INTERNAL AUDIT
IAS
ADVISORY SERVICES

Internal Audit Report

PRINTING SERVICES

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I.   EXECUTIVE SUMMARY

Internal Audit & Advisory Services (IAS) has completed an audit of Printing Services to evaluate the effectiveness and status of operations resulting from the recent reorganization and significant downsizing of services.

Overall, the downsizing and integration of Printing Services into Physical Plant has been successful.   Specific plans and actions have been implemented to bring Printing Service operations more in line with campus needs while achieving financial break-even operations.

However, while Business and Administration Services (BAS) has actively monitored results to assure the new business plan is working as intended, the payoff of the accumulated debt of $1,477,089 is forecasted out into FY2035, and will require continued monitoring and sound management over an extended period of time to assure its operational and financial goals are achieved.

The following issues requiring management corrective action were identified during the review:

A.   Risk of copyright infringement associated with off-campus printing
Professors and academic division administrators were using outside vendors for printing course readers; as a result, these materials were not subject to on-site copyright clearance service review provided by Print Services.

B.   Deposits of cash not in compliance with BUS 49
The Copier Program has a recent history of making monthly deposits averaging more than $1,000 which is not in compliance with BUS 49 (Policy for Cash and Cash Equivalents Received).

C.   Updating written policies and procedures
Written policies and procedures over business continuity, internal controls, and data loss prevention had not been updated to reflect the reorganization and changes in operations within Print Services.

Management agreed to all corrective actions recommended to address risk identified in these areas.

Observations and related management corrective actions are described in greater detail in section III of this report.   Appendix A contains a graph of Printing Services accumulated debt history.

II.   INTRODUCTION

Purpose

The purpose of this audit was to evaluate the effectiveness of Printing Services in implementing its recent reorganization and debt repayment plan.

Background

As the demand for traditional printing services have changed over the past decade, the impact on the UC campus print services providers have been dramatic. Prior to FY2001-2, and increasing each subsequent year, campus Printing Services began to incur budget deficits. (See Attachment A Print Services Deficit Trend Graph). Documents that had traditionally been printed were being published in on-line viewable or downloadable formats or not being published at all.

The deficit growth slowed in FY 2005-07, and an operating surplus of $47K was generated in FY2007-08. In FY2008-09, Printing Services experienced a drop in revenues of 16%. In FY2009-10, Printing Services reduced overall expenses by $294K in salaries/benefits and facilities rental. Despite continued expense reductions enacted in FY2010-11, printing revenue declined so dramatically that BAS determined that Printing Services was unable to continue to serve the campus in a sustainable manner.

In March 2010, BAS re-organized Printing Services by integrating it into Physical Plant along with Campus Mail and Receiving/Surplus. During the re-organization, the Printing Services unit was dramatically downsized by combining its printing operations with the campus Copier Program. In March 2011, BAS had reviewed printing services financial and operating condition including; campus budget cuts, an increasing historical deficit, and a decline in need for an on-campus full service print shop and had concluded that the Copier Program should continue as a campus service but that the full service print shop business model should be discontinued. BAS anticipates that the reorganization along with cost reductions will allow the unit to service the accumulated deficit and on-going STIP interest expenses.

Accordingly, Printing Services full service print shop was discontinued as of June 30, 2011. Printing Services now consists of Professor Publishing Services and the campus Copier Program.

Professor Publishing Services is a small copy center tailored to the academic document reproduction needs of UCSC professors. It specializes in the production of:

- Course readers which provide professors the ability to customize specific texts for their classes. Students pay only for the material actually used in class. Professors select, copy, and submit the materials they wish to have reproduced for their classes. Printing Services provides copyright clearance services including researching copyright ownership, arranging payment applicable royalties, or obtaining written permission to use the materials free of charge.

- Lab Manuals for departments that have authored their own lab manuals.

- Exams are printed for courses at UCSC. Exams are reproduced by university staff under controlled conditions. Orders are available for pick up or are delivered in tamper-proof boxes.

The Copier Program provides self-service copiers and multi-function devices on a cost-per-copy basis to the campus. The copier Program assists departments in the selection of the copier that best suits their needs. The copier Program staff handles the acquisition, installation and provides on-going support of copiers including network set-up, training, maintenance, repair and supplies.

There are approximately 163 copiers managed by the Copier Program in administrative, academic and public areas; 79 copiers have Slug Card access for faculty, staff and students, 11 copiers accept Slug Cards or cash, and 73 copiers are dedicated for use in specific offices. The copier Program is installing the Pharos copier control software system which will replace the current Danyl copier card with an option for a Pharos card or user ID and PIN to control payment for copying, printing and scanning. The copier Program is in the process of eliminating copier/printers equipped to accept cash. In the future two kiosks will accept cash for accessing Pharos equipped copier/printers.

The reorganized, reconfigured, and refocused Printing Services unit appears to be off to a good start. The staff and management of Printing Services are skilled and experienced. It is apparent in the documentation and from our interviews that the reorganization is the product of cooperative efforts under the direction of BAS leadership involving Planning and Budget, the Direct Cost Committee, Staff Human Resources, Campus Counsel, labor representatives, and the management and staff of Printing Services. It appears that the transition has been well managed.

Further, it is apparent that BAS personnel have been involved in the operational planning and budget composition and are well informed and well positioned to closely monitor implementation of the revised business plan and repayment of the accumulated debt. At the end of FY 2011, the accumulated debt had a balance of ($1,477,089). Current forecasts call for the repayment of the debt by FY 2035. Printing Services management and staff are confident that they offer valuable services to the campus and will achieve their operational and financial goals.

Scope

We conducted interviews with Physical Plant, BAS, Financial Affairs, Information Technology Services, Legal Counsel, and Printing Services personnel.

We reviewed the documentation supporting the reorganization plan and the revised business models for the Printing Services units. We reviewed the documentation supporting rate setting, financial performance forecasting, and compilation of the operating budgets. We reviewed the accumulated debt history and the repayment forecast.

During the review we tested selected revenue and expenditure transactions for compliance with applicable policies and procedures. We reviewed and tested the management of data related to the equipment in the Copier Program inventory.

We did not review copyright issues related to course readers produced by off-campus printers or published electronically by faculty members. In addition, we did not assess the campus use of eCommons or other online publishing administered outside of Print Services.

Examples of Positive Observations

- Printing Services has an experienced and talented staff who have handled the challenges of significant change well.

- Physical Plant, BAS Operations and Resource Management and Printing Services have worked well together in crafting a new strategic plan, implementing the reorganization, and establishing performance monitoring and reporting.

III. OBSERVATIONS REQUIRING MANAGEMENT CORRECTIVE ACTION

A.	Risk of copyright infringement associated with off-campus printing

Professors and academic division administrators were using outside vendors for printing course readers; as a result, these materials were not subject to on-site copyright clearance service review provided by Print Services.

Risk Statement/Effect

There are potential risks to the university and the professor if printed course readers and other printed materials are not sufficiently reviewed for copyright infringement.

Agreements

A.1	Printing Services management will incorporate information regarding copyright liability risks in each quarterly announcement of the course reader printing schedule, starting with the announcement for the spring quarter.	Implementation Date
		2/10/12
		Responsible Manager
		Director - Copy, Mail, and Receiving Services

A. Risk of copyright infringement associated with off-campus printing

According to Print Services, in the fall of 2010, there were 127 unique course readers of which 20 were found to be available off campus. In the fall of 2011, 36 of 114 course readers were found available off campus. For a variety of reasons, including cost of lead-time to obtain copyright clearance and the use of outside print service vendors is increasing.

Professors and academic division administrators who use off site printing services for copyrighted materials should be aware that these vendors may not offer the same level of copyright clearance services as provided by campus Printing Services, increasing the risk of copyright infringement.

Off-campus printers do not have the same vested interest in protecting the professor and university from potential copyright infringement. Rather the off campus printer is likely to have the professor sign an attestation of fair use exemption from copyright protection shifting the potential risk to the professor and the university.

While Printing Services is not in a position to restrict off-campus printing, it does remind professors and academic administrators each quarter of its course reader Printing Services and related schedules.

Each quarter Printing Services sets a deadline approximately eight weeks in advance of the start of a quarter to allow for copyright ownership research and payment of applicable royalties. As part of their quarterly reminder, Printing Services could remind professors and academic administrators of the risks they face if they elect to print off campus.

B.	Deposits of cash not in compliance with BUS 49	
The Copier Program has a recent history of making monthly deposits averaging more than $1,000 which is not in compliance with BUS 49 (Policy for Cash and Cash Equivalents Received).		
Risk Statement/Effect		
Untimely deposits increases the risk that cash on hand may be misappropriated and also causes the university to lose short term interest earned on bank deposits.		
Agreements		
B.1	Printing Services management has received a BUS 49 Section XB.2 exemption from the campus cash handling coordinator.	Implementation Date
		11/9/11
		Responsible Manager
		Director - Copy, Mail, and Receiving Services

BUS 49 Policy XB.2 States: "Collections at Sub-cashiering Stations and Departments shall be deposited at the designated Main Cashiering Station at least weekly or whenever collections exceed $500."

Due to its small staff and inability to know when the collective amount held in eleven copiers exceeds $500, the Copier Program has a difficult challenge of achieving its operational goals and being in compliance with the BUS 49 deposit requirements.

The Copier Program is in the process of reducing the number of machines that contain cash. In the future, there will only be two kiosks that accept cash for copies. In addition, the Pharos copier control software has the capacity to send Copier Program an email when a predetermined amount of cash has been received. The copier Program may be better equipped to make deposits in compliance with BUS 49 at a future date.

Rather than to continue operate out of compliance without acknowledgment, it may more appropriate for Printing Services management to seek an exemption from BUS 49 requirements from the Campus

Cash Handling Coordinator. The campus cash handling coordinator will be monitoring Copier Program cash deposits and may extend the exemption if deemed appropriate.

On 1/5/2012, the Copy, Mail, and Receiving Services director provided IAS with an exemption (five year variance) obtained from the Campus Cashier Coordinator and the Campus Cash Control Specialist on 11/9/2011.

C.	Updating written policies and procedures

Written policies and procedures over business continuity, internal controls, and data loss prevention had not been updated to reflect the reorganization and changes in operations within Print Services.

Risk Statement/Effect

The lack of updated policies and procedures within Print Services over:

- Business continuity planning - could result in an inability to provide services in the case of an emergency;

- Internal Controls - could result in a lack of understanding of separation of duties and other controls; and

- Data loss prevention - could result in the loss of data (including restricted data) that may be stored in copiers that must be removed before the copiers are sold or recycled.

Agreements

C.1	Printing Services management will update its written policies and procedures related to business continuity, internal controls, and data loss prevention. This should include a consideration of related ITS and Surplus Department policies and procedures with the goal of coordinating efforts to protect the campus against data loss.	Implementation Date
		7/16/12
		Responsible Manager
		Director - Copy, Mail, and Receiving Services

C.	Updating written policies and procedures - Detailed Comments

With all of the changes occurring within Printing Services, we noted the absence of updated policies and procedures that reflect the current operation. The need for clear guidance was most evident in the following areas:

Business Continuity – Disaster Preparedness: In updating policies and procedures, Printing Services will add to information available to remediate service interruption in the event of a disaster, personnel turnover or temporary employee absences.

Internal Controls: Printing Services has significantly changed its operations and the process of updating policies and procedures gives Printing Services management an opportunity to assess whether internal controls, for example segregation of duties, are appropriate.

Data Protection: In reviewing its policies and procedures, Printing Services has the opportunity to strengthen controls and risk related to the loss of data. Nearly all modern photo copiers have a computer hard drive built into them that stores copies of all the images copied. If this data is not overwritten, encrypted or destroyed before the copier is taken out of service who ever obtains the copier will potentially have access all images copied on that copier. Many users are unaware that copiers can often retain image files. This would be particularly risky if the item copied contained restricted and/or sensitive information. Business and Finance Bulletin IS-3 states:

> *Procedures should ensure implementation of controls to address the reassignment or final disposition of hardware and electronic media, including requirements that ensure complete removal of restricted or other sensitive information as appropriate, such as by shredding, overwriting a disk, or employing professional data destruction services as commensurate with risk.*

Printing Services should consider coordinating the update of their policies and procedures with Information Technology Services and Surplus Department best leverage efforts in protecting the campus against data loss.

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Appendix A: Printing Services Cumulative Deficit History

Fiscal years 2001 through 2011 actual accumulated debt balance while FY 2012 is an estimate based on Printing Services forecasts.

Printing Services Cumulative Deficit History

FY	Value
FY 2001	101139
FY 2002	172983
FY 2003	111114
FY 2004	-178394
FY 2005	-516226
FY 2006	-814949
FY 2007	-892895
FY 2008	-834005
FY 2009	-914726
FY 2010	-1231703
FY 2011	-1477089
FY 2012	-1446703