Joshua Tree Consulting

Improving the Bottom Line

Generating Financial Benefits with the OpsTechnology Purchasing Solution

An Executive White Paper by
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OpsTechnology

OpsBuyer™ - Financial Benefits

The Bottom Line

United Dominion completed their deployment of OpsBuyer™ before Camden, and as a result has more data from actual experience to evaluate. Based on actual experience, United Dominion should see financial results that look like this:

Because of confidentiality requirements, the individual line items for each area of savings are not broken out. Camden's data is still being developed, thus the data is not yet available for analysis. However, this paper will explore some of the areas that have been quantified thus far.

	IRR	Annual Cash Savings	Payback Period
UDRT	**655%**	**2.65% of annual total spend on deliverables**	**<3 months**

David Houghton, UDRT's Vice President of Purchasing and Corporate Services reports UDRT implemented OpsBuyer™ to manage and monitor their separately developed spend management program. The implementation of OpsBuyer™ in conjunction with the spend management program has resulted in the tremendous savings reported in this paper. For most firms, OpsBuyer™ will power and provide the information backbone to allow them to develop a more aggressive spend management program.

Internal Rate of Return, Annual Cash Savings and the Payback Period

The financial impact of any corporate innovation may be quantified in dozens of different ways. This white paper estimates the internal rate of return, the annual cash savings and the payback period.

For capital-intensive real estate firms whose retained earnings are precious to generate, it is natural to think first of the internal rate of return on capital - asking literally whether it creates or reduces capital available for other investment. Net present value is useful for establishing the magnitude of the cash generated and for evaluating the opportunity cost of deploying labor to activate one project or another. It is not reported here in the interests of preserving the confidentiality of the cooperating firms. Rather, an alternate measure of magnitude is substituted that should be at least as useful for benchmarking your own projections. Finally, the payback period is also useful because it stresses the importance of gains to be made in the near future, versus more risky and uncertain gains to be harvested in the future.

Often, innovators think of the payback period as irrelevant, and discount the risk of future innovators making their work less valuable. History suggests however that the payback period matters. For instance, the Chesapeake and Ohio canal was the great efficiency generator of its day, but the $11 million of capital it required to complete in 1850 was destroyed by the consolidation of the eastern railroads in 1852. They payback period was too short to harvest the fruits of the innovation.

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Definitions

The internal rate of return is the project manager's favorite measure. It can measure the value of a discrete project's expected cash flow and show the imputed rate of return to the net cash flow in and out of the project. The IRR is most useful for demonstrating profitability, and for comparing the project's return of capital to the organization's weighted average cost of capital or other hurdle rate.

Annual cash savings is figured net of expenses, and divided by the estimated annual spend on deliverable items to derive the percentage. For those who wish to figure net present value on their own, NPV is the discounted value of the net annual cash flows attributable to the project. The market interest rate should be (conservatively) estimated as the firm's weighted average cost of capital, plus an added risk premium to account for the risks of a joint project in which the apartment firm does not have a lot of core expertise. In other words, if a firm's weighted average cost of capital is 10%, it should add a risk premium of at least 2-4% to properly factor in the risk from performing a new, non-standard task.

Payback period is defined simply as the time period required to recover an initial investment from the cash flow of the project created.

For Camden and UDRT, the following elements go into the calculations of financial return. Any firm can use the same criteria.

		Upfront	Year 1	Year 2	Year 3...
Cash Benefits	Savings generated from reducing maverick spending w ith h igher-cost suppliers				
	Savings generated from aggregating purchased quantities to reach higher price discount breakpoints with approved suppliers				
	Net prompt payment discounts (and absence of late fees)				
	Process savings in labor (realized)				
(less) Costs					
	Upfront fixed costs and one-time fees: software licenses, training, travel, implementation support, data conversion				
	Recurring fees: per-seat licenses, training				
Net Benefits					

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Maverick Spending

Cash savings are generated when orders are fulfilled with contracted vendors, as opposed to non-contract vendors, orders are fulfilled with contracted vendors at prices that deviate from the contracted price, and orders are made for unapproved products or services. Firms negotiate purchasing contracts in order to achieve best pricing. When employees make purchases outside of the contracts, the spending is maverick. Some maverick spending is almost inevitable, even when a central purchasing department does the buying. A survey[1] of 125 firms and governmental agencies reported that:

- Maverick spending ranged broadly from 1 - 43% of the total amount spent;
- On average, maverick spending was 3 - 5% of the total amount spent;
- Among these responding firms, more than 80% of the purchasing was actively managed by a central purchasing department.

For multifamily firms that lack a purchasing department, or don't manage purchasing as a core function, maverick spending is even more likely to occur, and to result in a higher percentage of the total spend - thus creating a relatively greater opportunity to profit from a program of spend management. The less well-managed purchasing is currently, the greater the financial opportunity. However, active management is necessary to take advantage of all the potential benefits of any spend management program.

To determine how much a spend management program saves or to project savings, an analyst must compare spending patterns before and after the project implementation. An analyst would need to know the difference between on- and off- contract pricing, the amount purchased on average and would have to make an educated guess at the potential on-contract compliance rate. (Some purchasing will always be off contract - emergency items, non-standard items, supplier error, etc.) Advanced analysts with supporting data would also add in the differences in total cost of ownership by product, assuming that the compliant products in each category have the lowest TCO.

Ideally, each individual product SKU would be compared to determine the exact pricing differential between on and off-contract spending, and individual compliance rates for items known. More practically, an analyst can project savings by knowing:

- Total spend per unit for current year and project years for each product category (excluding rehab and construction projects);

- The average cost difference between on- and off-contract purchases per unit for each product category (excluding rehab and construction projects);

- The ratio of compliant and maverick spending (over the past three years if available). This includes spending with contracted vendors that is invoiced and paid at higher, non-contracted rates; and

- The expected (or realized) ratio of compliant spending after the spend management program is put in place, including both the reduction of spend with non-contracted vendors, and spend with contracted vendors at incorrect prices.

While more precision should yield better results, the calculation is short-term in nature. That is because we're projecting cost savings from a set point in time, going out into an uncertain future. It is reasonable to assume that prices will continue to rise with inflation in the short run. In the medium term, or the long term it is less certain. Economic history is full of price shocks,

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both favorable and unfavorable. Prices could deviate significantly for dozens of reasons, including productivity gains that drive pricing down for all buyers.

	Contract Savings per unit in $	x	Change in Compliance Rate in %	x	Number of Units	+	Difference in Total Cost of Ownership per Category or SKU	=	Net Savings Generated
Category 1 SKU 1 SKU 2 SKU 3									
Category 2 SKU 4 SKU 5 SKU 6...									
Category X									

Aggregation Savings

Aggregation savings are simple. The more of a particular item a firm buys, the lower the price it pays. When purchasing is combined, consolidated and verified, vendors can pass along their efficiencies (delivery, warehousing, certainty, cost of customer acquisition) in the form of lower prices. Typically, price breaks take effect in stair case fashion, as illustrated below.

Quantity Purchased	Price
1-99	$500
100 - 499	464
500 - 850	427
851- 1500	402

By aggregating larger quantities or multiple vendors - either through larger orders, or by knowing its consumption in advance, a firm can negotiate better pricing upfront. By making commitments to a producer and supplier, they can in turn pass along the better pricing they receive for their materials and labor. An analyst can use past purchasing history to predict current or future consumption (minus the amount of non-compliance). Or, she can estimate aggregation simply by estimating compliance and multiplying that by total spend - either in total, or on a subset of products.

A Note on Labor Savings

Through attrition, Camden realized efficiencies in Accounts Payable of 2.5 full time employees (FTEs) who were no longer needed to support a batch process that had become more efficient for one person to manage. Before benefits, JTC estimates this to be a $60,000 annual savings. These savings were generated by electronic presentment of invoices to the back office for approval. Work that used to take five people one and a half hours can now be completed by one person in three hours. Their focus on process had a tangible effect on the bottom line. Impartial analysts typically take the view that savings can only be counted when it's "cash in the cash drawer." For the purposes of this white paper, we take the same view.

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It's rare that a single technological innovation can create rapid labor savings. More often, efficiency-generating technology has a marginal impact on productivity until the technology is widely understood. Also, similar kinds of efficiencies have to impact the same workers in the same way. As a combination, voicemail, the fax machine, and the personal computer have hastened the decline of secretaries and receptionists in a way that each product never could individually.

Further, many analysts of innovation now believe that firing redundant workers can short-circuit the larger benefit of freeing up time so that an individual can pursue more profitable activities for the firm. Camden's Director of Purchasing Bernadette Revis agrees, citing their ability to better manage their pricing and compliance with programs with their remaining staff as an even larger, but perhaps not quantifiable impact of the program. In other words, removing menial low-value tasks from a worker, and replacing it with work that produces higher economic value can produce far more in the long run. According to the Center for Advanced Purchasing Studies, when companies can streamline purchasing, firms in capital intensive industries more often redeployed personnel than firms in service industries.[2] Redeployment, transfers, retention and new work are, as a whole, more popular than eliminating positions.

Active Management to Achieve Financial Returns

Users must actively manage their purchasing process in order to capture the largest gains that the OpsBuyer™'s database makes possible. Unlike a purchasing consortium that promises passive savings to its members in exchange for the members guaranteeing a certain level of purchasing, OpsBuyer™ is a tool that makes a spend management program easy to manage. By itself, it doesn't create and actively manage a high-yielding program. This isn't a criticism. It is an observation that the happiest users will be those that plan out how they will harvest the potential savings over time, using the resources that they have available to them. Microsoft Word won't create a novel by itself, and a car won't drive itself to a ski weekend in the mountains. Both technologies require an active plan to realize desired results.

As a standalone product, OpsBuyer™ and others like it save a company time. Time efficiencies are often a soft benefit which don't put more cash in the company drawer. To get at that cash, vendors, company executives and most critically, the individual buyers all must be motivated and involved. The steps that must be taken are similar to those in any spend management program and are detailed in the fourth white paper in this series.

Given management resources and a plan, the OpsBuyer™ system provides outstanding management information that can be used to:

- Consolidate purchasing with best-price / best-performing vendors, resulting in lower costs;
- Consolidate purchasing with fewer vendors which can drive savings from hitting higher break points;
- Standardize products using products that provide the highest value;
- Speed the "req to check" process, eliminating late payment fees, and potentially realizing prompt payment discounts;
- Reduce the number of accounts payable staff and accounting analysts.

United Dominion achieved strong, early financial results because it already had a robust plan in place to manage its spend that the executive team and the board already enthusiastically supported. OpsBuyer™ was the tool that best fit their needs to drive savings they'd already identified. Camden's newly available data suggests to them that they are also generating savings in an already strong program and will increase their savings over time as the program continues to expand. Both firms acknowledge

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Footnotes

[1] "Defining and Determining the 'Services Spend' in Today's Services Economy," Center for Advanced Purchasing Studies, August 2002.

[2] "Reducing the Transactions Costs of Purchasing Low Value Goods and Services: Discussion of Findings," p. 28, Michael G. Kolchin and Robert Trent, Lehigh University, 1999.

the importance of having program managers with available time to pursue all of their opportunities. Each firm values their time savings and other efficiencies. They also value OpsBuyer™ for its ability to provide real-time management information with which the company can better manage their spend and with whom they spend.

About Joshua Tree Consulting

Joshua Tree Consulting is a niche consulting practice dedicated to the growth and success of the multifamily industry. We help our clients achieve success through studying and optimizing strategies and operational processes that are close to the heart of the business. Joshua Tree Consulting works on selected engagements in which it can add value through analyzing strategies for asset management, positioning and making better use of management information.

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About OpsTechnology

OpsTechnology develops software that saves money for real estate operating companies by improving their ability to manage and standardize Procurement, Purchasing and Payables functions. Founded in 1999 by real estate and technology industry experts, the company is backed by real estate operating companies and VC firms including SAP Ventures, Vortex Partners, Cohen & Steers, Equity Residential and Camden Property Trust. For more information visit www.opstechnology.com

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