

A project with the scope of Merkava has produced numerous returns—both public and internal to the government—across a wide range of activities and government units. These returns are generally a mix of direct savings and efficiencies resulting from Merkava implementation, direct service improvements to citizens based in part on Merkava capabilities, plus strategic and political benefits resulting from Merkava integrating and handling information. This section focuses primarily on the public value returns in that mix along with a summary of the internal efficiency and operational returns.

Direct Returns

Much of the direct benefits to citizens results from lowering the cost of transactions with the government or providing information for new queries or transactions:

Financial transactions: Merkava provides a platform for back office processing of citizen and business transactions.

Payment Server – The public accesses the payments server online for most remittances to the government. The server connects directly to the government accounting system in Merkava and with banks and credit card companies. The payments can be made by credit card or direct withdrawal from bank accounts. The system currently processes approximately 120,000 transactions per month, with payments totaling NIS 4 Billion/year (10 percent of total collections). Over 30 percent of these transactions occur between 7-11 p.m., which indicates that the transactions formerly requiring citizens to visit government offices are shifting online.

The government does not collect data on the cost or staff savings resulting from the use of this payment system. However, the e-government system collects survey data on citizen satisfaction: a larger sample survey of 2,000 users quarterly plus a short satisfaction survey at the end of each transaction. The surveys show high levels of satisfaction (over 90 percent) and help identify problems or areas for new development.

Procurement Server – The e-government program established a procurement server to support online reverse auctions for purchasing. Qualified vendors receive a tender and instructions for participating online. The auction is open only to registered vendors who submit bids and see the current pricing. New bids can be submitted at will until one stands for a pre-arranged length of time (e.g., 30 minutes), closing the auction. The second use of this server was underway during the site visit, allowing the study team to observe it in action for a PC procurement in real time. During the observation time, the offered price for the PC order worked downward rapidly, ending at less than ½ the previous price for comparable equipment. This server is not yet linked directly to the Merkava procurement module, so measurements of returns are not yet available.

Information transactions: These include government obtaining information from citizens, via forms, and individuals seeking information from the government.

Forms Server – A forms server allows citizens and organizations to submit information to the government by completing applications and other government forms online. The forms server is not currently integrated with Merkava. Merkava provides value for citizens and organizations seeking information about financial transactions, both in terms of transparency about government decisions and about the status of specific claims or subsidies. These include vendors seeking status of orders and payments and citizens seeking status of payments due or eligibility for grants and subsidies. The e-government program also plans to implement a secure authenticatable email system to replace registered mail. This would lower the cost to citizens of obtaining or submitting legal documents. This is not currently linked to Merkava but represents another public return that can eventually be linked through the ERP infrastructure. Savings to the government or citizens from use of these services has not been documented.

The connection between service delivery through the e-government program and the Merkava project is made complex by the large scope of both, the many possible connections between them, and the difficulty of coordinating diverse development activities. The e-government program is organizationally separate from the Merkava project, but still within the Ministry of Finance and under the authority of the Accountant General's office. At present e-government focuses primarily on the services mentioned above plus an internal government portal for secure internet access from government computers and a secure intranet for agencies. These are primarily front-office services, on the interface between the government and its customers, or the infrastructure that directly supports those services. Merkava is the back-office system for the internal operations of the agencies. The back-office foundation will eventually link to direct services, as some do now. In the interim, however the development paths will be partially independent. Thus the full value of Merkava as an external service delivery platform has yet to be realized.

Internal Returns

The plans and descriptions of the Merkava project describe a substantial list of internal returns and strategic advantages to be obtained. The claim for the project is that both service quality and greater internal efficiency and effectiveness will flow from integrated information, improved controls, better input for decisions, and more accountability and transparency. Evidence for improved overall efficiency, while sparse, is impressive: elimination of 143 legacy systems during the roll-out to less than one-third of the agencies and a reduction of 45 percent in overall IT expenditures. At the agency level, however, there is limited evidence on how these managerial and operational improvements play out. Fortunately, there has been some detailed analysis of the impacts in one of the largest roll-outs, the Ministry of Health. This analysis provides a useful model of the kinds of impacts that may be found generally.

The Ministry of Health is responsible for 26 government hospitals and clinics as well as health policy, disease prevention, health research, and related functions. It was one of the early Merkava implementation sites. The Ministry's report of the positive impacts of the Merkava ERP on internal operations is summarized below.

Strategic Advantages:

1. Improved information for decisions; improved control and supervision; manager access to analyses without staff assistance; top executives have overview of operations not previously available.
2. Provides accounting detail by unit and activity beyond gross categories in budget statutes.
3. Ability to aggregate budget detail across units for comparison, standard setting, monitoring, and performance assessment. This includes monitoring laboratory performance and grants management.
4. Process integration reveals connections across units and activities and opportunities to improve efficiency and detect waste. For example, the logistics system showed a supplier was also a client of the government, allowing for offsetting payments in the amount of NIS 1.8 Million.
5. Tools for increased tax collection, such as reminder letters and label printing with debt data.
6. Accounting for assets, income and expenses on the accrual basis provides obligations transparency and better budget control.
7. Foundation for improved citizen service by connection with payment server.

Tactical Advantages:

1. Preservation of investment in unique systems for emergency inventory and reserve management to work with the SAP-ERP system.
2. Improved decentralization and delegation of authority for lower ranked tenders.
3. Standard procurement system allows monitoring across departments.
4. Combined tracking of department budget reserves and inventory.
5. Unified data and language supports faster updates of policies and business rules.
6. Expanded capability to manage both internal and external work force.
7. Provides income analysis of remote public health offices.

Similar operational and managerial benefits were described in the other ministries we included in the case study data collection: Science, Immigration & Absorption, Finance, and Transportation. The Ministry of Immigration & Absorption obtained some additional returns from information integration linked to their responsibility for large numbers of immigrants—as many as 100,000 per year. The scope of social and economic services provided is large and the rules for eligibility for citizenship are complex. Information integration within the financial and procurement systems in Merkava, linked to the citizen data and business rules, provided the capability to identify improper or duplicate payments and manage payments to municipal agencies and other organizations operating immigrant programs. The Merkava HR system also provided the foundation for a business intelligence application to process rules for civil service pension eligibility. This application speeded and standardized the eligibility review for thousands of government employees.

External Returns

The Merkava and five-layer initiative were seen from the beginning as having returns well beyond the internal reform of government operations. One return that is emerging is a result of the impact the ERP and related systems are having on the relationships between the government and the private sector. For example, the financial sector and vendors doing business with the government are being influenced to implement their own reforms based on better information integration, Web enablement, and perhaps most significantly organizing

around the kinds of standards in the Merkava ERP. Nir Gilad referred to this effect as the wave rippling outward from the impact of the Merkava ERP in the center of government. The potential returns to the public from this wave could well exceed those from the government improvements alone, though no measurements of these effects are available.

The political importance of the Merkava investment is also evident in the actions of the government and the public recognition of the program. The current Accountant General, Dr. Yaron Zalika, in charge of the Merkava and overall e-government initiatives, was named the current IT Official of the Year for Israel. The local press published regular articles (monthly or bi-monthly) about Merkava and related projects. Yitshak Cohen has been invited to speak about the project in several countries. Soon after coming to power in 2001, the Sharon government endorsed the Merkava project and later sponsored legislation to support and continue it. Prime Minister Sharon issued a strong endorsement of the continuation of these initiatives in 2003. The strategic plans and numerous press releases describe both the plans for development and the expected benefits for the quality of government and citizen life. These actions suggest the political importance of the ERP and related initiatives from the elected official perspective.

The interviews and documents reviewed for this case, consistently emphasized the importance of Merkava as a source of transparency and integrated, holistic views of government resources and operations. This transparency can produce public returns in several ways:

- Provides citizens with knowledge about how government works or information about access to benefits that they would otherwise be unaware of or not know how to acquire.
- Provides citizens with knowledge about government that helps them influence actions and decisions in desired ways.
- Access to the results of government actions and decisions provides citizens with material useful in evaluating government performance and engaging in political action and participation (advocating, debating, voting, etc.).
- Provides citizens with knowledge about government that increases their trust in and allegiance to the government.
- Availability for public scrutiny of information about government processes and decisions influences decision makers and other officials to pay closer attention to public interests and desires.

Overall, there is greatly increased quality and quantity of information about government performance becoming available from the ERP and related applications. This aspect of transparency increases the likelihood that assessment and ongoing performance improvement programs based on Merkava data will result in greater public returns from government services.
