



Procurement Through Commercial E-Commerce Portals

Business Model Cost Estimate Analysis

June 2021

I. Executive Summary

The National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2018, Section 846 “Procurement Through Commercial E-Commerce Portals” directs the General Services Administration (GSA) in partnership with the Office of Management and Budget (OMB) to establish a program to enable Federal agencies to procure commercial off-the-shelf (COTS) items through commercial e-commerce portals.

As outlined in the ['Procurement Through Commercial E-Commerce Portals Phase II Report: Market Research & Consultation'](#), issued by the OMB Director and GSA Administrator in April 2019, the report concluded that the most prudent path forward to begin operational implementation of Section 846 was with an initial proof-of-concept for purchases below the micro-purchase threshold (MPT) using the e-marketplace model. This model enabled GSA to implement an initial proof of concept quickly while minimizing Government burden and costs. The proof of concept contracts were awarded to Amazon Business, Fisher Scientific and Overstock Government in June 2020, and the program launched in mid-August 2020.

To further aid implementation efforts of this program, additional legislation was enacted in both Section 838 of the FY19 NDAA and Section 827 of the FY20 NDAA, the latter of which directed GSA to develop a cost estimate for the three models of commercial e-commerce portals, as identified in section 4.1 of the aforementioned *“Procurement Through Commercial E-Commerce Portals Phase II Report: Market Research & Consultation”*. They include the e-marketplace, e-commerce, and e-procurement models. (See Appendix A for a detailed description and a comparison of each model.) The requested cost estimate was to consider a range of potential costs as a rough order of magnitude for each model, and was requested within one year from the award of the initial proof of concept contracts (late June 2021). The following report meets the requirements of Congress’ direction.

The three models outlined require sharply different levels of effort from GSA and result in opportunity costs ranging from minor to significant. The cost drivers and variables identified are estimates, but are based on the actual costs associated within the current implementation of the proof of concept using the e-marketplace model. Any cost drivers that are unique to each model are noted accordingly, with the estimates for those costs derived from GSA’s market research.

When looking across the three models, any implementation efforts associated with testing all three (individually or simultaneously), comes at a significant cost to the Government, for little added benefit. Cost efficiencies cannot be realized through multiple or worse yet, parallel,

implementations across the three portal provider business models and doing so will result in a confused and disjointed customer experience for Government purchase cardholders.

To replicate the same level of supplier participation and competition within the e-commerce model, as in the e-marketplace model, GSA would need to implement a program on a similar magnitude than the current GSA Multiple Award Schedules (MAS) program. Furthermore, to implement an e-commerce model effectively, GSA would also need to consider the use of an e-procurement solution (or other central overlay) to manage the user experience and rationalize the marketplace, adding further costs to implementation.

With the e-procurement model alone, there is a high cost associated with ensuring competition and managing a broad supplier base, as well as through the subscription fees that are charged. Adding a new major IT initiative, such as the e-procurement model, would require GSA to divert resources and strategic focus away from a growing number of critical IT initiatives currently underway.

Ultimately, the implementation of either the e-commerce or e-procurement models won't realize the benefits of an efficient, commercially-driven shopping experience, and instead result in an overly expensive, resource-intensive implementation. The low cost and lightweight structure of the e-marketplace portal provider business model was a primary decision in selecting this model for the proof of concept, and GSA believes that the e-marketplace provider model continues to provide significant benefit to the Government buyer, while closely aligning with administration priorities and minimizing Government burden and costs. Finally, once fully implemented, the program believes it can be cost-neutral, further reducing the burden to the American taxpayer.

II. Program Overview

Federal agencies have increasingly looked to leverage commercial capabilities for purchasing commercial items via the Government Purchase Card (GPC) given its inherent flexibility and ease of use. At both the Governmentwide and agency level spending through commercial online channels have increased rapidly (from \$135M in FY14 to almost \$500M in FY20). As a result, agencies have been looking to obtain greater spend data visibility that they can use to analyze spend, reduce supply chain risk, and improve internal controls. To do so, many agencies have begun using e-commerce channels in a fragmented manner to gain insight into what is being bought, who is selling the items, and where the products are coming from. However, this ad-hoc and uncoordinated purchasing comes at a cost as it misses many of the benefits GSA's program offers, both today and in the future.

GSA's Commercial Platforms Proof of Concept is available to GSA SmartPay Purchase Card holders as a 'managed channel' for open-market purchases through select e-marketplace platforms. The contracts with Amazon Business, Fisher Scientific, and Overstock Government, were awarded in June 2020 and launched in mid-August 2020. The program is heavily focused on implementation of the current proof of concept, has received positive feedback from buyers, as well as initial data insights to begin to identify trends and set initial benchmarks. This implementation approach allows GSA to test, refine, and ultimately grow the program based on lessons learned and data collected. It is for this reason that GSA strongly recommends continuing this current implementation approach, and not losing focus through the testing of other models that would require shifting resources (and increasing the investment significantly) to support a much larger and costlier rollout that would yield little additional benefits to agencies.

The scope of the proof of concept is as follows:

- **'E-marketplace' business model** as a starting point, with a focus on maximizing competition, both within the platforms themselves and across the participating platforms
- Growth through **strategic partnerships with agencies** (and their cardholders) as a primary focus, while providing access to individual participants
- Ability to spend up to the **micro-purchase threshold** (MPT), including emergency response buys
- Active promotion of **AbilityOne, small business, and green purchasing** with buyers
- Inclusion of key requirements in the contracts to **proactively manage supply chain risk**
- **Collection and analysis of online spend data**, made available to agencies in dashboards

By establishing a managed channel for micro-purchases, the Commercial Platforms program allows GSA to offer a better buying experience featuring unrivaled speed, cost savings, and breadth of product availability combined with the benefits of business-to-business (B2B) capabilities, visibility into agency spending, and risk reduction tools. The insights gained to date from the proof of concept, and the value proposition of the program to participating agencies, is summarized in Figure 1.

Figure 1: Benefits to Participating Agencies

- Whole-of-government approach offering **standardized terms and conditions**, cost savings, and **B2B features** from Amazon Business, Fisher Scientific, & Overstock Government (Note: this approach results in significant savings on platform memberships, expedited shipping, and other add-on features);
- Broad product access to quickly fill agency requirements at the speed of need, especially beneficial in remote areas or in support of emergency response, while offering a familiar, **consumer-like buying experience**;
- **Critical insights into online spend** for agency executives, with additional **management controls to mitigate risks associated with 'rogue spend'** occurring outside of strategic contracts;
- Ability for GSA to **leverage the collective voice of participating agencies to help promote important buyer requirements and administration priorities** (e.g. incorporating key standard terms and conditions, supply chain risk management (SCRM), AbilityOne, 'green' purchasing, products from underserved communities and small businesses, and other priorities);
- **Pro-active and ongoing review of supply chain capabilities**, to include counterfeit prevention, Section 889 compliance, and best practices from partners like DHS;
- **Access to a deep and highly competitive supplier pool**, including small businesses and mandatory source programs;
- **Reduce barriers to entry for small businesses** and other companies to sell to the government through the same channels used to reach their commercial buyers; and
- **Dedicated program team proactively managing all aspects of the agency's engagement** (from change management to SCRM to spend analytics).

These benefits help to underscore what agencies look for in a “managed” open-market solution, and those features/capabilities that are going to resonate most with buyers and support their overall agency acquisition goals.

The program aligns with administration priorities, by working with the participating platforms and agencies to best understand the ways in which this buying channel can support areas such as COVID 19 response; climate change; diversity, equity & inclusion initiatives; and economic recovery. **A Key Performance Indicator (KPI) dashboard will be launched featuring Commercial**

Platforms contributions in these key priority areas. The intent of this effort is to directly align the Commercial Platforms program with Governmentwide acquisition goals, while also leveraging the commercial capabilities that agencies value within this channel as they report on their targets and objectives. See Figure 2 for those metrics that have been added to the KPI dashboard.

Figure 2: KPI Dashboard Metrics - Administration Priorities

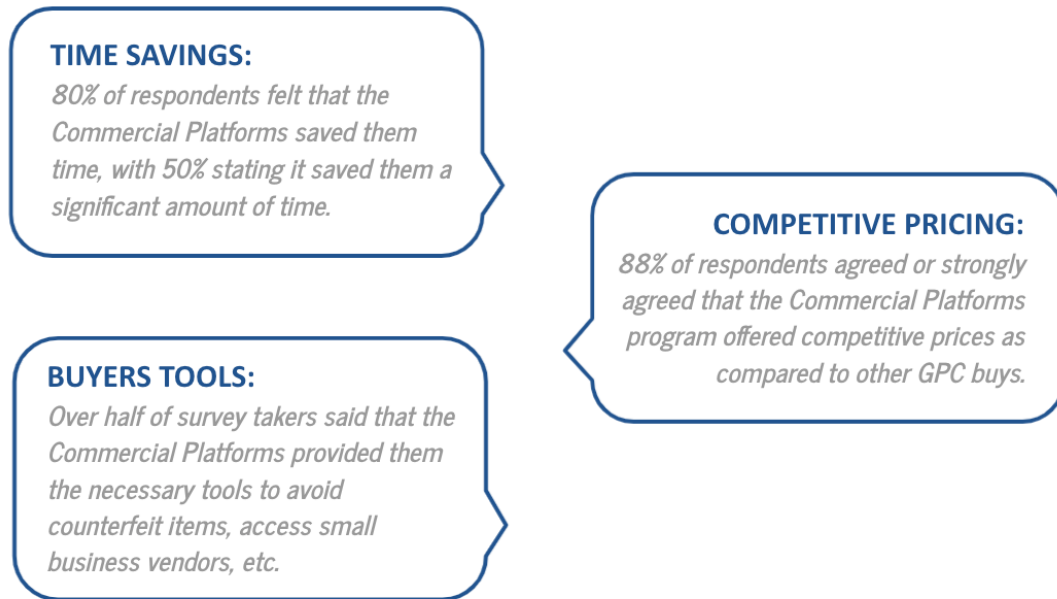
| COVID-19 Response EO 13991 | Climate Change / 'Green' Buying EO 14008 | Diversity, Equity, and Inclusion EO 13985 | Economic Recovery EO 14005 |
|--|---|---|--|
| Total spend in support of COVID response | Total spend on 'green' procurement products (e.g. EPEAT, EnergyStar, and other 'eco' identifiers) | Total spend with underserved communities (e.g. AbilityOne, minority-owned businesses, and other identified affinity groups, as available) | Total spend with small businesses |

Initial feedback from agencies participating in the proof of concept has been overwhelmingly positive, with customer satisfaction measured at 9.4 out of 10¹. Within the program, GSA has implemented a customer experience framework to gather information about current-state and future-state usage of the awarded platform providers. This includes regular outbound buyer surveys, to measure overall satisfaction with platform provider capabilities, as well as conducting in-depth user interviews. This information is being used to help inform KPIs associated with overall customer satisfaction, while also identifying areas of needed improvement and/or enhancement in the future-state. Overall, to date, buyers have found strong value in key areas that help them better support their agency's missions, see Figure 3 below.

GSA moved deliberately through contract award and rollout for the proof of concept. As it considers program expansion and in particular the available commercial business models, it is taking into account the lessons learned from the current proof of concept, to include both the feedback collected, as well as insights gleaned from the data. While the program is still early in its implementation, agency interest has been very strong and the initial feedback from participants has been very positive, emphasizing the need to continue the current implementation approach and ongoing expansion to other agencies.

¹ Customer satisfaction score taken from March 2021 Commercial Platforms Purchaser Survey question of "Overall, please rate your satisfaction with [insert platform]?"

Figure 3: Feedback from E-marketplace Model Buyers



In the following analysis, GSA will outline and discuss the key considerations of both the current e-marketplace approach, as well as the e-commerce and e-procurement models.

III. Business Model Cost Estimate Analysis

Section 827 of the FY20 NDAA requested GSA to provide Congress with a rough cost estimate of implementing each of the portal provider models identified in the Phase II report, which included the e-marketplace, e-commerce, and e-procurement business models. See Appendix A for a detailed description and a comparison of each model.

In the first phase of this program, GSA identified three different models. Each had its own cost drivers and variables that impact the cost estimate. The three models require sharply different levels of effort from GSA and result in opportunity costs ranging from minor to significant. The cost drivers and variables identified are estimates, but are based on the actual costs that are occurring within the current implementation of the proof of concept, using the e-marketplace model. They are particularly applicable in areas such as data management and acquisition. In addition, varied costs exist across the portal provider business models, based on factors such as program management and subscription fees. A full definition of each cost driver is available in Appendix B.

E-Marketplace Model [GSA's current implementation approach]

[Model Definition] The e-marketplace model offers an online marketplace that connects buyers with both the portal provider's products (including, but not limited to, those that are proprietary), and those offered by third-party suppliers. Portal providers and third-party vendors are generally responsible for fulfilling orders for their respective products with some exceptions where the portal provider may complete order fulfillment on behalf of the third-party vendor for additional fees. There is increased competition within this business model given the access to both proprietary and third-party products, across thousands of suppliers. Profits in this model are mainly derived through commissions on products sold by third-party vendors or the portal providers themselves, supplier-listing fees, service-upgrade fees, and/or a combination of these fees.

[Cost drivers] The primary cost driver associated with the e-marketplace model is data management, and the need to ingest and analyze the data that each participating e-marketplace place is providing for analysis at the agency and Governmentwide level. This includes costs related to standardizing the data elements and attributes across any number of participating providers, managing the data ingest process including any required data transformation, and making those insights available through online dashboards. Based on the existing implementation of the e-marketplace model to date, data is a key element helping agencies understand how they can best support better buying decisions, and where to leverage the commercial capabilities of portal providers.

[Opportunity costs] GSA's opportunity costs in this model were minor. Successful launch and management required creation of a program management office of four employees, a matrixed contracting staff of six, and limited IT-costs, primarily around data management and dashboard creation. Agencies were already beginning to adopt this model at the agency level or through a decentralized approach, causing ongoing fragmentation and limited visibility into what is being purchased. This comes at a significant cost to the government in terms of membership / subscription fees, shipping costs, and labor costs associated with requests for tax exemption reimbursements. As a result, there is significant interest at the agency level in participating in a whole of government program thereby reducing the need for change management resources, and stopping the continuation of further expenditures that result from individual agency relationships.

When looking at the e-marketplace model, and the overall management cost within the commercial product buying space, the ability to maximize competition can occur at a lower acquisition cost than other models, due to a more limited number of contracts. While the number of prospective providers in this model is smaller, it is one variable that impacts

implementation costs within this model (e.g. the more providers, the higher the cost). However, relative to the other models, that cost is highly optimized given the deep supplier base offered. This means the program is able to offer buyers access to over 10mil+ suppliers across the three participating providers, at an annual cost of less than \$2M dollars. No other model comes close to offering that level of competition across their supplier base, let alone at that cost.

Finally, with this portal model, GSA has the potential to cover its costs in the outyears as the program grows, through the collection of a fee embedded in the program.

[Model Cost] When looking across this portal provider business model, and the actual costs from implementation of the proof of concept coupled with the estimated costs in the out years, the total 5 year cost estimate is approximately \$9.4 million. The cost and structure of this portal provider business model was a primary decision in selecting this model for the proof of concept, and GSA believes that the e-marketplace provider model continues to provide significant benefit to the Government buyer, while closely aligning with administration priorities and minimizing Government burden and costs. Finally, once fully implemented, the program believes it can be cost-neutral, further reducing the burden to the American taxpayer.

...the total 5-year cost estimate [for the e-marketplace business model] is approximately \$9.4 million.

E-Commerce Model

[Model Definition] The e-commerce portal provider business model leverages an online platform to sell their own proprietary or wholesale products. The vendor is responsible for the fulfillment of product orders, including invoicing and delivery. Given the limited competition within this business model, the focus is on selling proprietary products online with little to no horizontal price comparison other than what might occur across products with similar form, fit, or function. E-commerce businesses generate profit mainly from product prices that they directly manage and control, and the margin they receive versus their cost of goods sold. Margins can vary quite a bit depending on the category of products being offered for sale.

[Cost drivers] This e-commerce portal provider business model has primary cost drivers in the areas of both acquisition and data management costs. Out of the three portal provider business models, the number of prospective platforms that could potentially participate most dramatically impacts the e-commerce model's acquisition costs, as essentially any company with an online retail site could opt to submit a proposal. In an effort to ensure adequate competition, acquisition costs to the government could be considerable, especially in the out

years for contract administration to ensure that all requirements are being met. Furthermore, each contract would require an assigned Contracting Officer, Contracting Specialist and Contracting Officer Representative, to assist in the management and assessment of key areas such as supply chain risk management, green purchasing, AbilityOne, small business, and additional areas as Government priorities are identified. Ensuring consistency across all the participating platforms could prove quite costly. As the program discovered in the market research phase, the cost to access the same number of suppliers in the e-commerce model as is available in the e-marketplace model is significantly higher.

[Key variables impacting costs] The number of participating e-commerce platforms is by far the most significant variable impacting end costs in this provider model. Consider the example provided in the e-marketplace section above with customers having access to 10mil+ suppliers. To replicate this same level of supplier participation and competition within the e-commerce model, GSA would need to implement a program on a similar magnitude than the current GSA Multiple Award Schedules (MAS) program, which has annual costs in the tens of millions. The complexity of implementation extends far beyond the costs, as it impacts every aspect of the program from change management, to data ingest, to the required acquisition and program management resources to manage contracts at the individual supplier level. While the program could conceivably collect a small fee from each transaction, similar to the e-marketplace model, the costs and resources needed to implement this model are difficult to justify for products below the micro-purchase threshold.

[Opportunity Cost] The primary opportunity cost within this model would be the potential size of the program needed to support the number of participating providers. For comparison, GSA's management of the Multiple Award Schedule program features approximately 17,000 contractors with spend in FY20 of \$36.6B. The MAS program requires hundreds of acquisition professionals who directly support the program and an equally sized workforce indirectly supporting it across the agency. These levels of spend and resources far exceed the expected market for product purchases under the micro-purchase threshold, and thus the return on investment is difficult to justify.

As the number of suppliers grow within the e-commerce model, GSA would need to consider the use of an e-procurement solution (or other central overlay) to manage access to such a large supplier base and rationalize the marketplace. This layer would help to guide the buyers' experience by making it more accessible and streamlined, while also adding a level of standardization to the purchasing process. Costs and opportunity costs under the e-procurement model are discussed below and would likely need to be considered in conjunction with the e-commerce model, particularly in the outyears.

Ensuring an adequate oversight environment would not only require staffing it with a comparable level of resources, it could require GSA to divert a portion of its current acquisition workforce from critical Governmentwide initiatives. GSA (and in particular the Federal Acquisition Service) has recently focused significant attention on the creation of offerings and acquisition vehicles for the purchase of services and integrated solutions (made up of both products and services), including complex offerings requiring significant subject matter expertise that directly help agencies achieve their missions. It would be of little value to shift those resources to focus on the management of sellers offering routine products, particularly when a.) GSA already manages the Multiple Award Schedule program and b.) the commercial sector already has a strong presence in this area that agencies find benefit in.

Needless to say, there are significant opportunity costs inherent in the e-commerce model, given the above variables across the likely large number of participating suppliers. The required internal resources necessary to manage this particular model comes at a significant cost, and would come at the expense of other mission-oriented programs and initiatives (see Figure 4).

Figure 4: Key GSA Initiatives

Initiatives within GSA with high-involvement from acquisition workforce

- Supply chain risk management capabilities (including Section 889)
- COVID Response
- Climate Change
- Diversity, Equity, Inclusion & Accessibility programs
- Economic Recovery / Small Business access
- Support and implementation of *Made in America* policies

[Model Cost] When considering the various cost drivers of the e-commerce model, relative to the actual costs from implementation of the current proof of concept, the total 5 year cost estimate is estimated at \$44.7 million. This figure is primarily driven by the number of participating suppliers and the data management and integration requirements across this same supplier base. The implementation structure and significant acquisition costs within this portal provider business model are the primary reasons for why it was not included in the initial implementation of GSA's proof of concept. Additionally, this cost total does not include the costs outlined in the e-procurement model, given that a management layer would likely be needed in the

...the total 5-year cost estimate [for the e-commerce business model] is estimated at \$44.7 million.

outyears in order to simplify and manage the buyer experience across hundreds, if not thousands, of participating suppliers.

E-Procurement Model

[Model Definition] The e-procurement model is a software-as-a-service model that is managed and configured by the buying organization, and often has workflows connecting to organizations' financial systems and acquisition vehicles / catalogs. The software integrator offering the platform solution does not sell products in this model; instead, contracted suppliers are responsible for fulfilling orders -- many from outside marketplaces -- thus supporting a larger supplier pool and horizontal price comparisons. Profits for providers in this model are mainly derived from a combination of transaction fees from participating suppliers, tiered subscription fees from buyers, and often configuration costs paid for by the administering organization. These tiered subscription fees generally increase as the volume of transactions on the platform increases; however, many portal providers cap transaction fees to encourage a high volume of transactions. Based on research conducted to date, GSA would bear more of the costs to manage and implement this model with limited options to recoup program costs.

[Cost drivers] In this provider model, the primary cost drivers are contract administration costs (in the form of supplier administration). Subscription fees and configuration costs are also incurred, both of which are unique to the e-procurement model. Contract administration costs will be heavily dependent on the number of participating suppliers on the e-procurement platform, as there is a high likelihood that GSA would need to be involved in the management of these suppliers, particularly during their initial onboarding period with the e-procurement platform, to ensure that all requirements are met.

Software vendors in the e-procurement space typically have subscription pricing structures that are based on a variable versus fixed rate. The variable rate can be based on a number of different parameters depending on the software vendor's cost recovery model, but in most cases utilizes a per-user-fee combined with a per transaction fee. The software vendor recoups these costs through subscription fees charged to the administering agency and/or participating agencies.

Historically, configuration costs have also been quite high, often necessitating a consulting firm or integrator to implement and manage the various aspects of the rollout. While many of the software vendors have moved to the cloud, resulting in decreased costs, integration and configuration is still required particularly when it comes to data sharing.

[Key variables impacting costs] In the e-procurement model, there is a higher cost, similar to the e-commerce model, associated with ensuring competition across a broad supplier base. Solution providers in the e-procurement model will likely need to build up relationships with new suppliers in order to reach a similar level of participation as seen in the e-marketplace model. This could include significant, ongoing promotion with new and prospective suppliers and potentially heavy coordination with agencies and their supplier relationships to match what the e-marketplace model offers. These factors will have an impact on the cost of this model, particularly as software vendors seek to maintain a similarly competitive environment by deepening the supplier pool. As the supplier pool grows, additional acquisition resources will be required in order to assess and ensure that all are meeting the requirements of the contract.

[Opportunity Cost] Adding a new major IT initiative, such as the implementation of an e-procurement model, could require GSA to divert resources and strategic focus away from a growing number of critical IT initiatives currently underway. While not exhaustive, this list includes efforts such as the overhaul and redesign of regulations.gov, the transition and management of OMB MAX, a number of system enhancements required for continued improvement of the Multiple Award Schedules (including a Contract Management system and launch of new Catalog Management capabilities), creation of pricing tools to implement Section 876 of the FY19 NDAA, and finally, support for various supply chain risk management and cybersecurity related initiatives. While there may be long term value in such an initiative, GSA does not rank it as being one of its top IT initiatives at this time.

The e-procurement model allows the Government to manage risk through the use of management tools, workflows, and tailored configurations of the platform offered by the software provider. However, given the amount of upfront investment there is a stronger likelihood of having to establish a contract with a single provider, given that the benefits of contracting with multiple, configurable e-procurement platforms (each with different subscription models and configuration requirements) is duplicative and inefficient. Thus, a singular relationship introduces other risks that need to be heavily considered, particularly as it relates to potential cybersecurity risks and supply chain vulnerabilities that could result from a single point of entry for micro-purchase buys. Additionally, this single relationship could be problematic for the supplier community, who might not feel comfortable having a single provider act as the gatekeeper to the Government market. This could further diminish this model's ability to attract suppliers and promote competition on the platform or could necessitate additional agency involvement.

Finally, this model offers limited opportunity for the Government to recoup its costs and could lock the Government into a long-term solution that may not ultimately meet customers' needs.

Given that much of the resource expense occurs in the up-front configuration, it would be difficult to change software providers. Government, as it has done with other commercial software implementations, also runs the risk of over-configuring the platform to the extent where the original commercial benefits are no longer present. Of all the models, the e-procurement model is the closest to a Government-owned solution, which moves further away from the original intent of the Section 846 legislation where GSA was directed ‘...to accept the commercial practices as much as practicable’.

[Model Cost] When looking across this portal provider business model, and the actual costs from implementation of the proof of concept, the total 5 year cost estimate is approximately \$39.4 million, primarily driven by supplier administration costs, subscription fees and configuration costs. The significant upfront costs and time associated with the implementation of this portal provider business model as well as the likelihood of a low adoption rate combine to make this portal provider business model a less effective use of resources for the needs of this program.

...the total 5-year cost estimate [for the e-procurement business model] is approximately \$39.4 million.

NOTE: A cost estimate summary for each of the three models is available in Appendix C.

IV. Conclusion

Overall, when looking across the cost estimates provided for the three portal provider business models, there are significant variables and cost drivers to consider with each of the models. The most economical and efficient approach to learning more about how to implement a Governmentwide program for the purchase of commercial products continues to be utilization and implementation of the e-marketplace model. Spend continues to grow at an increasingly rapid rate through the e-marketplace channel given the ease of use associated with the commercial capabilities, and provides needed visibility into online, open-market spend data. By leveraging the commercial capabilities available, GSA has an opportunity to provide a “managed” channel that incorporates key Government requirements, and sets the stage for alignment with the administration priorities in the short-term, and a solid foundation for innovation and growth in the future.

The current implementation efforts of the proof of concept through the e-marketplace model are delivering on the program value proposition for participating agencies, based on program feedback to date. The benefits outlined by Government buyers and agencies are significant and

further validate GSA's current approach. The e-marketplace model delivers on an optimal blend of competition, user experience, and management controls, all while doing so at lowest total resource cost to the Government and with the potential to be cost neutral in the out-years.

When looking across the three models, and any implementation efforts associated with testing all three (simultaneously or otherwise), a high expense is levied on the Government, for little added benefit. Cost efficiencies cannot be realized through multiple or worse yet, parallel, implementations across the three portal provider business models, and doing so will result in a confused and disjointed customer experience for the Government purchase cardholder. This experience would also seem to be in direct conflict with the stated purpose of Section 846, whereby GSA was directed to enhance competition, expedite procurement, enable market research, and ensure reasonable pricing of commercial products. In fact, the achievement of these goals becomes increasingly difficult if required to implement beyond the existing e-marketplace model. Ultimately, this path will not leverage the commercial capabilities that buyers are seeking in this market space.

Furthermore, the pursuit of three portal provider business models shifts the focus of GSA's existing acquisition and program management resources, away from the creation of offerings and acquisition vehicles for the purchase of services and integrated solutions. Little value would be gained if GSA were to shift acquisition resources to focus on the management of sellers offering routine products, particularly when GSA already manages the Multiple Award Schedules program, and the commercial sector already has a strong presence in this area that agencies find benefit in. GSA sees the proof of concept executed in its current form as a significant step forward in determining the most cost effective and value-driven plans for the future of this program to streamline and modernize the purchase of commercial products.

Looking ahead, GSA plans to continue a strong focus on the implementation of the current e-marketplace model through the duration of the contracts period, through June 2023. The feedback and spend data insights gained throughout implementation will help to inform how the program is progressing and will allow GSA to share those lessons learned with key stakeholders and Congressional committees, as appropriate. Parallel market research will continue to occur to assess how to bring other platform providers into the program, to include those in other business models, without the need for a more formal software layer. With this information in hand, GSA can begin to identify an appropriate acquisition strategy to ensure a competitive selection of participating platforms, and an acquisition roadmap by mid-FY22.

Appendix A: Business Model Factors

The following chart represents GSA’s research on the models across key differentiating factors.

| Model | Competition | User Experience | Compliance | Investment / Complexity |
|----------------------------|---|--|---|---|
| E-Commerce Model | Sell their own products/ wholesale goods. Facilitating order level competition requires greater change in buyer behavior | Advanced search and comparison functions, mimics consumer experience; <u>however</u> , only for individual suppliers’ products — cross-supplier search and comparison is limited. Each website may require its own account registration adding to both management and user complexity. | Basic features can support compliance needs at the MPT (account set-up, restriction of items, approval workflows, etc.) Program oversight will be challenging after the websites submit data to GSA due to the complexity of account management across multiple websites. | Limited investment cost to access any one portal, however, to get supplier level competition would likely require a very large number of portals with some user interface solution, increasing GSA investment and administrative costs. |
| E-Marketplace Model | Promotes competition at the supplier level (sell third-party vendor products in addition to their own, provides support for onboarding) | Offers search and comparison functions, product and supplier reviews, mimics consumer experience | Basic features that can support compliance needs at the MPT (account set-up, restriction of items, approval workflows, etc.) GSA and agencies can have real time visibility into buying via the sites and management accounts. | Limited investment cost to access e-marketplace model portals. Many existing suppliers access the markets through e-marketplace model offerings, negating the need for onboarding costs. Implementation would require GSA to address a number of supplier concerns. |
| E-Procurement Model | Promotes competition at the supplier level (only sells third-party vendor products); contract level competition is difficult to achieve | Offers search and product comparison, though users are more likely to be unfamiliar with platform since it has no consumer equivalent | Robust support for purchases and approval workflows that are more applicable for compliance needs above the MPT. GSA and agencies can have real time visibility of buying. | Typically charge a subscription fee for services and can often require more complex configurations, which exceeds need for an MPT offering. Further complicated by the need for multiple marketplaces. |

Appendix B: Cost Driver Details

The following chart details the researched cost areas as well as their relative applicability to each of the three models.

| Cost Item | Description |
|--|---|
| Program Costs | |
| Subscription Fees | Fees associated with software usage - typically charged based on number of users or number of transactions |
| Internal Program Cost | |
| Internal Program Cost | Internal GSA costs to support the design, build (if applicable), manage and run of the Commercial Platform |
| Acquisition - Solicitation / Eval | Resource costs associated with partner selection process |
| Acquisition - Contract Admin | Ongoing costs associated with the management and administration of partner contracts, including review of supplier compliance |
| Change Management | Agency recruitment /onboarding / engagement and change management resource costs |
| Support (Customer Support) | Assisting with questions from users and agencies |
| Platform Strategy / Governance Execution | Resources associated with overall short-term governance and long term strategy development including execution of SCRM, green procurement, etc. |
| Data Management | Resources associated with data acquisition, integration, management as well as development of analytical reports and dashboards |
| IT Expenses - Cloud Hosting | Internal costs for IT infrastructure and hosting - for example SRP |
| IT Expenses - Configuration | Internal IT resources utilized in coding and configuration of platform |
| IT Expenses - Project Mgmt | Internal IT project management costs |
| IT Expenses - QA / Testing | IT testing of platform code and configuration |
| Contractor Support | |
| Contractor Support | Costs associated with the design, build (if applicable), manage and run of the platform. These are costs associated with external contractors or platform providers. These costs are typically represented as FTE |
| Configuration | Costs for installation and configuration of software required to enable the solution |
| Data Integration and Analytics | Costs for design of data storage, ETL data activities, management of data, definition of KPIs and analytics and buildout of data visualizations / reports / dashboards |
| Project Management / Strategy | Project management support for design and build (if applicable) as well as strategic guidance during on-going platform evolution |
| QA/Testing | Testing of software platforms and technical enablers of the platform |
| Training Cost | |
| Training Cost | Internal opportunity costs associated with time spent by users on training |

Appendix C: Cost Estimate Summary by Model

The table below outlines the various portal provider business models, as well as the primary cost drivers, the 5-year cost associated with those drivers, and key variables impacting drivers.

| Model | E-Marketplace | E-Commerce | E-Procurement |
|--|--|--|--|
| Main Cost Driver(s) | A. Data Management | A. Data Management B. Acquisition Costs (Supplier Management) | A. Acquisition Costs (Supplier Management) B. Subscription Fees C. Configuration |
| 5-year driver cost(s) | A. ~\$4.0M | A. ~\$22M B. ~\$18.5M | A. ~\$15.8M B. ~\$5.7M C. ~\$4.0M |
| Cost Drivers and Variables | <ul style="list-style-type: none"> Number of marketplaces | <ul style="list-style-type: none"> Number of participating providers / new onramps each year Could require a layer to manage user experience | <ul style="list-style-type: none"> Number of suppliers / catalog size Number of users / transactions Number of rules / degree of config. |
| 5-year estimate | ~\$9.4M | ~\$44.7M | ~\$39.4M |
| Competition | Promotes competition at the supplier level (sell third-party vendor products in addition to their own, provides support for onboarding) | Sell their own products/ wholesale goods. Facilitating order level competition requires greater change in buyer behavior | Promotes competition at the supplier level (only sells third-party vendor products, support for onboarding); variety of providers to promote competition at the contract level |
| User Experience / Adoption | Offers search and comparison functions, product and supplier reviews, mimics consumer experience | Specialized search and comparison functions, mimics consumer experience; however, only for individual suppliers' products — cross-supplier search / comparison is limited | Offers search and product comparison, though users are more likely to be unfamiliar with platform since it has no consumer equivalent |
| Compliance | Basic features that can support compliance needs at the MPT (account set-up, restriction of items, approval workflows, etc.) | Basic features can support compliance needs at the MPT (account set-up, restriction of items, approval workflows, etc.) | Robust support for purchases and approval workflows to support compliance requirements, particularly above the MPT |
| Opportunity Cost Considerations | <ul style="list-style-type: none"> Lowest overall investment Access to a deep, ever-growing supplier pool Potential to recoup costs in future | <ul style="list-style-type: none"> Adequate levels of competition would likely require a large number of participating portals Acquisition and contract administration costs would be significant Would require GSA to shift resources to support routine products instead of complex, mission oriented solutions | <ul style="list-style-type: none"> Upfront investment with subscription fees and resources to support more complex configurations Risk in having a single provider acting as gatekeeper to Government buyers for suppliers Added cost for licenses and cost to manage contracts with suppliers Difficulty in changing providers Risk over-configuring and losing out on the commercial benefits |