

Executive Summary

Background:

The purpose of this document is to provide an overview of the Iowa Department of Revenue (IDR) business case for tax capability modernization. Gartner, Inc. (Gartner) prepared the document in partnership with IDR and the Office of the Chief Information Officer (OCIO). Gartner is the world's leading authority on the business of information technology. Over its 39-year history, Gartner has worked with numerous federal, state, and local agencies to develop strategies for digital modernization, including enterprise tax and revenue systems. Its advisory services are uniquely supported by a research practice, which includes best practices, trends, and benchmarks for tax modernization strategy, systems, and integration approaches. Gartner has no economic interests in any hardware, software, or system integration vendors. Gartner provides unparalleled objectivity in its analyses and eliminates the biases found in other consultancies.

IDR is the agency primarily responsible for tax administration in the State of Iowa. IDR's mission is to serve Iowans and support state government by collecting all taxes required by law, but no more. In FY 2017, IDR collected over \$10.1B in taxes and issued \$1.2B in refunds to taxpayers resulting in net deposits of \$8.9B to the State. In FY 2017, IDR processed over 2.5M tax returns.

Gartner identified eight constituency groups that interact with IDR—each requiring tailored services to meet their respective needs. The groups are: tax professionals, business taxpayers, bulk filers, individual taxpayers, local governments, other government agencies, elected officials and their staff, and IDR staff.

Gartner used a three-phase approach to develop this business case:

- Current state analysis: interviewed business and technical stakeholders and examined IDR's systems and operational processes to determine the current state of operations.
- Gap analysis: identified the gaps between IDR's current state and recommended practices for a modern integrated tax processing system.
- Recommendation: provided solution recommendation and outlined the benefits to major stakeholders after performing options analysis.

Current State Analysis:

Gartner research shows that IDR's constituency groups expect greater ability to manage their tax information and transactions; want greater transparency into the status of their accounts and balances; and want the ability to perform self-service transactions online as they do with the technology platforms in other industries such as banking and retail. Gartner examined IDR's current technology architecture and determined that the investment, time, and resources required to transform it to fulfill constituent expectations and future needs would be so significant that this option would not compare favorably to others.

Over two dozen unique systems support IDR's processing of taxes and span a variety of technologies. The development of the main tax processor started over 30 years ago with subsequent enhancements built in supplemental systems, which were custom-integrated to create a complex architecture.

Key findings:

- Four primary systems support the following functions: tax processing, revenue and taxpayer accounting, collections and compliance. The data warehouse houses the compliance module.
- Three additional systems are used to manage the receipt of paper returns and payments.
- Miscellaneous other systems exist to perform a variety of tax functions, including two systems to manage receipt of electronic returns and payments from the IRS (modernized eFile) and a system

to manage tax credits. These systems leverage a variety of technologies and custom web development.

- A limited number of staff have the combination of technical skill and business insight to manage IDR's technology environment.
- The strategy of hiring or reassigning staff and then training them on IDR's aging systems is less effective than in the past. Replacing mainframe IT skills is not as simple as it was 10 years ago, because the pool of external candidates with this kind of expertise is shrinking.
- IDR has relatively complex processes that include substantial manual intervention due to the ad-hoc nature of application development over the past 40 years.
- Batch file transfers are used to facilitate the flow of information across systems. This creates redundancies, inconsistencies and multiple versions of the same data.

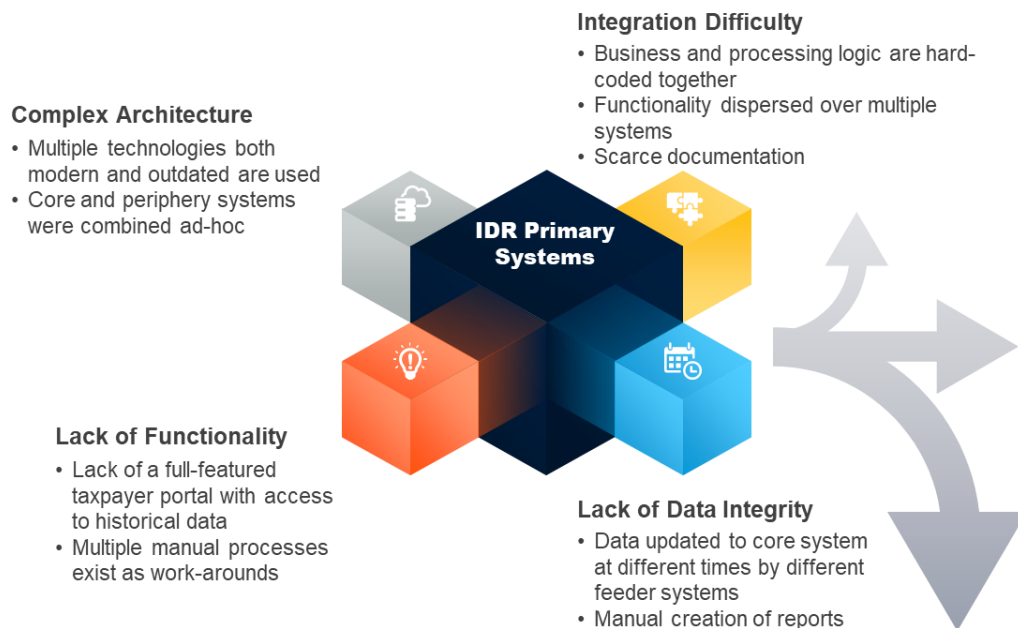
Gap Analysis:

Gartner identified multiple gaps between IDR's current operations and a desired state, defined by the ability of the agency to administer taxes, as required by law, with the speed, efficiency and effectiveness the public expects. Today, many revenue agencies use modern integrated tax processing systems to improve taxpayer experience and lessen manual or inefficient processing, improve analytics, and expedite taxpayer communications.

Key findings:

- Current IDR systems hinder staff's ability to efficiently manage the tax process. Also, taxpayer information is not managed holistically.
- The systems lack the functionality of modern tax systems, e.g., an outward facing, mobile-ready, secure taxpayer portal allowing the capability to self-help and access account information.
- Primary systems are not flexible, scalable, or configurable. It is difficult, time-consuming and costly to implement system updates or integrate new functionality, which is required by evolving business needs and legislative changes.
- Complex technology architecture introduces risks when making changes or additions to functionality. It also requires that updates to the core processing system (mainframe), be executed through batch processes on a daily, weekly, or quarterly basis.
- Few technical experts have an in-depth understanding of the existing technical environment.
- The current technology landscape encourages IDR divisions to operate in "silos" that limit the effectiveness of IDR in managing the overall tax process.

Figure 1. Technology Gaps



Cumbersome business processes driven by aging, inflexible and siloed technologies negatively affect the capacity of the Department to be smarter, leaner and more taxpayer-focused. IDR’s ongoing ability to meet annual legislative changes and evolving constituent demands efficiently with its current systems is becoming more and more difficult and costly.

Too often, crisis dictates transformative action. For example, organizations are prone to making significant investments in cybersecurity after a breach. This reactive approach to modernization is hasty, overly-specific, and infrequently tied to the organization’s mission. While IDR is not currently in a state of crisis, the agency has experienced “near misses” in recent years due to the instability and inflexibility of its core tax processing systems. These events have resulted in urgent reallocation of resources away from working on business outcomes, such as improving the tax process, reducing fraud and increasing collections. Gartner recommends IDR not to wait until a crisis occurs before making an investment to improve its primary systems.

Options Analysis:

Gartner identified and evaluated four options for IDR’s tax modernization:

- **Best-of-Breed**—a collection of applications, each built for a specific operational function, procured from multiple vendors and aligned to IDR requirements.
- **Single Vendor**—a ready-made solution that contains a suite of standard, commoditized functional features.
- **Custom Re-Write**—a ground-up rebuild of the current tax processing applications using modern development tools.
- **Incremental Improvements**—as-needed enhancements, leveraging only the existing funding sources for operations and maintenance.

Gartner conducted a financial analysis of the four options and compared them to IDR’s current technology budget. The 11-year model assumes one year for procurement, five years for system implementation, and five years of post-integration maintenance and support. Gartner then analyzed the cash flows over 11 fiscal years for all options.

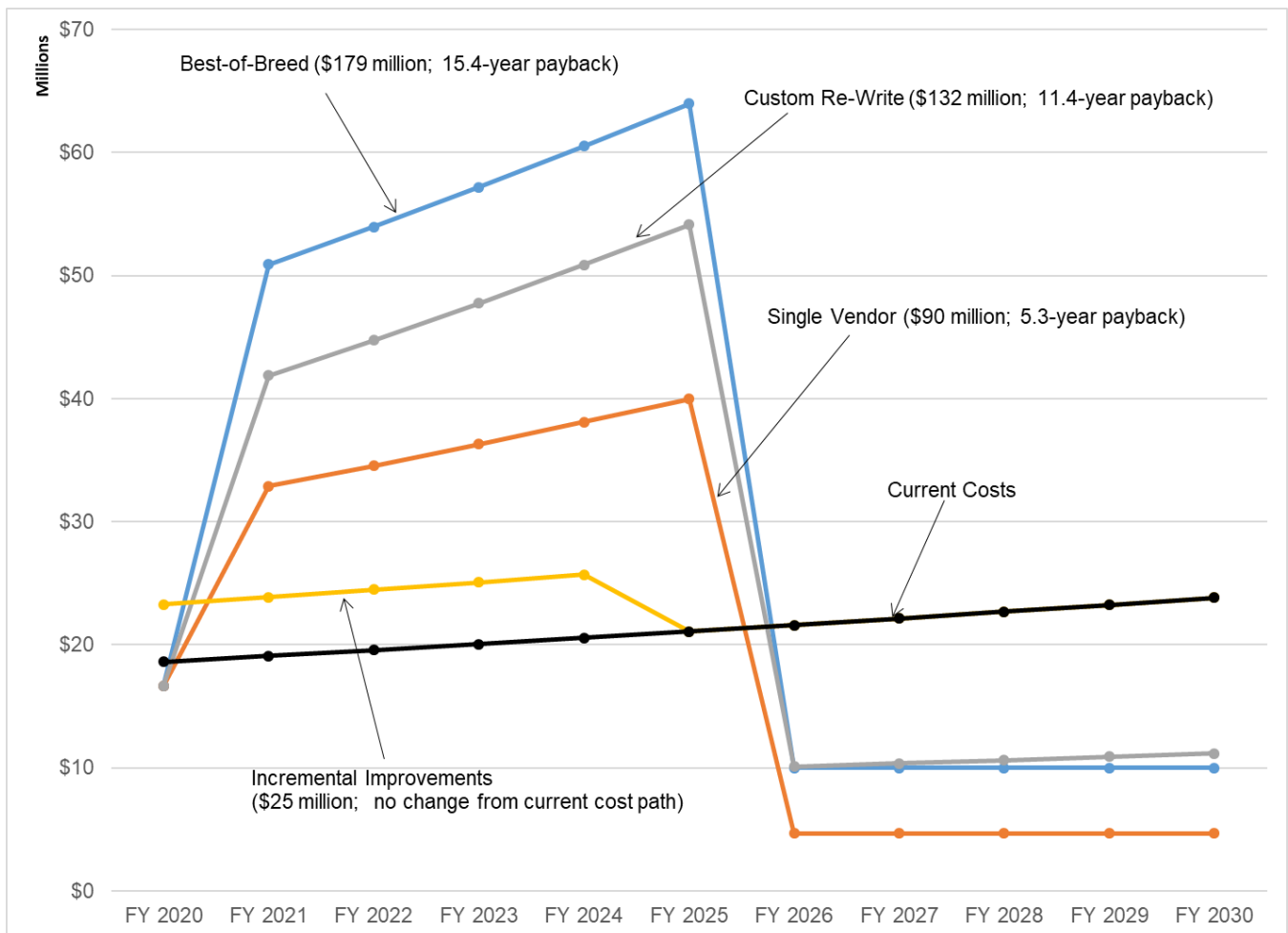
Recommendation and Benefits:

When evaluating the urgency for modernization of Iowa's tax capabilities, Gartner considered internal and external factors, including taxpayer and other constituent expectations, legal and policy mandates, and the potential for digital disruption of IDR's core mission. After extensive analysis, Gartner concluded that Iowa should make a capital investment in the modernization of its tax and revenue capabilities and systems. The system should be a modern, user-friendly, scalable, robust, secure tax system that will meet current and future tax processing needs.

Gartner recommends IDR select a single vendor commercial-off-the-shelf cloud-based solution for an integrated tax processing system. This new modernized tax system needs to feature an enterprise architecture that supports the use of modular technology.

Gartner's recommendation is supported by a detailed assessment of the tax system marketplace and a thorough cost analysis. Of all the options considered, the single vendor option is also expected to generate the lowest ongoing operations and maintenance costs after project implementation, starting in FY 2026 as shown in Figure 2. Another characteristic of the recommended option is a 5.3-year payback period, the shortest of all options.

Figure 2. Options Cost Comparison: Total Project Cost Over Five Years and Payback Period



An initial investment of approximately \$90M over a 5-year period will be required to procure and integrate a modern integrated tax processing system from a single vendor. The estimated investment allocation by fiscal year is depicted in Table 1.

Table 1. Estimated Investment Request for Tax Modernization, by Fiscal Year

Fiscal Year	Amount
FY 2020 (Procurement)	\$1.7 M
FY 2021	\$16.8M
FY 2022	\$17.2M
FY 2023	\$17.6M
FY 2024	\$18.1M
FY 2025	\$18.5M
TOTAL	\$89.9M

There are limits to this analysis and the figures presented here are estimates. A more refined financial analysis will be completed when IDR has developed functional and technical solution requirements and vendors have submitted pricing proposals aligned to those requirements. Nonetheless, Gartner recommends that IDR make significant technical changes to their technical architecture and focus on replacing their out-of-date primary applications and request investment for a modernization program.

Figure 3. Benefits of Modernization

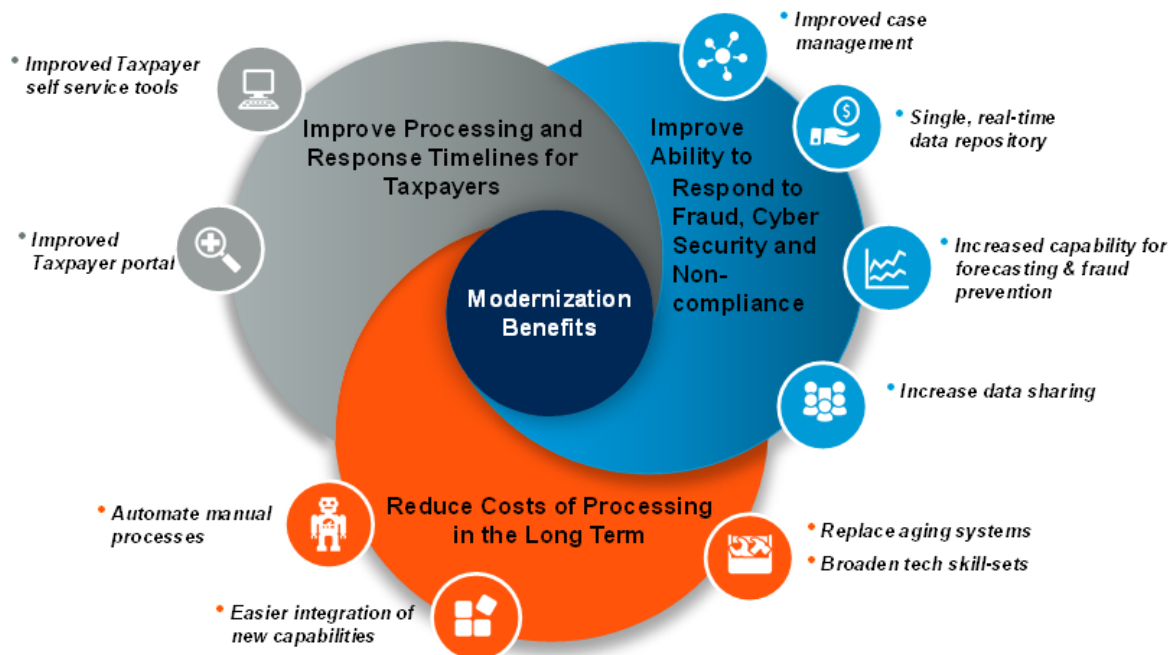


Table 2. What do IDR constituents gain from an integrated tax system?

IDR Constituent	What do they gain from an integrated tax system?
Tax Professionals	<ul style="list-style-type: none"> • Consolidated data will allow an easier way to analyze and review all information in one place to gain a comprehensive understanding of each client's tax situation. • Single tax portal will increase efficiency. Taxpayers will more easily authorize information access and decision making by tax professionals, reducing processing and correspondence delays.
Business/ Individual Taxpayers	<ul style="list-style-type: none"> • Ability to see in one place all permits, obligations, timelines for payments, correspondence and answers to questions. • Easy and timely interactions with IDR will lead to improved compliance. • Improved correspondence management will enable IDR to better track and manage interactions.
Bulk Filers	<ul style="list-style-type: none"> • Special forms with pre-determined schema and electronic filing instructions will support quicker uploading and more efficient interactions with IDR via a customized portal.
Local Governments/ Government Agencies	<ul style="list-style-type: none"> • More precise, timely collaboration for the administration of various taxes.
Elected Officials and Their Staff	<ul style="list-style-type: none"> • Availability of better quality data for analysis purposes will facilitate timelier input into budget or other discussions with the legislature.

Next Steps

Gartner recommends that IDR work with OCIO to develop a technology Request for Proposal (RFP) to accurately assess the vendor marketplace and procure the most appropriate single vendor solution for a modern integrated tax system. The RFP will start the document trail that will lead to a legal contract.

Gartner has identified three key steps in structuring a successful RFP process.

- **Architect a viable solution:** In this step IDR and OCIO will document business context, product functional and nonfunctional requirements and any existing constraints so that vendors can design a viable solution with suitable delivery model and optimal pricing.
- **Schedule and prioritize activities:** The execution of this step will provide RFP recipients a list of activities, anticipated timelines and evaluation criteria so that they can prioritize and assemble their best team to create a response and showcase their abilities.
- **Respond in a consistent manner:** In this step IDR and OCIO will develop provider response templates to allow for effective comparison of submitted proposals.

The flawless execution of the steps outlined above will allow IDR to successfully procure a single vendor solution corresponding to its vision and goals.