IMPROVING E-PROCUREMENT AT THE GENERAL SERVICES ADMINISTRATION

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Executive Summary

Although the United States is slowly recovering from the 2007-2009 recession, the federal government is continuing to operate at a budget deficit that contributes to the growth of the national debt. In order to slow the growth of the national debt and operate under flat or declining appropriations from Congress, U.S. government agencies must continue to seek operating efficiencies that reduce total overhead expenses. The U.S. Government Services Administration (GSA) is in a unique position to assist federal agencies in operating effectively despite smaller budgets by attracting buyers from federal agencies and earning their business more often. Federal agencies that leverage GSA-negotiated contracts and purchase through GSA-operated platforms can realize significant cost savings through lower prices and reduced administrative costs. Agency customers frequently interact with GSA through its e-procurement platforms. In order to compete for the business of government agencies, GSA must improve their business practices and provide a procurement platform that meets the functionality needs of its customers now. GSA must also prepare for the future of e-procurement in order to continue extending its reach as the supplier of choice for federal agencies.

This report examines four case studies in e-procurement transformation to explore best practices across public and private sectors. Next, a benchmarking analysis is used to identify areas for improvement in GSA's strategy and operations. This report concludes with strategic recommendations for GSA's e-procurement strategy and operations in order to drive growth in revenue and market share through adopting sound business principles that apply to its governmental context.

This report begins with an overview of the Government Services Administration, its current operating environment and ten-year goals. It then identifies challenges that GSA is facing in e-procurement. Four case studies in e-procurement transformation are examined, approaching each with a company overview, strategy, operational plan, metrics, results, and best practices.

After examining case studies and identifying relevant best practices found in each case study, we combine best practices to form a matrix. The best practices matrix is used for benchmarking the standing of GSA's e-procurement program in six key areas. The paper concludes with recommendations for how GSA might align itself more closely with best practices in each area in order to improve and align its operational basics to drive growth. Recommendations are linked to form a continuous cycle of improvement.

Four Case Studies: We have selected four case studies that we feel can serve as illustrative best practice examples for GSA. These cases are from various organizations in different stages of growth, but management prioritizes e-procurement as a strategy tool in all situations.

- Amazon: How Amazon decided to become the world's most customer-centric business and used metrics and development to change the retail industry.
- Zappos: How a devotion to customer delight drove growth and innovation within the company.
- **Scotland**: How Scotland improved transparency and collaboration with different classes of suppliers throughout its public e-procurement system.
- **Skanska**: How management's strategic goals led to a shift in e-procurement strategy and why Skanska chose to develop a long-term partnership with a vendor.

Best Practices: This report utilizes four case studies and background research to build six best practices that drive revenue and customer growth. Preliminary research into procurement best practices yielded a study by the Aberdeen Group, entitled "Best Practices in E-Procurement," which provided key insights for this report. This report utilizes best practices outlined in the 2005 Aberdeen report regarding Skanska and the Government of Scotland, and builds knowledge through additional research into e-procurement transformation and development at Amazon, Zappos, and updated information on the procurement transformations of the Government of Scotland and Skanska.

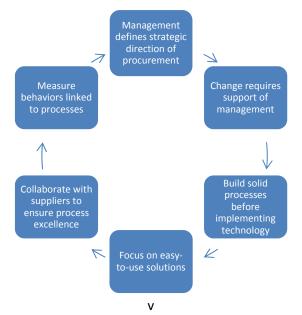
- Organizational Strategy: Focused on developing a core competency of key capabilities to drive growth
- Data Collection: Data must be collected continuously and must be used to fuel adaptive decision-making
- Collaboration: Organizations must collaborate with partners and suppliers to ensure excellence
- Dedicated Management: Management attention to e-procurement is essential to fully fund initiatives, provide strategic direction, and drive user adoption
- **Ease of Use:** Business processes underlying technology solutions must be sound, customers must be able to achieve desired outcomes with minimal user pain

 Performance Metrics: Metrics must be developed in concert with strategy, and be based on existing processes to drive manager behavior and system adoption

Measuring GSA Against Best Practices: This report establishes the following matrix. GSA clearly understands best practices, as it maintains expertise on website development as a resource for other government agencies. However, legal and structural challenges may obstruct GSA's full implementation of best practices in e-procurement.

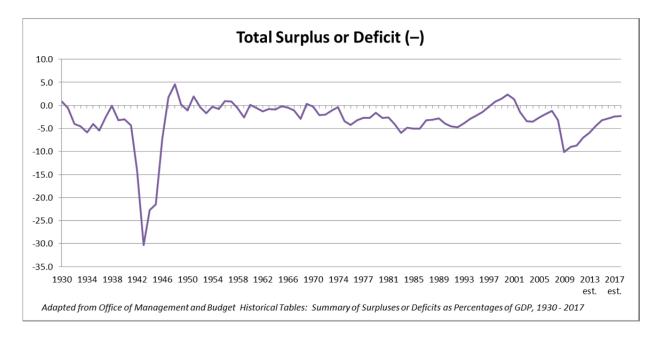
Measuring the GSA Against Best Practices						
Organization	Organizational Strategy	Data Collection	Collaboration	Dedicated management	Ease of use	Performance Metrics
Amazon	V	1	/	/	V	V
Zappos	/	/	/	/	✓	V
Skanska	V	V	/	V	V	/
Scotland	V	1	/	/	V	/
G SA	-Existing, but difficult to follow	-Yes -Fuels decisions?	-Agencies: Yes -Vendors: No	-Internal: yes -Funders: no	-Limited	-Limited

Recommendations: This report provides recommendations in each best practice area to help GSA shape strategic planning in regards to e-procurement. Recommendations are linked to provide for a cycle of continuous improvement to fuel future innovation by providing information and a framework that drives value-driven decision-making on a regular basis.



I. Introduction

As the U.S. economy slowly recovers from the 2007-2009 recession, the federal government continues to experience downward pressure on spending. The federal government has operated at a budget deficit since 2002, but the recession reduced tax revenues received to amounts well below budgeted projections, causing the deficit to grow to \$1.4 trillion in 2008.² As a result, total U.S. indebtedness has continued to grow throughout the past ten years and, at the time of writing, stands at \$17.15 trillion.³ Although the federal budget deficit has narrowed significantly since 2008, the government is projected to continue operating at a deficit at least through 2017. Interest payments on federal debt result in government spending that might otherwise be spent on more tangible budget items; therefore, the growing deficit of the U.S. has caused significant public debate.



In order to minimize the growth of the federal debt, government can cope with reduced income in several ways, including reducing government spending and attaining greater efficiency. Congress has attempted to enforce reductions in government spending through sequestration, which resulted in approximately \$80 billion in spending reductions for fiscal year 2013.⁴

In order to continue operating in a constrained fiscal environment, the federal government must also continue to increase its spending efficiency. The Government Services Administration (GSA) has a crucial role to play in this endeavor.

GSA provides value to the entire federal government by managing the administrative burden of U.S. government agencies in areas such as real estate, travel, and procurement. GSA negotiates purchasing contracts for multiple federal agencies, striving to reduce the amount of administrative overhead required by federal agencies in order to drive down unit costs of procurement. One such initiative that the GSA has undertaken has been strategic sourcing of products and services; GSA undertakes a structured process to negotiate better prices as a single buyer of these for the federal government.

As a result, GSA has saved over \$330 million through solutions in office supplies, printing, wireless, and delivery services, since 2010. GSA is currently implementing phase two of the project, and expects to generate \$1 billion in annual savings once its entire strategic sourcing program is in place.

This report has been written to examine strategies for GSA to reach a broader customer base among government buyers through an e-procurement strategy that will optimize web-based procurement platforms, and ultimately result in significantly increased savings for the entire federal government. These gains in efficiency will reduce program administrative spending across federal agencies and yield more latitude in agency operating budgets for program or mission-driven expenses.

Report Roadmap:

This report examines four case studies in e-procurement transformation to explore best practices across public and private sectors. These best practices will be used to conduct a benchmarking analysis of the operating environment of the Government Services Administration in the field of e-procurement and then to provide strategic recommendations that would assist in the development of a technology roadmap for the organization.

This report will begin with an overview of the Government Services Administration, its current operating environment and ten-year goals. It then identifies challenges that GSA is facing in e-procurement. The report will examine four case studies in e-procurement transformation, approaching each with a company overview, strategy, operational plan, metrics, results, and best practices.

II. Background

Government Services Administration

The General Services Administration (GSA) manages federal building space and procurement programs in order to streamline the administrative work of the federal government. The GSA is responsible for negotiating contracts that leverage the combined buying power of the federal government, with the intention that such contracts can reduce overhead and administrative expenses across the federal government, achieving improved efficiency throughout government procurement programs. The GSA's work does not always achieve intended results, for example, not all agencies choose to procure goods and services through GSA-negotiated contracts and instead choose to negotiate their own contracts, which can often result in redundant expenses or contracts that do not achieve the equally valuable prices for goods and services.

The GSA intends to achieve a 90% market share goal of reaching potential agency customers within 10 years. In doing so, the federal government should realize greater purchasing efficiency. This paper intends to address one sphere of the GSA's efforts by exploring best practices in e-procurement programs across the public and private sectors.

History

With an annual budget of over \$26 billion, the General Services Administration (GSA) manages over \$500 billion worth of federal assets. Established in 1949 at the discretion of President Harry S. Truman, the GSA's first mission was to "streamline the administrative work of the federal government." Chief among the GSA's responsibilities were the administration of federal employee workspace and the acquisition and administration of government supplies. Since then, the GSA has disposed of war assets, overseen historic building preservation and federal renovation, and has implemented measures to streamline federal acquisitions. Over the past two decades, the GSA has made major strides towards improving government efficiency in acquisitions and federal contracting, including a move towards more open, transparent, and efficient government through the use of information technology.

Legislation and GSA Evolution

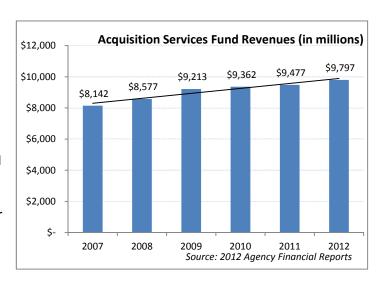
The GSA uses the combined weight of the size and quantity of the Federal Government in order to negotiate lower prices for goods and services traditionally required for various government agencies.

This can include motor vehicles, federal building administration and maintenance, and information technology such as the USA.gov web portal.

During the 1990s, Congress enacted several pieces of legislation to promote efficient purchasing. The Federal Streamlining Act of 1994 and the Clinger-Cohen Act of 1996 provided for federal agencies to buy commercially available products. ¹¹ This meant that the Federal government could make use of the efficiencies of competitively made products in order to reduce procurement costs. In 1997, GSA began promoting a stronger reliance on commercial vendors to fulfill government needs for goods and services. They believed that more buy-in would encourage more participation from various agencies, in turn fueling competition and lower prices.

Federal Acquisition Service

In 2006, the GSA created the Federal Acquisition Service (FAS), which manages procurement for the Federal Government. This includes acquisition policies and regulations, acquisition and project management services, and procurement of goods and technology to be used throughout the Federal Government. The Federal Acquisitions Service is organized into four branches: Integrated Technology Services (ITS), Assisted Acquisition Services (AAS), General



Supplies and Services (GSS), and Travel, Motor Vehicles and Card Service (TMVCS). 13

These four business operations are largely financed by the Acquisition Services Fund (ASF), which operates on revenue generated by its activities as opposed to Congressional funding. The primary revenue driver for the fund, and therefore the FAS, is Travel, Motor Vehicles and Card Services (TMVCS), which generated \$95 million in net revenues (revenues after cost of goods sold and operating expenses) in FY 2012. 14 ASF's top customers are the

Acquisition Services Fund Top 5 Customers			
	Revenues (\$ in Millions)	Percentage of Total Revenues	
Defense	\$2,565	27%	
Homeland Security	\$1,516	16%	
Agriculture	\$903	9%	
Justice	\$653	7%	
Health	\$484	5%	
Data provided from GSA 2012 Agency Financial Report			

Department of Defense, Department of Homeland Security, Department of Agriculture, Department of Justice, and Department of Health. 15

In order to simplify the procurement process for customer agencies, the GSA runs supply and procurement e-tools such as the Federal Procurement Data System, GSA Advantage, GSA Global Supply, e-Buy, etc. These e-tools are portals that provide an interface between government agencies and products, contractors, or vendors. As the public face of GSA acquisition operations, these e-tools are central to customer experience and future business.

Strategic Goals of the GSA

The GSA regularly sets new strategic goals in order to drive the priorities and initiatives of the Agency. In FY 2011, GSA set the following agency priority goals: "Green the Federal Supply Chain, Open Government and Transparency, and Excellence in Solutions through Customer Portfolio Planning." For FY 2012, the Agency's goals were to:

- Be an innovation engine for the government;
- Seek resonance with customers;
- Strive for
 - o Performance excellence;
 - Continuous improvement;
 - o Elimination of waste.¹⁷

In addition to the strategic goals identified above, GSA Administrator Dan Tangherlini has identified growth in market share as a major objective for GSA, setting a 10-year 90% market share goal. ¹⁸ Tangherlini has established six agency priorities for 2013, which are:

- Delivering better value and savings
- Serving our partners
- Expanding opportunities for small businesses
- Making a more sustainable government
- Leading with innovation
- Building a stronger GSA

Strategic and agency goals are meant to tie together for years in order to ensure progress towards an agency's mission. Although innovation, customer intimacy and open government complement the previous year's goal to "green" the supply chain, year-to-year variation in strategic goals makes it more difficult for an organization to make sustained progress in one specific direction.

With respect to the GSA's growth priority, GSA is expected to meet 17% market share this year, up from 12% in 2012.¹⁹ In order to meet its lofty 90% market-share goal, the GSA would need to increase its share of government purchases at the rate of 7.5% each year for the next 10 years. The Acquisition Services Fund, the primary fund of the Federal Acquisition Service, has experienced steady but slow revenue growth over the past five years, from 2007-2012, with 3.5% revenue growth per year.

Year	Revenue (millions)	Percentage Change
2007	\$8,412	
2008	\$8,577	+5%
2009	\$9,213	+7%
2010	\$9,213	+2%
2011	\$9,362	+1%
2012	\$9,797	+3%

GSA Challenges

Despite its steady revenue growth, the percentage change in acquisition revenues has been small. In order to reach its 90% market share goal and become the go-to destination for government purchasing, the GSA will need to overcome significant challenges. GSA faces challenges that are unique both to government and to its own agency structure and culture.

Leadership Continuity: Every four years, the presidential election cycle brings a renewed wave of goal-setting for federal agencies. New presidents often change top management personnel and agency goals, often changing strategies, goals, and objectives. To make matters worse, GSA has had seven different Administrators since 2007, which is equivalent to approximately one new Administrator every year. When new leaders are designated, they must first acclimate to the working environment, while many are motivated to leave their own managerial "stamp" on the organization. This leads to frequent shifts in strategic focus and direction, which does not allow sustained progress over time to a unified agency goal. In contrast to the GSA, successful private sector firms, such as Zappos and Amazon, generally have had consistent leadership with a long-term singular focus used to drive growth and innovation.

Constrained budget: Best-of-breed companies are able to devote resources to initiatives that management believes will help bring it closer to its mission. The GSA faces a constrained budget

environment, with restricted use of funds and a limited and uncertain annual budget that must be appropriated every year.

The GSA's Acquisition Service relies almost exclusively on government agency customers to fund its operations, so trends affecting Congressional funding of the national government also affect the market for federal contracts. Annual budget uncertainty, continuous funding resolutions, and sequestration place dampers on agency spending, increasing competition for agency resources and GSA revenues. For example, the Department of Defense, the largest customer of the GSA Acquisition Service, experienced \$37 billion in cuts for FY 2013 and estimates \$52 billion in cuts for FY 2014.²¹ While budget cuts could create a more competitive environment that might enable the GSA to negotiate lower volume-based prices, budget cuts will restrict GSA's ultimate growth potential.

Economies of Scale: One logical underpinning to the creation of the GSA was to leverage the buying power of the entire federal government. One way to achieve this effectively is through negotiation. The other is through economies of scale, which achieve a reduced marginal cost per item by spreading out fixed costs of production and acquisition over a larger buying base. Economies of scale are one reason that chain corporations can offer consistently lower prices than smaller, boutique companies. In order to achieve larger economies of scale, the GSA would need to utilize its contracts across agencies for large purchases and reduce the number of unique contracts when they are not necessary. The GSA is not currently realizing its potential for economies of scale across contracts because many federal agencies rely on multiple contract vehicles, including their own redundant agency contracts, for their buying needs. Redundant contracts allow for greater variation in contract terms, such as price. Smaller-sized contracts (those that do not account for the buying power of the entire federal government) reduce bargaining power over contract terms and prices and reduce gains in efficiency and overhead that the GSA could otherwise be achieving. While smaller-sized contracts are useful for meeting unique agency needs and this space should continue to exist for vendors, redundant contracts will increase unnecessary costs and reduce the economies of scale that GSA could be achieving.

Value Proposition: As outlined in GSA's FY12-15 Information Technology Strategic Business Plan, IT is challenged with clearly articulating the "value that GSA IT delivers to customers." This is a challenge all organizations face. Investigating, understanding, and quantifying the GSA's value proposition to customers – what it is that customers want and that GSA provides – will help it move towards its strategic goal of "resonance with customers."

Business Processes and Improved Coordination: GSA IT seeks to "identify and adopt common and repeatable business processes based on business and IT needs." It also identifies a need to reduce duplicative efforts and increase data-sharing. Processes that do not meet customer or organizational needs, are not user friendly, or that replicate data, are inefficient uses of money and do not contribute to goals of customer resonance or growth in market share. Business processes that are optimized for time, simplicity, and accuracy are also a challenge.

Customer Relationship and Vendor Management: In interviews, we have found two key areas of improvement for GSA: first, platforms are not easy-to-use or easy-to-navigate, which causes user pain and can lead to decreased customer satisfaction. Second, supplier management regarding data entry, data upkeep, and product delivery have been key challenges for the GSA, as the services provided by vendors do not always meet the expectations of GSA customers. One of GSA's key strategic goals is to seek resonance with customers. A preliminary survey of publicly available information on GSA customer satisfaction analysis shows that the GSA undertakes customer satisfaction or customer loyalty surveys once per year. Vendor or supplier management has also been cited as key to the GSA's continued performance improvement. GSA acts as an intermediary in many cases, connecting U.S. government agencies with goods and services providers. GSA provides internet platforms known as e-tools (GSA Advantage, eBuy, etc.), which are key to its service provision as an intermediary. In order to track its progress as a contracting body, as a buyer, and as an intermediary, GSA must monitor customer satisfaction more closely. Regular customer satisfaction monitoring will help GSA better understand its customers and advocate for them, especially when dips in customer satisfaction can help reveal vendor or operational issues.

Social Priorities: As a federal agency, the GSA must meet social objectives that may hinder or modify its performance objectives. For example, the GSA strives to award a certain amount of contract awards to small businesses, and can face legal complaints or repercussions if its initiatives are perceived as being too demanding for small business. ²⁴ In order to address these challenges, GSA officials may want to look to Scotland's e-procurement initiatives, which tiered contracts to meet the capabilities of small and large businesses.

Legal Obligations: GSA must undertake various federally-mandated initiatives and must abide by federal law in regards to all of its programs, policies, and processes. Federal law is not designed by business managers, and so some components of law may not provide for the most efficient use of

resources, and reduce the flexibility to meet new challenges that some businesses enjoy. However, the best practices examined in this paper should still provide for fruitful conversations in goal-shaping at GSA.

Key Question

When the University of Maryland team met with Lockheed Martin to discuss the GSA's strategic goals and challenges, we arrived at four key strategic objectives critical to the GSA's future success. The GSA's critical mission is to drive down the cost of procurement and management across the federal government by leveraging the vast buying power of the government to negotiate low prices and reduce the administrative burden of procurement.

In order to take advantage of these savings, the GSA needs to remain relevant to its customers: government agencies. In order to do so, it needs to retain its current customers and convince others to purchase through GSA-negotiated contracts. Increasing the percentage of spend going through GSA contracts will further increase GSA's relevance to suppliers, further amplify negotiated cost savings, and further reduce the administrative burden on agency staff members who can then turn their attention to value-adding activity critical to their agency mission.

The GSA needs to increase its sales volume to achieve greater economies of scale within its own administrative architecture.

Therefore, the critical question is as follows: How can the GSA best utilize information technology resources to achieve the following objectives:

- Increase customer base
- Increase customer loyalty and compliance
- Increase sales
- Decrease cost

Research Lens

The University of Maryland research team undertook a thorough analysis of performance excellence in e-procurement across business and government entities in order to discern best practices applicable to the GSA's mission and strategic goals.

Our findings led us to conclude that using a cyclical process of continuous performance improvement best demonstrates the effective predominant practices identified in the four case studies. Our findings are best explained through a four-part cycle: Strategy, Planning, Metrics, and Results. This cycle can



progress concurrently with ongoing business processes. For new programs, strategy, planning, and metrics should provide inputs into program design. Then, results should be measured and used to assist decision-makers as they continuously improve business processes.

- **Strategy:** In order to fuel growth, a company should formulate a mission-focused strategy with a focus on key objectives, such as customer loyalty or revenue growth.
- Plan: An operational plan will ensure that the organization can strive to attain its goals as a cohesive unit.
- Metrics: When based on data and an organization-wide strategic plan, performance metrics
 incentivize results that are in line with company mission and strategy.
- Results: Continual analysis of data and results, including customer feedback, provides inputs
 into strategy and operational planning. Program results data should be inputs into regular
 evaluations to determine organizational progress towards goals.

III. Cases

We examined the following cases of organizations that have been recognized for their e-procurement achievements. Three were from the private sector (Amazon, Zappos, and Skanska), and one (Scotland) was from the public sector. This review and analysis helped to inform our recommendations.

Amazon

Background: Amazon is quickly becoming one of the most legendary business success stories of our time. Most known for serving customers through its retail website, Amazon reported over \$61 billion in sales revenue in 2012 and was ranked as the world's 14th most valuable brand in 2013, ahead of UPS, WalMart, and Starbucks. Although Amazon got its start as a book retailer, it now operates business services, local grocery delivery, local deals, and a host of other services. Amazon's incredible growth was founded on continuous movement towards a singular mission since its founding in 1994: "We seek to be Earth's most customer-centric company for four primary customer sets: consumers, sellers, enterprises, and content creators."

Amazon's strategy of customer understanding should resonate with GSA. This section explores how Amazon achieved the strategic objectives of increasing customer base, increasing customer loyalty, and increasing sales.

Strategy:

Amazon has focused on becoming Earth's most customer-centric company from its earliest founding days. In order to build its web site, brand, and operations around customer focus, Amazon focused on three pillars: listening, innovation, and personalization. Amazon "listens" to customers to understand what they want. It then develops infrastructure that meets customer needs, which is innovation. A crucial direction of

We're the Earth's most customer-centric company. It means three things: listen, invent, and personalize. —Jeff Bezos

Amazon's innovation path has been personalization, so that data analysis and unique customer histories are blended to provide tailored storefronts to each customer. Amazon has built its mission into a core competency, an area of business for which it excels. Core competencies in companies help to

differentiate them from one another, attract customers, grow market share, and develop new business opportunities.

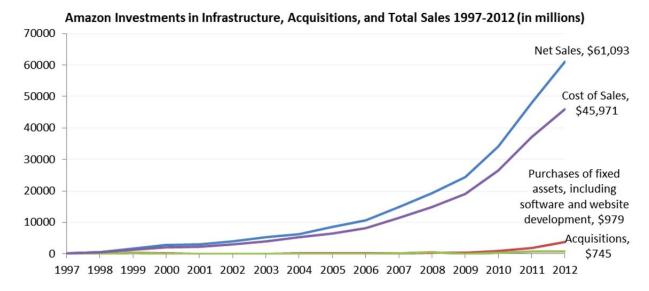
Operational Planning:

Two outgrowths of Amazon's founding strategy and mission have been selection and convenience.

Amazon has meticulously utilized data on customer activity to influence its operations, investments, and initiatives; bringing it ever closer to its customers.

In 1995, users could access approximately 1 million book titles through Amazon. Based on customer response to its initial market entry and to the predicted growth of the market, Amazon expanded from book retail into a variety of categories such as home and lawn, music, DVDs, and electronics and software in 1998. By 1999 users could access 1.5 million titles through Amazon.²⁷ In order to fuel its 1990s expansion into new markets for wider selection, Amazon leveraged its warehousing, distributor relationships, and digital infrastructure to launch into new markets. To aid this leap, Amazon made an initial \$300 to \$400 million investment in digital infrastructure, which included 70-80% overcapacity to accommodate its planned growth.²⁸

Amazon is widely lauded for its site convenience. Amazon developed many innovative tools early on in the 1990s to bring it ever closer to customers. Among these innovations are customer reviews, 1-Click shopping, syndicated sales, and order verification via email.²⁹ One major decision that Amazon made early on was to bring order fulfillment in-house. Utilizing customer data for its decision, Amazon decided to build capacity and expertise for in-house distribution and fulfillment of products, as opposed to outsourcing those services. Through attention to detail and to customer satisfaction, Amazon has been able to execute its web vision by ensuring timely delivery of orders. By maintaining control of operations through fulfillment, Amazon has been able to get and stay close to its customers, bringing internet customers ever closer to instant gratification. In line with Amazon's strategy of listen, invent, and personalize, these early customer experience innovations fueled rapid growth.



Source: Amazon 10-Ks³⁰

In order to enable customer listening, innovation, and personalization, Amazon has maintained steady investment into software and website development over its operating period. It is worthwhile to note that until recently, Amazon's total investment in digital infrastructure and acquisitions has remained a very small percentage of net revenues. Although company reinvestment delays gratification for investors by nurturing growth within the company as opposed to redistributing wealth, reinvestment enables Amazon to run efficiently and continue to gain market share by funding continuous customer-focused innovation. This strategy may be worth considering for the GSA.

Today, Amazon's website is highly personalized and customized to individual users based upon their browsing and purchase history. Amazon's operations are evolving to bring Amazon's convenience and selection ever-closer to customers. The individualized attention Amazon provides spreads far beyond book recommendations. Customers can now regularly resupply household goods such as toilet paper and paper towels through Amazon's new "Subscribe and Save" service. Other recent initiatives, AmazonFresh and AmazonLockers, are built upon a state-of-the-art infrastructure to answer customer needs. Through AmazonFresh, customers can receive same-day "fresh" grocery purchases. Through AmazonLockers, customers can retrieve packages at locations that are even more convenient for them than home or office shipping addresses: AmazonLockers are offered in partnership with local chain shops. In addition, Amazon has acquired robots to reduce the cycle time from order placement to delivery and is adding on to its distribution network through warehouses in order to station inventory

closer to major urban populations. This host of new initiatives is bringing Amazon ever-closer to customer needs.

Metrics at Amazon:

In order to inform strategy, investments, and decision-making, Amazon tracks customer behavior and vendor performance in addition to its own gross margin and performance data. It tracks customer metrics at individualized and aggregate levels, and does so continuously. By tracking behaviors and performance data continuously, Amazon is able to identify problems early and to continuously test each component of its site and operations. By tracking data continuously in aggregate, Amazon keeps an eye on the overall health of its business and each of its subunits and is able to modify course quickly to take advantage of opportunities presented by emerging customer trends.

A sampling of Amazon's metrics:

Customer Level	Vendor Level	Amazon
Unique visitors	Perfect order percentage	Gross margin
Average unique pages/visitor/day	Order defect rate	Market share
Average minutes spent/usage day	Pre-fulfillment cancel rate	Reach
Average usage days/visitor	Late shipments	
Number of customers		
Repeat customer sales		

Customer Metrics: Amazon tracks nearly every component of user data. Websites often measure customer statistics on the amount of time spent on a page, often because more time spent on a page means that customers are not spending as much time shopping elsewhere. Amazon also measures time spent on pages and number of pages viewed in relation to customer sales, bookmarks, wish lists, and shopping carts. By tracking metrics thoroughly, Amazon can determine whether customers are finding what they need, whether customers visit Amazon regularly, whether frequency of visits are rising or falling, and whether page views are being translated into sales. Below are descriptions of some of Amazon's customer metrics.

- Average unique pages/visitor/day: How many unique (product or shop) pages visitors are viewing when they visit Amazon. In a sense, this measures the amount of "window shopping" customers are doing or how much of Amazon's content that they are viewing.
- Average minutes spent/usage day: This metric shows how many minutes customers are spending on Amazon's site per day. It is a way to measure how relevant Amazon is staying to customer's shopping needs, or how much time customers are thinking about Amazon and Amazon products.
- Average usage days/visitor: This metric measures how many days per time period that users
 are viewing the site. This metric can translate into sales insights, marketing insights, or
 infrastructure planning insights so that developers can ensure that Amazon maintains the speed
 and capacity that customers expect.
- Number of customers: This metric determines how many visitors are joining the site, and how
 many visitors ultimately become paying customers.
- Repeat customer sales: Repeat customers are essential for company growth and reduce the
 marketing costs per customer. Repeat customers tend to spend more at a business than firsttime customers and can be counted upon to return again and again for items that they need.
 This means higher profits for a company, reduced marketing cost, greater reach, and greater
 potential for growth as repeat customers ensure continued revenue streams and may spread
 the word about a company, encouraging future sales.

Vendor Metrics: In order to ensure that Amazon customers receive the widest possible selection of goods, and to ensure its own low operating costs, Amazon utilizes vendors who stock and ship items through Amazon. Amazon does not maintain control of these items but it must continue to ensure that customers are satisfied, so it monitors vendor activity very closely.

- Perfect order percentage: This statistic measures the number of orders that are fulfilled without error. These orders are processed correctly, shipped on time, are not exchanged and do not receive complaints.
- Order defect rate: Amazon strives to maintain an order defect rate of less than 1%. An order defect can be something shipped that was not as expected, missing parts, etc.

- Pre-fulfillment cancel rate: How many buyers change their mind before orders have been
 fulfilled? Amazon's business model brings it ever closer to customers, which is one reason it
 strives to achieve such fast delivery times. Longer lags in shipping give customers more time to
 change their mind or cancel.
- Late shipments: Shipping timeliness is a major component of Amazon's success. Significant delays in shipping can increased the perceived "cost" to the buyer, and unexpected delays reduce a product's value. To remain competitive with in-person shopping and to ensure customer satisfaction, shipments must be delivered on time.
- Percentage of Orders Refunded: Amazon measures the number of refunds that sellers grant
 and divides them by the sellers' number of orders over a specific amount of time. Amazon
 utilizes this metric in order to capture all dimensions of customer experience, and includes "any
 refunds initiated by the seller for any reason."³¹
- Amazon Seller Ratings: Amazon has recently introduced Amazon Seller Ratings in order to help vendors monitor their overall performance over the past calendar year. It combines various metrics in order to provide a holistic view on customer experience on a 0 to 100 point scale. The Amazon Seller Rating includes on-time shipments, cancelled orders, guarantee claims, and negative feedback. The rating factors into account negative customer events (late shipments, cancelled orders, etc.) as well as positive events, such as shipping with a valid tracking number, order arrival date within 3 workings days, and more³².

Metrics

Amazon measures the health of its wider business as well as the activities of each sub-unit. These metrics ensure that Amazon on the whole is growing, although some units may be more profitable than others.

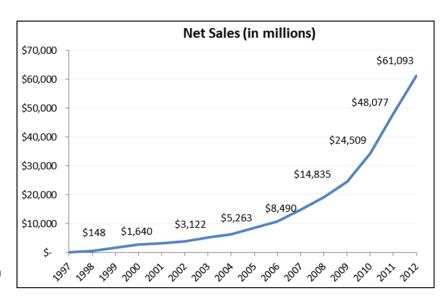
- **Gross margin:** Often identified as the margin on sales, gross margin is the difference between the cost of an item and its selling price. It is measured as the percentage profit that a company makes on the sale of an item before other costs are accounted for.
- Market share: Market share measures how well Amazon competes against its competition.
 When customers have a choice of where they spend money, are they spending through Amazon

or through a competitor? Market share encapsulates the amount of available revenue that Amazon captures as well as the relative health of the company.

• **Reach:** Reach measures the number of people visiting Amazon's site as compared to the total number of people within a given market, for example, the United States.

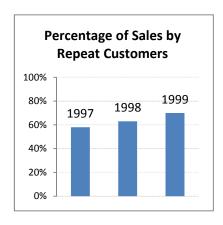
Results

Since its founding, Amazon has experienced steady growth in sales. In 2012, Amazon posted year-end revenues at nearly \$61.1 billion, a 127% increase over its 2011 income of \$48.1 billion. At the time of writing, Amazon's stock price was at \$369.17, up from a high price of \$276.71 in 2011 and of \$94.31 in 2007, reflecting steadily growing



enthusiasm in Amazon's potential by investors.³³

The growth of sales by repeat customers has also steadily increased. The graph at right shows the growth percentages of sales by repeat customers during the late 1990s. Customer loyalty, often measured through sales by repeat customers, is a significant driver in topperforming firms. Strong customer loyalty drives higher sales per customer as well as higher customer wallet share. It can also lead to continued growth as happy customers continue to make purchases through the company, driving higher revenues, and as they share



their experiences with others through word of mouth, encouraging more customers to try Amazon.

Best Practices

In today's business market, Amazon stands out from the crowd for its speed of innovation, customer ease of use, customer satisfaction, delivery speed, and phenomenal growth and market penetration. Amazon has achieved much over the past fifteen years and will continue to grow and innovate as it brings ever more products and services closer to customers. The below are samplings of Amazon's critical success factors that may have bearing on the GSA's growth strategy.

Vendor relationship management: Increase the breadth of products and services available through collaboration. This includes a host of "shops" that list products on Amazon, which greatly amplifies the number of items listed available for sale through the website.

Catalog management at Amazon: Amazon vendors input product information into standard Excel-based templates for creating product pages. Amazon also provides a standardized system for vendors to update product information by SKU. This standardized format makes data collection easy, ensures that product pages are up-to-date, and that product pages are standard. Therefore customers can expect to find minimum standards of information across all products that they find, regardless of vendor. This reduces customer pain when navigating through Amazon-managed inventory as opposed to vendor-managed inventory, and ensures the efficiency of vendor operations and uniformity of experience across Amazon and non-Amazon operations.

Customer ease of use: Amazon's early innovations, such as 1-Click Shopping, Customer Reviews, and Email Order Verification carried it far. They have been so instrumental to success that all are still in operation today. Amazon won third-party awards early on for its ease of use and web interface. However, Amazon's ease of use isn't static. Customers may now schedule same-day grocery delivery through Amazon, may specify next day-delivery for many Amazon items, and may have items delivered to "Amazon Lockers" for continued ease of delivery.

Speed of delivery: By building fulfillment competencies in house, bringing warehouses and inventory ever closer to customers, and by developing shipping partnerships with companies such as FedEx to ensure speedy delivery, products reach customers quickly and reliably with over 99% on-time rates.

Data-driven decisions: Amazon's decisions, such as building in-house fulfillment services, are made with customer-centric data. Amazon's choices are based on a customer-focused strategy and informed

with data. Therefore new initiatives and business model modifications can be made intelligently and funds can be invested where they are likely to generate high returns and future profitability.

In summary, Amazon focuses on creating value for both customers and partners.

Zappos

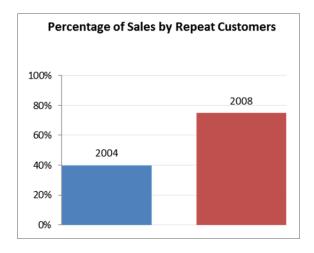
Background

Zappos, a web-based retail company, was founded in 1999. Zappos grew rapidly by nurturing a rapidly growing customer base, achieving \$1 billion in sales in 2008. Tony Hsieh, an early funder and later CEO of Zappos, has referred to the company as "a service company that sells shoes." Zappos is most known for its commitment to "customer delight," meaning that customer experience is defined by customer service that exceeds expectations and wows "everyone we come in contact with." Zappos was purchased by Amazon in 2009 for \$847 million in order to ensure continued growth, but with assurances that the company culture would not be affected.

Strategic Objectives

Zappos began as a cash-conscious startup and always operated that way. Its company mission was to achieve "customer delight," and so Zappos' strategic

objectives were to grow customer loyalty and a strong customer base. ³⁶ Happy customers were more likely to advertise Zappos by word-of-mouth to their friends, driving organic growth for the company. Happy customers were also more likely to return to Zappos over and over again for their shopping needs, and were more likely to be higher spenders when they did return. Although Zappos worked for growth, it did not set profit maximization as a core objective. Instead, like Amazon, it invested profits into the company. ³⁷



Operational Plan

In order to grow through word-of-mouth advertising and to develop loyal customers, Zappos focused its energies on initiatives that would beat customer expectations at every turn. Zappos measured customer satisfaction continuously, and used data to formulate an operational plan that would deliver higher customer satisfaction ratings.

Content Management: Zappos manages every detail of product content on their website. Zappos staff members develop written and visual content in-house for all of their products, for example, Zappos maintains a photography department to photograph merchandise in-house before advertising it on the website. Zappos' extremely detailed content management system provides pictures, videos, and specific details about products, which allows them to be extremely accurate when providing sizing, color, and fit information.³⁸ Zappos also includes product reviews below product listings, giving customers even more detailed information than they might receive in a brick-and-mortar store.

Website Speed: In 2006, Zappos' website was rated the fastest site in terms of page-load time at .879 seconds.³⁹

Ease of Use: The Zappos site is easy to navigate so that customers can find what they need quickly and easily. Zappos made a commitment to customers by advertising free shipping on anything, free returns with 365 days and an extremely accessible customer service team that can be reached 24/7. These policies have allowed for customers to have constant transparency and communication with the company.

Inventory Management: The inventory system is developed and upgraded in-house and utilizes open source software. Inventory management has moved to ~100% accuracy. Zappos stores their inventory where a random assortment of products are coupled in bins, for example, a certain size and color of a shoe are mostly likely stored near jackets, skirts, and bags. This is done to reduce accidents in sending wrong sizes/colors. Additionally, Zappos' website automatically updates when a product is no longer available-even if the product is already in your shopping cart.

Next-Day Delivery: Before Zappos became famous for its fast delivery, Zappos provided free delivery upgrades over what customers had expected. Zappos promises 4-5 days for delivery, when in fact merchandise usually arrives the next day. Zappos briefly experimented by offering all customers free

next day delivery, but found that customer satisfaction dropped. However, when Zappos re-reduced its shipping promises and items were received in one day, customers were thrilled!

Operations Based on Customer Feedback: Zappos conducts frequent customer surveys and uses the results to help managers make decisions. For example, it reviews its Net Promoter Score (described below) daily.⁴⁰

Zappos does not compete on low prices and does not discount heavily because it is not a low-price competitor in online retail. Instead, Zappos competes for market share based on customer service. In order to maintain customer service levels that consistently exceed expectations, Zappos maintains strong margins. In essence, Zappos invests in aspects of customer experience (such as rapid delivery) in order to develop strong customer satisfaction that in turn drives growth. Zappos achieves loyalty through striving to exceed expectations – providing customers with an easy to use platform as measured by speed, information, ease of use, and ensuring rapid delivery.⁴¹

Metrics

Zappos utilizes a Net Promoter Score (NPS) survey daily. Net Promoter Score is a management tool designed to measure customer satisfaction and more. It evaluates the loyalty of a firm's customer relationships by asking the likelihood on a scale of 0-10 that a customer would recommend a sale or service to a friend. Those who rate from 0-6 are detractors, while those who rate from 9-10 are promoters. The difference between promoters and detractors is a company's Net Promoter Score. Zappos maintains an average score of 93%. The majority of world-class companies are only receiving a 20-50% score on average. NPS surveys provide an added advantage by incorporating qualitative feedback alongside a number: analysts and managers can examine a series of responses to determine just what it is that their organization is doing well or poorly.

Zappos also tracked a Happiness Experience Form (HEF), which measures four factors on a 100-point scale, encompassing a personal emotional connection and whether a customer service provider achieves a "WOW" experience.⁴³ Each call center employee aimed to keep an average of 50 (out of 100) or higher each day. After implementing the HEF, Zappos' NPS rose five percent.

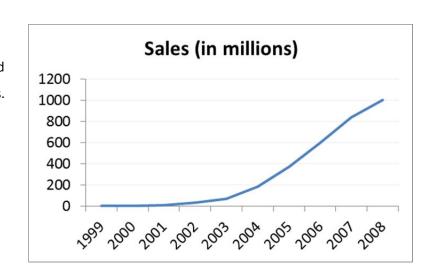
Zappos managed inventory accuracy up from 95% to nearly 100%, while managing 70,000 to 80,000 SKUs. In order to achieve such strong inventory accuracy, Zappos developed in-house, open-source

solutions to meet their needs exactly. Eventually, Zappos built accuracy and software development into a core competency that later became a profit center for the company. 44

Another successful metric was their call center's abilities. Zappos employed 1500 persons and those employees served 9 million customers. The call center received 5,000 calls daily and each was answered in less than 20 seconds. The call center metrics focused on answering speed to determine their quality: they did not measure efficiency. The call center employees' job is to focus on the customer and to make them satisfied. At the time of writing, the longest call taken by a Zappos call center employee lasted over ten hours. These employees have the authority to make any decision in order to help a customer. Employees are not required to connect someone to an employee with a higher rank because of challenges, and are encouraged to solve a problem with the first call.

Results

Zappos' plan was to grow based on word of mouth and through repeat customers. Zappos experienced incredible growth from 2004 until 2008. In 2008, 75% of Zappos sales were made to repeat customers. In 2009, Amazon bought Zappos for \$847 million.



Best Practices

Zappos business operations encompass multiple best practices. Most notably, Zappos measures customer loyalty at every transaction. Zappos' customer loyalty survey provides qualitative insight into issue areas early on. Consumer feedback allows management to make immediate changes to better serve consumers.

In addition to customer loyalty, Zappos tracks operational data regularly. By tracking customer data, Zappos generates insights and can anticipate consumer needs, which enables the company to consistently deliver customer delight.

Additionally, Zappos develops innovative solutions to serve its business needs. It does not pursue innovation for innovations' sake; rather, it tracks customer delight at every turn and makes decisions

that will improve customer satisfaction. Zappos develops software and inventory management in-house. In-house development allows Zappos to make swift, appropriate change based on their fluctuating needs and allows Zappos to keep information technology solutions as simple as possible. By operating and managing information technology in-house, Zappos has control, making all IT processes less difficult.

Long-term planning is also a key component of Zappos best practices. Each year, Zappos expands IT infrastructure to meet an anticipated demand, allowing 6 months of testing before the holiday season in every calendar year. By managing software development in-house, Zappos ensures long-term relationships between coders and company, so that both communicate regularly, openly, and honestly in order to create the best possible experience for customers when they go to Zappos for their shopping needs.

Skanska

Background

Headquartered in Sweden, Skanska is one of the world's largest construction companies. Skanska was founded in 1887 and has 57,000 employees with annual revenues of \$15.11 billion in 2004. In 2004, Skanska's annual spend was \$4.36 billion. In order to run its construction business effectively, Skanska negotiated many raw materials purchases and contracted out value-generating activities to subcontractors. As a multinational company with significant reliance on employees and subcontractors, Skanska employees sometimes had trouble presenting a united front to suppliers, or signing contracts that would cover all of the company's needs in a single area. In addition, employees and purchasing managers were not utilizing signed contracts and were instead choosing to lean more heavily on their favored suppliers, which did not lead to prices that were favorable for Skanska. Therefore, Skanska was not realizing the full potential of its bargaining power with suppliers and was not achieving the low prices it knew were possible.

Strategy

Skanska was a well-established business looking to achieve two strategic objectives that are relevant for the GSA: Increasing adherence to negotiated contracts and reducing costs. These objectives are fundamentally linked to the long-term goals of the GSA. As an entity, the GSA exists to leverage the purchasing power of the government and yet struggles to find and retain customers. Skanska's

procurement team also exists to leverage company purchasing power, and yet Skanska employees were not complying with existing contracts, reducing company efficiency and potential cost savings. Increased compliance and reduced costs would reduce purchasing costs to help Skanska better realize economies of scale across its purchasing operations. Skanska knew that a more tightly-knit company would be able to pass on additional value to its customers. In 2004, Skanska made the decision to implement e-procurement as part of a company-wide shift in strategy.

Operational Plan

In formulating an e-procurement plan, Skanska relied heavily upon its business strategy to drive information technology implementation. It first developed goals that were in line with its corporate strategy and then selected a vendor who would bring Skanska closer to its goals. Skanska's corporate goals were: close cooperation, standardization of products, continuous cost reduction, and 100% compliance with established processes to ensure all purchasing activities were in line with the company plan.

As a global construction company, Skanska's core competencies were creating large facilities and less in designing optimal user interfaces. Therefore, the company decided to outsource e-procurement implementation to a vendor. With these goals in mind, Skanska developed selection criteria for an e-procurement solution. Among the criteria Skanska used in determining a vendor were: functionality, delivery capacity, cost, long-term commitment, catalog management, and the utilization of software as a service (SaaS) model. Ultimately, Skanska partnered with IBX.

Skanska implemented a 5-year partnership with IBX. The long-term nature of the contract provided an opportunity for IBX and Skanska to co-develop a tailored approach that would fuel Skanska's business transformation. IBX tailored its IBX eProcurement program to meet Skanska's global needs: for example, in virtual warehousing and in functionality that provides for sub-contractor utilization of the e-procurement program. By onboarding sub-contractors to its purchasing program, Skanska was able to ensure cost savings and quality across projects. Furthermore, the deep partnership between Skanska and IBX enabled IBX to shine through providing content management and user training services. This approach, building on the core competencies of IBX, better enabled Skanska to deliver a business-wide strategy and business transformation to achieve additional value for its clients.

Metrics

In order to measure the success of the implementation of e-procurement systems, Skanska chose metrics that were in line with its strategic objectives. Skanska studied and measured its relevant processes in order to build a procurement system that would work with its business activities. Process data was also used in the development of key performance indicators to develop incentives for managers.

Contract compliance: Early on, Skanska set a target rate of 100% contract compliance, which is defined as spending channeled through the e-procurement system. A move to e-procurement and disciplined contracting would require a shift in organizational culture, and the only way to ensure that such a change would stick would be to measure and support it very specifically.

Users and suppliers trained on system: Skanska measured staff capacity as a key outcome of its e-procurement switch. A system can only be as good as the people who use it, and Skanska provided the system with a stronger chance for success by ensuring that internal and external stakeholders would be well-equipped to use the system. Skanska contracted with IBX to provide training on the new system and set the number of users and suppliers trained on the system as a key performance metric.

Key Performance Indicators (KPIs): When developing its new e-procurement system, Skanska measured the details of its existing processes. These details were used to develop KPIs specific to the purchasing process and were used to create incentives for managers.

Cost savings: Finally, Skanska measured the financial impact of its programs. The shift to e-procurement one was an organizational strategy decision as well as a cost-savings decision, and Skanska would need to understand the return on its technology investment in order to be able to inform future technology and purchasing decisions. Therefore, Skanska measured total cost savings through new negotiated contracts as well as the cost savings generated by improved contract compliance. By measuring these cost savings, Skanska would be able to better identify the gains in bargaining power it would realize by leveraging its full buying volume on new contracts and through contract utilization.

Results

Skanska's mission was to become one of the best construction services in the world, and critical components of Skanska's operation were adherence to established processes, transparency, and unity. Previously, Skanska's project-based model had led to uncoordinated purchasing. Skanska implemented e-procurement, with a focus on unity, as an aspect of company strategy.

Spend through System: Within months of implementation, Skanska employees were driving 100% of spend through the new e-procurement system. As of 2009, Skanska's e-Procurement system handles 250,000 electronic purchases each year.⁴⁷

Increased Compliance: Employees demonstrated increased compliance with established processes. This included formal purchasing procedures, usage of standing contracts, and a larger amount of buying flowing through preferred contractors. In fact, Skanska has driven contract compliance up to nearly 100%, meaning that purchasing activities flowing through the new system are being made through established contracts that better leverage the scale and negotiating power of Skanska.

Improved Transparency: Skanska was able to generate improved transparency into global procurement by tracking purchasing through a procurement system. Greater transparency and more available data supported improved decision-making in procurement. Skanska's procurement transformation supported the greater company-wide goal of increased transparency throughout the organization. Now, Skanska realizes "measured and guaranteed outcomes" throughout its procurement program, reducing uncertainty in its business model.⁴⁸

Price reductions: Skanska was able to negotiate e-procurement price reductions and savings on new contracts by realizing stronger economies of scale and by adopting a more efficient way to do business: e-procurement. After several months, Skanska had negotiated \$311,500 in e-price reductions and \$4.98 million on new contracts. We have not been able to obtain more updated data on Skanska's cost savings as a result of its e-procurement initiatives.

Continuation of Program: Skanska's implementation and use of e-procurement systems is dynamic. In 2009, Skanska and IBX signed a new five-year e-Procurement contract, which added eRequest and eSourcing to the platform. 49 Skanska's eProcurement program has continued to evolve as

management focuses on continuous improvement, especially in regards to ensuring high quality, cost reduction, and growth in number of products and services available through the system.⁵⁰

Best Practices at Skanska

Skanska serves as a best practice example for implementing procurement solutions that are integrated with its mission, business model, the global marketplace, and stakeholders.

Strategic Focus: Skanska undertook an e-procurement transformation as a part of its company strategy, implementing purchasing reforms to strengthen its business model and its standing in the marketplace. This strategic focus led Skanska to choose IBX as its long-term technology provider. IBX supported Skanska throughout program implementation and later assisted with full supplier integration and catalog management, ensuring the Skanska staff, contractors, and suppliers would move together to adopt the new system and that the system would be fully equipped to support them. Supplier integration was a key component of the success of the new model, especially since Skanska's global positioning includes high quality materials and an environmentally friendly supply chain.

Top management support: Management realized the opportunities in cost savings and market positioning that the company could achieve by implementing a world-class procurement system. Therefore, they played a prominent role in crafting Skanska's partnership with IBX and in implementing sound change management policies to ensure a smooth rollout and long-term technology adoption. They set goals, provided organization-wide support, and focused on process improvement. 51

Measured processes to create custom

metrics: Skanska measured the details of the new procurement process, ensuring transparency and a results orientation for the new system. The details of the new processes provided the basis for the development of key performance indicators (KPIs), which were instrumental in developing incentives for managers. ⁵²

"Holistic **innovation** and improvement of key performance metrics can only be achieved by connecting the owner's business goals, the individual system metrics and the operation of the facility as a whole."

-Skanska: Delivering Mission Critical Solutions.

Scotland

Background

In order to illustrate a public sector approach to eProcurement, our report highlights the Scottish government before, during, and after their reformation of public services. The Scottish government sought to reform its approach to eProcurement. During the 2000's, the Scottish Government had no strategic approach to eProcurement at the national level and a limited approach at the local level. The platform that the Scottish Government used to display information caused extra expenses to third parties and small to medium enterprises (SMEs). There were high transaction costs which excluded many companies and provided large barriers to entry for others. Additionally, a lack of spend data brought the government's transparency into question. What really propelled the reform was the contribution of the McClelland Report that was written to analyze the Scottish government and their eProcurement data and capabilities. This report led to the state wide, Public Procurement Reform Program headed by the government. John McClelland, CBE was the individual who assessed the government and formulated an official report making recommendations for fixing the system. This review was completed in 2006.

John McClelland's background of expertise is in the field of IT in the public and private sectors.⁵³ Previously, McClelland has worked as the VP of Worldwide Operations of IBM's personal computer company and President of 3Com's Business Networks Company.⁵⁴ John's trusted background and knowledge base allowed him to be the catalyst for change within the procurement reform.

Strategy

Scotland's goals were to increase collaboration between all sectors and sizes of business within Scotland, and to create a singular platform that was accessible by all companies, sectors, and individuals. This would be done by organizing all information in a singular eHub. By implementing this singular platform, Scottish government achieved greater transparency for contracts, suppliers, and consumers. Not only would the singular platform be accessible to all, it would house information of previously negotiated contracts. Moreover, if an individual or company needed legal or practical advice, there would be frequent points of access to obtain assistance. The singular platform really allowed for heightened transparency. An added benefit of increased transparency was ease-of-use: it became easier

for users to navigate the site as well as to make informed decisions. An additional driving force behind the Scottish government's transformation was increased efficiency: Scotland wanted to e-procurement transformation to lower costs and deliver greater value. ⁵⁶

Operational Plan

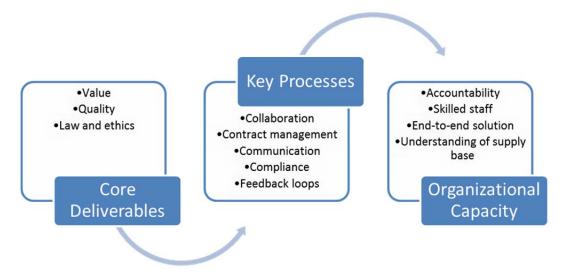
Scotland developed a formal plan in order to modernize its procurement system to develop stronger collaboration with vendors and to increase government transparency.

Core Deliverables: According to the 'Best Practice Indicators for Public Procurement in Scotland: Summary. The Scottish Government, Edinburgh, 2008,' Scotland utilized the challenges facing its eprocurement system to in its strategic planning process. This included: "low penetration of the online platform, fragmented operating processes and redundant processes and costs, poor industry engagement, lack of sustainability, and lack of oversight and governance." To make this change, the Working Group deliverables were deliverables which would be expected by the procurement system. Moving forward, Scotland's objectives were to adhere to value, quality, law and ethics. Value for money spent was crucial to the success of the reform because long-term sustainability was possible if they achieved savings while delivering goods and services. Quality meant that the timely delivery of goods was essential. While it needed to be balanced with financial priorities, Scotland ensured that it achieved savings but that quality did not suffer. Law and ethics were the final component of the core deliverables. Scotland needed to spend public money transparently, in an ethical manner that adhered to Scottish law. Their commitment to good governance would be vital to their success.

Key Processes: Key processes would become the backbone for the reform and were essential if they were to achieve the core deliverables. Scotland improved its business processes, driving improved operations through the present day. Collaboration means the Scottish government works with all people, even outside their organizations, in order to develop the best ideas. This encourages and reduces the number of duplicated projects and contracts. Contract management personnel are an integral part of this process because procurement teams are overseeing contracts from start to finish. Contract management teams provide general information, legal advice, and support that users need before, during and after procurement transactions. It is essential that the procurement teams are knowledgeable about what consumers wants in order to be able to clearly relay that information to suppliers. This relationship provides the foundation for happy, repeat customers. Communication,

compliance, and feedback loops comprised Scotland's other key processes. In order to consistently serve the needs of the consumer, the procurement teams must be ready for change and development. Feedback loops allow for the teams to hear direct feedback from the consumer about the user experience, their concerns and likes, and the functionality of the procurement process. Receiving and analyzing customer feedback allows the procurement teams to be directly aware of their performance. It allows them to understand where changes need to be made in order to suit the needs of their consumers through the goods and services they provide.

Organizational Capacity: Organizational capacity encompasses accountability, a skilled staff, end-to-end solutions, and a thorough understanding of the supply base. All of these areas of importance contribute to a functional, well-trained staff that sees procurement as an exciting career. These staff members hold themselves and their co-workers accountable for their work and understand their enormous role in the procurement process. Their understanding of customer demand means they have the knowledge to make adjustments according to what is needed to maintain a competitive supply base. ⁵⁹ A well-equipped staff adds enormous value to consumers navigating the government procurement process.



Source: The Scottish Government⁶⁰

Performance Metrics

Scotland understood that parameters and metrics would be vital to the success of its e-procurement reform. Scotland to use performance metrics to measure efficiency, e-procurement, collaboration, skills, and compliance. These five areas would allow them to measure success and make progress towards specific performance goals. Each area encompassed several indicators of performance.

Scotland measured efficiency through cash and non-cash savings as well as customer satisfaction to ensure quality. Collaboration measures the amount of spending done through collaborative contracts. If several suppliers operate through a singular contract, it reduces the number of unnecessary contracts and reduces waste. Compliance measures the proportion of total spending with suppliers who are on contract. Additionally, frequent user surveys administered to help measure whether the procurement hub and other resources are providing accurate, useful information and whether processes are user friendly.

Skills measures investments in human capital. Training programs and additional resources invested into the staff ensure that eProcurement is an area where they want their career to blossom. By having a highly skilled, enthusiastic staff, Scotland projects they will increase efficiency and ensure quality.

E-Procurement is done through Catalogue Content Management (CCM) and is contracted to European Dynamics. They provide the online hub for the Scottish government. However, all Centers of Expertise (CoEs) manage their own catalogues within CCM.⁶¹ The web hosting is provided by Elcoms' PECOS which provides a Purchase-to-Pay (P2P) function. This electronic host has the capabilities for elnvoicing, self-billing and government procurement cards.⁶²

Results

Audit Scotland indicates that Scotland's e-procurement reform made progress over the first three years of the reform. In 2006-2007, there was a total of over 100 million pounds in savings. After the first three years and the end of 2008, the reform allowed the Scottish Government to save approximately 327£m. By the end of 2010, Scotland had saved a total of 799£m. These savings came from successful execution of collaborative contracts, reduction in administrative costs through free participation, and transparency, including reductions in frivolous spending. There were also definitive savings through Scottish Government-led contracts. From 2008 until halfway through 2011, the total savings amounted to 95£m.

Best Practices in Government

According to *Improving Public Sector Purchasing, Audit Scotland,* nine best practices indicators were determined in order to measure change, growth, savings, and success to ensure achievement of this program. Three of the nine best practices indicated were goals that the Scottish government sought to

achieve through reform. In fact, those three are the in the top four of the Best Practice Indicators (BPI) list.

- Efficiency Savings: Spending data was tracked in detail by the government. Where and how
 money was spent was crucial to understanding where they would be able to save money and
 become more efficient with their spending. Supplier level was also determined through detailed
 tracking in order to understand customer and supplier needs.
- 2. Customer Satisfaction: It was vital for Scotland to measure the satisfaction of their customers in regards to eProcurement. It was key that they were achieving high standards for their users, but also to ensure they were actually reforming the system. It was important in their reform to create a user friendly system. Surveys, frequently completed by users, gained feedback about the changes. Additionally, measures such as free entry into the hub and free access to information and advice ensured openness and satisfaction.
- 3. Collaborative Contracting: This aspect was vital in reducing administrative costs, confusion, and challenges. By awarding a singular contract to several suppliers, Scotland was able to save on administrative costs (for writing contracts) and they were able to maximize limited resources. This also cut down on confusion of what contracts were available and made locating what was needed much easier. Additionally, contracts were bracketed so that small-to-medium enterprises (SMEs) had the ability to compete for contracts. SMEs generally competed for the small to medium sized contracts with limited competition from the larger companies. In order for eProcurement to be successful in Scotland, the government reduced barriers to entry in government procurement so that competition could thrive. This allowed smaller organizations to utilize the online hub without fear of losing bids due to size. Large companies now competed in their own pool of larger contracts.

IV. Best Practices

In order to implement and maintain e-procurement systems, best-in-class organizations demonstrate commitment to excellence in e-procurement throughout the lifecycle of product development. Background research and case studies show that best-in-class companies adhere to the following best practices.

Best Practices Across Industries								
Organizational Strategy	Data Collection	Collaboration	Dedicated management	Ease of use	Performance Metrics			
Focused on developing a core competency or key capabilities to drive growth	Data on processes and customers to fuel adaptive decision- making	With business partners, suppliers, and vendors to ensure excellence	To fully fund initiatives, provide strategic direction, and drive change management	Business processes will be sound, customers will be able to achieve desired outcomes, user pain reduced	Developed in concert with strategy, based on existing processes to drive manager behavior			
Example: Zappos	Example: Zappos	Example: Scotland	Example: Skanska	Example: Amazon	Example: Amazon			

Organizational Strategy

Best-in-class organizations develop an organizational strategy aligned with company mission and make operational decisions along a strategic route. At Zappos, the underpinning principle of operations was (and continues to be) "customer delight." Zappos made operational and strategic decisions that would bring its business closer to customers and encouraged customer service to do what they could to ensure that customers would be happy with their Zappos experience. This focus on delight provided a single point of focus as a homing beacon for operational decisions: next-day shipping, customer service incentives, catalog management, and new product development. The principle of customer delight was used to develop staff training and recruitment programs, channeled Zappos product delivery, guided Zappos supplier and catalog management. The single focus on customer delight enabled Zappos to adopt innovations that were beneficial to its business model, such as those delivering insight into customer preferences, and to expand service and catalog options based on customer demand.

Data Collection

Best-in-class companies collect data on operations in real-time in order to fuel short-term decision-making and long-term strategic planning. Zappos and Amazon provide clear evidence of managerial use of continuously collected data. One clear, counter-intuitive outcome, based on this collected data was, for example, Zappos' decision to bring order fulfillment in-house, after analysis of the data demonstrated that their customers' satisfaction was higher than when orders were filled by third party providers, even logistics experts. So as many firms were outsourcing their customer fulfillment, Zappos was bringing it back in-house.

Collaboration

E-procurement platforms involve multiple stakeholder groups, and best practice organizations collaborate with vendors, suppliers, and other stakeholders in order to create and grow procurement solutions that work for everyone. Scotland provides a best practice example of enabling collaboration through revised processes in awarding contracts. In order to enable more evenly distributed competition while still achieving social goals, Scotland bracketed its contracts, reserving smaller contracts for small and medium enterprises. Bracketing contracts reduced confusion among government contractors, enabling all parties to focus more time and attention on fulfilling contracts and agency missions than administering contract agreements.

Dedicated Management

Management provides valuable lifecycle support for implementing new initiatives within an organization by providing budget support, incentivizing users to adopt new technologies, and by ensuring that e-procurement initiatives align with strategy and benefit an organization as a whole. Skanska serves as a best practice example for management dedicated to technology implementation as an active component of company strategy. Skanska initiated its e-procurement program first as a purchasing program and second as a technology program. As a result, Skanska management initiated process reviews and developed a long-term relationship with its vendor, IBX, which provided a suite of initiatives that would help Skanska achieve strong capabilities in e-procurement. Skanska leadership also practiced effective change management in order to encourage staff to adopt its new program by articulating support for the program, establishing clear expectations, and providing written guidance materials for staff.

Ease of Use

Best-in-class e-procurement solutions provide solutions that make the process of ordering goods and services easier for users. For example, organizations can reduce the number of clicks-to-order or the amount of time or search required to complete an order. Amazon is well-known for its early patents in 1-click checkout as well as its customer review and email-order verification innovations. In addition to a strong and ever expanding customer base, Amazon can boast numerous third-party awards for ease of use and customer-friendly design. Amazon's easy-to-navigate page, with "customer-centric" storefronts that provide recommendations based on a customer's browse and order history, enables customer to order merchandise in very few clicks.

Performance Metrics

Finally, organizations identify metrics that directly relate to progress towards organizational goals. Amazon is a best practice example for its development and use of performance metrics. In addition to standard measurements already utilized by the GSA, such as gross margin and market share, Amazon closely monitors order processes such as perfect order percentage and late shipments. Amazon is well-known for its use of customer metrics, measuring unique visitors, number of customers, and average unique pages per visitor, average usage days per visitor, and more. These metrics enable Amazon to understand its reach throughout its target population as well as the amount of attention it commands from current customers, enabling the company to ensure continued progress towards becoming the most customer-centric company.

Aberdeen Study

Other benchmarking studies have made conclusions aligning with the recommendations of this report. In 2005, Aberdeen Group released a report entitled "Best Practices in E-Procurement: Reducing Costs and Increasing Value through Online Buying." The Aberdeen Group developed the following best practices: ⁶³

- Procurement leaders seek and attain support and funding from management
- Cross-functional teams achieve excellence in business processes before implementing automated solutions
- Internal stakeholders utilize change management efforts to drive system adoption

- Suppliers are actively engaged in e-procurement initiatives
- Suppliers are "enabled" to utilize new solutions

The study also recommends that businesses focus on ease of use, efficient processes, and metrics to drive procurement excellence. This report accepts the best and next practices and recommendations of the Aberdeen report while emphasizing the importance of dedicated organizational strategy and continuous data collection and use to drive decision-making throughout an organization's life cycle.

Measuring the GSA Against Best Practices

GSA serves as a center of web presence expertise for the federal government. It provides thought leadership in areas such as usability and web page metrics for its customer agencies, enabling them to better connect with US citizens. GSA is facing some difficulty in regards to its delivery of e-procurement solutions to agency customers, and the following section analyzes GSA's delivery in each of the six best practice areas.

Measuring the GSA Against Best Practices							
Organization	Organizational Strategy	Data Collection	Collaboration	Dedicated management	Ease of use	Performance Metrics	
Amazon	V	√	V	V	✓	V	
Zappos	/	V	V	1	✓	/	
Skanska	/	/	/	/	√	/	
Scotland	/	V	V	1	V	/	
GSA	-Existing, but difficult to follow	-Yes -Fuels decisions?	-Agencies: Yes -Vendors: No	-Internal: yes -Funders: no	-Limited	-Limited	

Organizational Strategy

The GSA regularly releases strategic planning documents covering topics from sustainability to multiyear IT strategic business plans. The FY 12-15 Information Technology Strategic Business Plan highlights the GSA's mission, three priority goals, and the following IT mission and vision. The GSA's mission, in this document, is as follows: The GSA mission is to use expertise to provide innovative solutions for our customers in support of their missions, and by so doing, foster and effective, sustainable, and transparent government for the American people.⁶⁴

This document lays out the GSA's three goals: innovation, customer intimacy, and operational excellence. Then follows the IT guiding principle: "Information technology that enables excellence in the business of government," and a lengthy IT vision. ⁶⁵ These multi-pronged goals can be difficult to follow for stakeholders on many levels, from suppliers to staff and customers. In a word, the GSA's mission is unclear. For example, consider the varied business priorities the GSA might set depending on mission interpretation: if the GSA's central mission were to provide innovative solutions to customers, the GSA would pursue a very strong research and development budget while staff performed regular product and web portal testing. It would deliver the most up-to-date e-procurement platform possible. On the other hand, if the GSA pursued effective government for the American people it might pursue speed of operations in packing and shipping supplies, focusing its investment on warehousing and inventory availability. Or, if the GSA were focused on a transparent government for the American people, it might focus the bulk of its efforts on documenting and making available records of government transactions and strategic planning.

Despite its regular strategy planning, as of October 2011 the GSA did not have an agency-wide web strategy. The GSA maintains a "comprehensive web strategy for its two major web presences: for GSA.gov and for USA.gov."⁶⁶ This means that when reviewing and narrowing its annual strategy goals, GSA should imagine how e-procurement efforts and website will fit into its overall organizational strategy. A thorough strategy review will help the GSA make choices regarding its e-procurement administration.

Data Collection

Although the GSA regularly collects data on various aspects of its acquisitions business, such as data on contracts valued over \$3,000 through the Federal Procurement Data System – Next Generation,⁶⁷ percentage of contracts awarded to small businesses, and annual gross margin,⁶⁸ specific data collection on customers activity on GSA's procurement platform appears to be somewhat more limited.

Annual Survey: GSA measures customer feedback on an annual basis through Federal Acquisition Service Customer Survey. The FY 13 Customer Loyalty Study was conducted from May 7, 2013 to June

10, 2013 and received 12,156 responses.⁶⁹ This year, the FAS Customer Loyalty metric dropped from 8.0 to 7.6, despite the Agency's renewed focus on gaining market share.⁷⁰ Customer Loyalty is an informative metric, but we see that the GSA only receives responses on this topic once per year. Therefore the metric provides an annual insight into GSA progress towards its goals, this measure is not robust enough to provide up-to-date information for GSA e-procurement, for example, annual changes in customer loyalty cannot measure the success of roll-out of a new ordering process as opposed to the success of modified logistics arrangements if both are implemented in the same fiscal year.

Foresee: Foresee has partnered with the U.S. Federal Government since 2003 to create the American Customer Satisfaction Index, which is used broadly across government websites.⁷¹ Foresee is a widely recognized expert in customer analytics, but it is not clear how GSA staff are utilizing this information for managing e-procurement sites and processes.

Howto.gov: GSA serves as an information hub for best practices for U.S. Government websites. It has published how-to guides on digital analytics as well as digital metrics for federal agencies.⁷² Our research into best practices at top-performing businesses demonstrates that metrics such as those described by GSA are regularly monitored and used as inputs for managerial decision-making.

We have not been able to determine the extent to which GSA employees regularly monitor performance information and use data analysis for e-procurement improvement. Anecdotal evidence and a preliminary investigation of GSA procurement websites suggests that GSA solutions are not currently optimized for ease-of-use. Customer tracking and analytics can lend insight into problem areas of procurement websites that might discourage customers from completing a purchase.

Collaboration

As a long-standing component of the GSA's mission, service to agency customers has long been a top priority for the GSA. According to our research, the GSA actively works with customers to develop a deep understanding of their needs for buildings, goods, and services.

With respect to suppliers or vendors, GSA collaboration appears to be somewhat more limited. Although GSA negotiates contracts with suppliers and emphasizes small business inclusion for pre-approved award schedules, GSA has limited visibility into suppliers' operations. Therefore the GSA has limited

understanding and control over vendor order processing, packaging, and shipping; all factors which have significant and direct impact on end-customer satisfaction.

Dedicated Management

Internally, the GSA appears to have some dedicated management, although recent scandals indicate that not all management staff is dedicated to the mission of the agency. Negative press from the scandal has led to reduced customer trust⁷³ and has likely reduced the satisfaction of remaining staff and employees.

In best/next practice companies, management provides support for company initiatives by promoting company mission and providing the resources necessary to achieve a company mission and evolve internal capabilities along a single path.

Ease of use

Best/Next practice examples of companies with easy-to-use websites have won external third party awards. Amazon has consistently placed first in lists such as the American Consumer Satisfaction Index, with a score of 86 compared to an online retail average of 81 in 2011. For government, the score on average was 67.0. The ForeSee E-Retail Satisfaction Index scores on four main factors: functionality, merchandise, content, and price on a 100-point scale. Amazon, with an all-time high score of 89 in 2012, again placed first among third parties. The average score for retailers has plateaued at 78 out of 100 for the past three years.

The GSA defines its web priorities in its how-to on usability: "online services... should be easy to find and use." When evaluating the functionality, merchandise, content, and price of its e-Procurement, the GSA should strive to provide sites that deliver on all categories. It should keep in mind, however, that a single focus on lowest possible price is often not a winning company strategy and can negatively impact its market share if it is not a market leader for lowest price: without significant investment on functionality, merchandise, and content, the GSA may lose customers to a low-price leader with an easier to navigate website.

Performance Metrics

The GSA measures its performance against various agency goals, which include cross-agency priority goals and agency-specific goals. For FY13, GSA listed the following goals: savings, efficiency, service, innovation, customer intimacy, and operational excellence. The GSA also identified short-term agency priority goals: sustainability, transparency, and real estate excellence. The GSA utilizes metrics such as percentage of volume attributed to small businesses, cost savings achieved through SmartBuy, direct costs as a percentage of gross margin, and customer loyalty. These goals are necessarily varied to achieve a multitude of priorities, so it may be difficult for managers and staff to determine which goal is of most importance.

Tony Hsieh of Zappos, a best-practice agency for both strategy and performance metrics, set a long-term, overarching goal in 1999: hit \$1 billion in annual sales, and make it to the list of best companies to work for.⁸⁰ These twin goals identified Zappos main objective and how to get there. Zappos would grow to reach \$1 billion in sales, and would do so by building a people-centered culture.

The GSA's mission is to deliver the best value in real estate, acquisition, and technology. ⁸¹ Performance metrics should help clearly identify how the GSA will achieve best value by prioritizing various initiatives.

Recommendations

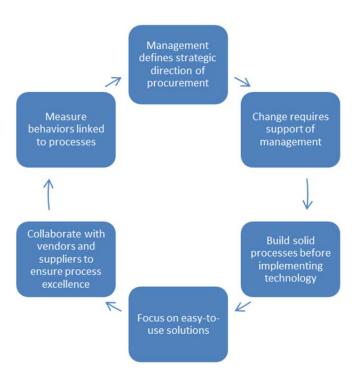
In light of the operating environment of the GSA and the best practice examples for building eprocurement systems highlighted in this paper, this paper offers six linked recommendations for building and maintaining a procurement system that steadily evolves, bringing the GSA ever-closer to its mission.

This report examines four case studies in e-procurement transformation to explore best practices across public and private sectors. These best practices will be used to conduct a benchmarking analysis of the operating environment of the Government Services Administration in the field of e-procurement and then to provide strategic recommendations that would assist in the development of a technology roadmap for the organization.

Although some professionals caution against an over-reliance on the use of best practices, benchmarking is a useful tool that can help an organization develop insights into business practices that

work. Organizations achieve success for a multitude of reasons, including timing, markets, and available financing. Best practices do not promise identical results and do not recommend identical efforts. Best practices can, however, delineate paths of action that an organization can take in order to develop stronger business practices. Defining and implementing strategy and collecting data will help GSA build stronger business processes and identify paths of innovation it can take that can help the agency evolve. As the GSA improves its processes in areas such as data collection, customer intimacy, and ease of use, it will be better able to compete for the business of the U.S. federal government on a higher level.

The six linked recommendations are provided below.



Develop a strategy with a single-minded focus.

Both the GSA and the IT department of the GSA have detailed strategy documents that identify numerous strategic goals. The GSA's strategy has 3 pillars: innovation, customer intimacy, and operational excellence. The GSA must meet interagency goals set by Congress and the President, it must meet the tiered and annually-changing operating goals of its own agency, and it must address challenges

that arise in the course of doing business. These varied goals can create competing priorities that result in confusion over which priorities should take precedence in decision-making and resource allocation. The result can be a fractured customer experience that unravels over time.

Our research into best practices has shown that companies achieving innovation have done so by developing new processes and technologies to meet a unified vision, such as "customer delight." It may be helpful for GSA to identify one of its three pillars of strategy, such as customer intimacy, and make strategic choices that drive agency growth down one path. This type of strategic development does not preclude excellence in multiple areas, but should help GSA compete for agency business. For example, If GSA decides to dive into a deeper understanding of customer intimacy, they should reconsider their customer loyalty surveys: instead of implementing these once per year, it may be wise to develop instant customer feedback that can provide real-time visibility into the strength of their business processes and systems, product pricing and relevancy, or the timeliness of vendor delivery. The second step of this process would be to ensure that GSA managers are regularly making decisions based on data that tracks progress towards customer intimacy and, ultimately, the agency vision of growth in market share.

Maintaining an organizational focus on clear goals can have a strong positive impact on employees. Several years ago, NovaCare, formerly known as InSpeech, began losing its mission focus after acquiring several companies. As the company turnover rate for employees gradually climbed to 57%, InSpeech was losing its ability to retain customers. Management realized that employees did not share a common set of values. Re-defining company vision, purpose, and mission helped the company to reduce turnover to 27% in three years while also improving staff recruiting.⁸²

Senior GSA leaders must develop and implement a change management strategy.

Management dedicated to implementing strategic initiatives is crucial to the implementation of an IT strategy that also delivers on organizational strategy. This recommendation is two-fold: first, GSA management should ensure that they are reaching out proactively to program funders, such as Congress, as well as customer agency leaders to build mutual understanding and support for such initiatives. Strong and evolving cross-agency management ties are necessary to ensure that GSA is developing and delivering upon capabilities that are necessary to sustain progress towards its 90% market share goal. We have seen an example of the GSA working closely with the Department of

Defense in order to ensure that the GSA was providing timely and value-added administrative support for DoD programs.⁸³

Management is also needed to smooth technology implementation, as was illustrated by Skanska's transition to e-Procurement. Resistance to adopting a new system is common, especially if buyer agency is reduced, for example: if favored suppliers are not supported by GSA schedule contracts, customer purchasing managers may resist purchasing through the GSA. Dedicated management can set agency priorities and incentives, respond to customer needs, and partner with agency management on the customer end to meet the needs of customer agencies while fulfilling one of its key priorities of delivering "better value and savings."

GSA must develop a process to collect and analyze data in (near) real-time.

Best-in-class companies measure constantly. They measure website speed, customer service speed, customer satisfaction, shipping delays, and more. Best-in-class organizations actively use data collected from performance measurement plans in order to spot and address areas for improvement. They are able to use data to make management decisions that might not be obvious. Companies that track data in (near) real-time are also able to catch falling customer satisfaction numbers and to find where

problems are taking place. As a result, they resolve issues quickly.

"If you don't innovate and address who your customers are, you become irrelevant."

-Kevin Sterneckert, Research VP, Gartner

We know that GSA establishes performance measurement plans in part because of the requirements of federal laws such as the Government Performance and Results Act (GPRA), which mandates the submission of strategic plans, annual performance plans, and annual program performance reports. However, these results must be used actively in order to achieve best-in-class performance. For example, GSA conducts an annual customer loyalty survey. Management may not have visibility into customer issues until the results of an annual customer survey are in, which could be weeks after the data collection survey or months after a precipitating event that a customer uses to judge whether they have a positive or negative opinion of the GSA. By this point, customers may have forgotten exactly why they are happy or unhappy with the GSA. It is much more difficult to use an annual survey to determine

how customer loyalty is impacted by specific initiatives or to use such a survey proactively to address

unforeseen portal or supply chain issues. Regular collection and review of data provides greater visibility into the performance of systems.

At Zappos, changes in customer satisfaction suggested that customers were more satisfied when order processing was completed in-house as opposed to outsourced to logistics companies. In response to this data, Zappos brought its order fulfillment services back in-house and developed technology to support order processing and growth in demand. One further best-in-class example of data collection depicts how Skanska utilized data to optimize business processes so that its new technology system would help the company realize its goal of developing a core competency in procurement. Skanska did not merely invest in an IT solution for procurement: with management's support, it built stronger procurement processes, measured them, and supported them with a new procurement platform and vendor.

Focus on ease of use and customer experience in platform and web portal development.

Best-in-class companies focus on the user when designing procurement systems. Improvements in ease-of-use solutions drive innovation. GSA should focus on identifying pain points for customers along the ordering process and innovate in order to smooth the process from search to delivery. In designing its strategic plans, the GSA should examine its assumption that customers expect the most innovative technology and ascertain what "innovative" means to customers: whether customers expect platforms that are easy-to-use, quick loading, a low amount of clicks-to-order, or some other signifier entirely.

At Zappos, which provides 24/7 customer service support, customer movement online is tracked and measured, so that employees can catch pain points that cause lost sales. When Zappos staff identify business process that cause problems for consumers, they have a problem to solve and can design a solution. At Amazon, a focus on ease-of-use and on customer satisfaction led to the famous one-click ordering solution, which continues to drive customer loyalty and repeat sales. Finally, Skanska implemented user and vendor training on its new procurement system to reduce any remaining obstacles to adoption.

Develop collaborative relationships with all stakeholders to include suppliers, business partners, and IT vendors.

Best-in-class companies collaborate with all stakeholders to ensure strategic alignment of objectives and a smooth vision implementation. Collaboration decisions are best made with the support of data, for example, if customer satisfaction varies with changes in logistics provision companies.

Zappos and Amazon perform most of order processing in-house. These companies have evolved programming and order picking capabilities over time after testing the impact of various in-house or out-of-house initiatives on customer satisfaction. Prior to developing their own capabilities, Zappos and Amazon both outsourced logistics and order picking to UPS and FedEx, respectively. In addition, Skanska partnered with an out-of-house vendor, IBX, to deliver software design, implementation, and user training as a step towards building its own capabilities in e-procurement. Skanska collaborated with IBX to ensure that suppliers would receive training on their new e-procurement system, for a platform needs both customers and suppliers to utilize technology for the technology to survive.

Identify and develop performance metrics that measure progress towards the organization's unified vision.

Best-in-class organizations start with business process data to develop key performance indicators to evaluate the strength of their programs. They measure

Potential Procurement Metrics						
Customer-focused	Cost-driven	Platform-driven	Supplier-related			
Customer feedback	Fulfillment cost	Platform volume	Cycle time			
Customer loyalty	Consistent pricing	Market share	Catalog and			
Custoffier loyalty	Consistent pricing	Ivial ket Silale	inventory accuracy			
Ease of use	Spend on contract	Contract compliance	Number of suppliers			
Luse of use		contract compliance	on system			
Delivery time	Cost savings	Platform	Supplier feedback			
Delivery time	COSt Savings	performance				
Customer spend	Working capital	Clicks-to-order	Perfect order			
customer spend	requirements	Clicks-to-order	percentage			

the human impact on business processes to develop incentives to drive progress towards an organizational vision. GSA has identified many performance metrics that it uses to evaluate its progress towards organizational goals in its annual performance reporting and strategic planning documents. GSA should re-examine whether established performance metrics are in line with its vision, driving growth towards a common goal, or whether staff are perhaps pursuing goals that might facilitate behaviors that lead towards different goals. Several performance metrics that facilitate procurement excellence in the literature are listed in the table above.

For a practical example of applying a process change and measuring results consider the following: currently the GSA contracting officers negotiate vendor, product and service contracts for the Advantage sales portal. The existing business process does not include an in-depth data quality review of the product or service catalog that is submitted for portal publication to be used by customers. Of the case studies, Amazon provides detailed information for vendors to self-manage their product listings while tracking the success of listings on the back end of the website. Amazon tracks a number of additional metrics to ensure that customer experience in browsing and purchasing from vendors maintains a high standard of excellence. On the other hand, Zappos staff creates and maintains every product listing to ensure quality and uniformity of customer experience on the site. A business process change motivated towards the goal of customer experience could encourage consistency in either vendor-provided information or in internal listing management. Establishing uniformity and quality within related vendor offerings provide a more consistent user experience that should ultimately benefit the customer.

V. Conclusion

In light of a constrained fiscal environment for the federal government, federal agencies are under pressure to reduce their operating expenses. Sometimes this pressure is enacted through budget cuts, such as through sequestration, or simply through appropriations that remain flat from one fiscal year to the next. Demands on federal agencies continue to evolve in spite of flat or falling budgets, and GSA is uniquely situated to alleviate budget pressure on agencies by providing cost savings through procurement contracts. In order to generate stronger cost savings to the federal government, GSA must ensure that more agency customers are utilizing its services more of the time. As a result, GSA has set a 10-year, 90% market share goal.

This report identifies best practices in e-procurement in public and private sectors in order to identify opportunities for GSA to grow its market share. This report then develops best practice-based recommendations that will help GSA develop and implement a cohesive and growth-oriented e-procurement strategy.

Best-in-class companies develop systems in line with an overarching vision. GSA should review its strategy to identify one mission that takes priorities over GSA's many goals and then design a plan that will bring its operations closer to its goal.

Once a dedicated vision is reinstated, GSA should continuously collect and utilize data that follows GSA progress towards operational excellence in that area. For example, if GSA identifies customer intimacy as its overarching mission, it should ensure that it is continuously reviewing changes in customer loyalty. This way, GSA can adapt more quickly and with more certainty if a new initiative is having a negative impact on customer loyalty. It can also formulate operational solutions and innovate with more certainty as it develops a more thorough understanding of its chosen area of excellence.

In order to attain operational excellence in an area such as customer service or unified procurement, best-in-class companies collaborated by including relevant stakeholders' interests in decision-making and by outsourcing operations in which they did not excel to partners. GSA should ensure that its procurement platform works with the needs and interests of potential customers and suppliers, because each needs the other group to ensure that GSA's e-procurement solutions continue to provide value.

GSA decision-making should move closer to customers, suppliers, and other relevant partners to ensure that its platform becomes more valuable over time instead of less valuable over time.

Ease of use enables a thriving procurement environment by stimulating continued collaboration, platform growth, and customer loyalty. Best-in-class companies carefully monitor the inputs of website vendors to provide uniformly excellent customer experience. They also monitor customer activity to develop solutions and initiatives that either solve customer pain points or meet a previously unfulfilled need.

Dedicated management plays an important role in attaining and maintaining excellence in e-procurement. Once an organization has created a coherent organizational mission and related strategic objectives, management ensures vision continuity. Management will allocate resources, support innovation along a dedicated path, and champion change management within an organization to ensure guided long-term technology adoption.

As a final recommendation, this report identifies the role that well-selected performance metrics can play within achieving and maintaining excellence in e-procurement. Just as business processes and customer and supplier behavior must be monitored to ensure an organization is making progress towards its goals, performance metrics incentivize behavior that directly contributes to these goals.

Although the Government Services Administration experiences challenges unique to its vision and legal environment, it may be able to incorporate practices that bring it closer to best practices in e-procurement. As the GSA further streamlines its procurement portals and tracks customer activity, it should be able to continuously move closer towards its customer. Continued improvement to GSA's online procurement portal will strengthen GSA growth towards its 90% market share goal.

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