

# **ITRMC Information Technology Achievement Awards Nomination**

## **Idaho Department of Fish and Game Automated Licensing System**

### **Executive Summary**

The Idaho Department of Fish and Game (IDFG) issues approximately 1.3 million documents annually to Idaho citizens and non-residents in accordance with state laws and IDFG Commission rules. Transactions are processed at the department's headquarters, seven regional offices, through a network of approximately 370 private vendors statewide, over the internet, via toll-free 800 telephone support and by mail-in applications.

When the department was informed by GTECH, our long-time licensing solution provider, that they planned to discontinue support for the IDFG licensing system this had the potential to significantly disrupt the administration of our licensing processes. The department looked at this as an opportunity to upgrade our services to Idaho citizens and businesses and resolve several weaknesses in the existing solution and associated processes. After soliciting input from our vendors and preparing a rigorous RFP a multi-disciplined team of senior staff members selected Outdoor Central as our new solutions vendor to develop a licensing system for Idaho. A key factor in our decision was the knowledge that GTECH planned to fully discontinue support for their existing system on a specified date and we would need to have the new system fully functional on the first day of operations and would not have our old system as a fallback position in case of problems. On June 1, 2007 the new system went "live" and transactions began processing through all sales channels. Significant improvements directly benefiting our citizens and Idaho businesses include:

1. Unreliable satellite communications with our vendors were replaced at all agent locations with an internet based system that to date has experienced 99.8% uptime. The severe weather we experienced in Idaho this past winter would have seriously impaired our ability to deliver services under the previous system.
2. New reliable hardware was provided to all vendors free of charge and a depot maintenance system has replaced on-site repair service. Hardware failures, when they do occur, are corrected by overnight shipment of replacement hardware and repairs are made at a central site keeping maintenance costs below those of costly and slow on-site statewide repair.
3. Demographic data may now be entered into the system by a simple swipe of an Idaho driver's license bar code or by swiping the new bar-coded license. This reduces errors and saves processing time for our vendors.
4. License paper was upgraded to a tough non-fading stock made to last for a full year under harsh conditions. Vendors no longer have to place tags in a separate waterproof protective pouch.
5. Agents are now able to process multiple transactions at once and save staff time while providing an improved service to the public.
6. Communications with vendors may be made by an integrated messaging system to immediately alert vendors of upcoming key dates or actions such as season setting.
7. Since the system introduction average processing time for a transaction has declined by 28% as our vendors have become more familiar with the systems new features.

The cost of our new system is \$10 million for a five year contract or about \$1.50 per document issued. This cost includes one-time initial development and hardware costs of \$1.5 million. All costs are being amortized over the initial five year contract period by monthly payments. The department also has renewal options built into our contract

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## **Idaho Department of Fish and Game Automated Licensing System**

### **Full Project Discussion**

The Idaho Department of Fish and Game (IDFG) maintains an automated system to administer the issuance of all licenses and tags required for sportsmen to comply with Commission rules and state laws regarding the harvesting of fish and game species. This service is provided at the department's headquarters, seven regional offices, through a network of approximately 375 private vendors, via toll-free 800 service, from a sportsman's home through their personal internet connection, and by mail-in application. The department issued approximately 1.3 million items last year which produced revenues of \$34 million to support the department's mission.

#### **Section (a) Description of Project**

Hunting and fishing rules in Idaho specify a complex matrix of license and tag combinations designed to provide our sportsmen the maximum opportunity to hunt and fish while also protecting the resource to insure a continuing opportunity for future generations. Season dates and lengths, hunting and fishing areas and quotas by area are adjusted annually by the Idaho Fish and Game Commission. In addition several licenses and/or tags have specific qualification criteria such as residency, required hunter education, age, disabilities, or other factors and all these special circumstances are built into the automated system to verify eligibility before licenses/tags may be purchased and issued.

The department's prior contractor advised IDFG that they would be discontinuing support for their system no later than June 1, 2007 and the department considered many options before issuing a contract to Outdoor Central, a Tennessee based service provider, to develop and install a new statewide solution in conjunction with IDFG staff. Vendor selection was driven by several key requirements. A primary requirement was that the new system was to be internet based rather than utilize the unreliable satellite communications that was the basis of our prior system. Under the old system the department's vendors each had a satellite dish installed on the roof of their facility and we experienced intermittent outages during bad weather either in Idaho or at the vendor's central hub location in the eastern United States. System flexibility was also a key component as the department anticipated that each year we could encounter significant changes to rules or new guidelines for license issuance. Vendors were interested in faster and easier processing and a smaller hardware footprint on their valuable counter space. They did not want to carry blank license stock at their locations. Sportsmen wanted licenses that would not fade and would stand up to a full year of rugged use in the outdoors and they wanted a system that would be responsive during peak buying periods. IDFG also wanted a system that supported our non-resident applications since the department receives significant revenue from non-residents. IDFG required a secure system since the department would be obtaining social security numbers and credit/debit card information from our customers.

Implementing a new licensing system in the middle of the year presented many business continuity challenges. The new system had to include transactions from the old system so that business rules could be correctly enforced. For example, a customer must have a valid hunting license before purchasing an elk tag. The new system also needed to include existing customer information so that customers and vendors would not have to waste time at the point of sale re-entering demographic customer data and prior purchase history. To maintain critical business continuity from the old system to the new, Idaho Fish & Game staff had to work closely with Outdoor Central to migrate existing data to an entirely new system structure. This data migration had to be secure, accurate and complete. Over 10 million transactions were carried from the old system to the new.

Once the historical data had been migrated to the new licensing system an extensive set of internal functional business rules had to be validated by Idaho Fish & Game staff to ensure proper

functionality. This required a thorough knowledge of the RFP requirements, quality control measures and relevant deliverables. All of this was carefully controlled and coordinated with Outdoor Central over the course of several months to ensure the ongoing continuity of license sales, the department's most critical fiscal operation.

The new system went "live" on June 1, 2007 and licenses and tags were being issued within two hours of the startup. Minor problems were quickly resolved and customer needs were met over the busy Memorial Day weekend. A second phase is now in planning and the department also continues to fine tune the system to improve small deficiencies that have been noted since operation commenced.

### **Section (b) Improvement to Government Operations**

Prior to converting to our new system the department and training specialists from Outdoor Central conducted a series of training sessions throughout the state to train all vendors. At least two sessions were held in all regions of the state and consisted of "hands-on training" with an explanation of new features and changes that our vendors should expect.

The department today is providing an improved level of service to our citizens and businesses without increasing the department's spending. In addition to providing improved service to our public the department now has improved tools to manage the states wildlife.

We can rapidly respond to changes in Commission rules, many of which are dependent on biological analysis or sociological considerations. Improved flexibility and IDFG control over the business rules driving the system allow us to easily make changes required for seasons, tags, locations, species or many other attributes. We can establish quotas and prevent additional sales once a quota is reached. Previously we relied upon our contractor for these changes and this proved to be a slow and difficult process. The end result is that we can manage the states resources better and quickly respond to changing conditions. Expanded management tool sets and administrative flexibility also allows IDFG to push systems upgrades to all vendor terminals simply and simultaneously.

The new solution also provides our vendors with a web-based tool and associated services providing enhanced reporting used to monitor their sales activities. Once each week we electronically sweep all vendors bank accounts for license/tag fees due to IDFG.

### **Section (c) Benefits to Sportsmen and Vendors**

We believe that Idaho's sportsmen and our network of vendors are very pleased with the improvements seen from our new system. Complaints from the public are rare and vendors have seen productivity improvements. The switch to an internet based system has given us an uptime of 99.8% since going live in June. Under the old satellite communications we would have suffered from intermittent outages during the difficult weather throughout the state this past winter.

The department provides sportsmen the ability to obtain licenses/tags around the clock from anywhere with an internet connection or via toll-free telephone to our customer support center. They may also visit any of our vendors throughout the state or come to any IDFG office for their needs. Sportsmen who are eligible for disabled consideration will now have to renew their qualifications only once every five years rather than annually as a new feature was added to the software to validate this status. The department has provided new reliable hardware and printers to all vendors free-of-charge. The prior method of slow and costly on-site repair of hardware failures has been replaced with an efficient depot maintenance procedure where replacement equipment is shipped overnight and the faulty equipment is returned to a central site for repair. The easy "plug and play" configuration of the new hardware has made this feasible with a minimum of inconvenience for our vendors.

Efficiency has also been improved by introducing bar-code scanners into our license sales process. Vendors may now simply scan Idaho driver's licenses to bring up the demographic information and buying history of our customers. This procedure reduces data input time and eliminates input errors. Our new licenses also are bar coded and may be scanned when a customer renews or purchases additional items. License and tag stock has been upgraded to a strong, non-fading, weather resistant grade that eliminates the need to place licenses/tags in separate plastic pouches for protection.

A messaging system has been incorporated within the system that allows us to provide immediate information to all vendors at one time and also provides vendors with a feedback mechanism to the department. Supplies and extra regulation booklets may be ordered by the vendors at the click of a button. The average "begin to print" time to issue a resident license has declined by approximately 28% since the system was introduced on June 1, 2007 as vendors have become more familiar with the system and its new features. A resident license is currently issued in an overall average time of 1 minute and 45 seconds system wide.

Independent vendors process 84% of all transactions and below are a sampling of comments we have received through our new messaging system:

**Sent by MANAGER: from Vendor ID: 005030 on 08-Jan-2008 11:07:46**  
**MESSAGE: FOR THE MOST PART THINGS SEEM TO BE RUNNING SMOOTH. OCCASIONALLY WE RUN INTO A SMALL CHALLENGE. WE HAVE BEEN ABLE TO RECIEVE PROMPT HELP WHEN NEEDED. THANKS! BINGHAM COOP BLACKFOOT**

**Sent by MANAGER: from Vendor ID: 003667 on 05-Jan-2008 15:33:22**  
**MESSAGE: HELLO I JUST WANTED TO SAY THANK YOU FOR ALL THE GOOD WORK THIS LAST YEAR. EVEN THOUGH WE MAKE VERY LITTLE MONEY ON FG WE ARE HAPPY TO PROVIDE THE SERVICE AND THE IMPROVEMENTS HAVE BEEN APPRECIATED**  
**HAVE A GREAT NEW YEAR**  
**REGARDS LAKE FORK MERC**

**Sent by MANAGER: from Vendor ID: 003713 on 04-Jun-2007 07:54:55**  
**MESSAGE: AFTER A FEW TIMES.....THE SYSTEM IS GREAT....AS I AM IN OREGON...AND CAN'T SELL IDAHO RES. LIC IT IS SOMETIMES CHALLENGING.....THANK YOU FOR THE GREAT EQUIMENT.....**  
**/OWNER/MANAGER**

**Sent by MANAGER: from Vendor ID: 003045 on 06-Jun-2007 08:21:13**  
**MESSAGE: HELLO ALL ,GREAT NEW SYSTEM.ALL OF US @ CABELAS ARE ENJOYING THE EASE OF MULTIPLE TASK . THANKS AGAIN CABELAS CUSTOMER SERVICE.**

**Sent by MANAGER from Vendor ID: 001649 on 06-Jun-2007 20:33:21**  
**MESSAGE:LOVE THE NEW SYSTEM!!**  
**THANKS FOR THE UPGRADE, THIS SHOULD SPEED THINGS ALONG THIS YEAR!**  
**THE LEONARD PAUL STORE**

**Sent by MANAGER: from Vendor ID: 004960 on 18-Jun-2007 12:04:09**  
**MESSAGE: WOULD JUST LIKE TO TELL YOU IIKE THE NEW MACHINE AND SYSTEM, VERY NICE.**  
**THANKS**

#### **Section (d) Cost/Benefit Analysis**

We believe, based on customer and agent feedback over the past year, that customer satisfaction has increased dramatically as sportsmen are now able to obtain fast and accurate licenses and tags, even during peak seasons and purchasing periods. This has been due to the improvements of the new system in the areas of operational system load balancing that lessens the impact of peak loads on system performance. This is a significant contrast to the prior system where peak sales periods resulted in

dramatic system slow down or periods of complete system inoperability. Other key benefits of the new system have been experienced in the areas of operational efficiencies, increased productivity, decreased support costs, and a more reliable, consistent, and expeditious sales process.

#### Benefits / Savings / Sales & Service Enhancements:

- IDFG Staffing
  - All improvements noted earlier in this document were accomplished without an increase in the department's overall budget. The initial contract with Outdoor Central is for a five year period with renewal options. The cost of \$2 million per year includes an amortization of the initial development and system-wide hardware cost of \$300,000 per year. Upon renewal this cost should be greatly reduced. The department's cost per item issued is approximately \$1.50 to generate revenue of \$34 million.
  - Licensing staffing levels have not increased even though the complexity of rules/regulations seems to grow each year. Our core staff supporting the system is 5 full time and 5 part time employees for support of 11 hours every weekday and 8.5 hours every Saturday to assist vendors and license buyers.
  
- Sales Process Improvements
  - Agent Productivity Increases
    - Significant improvements to the process by which sales are made have resulted in agents having to take less and less time to complete sales thereby increasing productivity and sales throughput.
  - Ease of Use / Minimal Training Required
    - The new touch screen terminals were designed and built with the user in mind. As such, they require little training and are process focused making the sales process faster and much more intuitive than the prior solution. This means that Agents spend less time administering the sales process which translates into more sales at the location and more time for the agent to spend conducting other profitable business at their locations
  - Increased Data Entry Efficiencies
    - The new solution provides more streamlined alternatives to data entry making the data entry process faster and more reliable. The ability to scan both Idaho driver's licenses as well as previously purchased tags, permits, and licenses to kick off subsequent sales processes has dramatically decreased data entry errors and provides the state with a more reliable repository of data. Quicker, more dependable data entry = quicker sales = more sales in a given period of time = better service by the state.
  - Introduction of Application-side Business Rules
    - The new system also provides a very robust set of underlying business rules that provides "checks and measures" against the data during the sales process which has dramatically decreased instances where customers receive incorrect or invalid purchases. In essence, the system prevents inappropriate sales by conducting verifications throughout the sales process that prohibits invalid sales to occur. Decreases in refunds, exchanges, and cancels are the direct positive results of this system-side efficiency.
  
- License Stock Improvements and Savings
  - The new solution license stock is extremely durable and nearly impervious to conditions that would have destroyed prior solution product. As a result, we have seen decreases in the number of product duplicate and reprint requests which equates to less ticket stock being required on a daily, weekly, monthly, and yearly basis. This produces tangible savings in license stock and a decreased number of dispute situations in the field dealing with damaged, destroyed, or lost licenses.

