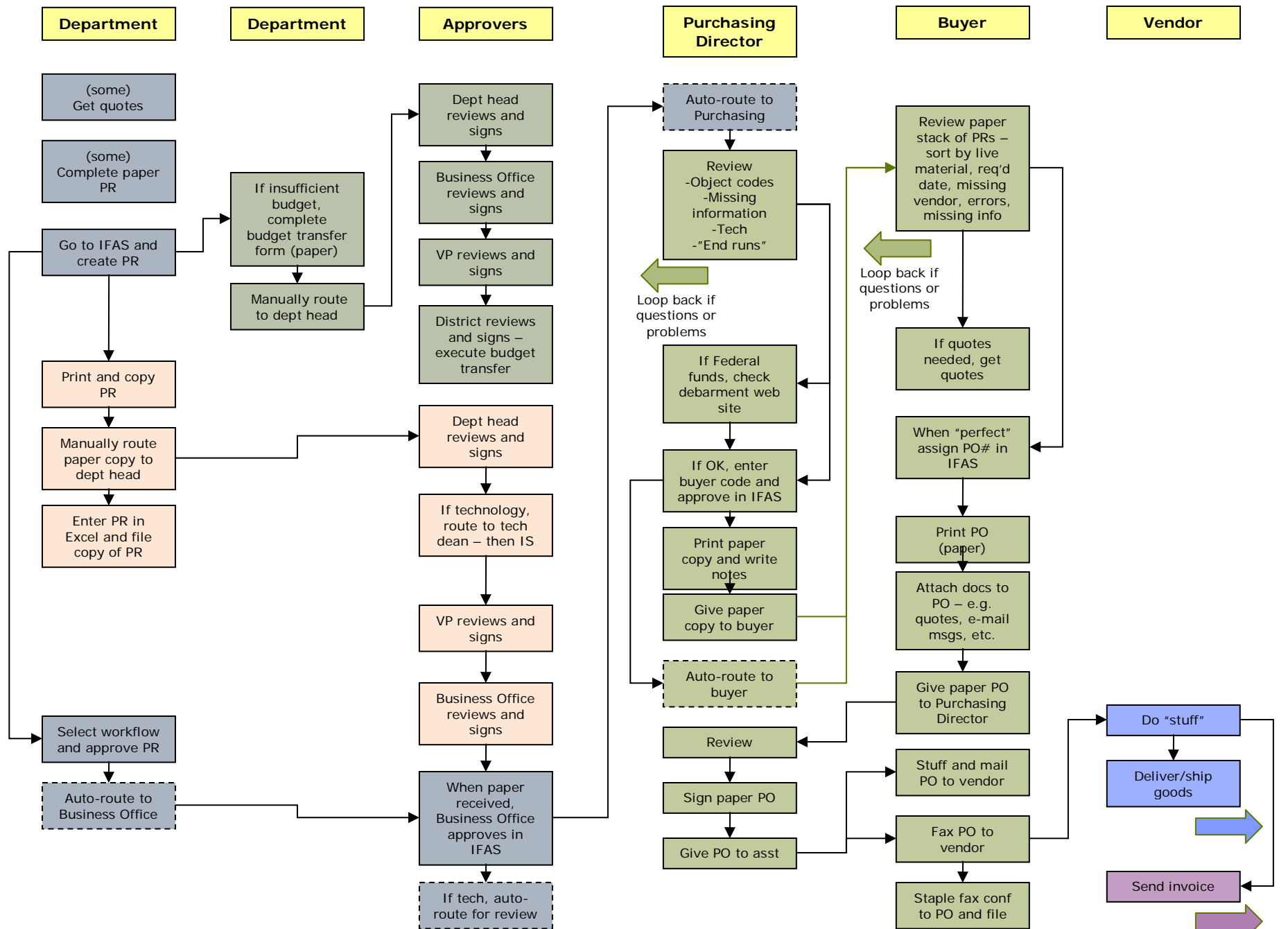
Process Maps

Mapping processes with stakeholders serves as a vehicle to:

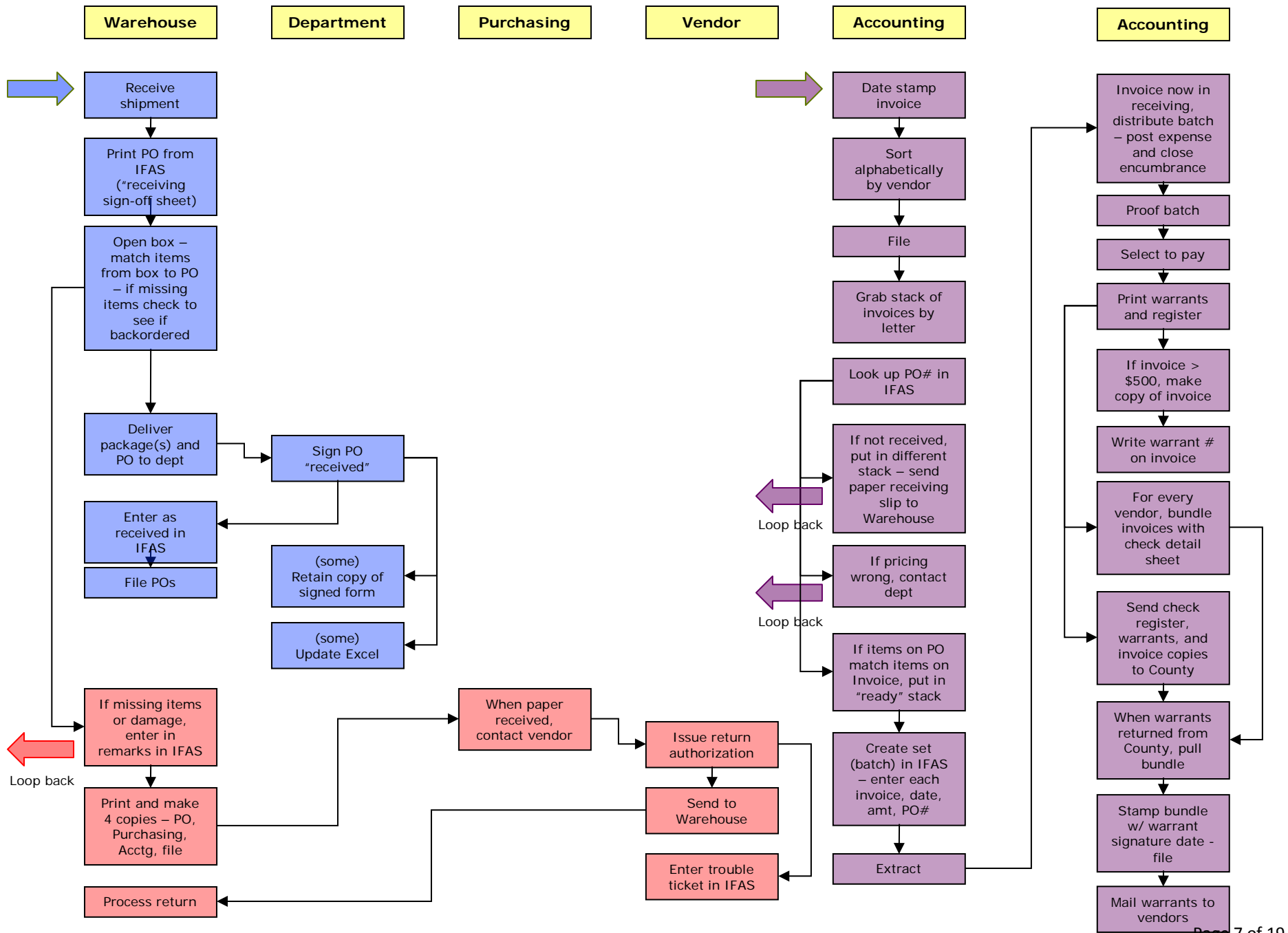
- Identify issues with the current processes
- Work together to develop a clear, streamlined, consistent process
- Take full advantage of technology

The pages that follow include the maps of the current processes and “ideal” process maps. The objective is to use the ideal maps as a guide as the District and Colleges evaluate an integrated system and to improve the purchasing process.

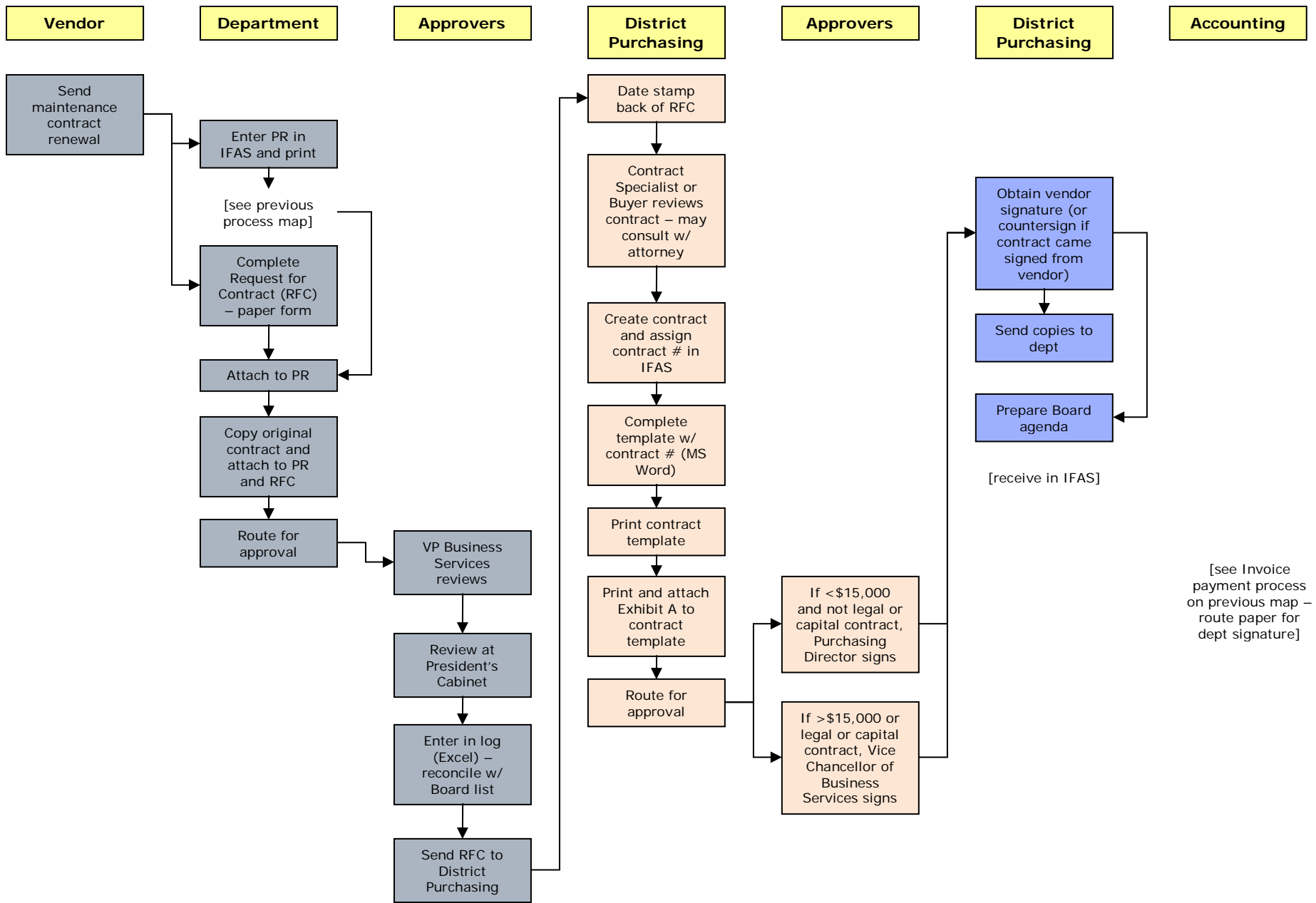
Current Purchasing Process – Purchase Orders – 1



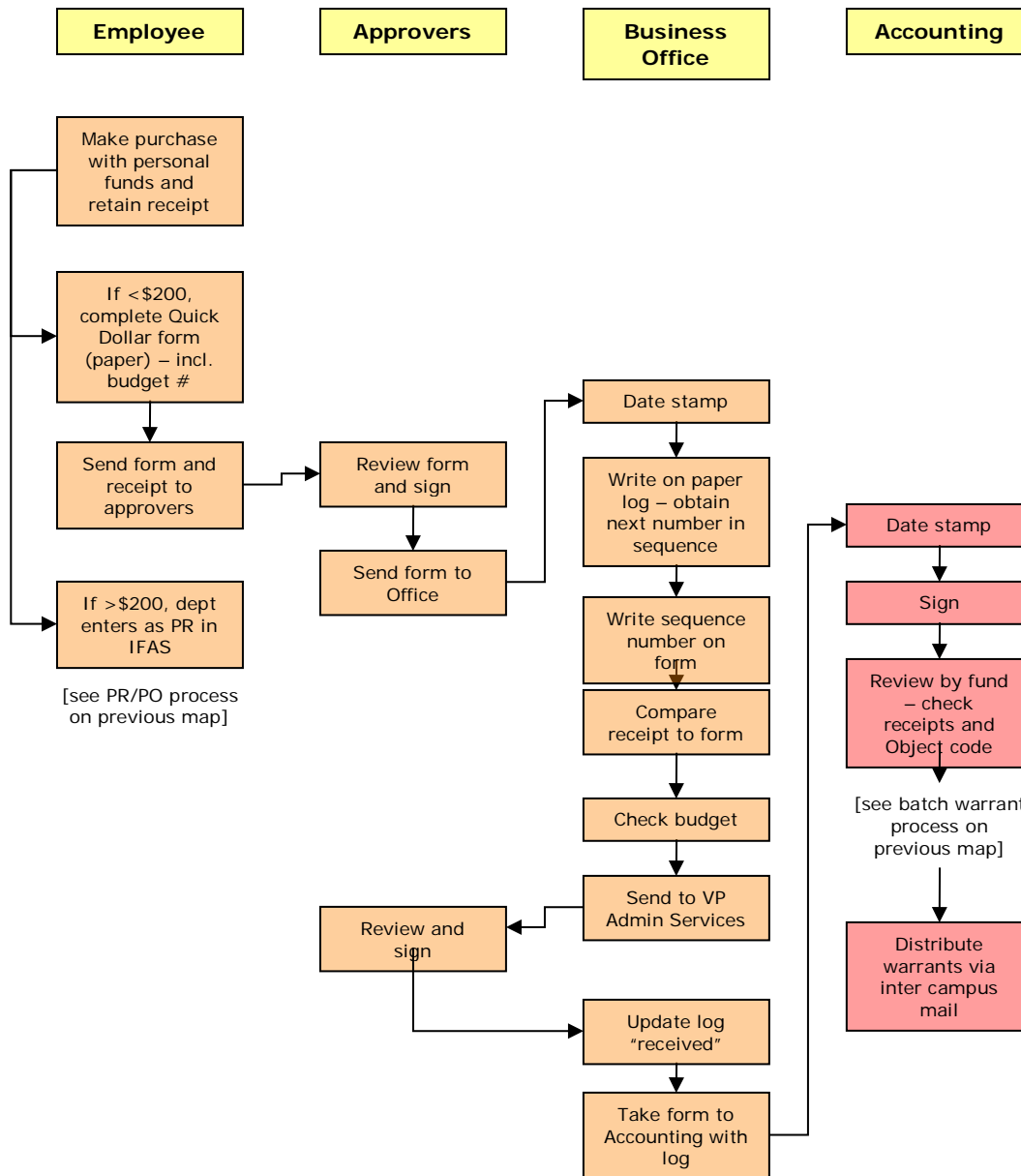
Current Purchasing Process – Purchase Orders – 2



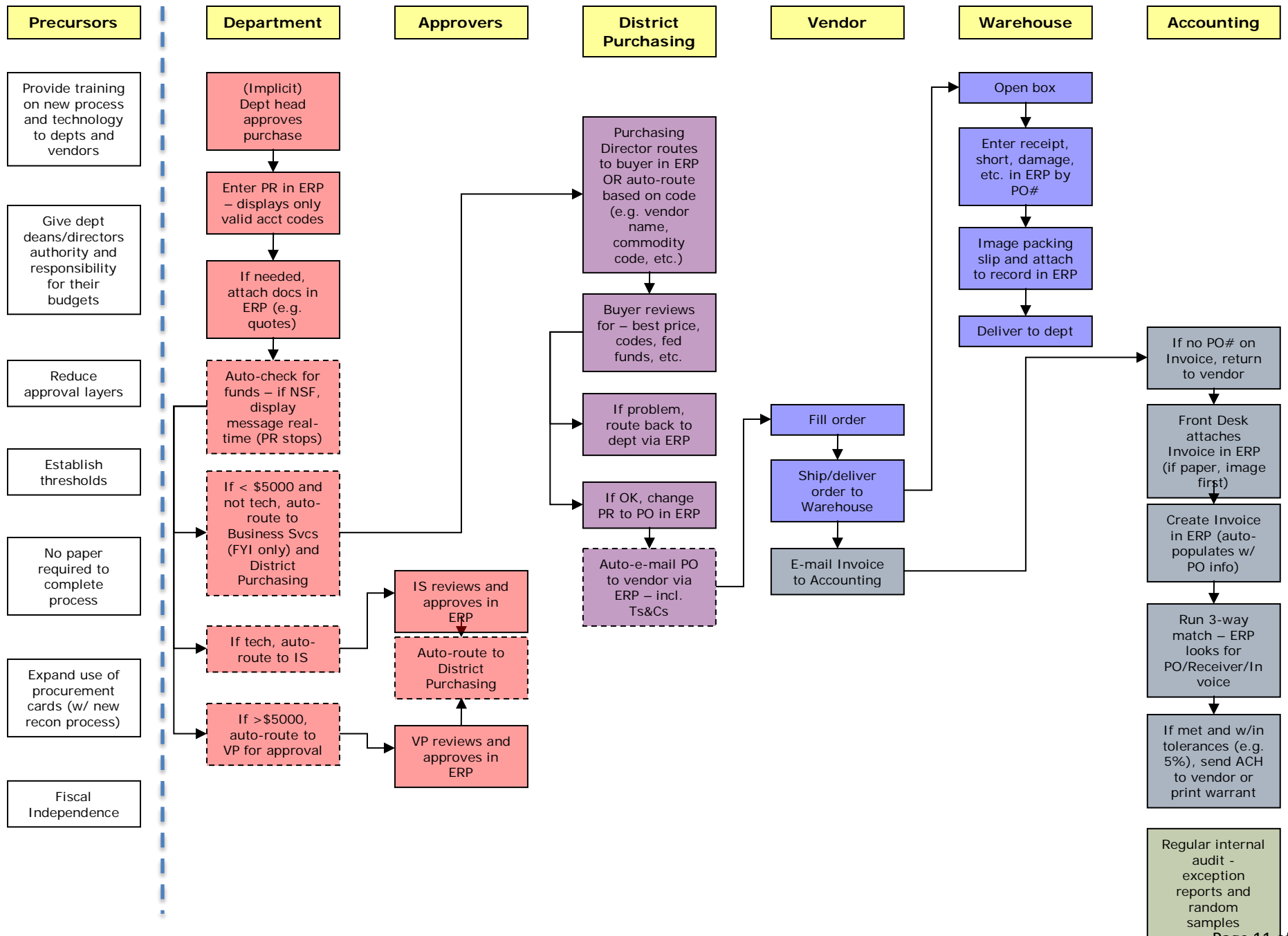
Current Purchasing Process – Contracts



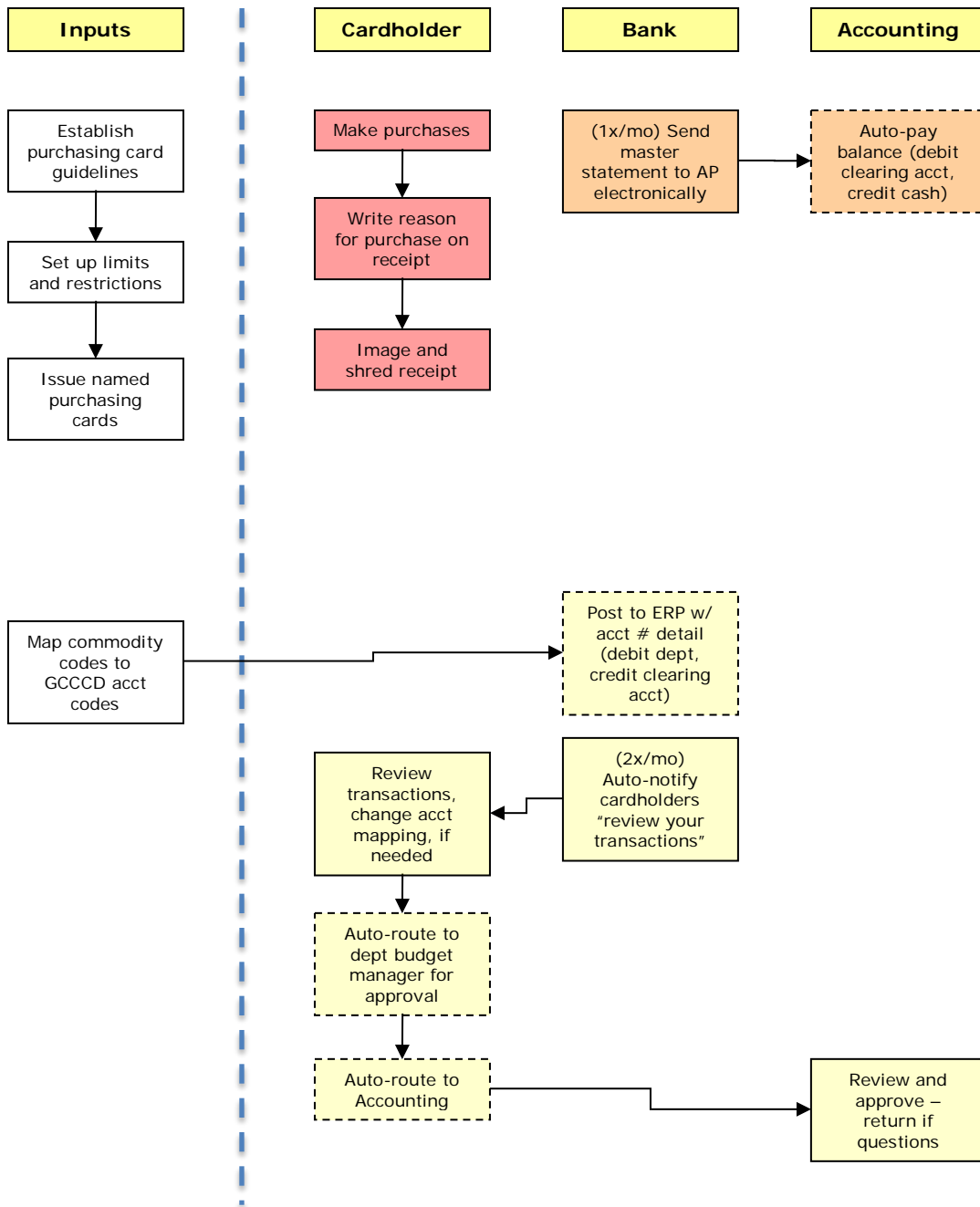
Current Purchasing Process – Reimbursements



Ideal Purchasing Process – Purchase Orders



Ideal Purchasing Card Process – example



APPENDIX A

Opportunities for Improvement

In brainstorming fashion, participants identified the following opportunities. (These are not listed in ranked order, nor do they necessarily represent consensus.)

- Deploy electronic approvals District-wide
- Create a standard process
- Eliminate paper PRs – work with both Colleges to implement
- Ensure the right people are in the approval queue – distinguish between notification (FYI) and approval
- Need an easy way to search vendor history
- Maintain a standard list of supported items – e.g. printers
- New ERP needs to be fast, web-accessible, and available on any platform
- Re-think budget control
- Auto-route technology items based on Object codes
- New ERP must be easy to get information out
- Roll out access
- Give more authority and responsibility to departments directors and deans – e.g. up to \$X
- Introduce approval thresholds – e.g. if < \$5000, director/dean can approve – then route directly to District Purchasing
- Don't send paper to District
- Eliminate paper from the process
- Re-educate vendors
 - District will e-mail POs to vendors
 - Vendors put PO# on invoices and packing slips
 - Vendors send all invoices to Accounting via e-mail
 - Vendors will not take phone orders
- Re-educate College and District departments with new, paperless process
- Key to quality is not checking and re-checking – “do it right once”
- Stop enabling – e.g. if Object code is wrong, send it back to department for correction – then behavior will change
- Create path to transfer money quickly – e.g. if under threshold, department can move it
- Ensure that Object codes are not tied to dollar amounts – don't mix apples and oranges
- Identify fixed assets with flag in new ERP
- Ensure new ERP can maintain an accessible audit trail – see history of changes
- Send back PRs (electronically) if missing information
- Share information – as part of roll-out, provide training in new process and new technology
- Clean up vendor file – e.g. eliminate duplicates
- If purchases are done every year (recurring purchases), plan and pre-order – e.g. chairs for Commencement
- Ensure new ERP handles recurring purchases – auto-generate “this is what you ordered last year”
- Send notification only for routine purchases – do not require approval
- Assume managers are responsible and able to manage budget
- Attach all supporting information – e.g. e-mails, documents (quotes) – in system

- Ensure new ERP has quote module
- Train a technology buyer
- Develop standard list of supported items (not 200, not 2) – e.g. 6 printers, 6 copiers, etc.
- E-mail POs to vendors – T&Cs printed on the back
- Ensure correct vendor numbers
- Deploy full functionality for Fixed Assets
- Use new ERP functionality to track damage, returns, back order, missing items, etc. – discontinue manual tracking
- Auto-notify department when order changes
- Consider percentage tolerance between PO and Invoice amounts – e.g. 10%
- Move toward Fiscal Independence
- Help users use IFAS more effectively
- Use system to view status – e.g. invoice received
- Okay to use Direct Pay for mileage, travel, emergencies, off-campus food
- If too many “Quick Dollars,” use procurement card
- Pursue Fiscal Independence
- Reduce the number of steps in the process
- Eliminate paper from the process
- Take advantage of discounts – negotiate volume discounts, pay vendors early, p-card rebates
- Reduce layers of approvals
- Give department directors and deans more authority and responsibility for budget
- Establish thresholds for approval – e.g. department approves if less than \$5000
- Educate vendors and departments about new process and new technology
- Improve experience for departments
- Expand use of procurement cards where appropriate
- Ability to easily view audit trail
- Larger e-mail capacity
- Explore what IFAS can do in the short-term – e.g. e-mail, attachments
- Restrict key codes to only those available to person logged on
- Develop internal auditing strategies – e.g. exception reports, random sampling – rather than layers of approvals for every PO
- Rethink budget process – allow departments to transfer money between specified accounts
- Utilize mobile devices in Receiving
- Deploy a Fixed Assets module
- Free up from routine activities in order to plan and strategize – pro-active
- Better reporting
- Better controls
- Better tools
- Review and revise policies and procedures
- Move to a single source of data – all information in one place, viewable by all
- Create controls for Dell orders

Contracts

- Issue an abatement for anticipated revenues
- Clarify what's needed for each contract
- Clarify when a contract is needed
- Categorize contracts and requirements – e.g. maintenance, installation, services, etc.
- Have vendors sign contracts first
- Educate providers – e.g. send invoice to Accounting
- Enter rates on contract
- Clarify invoicing process for contracts

APPENDIX B

Obstacles

In the same manner, participants identified the following obstacles:

Purchase Orders

- Paper Purchase Requests
- Making and sending copies of PRs, quotes, etc. – District throws them away
- Waiting to determine which vendor to use
- Steps to check what equipment is supported – e.g. printers
- Incorrect/incomplete information on a PR
- Using different names for the system – “Insight,” “Dashboard,” “IFAS”
- Cannot use on Mac or with Firefox
- IFAS is slow
- Incorrect names in workflow
- Budget transfers – no matter how small – need 4 signatures on a paper form
- Not all users know how to use Insight
- IFAS is hard to use
- Stopped at electronic approval step
- Excel – not IFAS – is the authoritative source of information
- PR/PO process is long – lots of approvals
- Some make purchases prior to submitting PR
- Some vendors send invoices directly to departments
- Departments tracking payment to vendor
- Process takes 4 to 6 weeks to issue the PO – then another 4 to 6 weeks to deliver the products
- Missing signatures
- Incorrect Object codes – finding it late in the process (checking earlier is not working)
- With technology purchases there are additional steps, IS contacts Technology Deans to ensure they are aware of purchases
- Duplicate orders result from long process
- Departments contact vendors directly – end run
- Electronic keys are difficult to track
- When orders are picked up, the receiving step is skipped
- “Enabling” – e.g. Purchasing corrects the Object code rather than sending it back to the department
- Paper – rather than the system – serves as the process trigger
- When vendor is entered as TBD, process slows down
- Some PRs include item numbers but no description
- People in the middle – e.g. approvers – are not aware of the issues – don’t feel the urgency
- Outdated specifications
- 200 choices is too many
- Mailing and faxing POs – rather than e-mailing
- Sometimes PO number is not on packing slip

- Department is out of the loop between vendor and Purchasing
- Departments don't access dashboard every day
- Invoices not being sent to Accounting
- Departments involved with invoices and payment to vendors – not “staying in their lane”
- Departments “promising” vendors
- Invoice amount greater than PO amount
- Strange division of the alphabet in Purchasing
- Process churn and delays when additional charges appear on Invoice – e.g. taxes, shipping, fuel
- Delays with Dell – unpaid invoices because items have not been received in IFAS – process “glut”
- Services received – extra steps to receive in IFAS – confusion about the process

Contracts

- Know that it will cost \$17K for the year, but create contract for \$2K – every amendment results in significant process churn – won't have money until later (e.g. from student fees) – holds up payment
- Unclear when a contract is required
- Chasing vendors for maintenance contracts
- Lost paper
- PR, RFC, Electronic PR are out-of-sync – very difficult to track three different pathways for the same contract
- Signatures create bottlenecks
- RFC with no attachments – e.g. SOW, contract
- Waiting for vendor signature on contract
- Vendor sends contract directly to department
- When is “Exhibit A” an invoice?
- Not enough detail on some invoices
- Any changes or increases require an amendment – go through the entire process every time

Direct Pay

- Used improperly – e.g. uniforms, food, toner, software
- Receipts missing or not in sufficient detail