



Automating an Inventory Management System While Maintaining Test Integrity

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NATIONWIDE TESTING

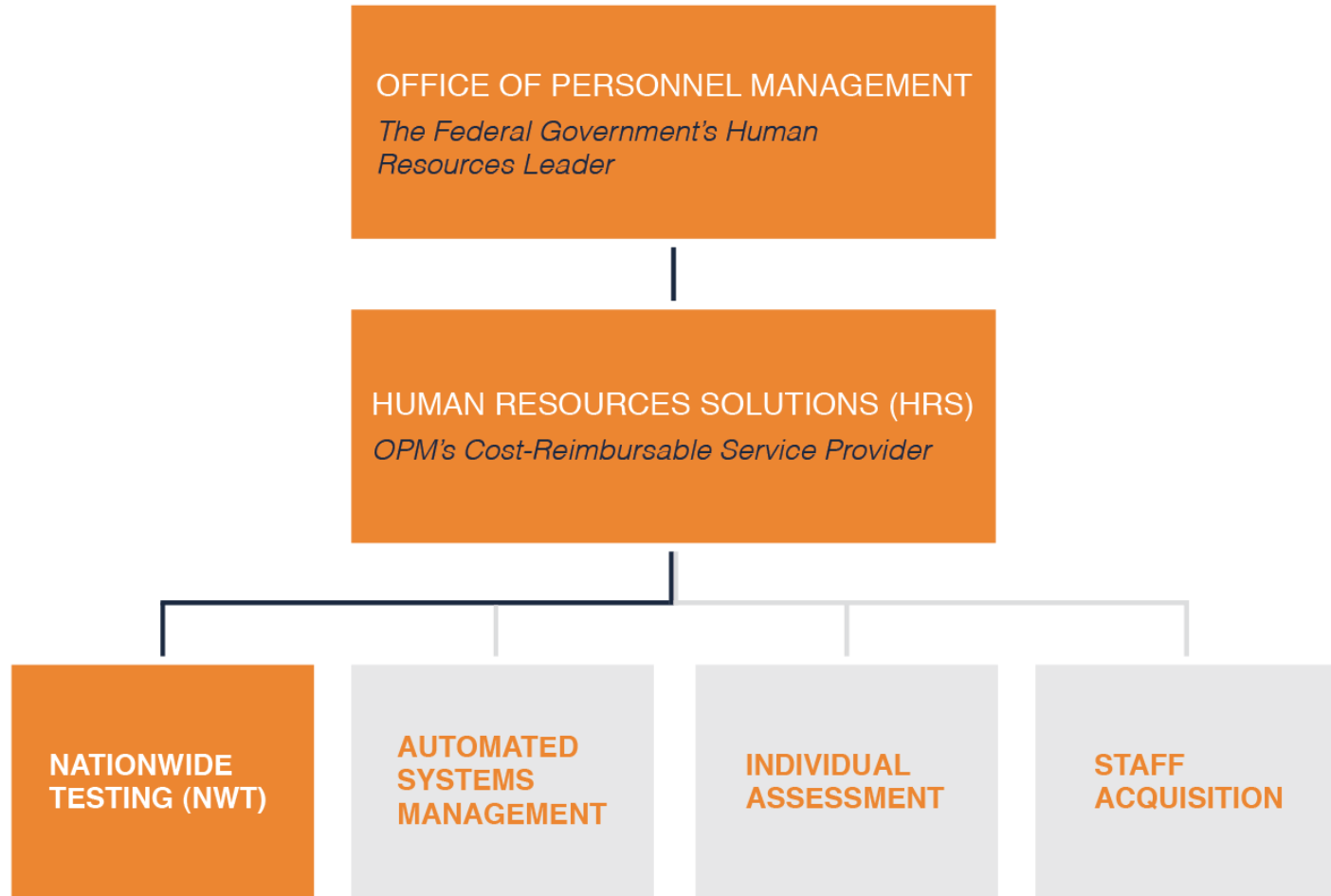
- Nationwide Testing (NWT) Overview
- Automating an Inventory Management detailed steps on:
 - Research
 - Development
 - Implementation
 - Oversight



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NWT OVERVIEW

NWT ORGANIZATION



Mission Focus

- Government-to-government organization
- Authorized to support federal, state and local agencies in all U.S. states and territories
- Nationwide network with more than 500 agency personnel

Stability, Scale

- Over 30 years of test administration and HR expertise
- Administers assessment solutions and entry-level and promotional tests to 1 million applicants annually



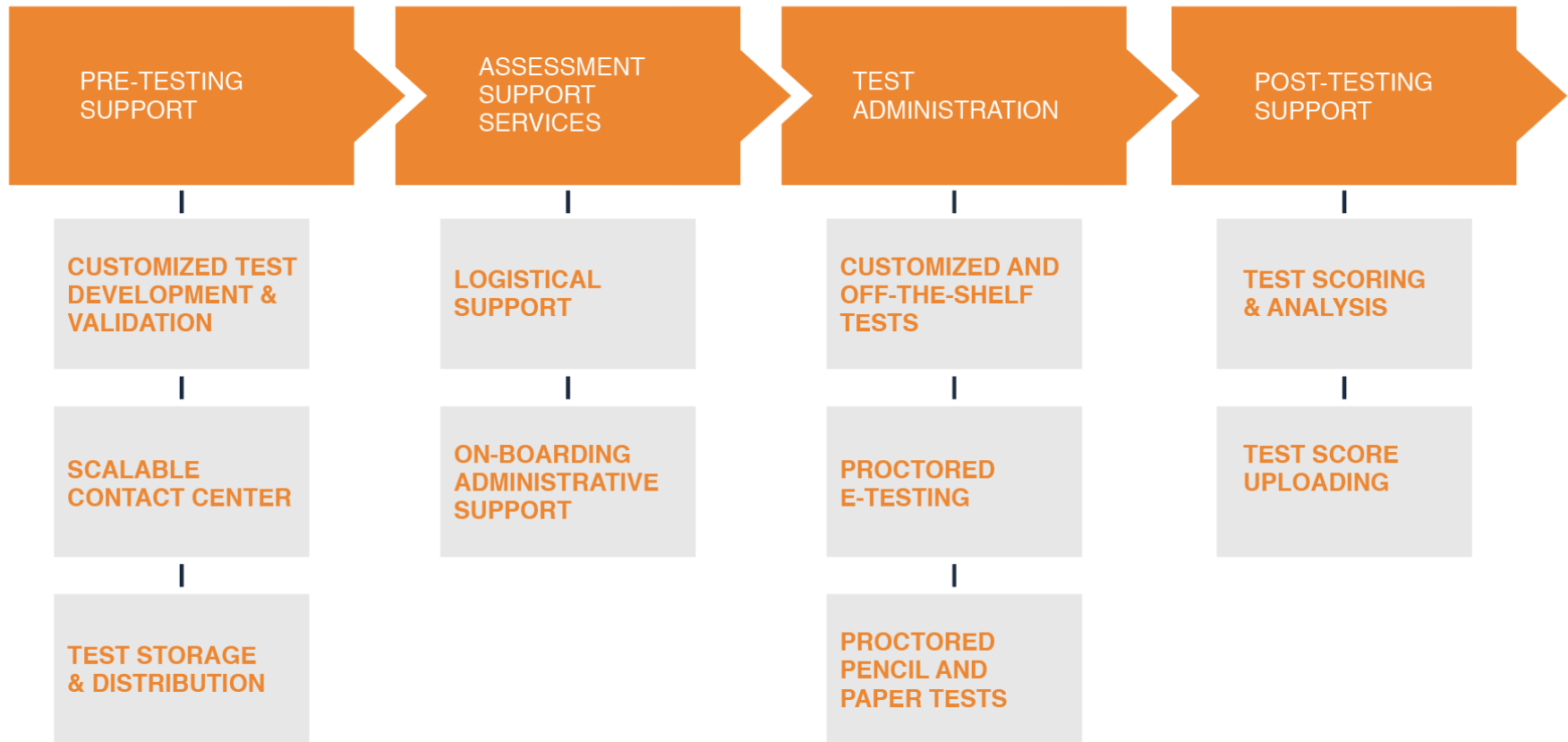
NWT CUSTOMERS



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NWT OFFERINGS

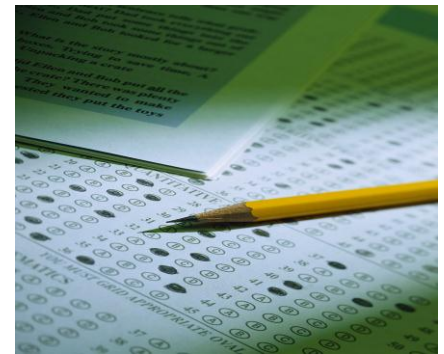
NWT OFFERINGS



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RESEARCH

- Risks of not pursuing modernization initiative:
 - Inadequate test security
 - Test Loss Compromise (TLC)
- NWT reputation of secure test handling and security
- Manual process did not function optimally



MANUAL VS. AUTOMATED

- Manual process was lengthy and not easily accessible
- Increase transparency when automating system to an Internet based site
- NWT warehouse operation is unique and is not fit for off-the-shelf and needed customization
 - Varying suspense dates
 - Serial numbers



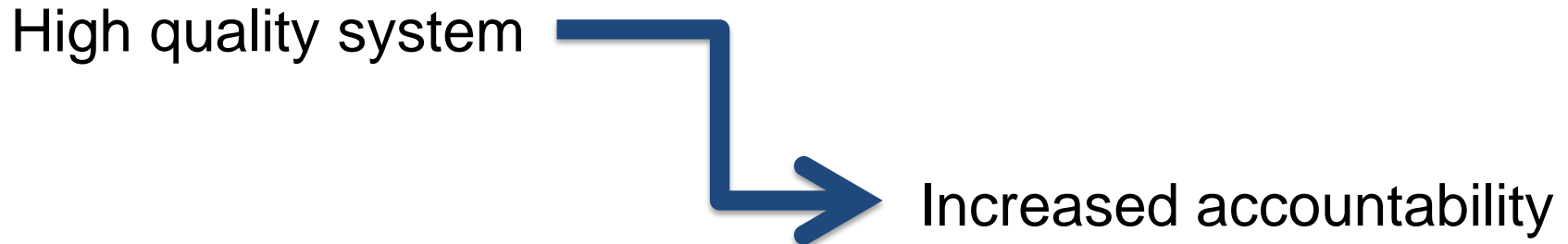
NWT RESEARCH AND DEVELOPMENT

Through conducting a formal study it was determined that the previous inventory management software needed to be replaced.

NWT collaborated with technical counterparts within OPM to design, build and implement a system that adequately addressed distinctive inventory management needs



IMPORTANCE DEFINED



- As a testing service provider, test security is the most important function we provide our clients
- Internal material handling, distribution system and processes would be streamlined



SYSTEM REQUIREMENTS SPECIFICATIONS

- Inventory and order management system Software Requirements Specifications (SRS) sections included:
 - Introduction
 - Overall system design
 - Inventory management
 - Ordering
 - Allocating
 - Picking
 - Packing
 - Shipping
 - Receiving orders
 - Warehouse management
 - Field operation management
 - System reporting and querying
 - Vendor requirements
 - Warehouse equipment





DEVELOPMENT

DESIGN & DEVELOPMENT

IT Specialist, program analysts, warehouse management and contractor diligently reviewed SRS

Ensured project scope and technical requirements properly addressed the needs

Once all parties understood requirements, system development began



SYSTEM DEVELOPMENT

- Ongoing communication with developers and programming staff
- Each portion of the SRS was tested for errors by IT personnel and a program analyst
- The system was finalized after a few minor changes

Continuous testing on each developmental aspect ensured that NWT would receive the highest quality automated system



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IMPLEMENTATION

IMPLEMENTATION GOALS

Minimize the impact of implementation on day-to-day operations



Train all system users



Account for all test material and enter it into the new system



IMPLEMENTATION PLAN

- Ensured all orders needed for first two months were placed and filled before implementation began
- Field staff returned any test materials no longer needed to the warehouse
- Shut down the old inventory system



IMPLEMENTATION PLAN (cont.)

- Conducted a nationwide physical inventory of all test material
- Entered all test material that was in use by employees into the new system
- Entered all test material that was stored in the warehouse into the new system
- Activated the new inventory system



- Three types of training tools were used:



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OVERSIGHT

3 LEVELS OF CONTINUOUS OVERSIGHT



CONTINUOUS MONITORING

- OPM warehouse ensures correct test material quantities are being requested by field staff before orders are filled
- Multiple counts of material are completed by warehousemen upon order shipment and receipt
- Verification of outbound shipment address
- UPS tracking number assigned to each shipping box in a given order



INVENTORY VERIFICATION

- Two types of inventory verification are done at regular intervals:

Material-In-Use Inventory

Any test material that is currently in use by NWT field staff for test administration

Active Inventory

Any test material that is available to order from the automated system by NWT field staff



BENEFITS REALIZED

- Minimize chance for TLC
- Data and reports available to rectify any discrepancies
- Increased operational efficiency
- Customer peace of mind
- Accurate online inventory system accessible to all levels of the organization despite geographic disbursement



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