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## EXECUTIVE SUMMARY

### *DB Analysis & Needs Evaluation*

In early January of 2006, ISD Group was asked to do a summary evaluation of:

- **Data System Design** with an emphasis on contact management, improved data sharing, and program support and improvement
- **IT Upgrade Requirements & Sustainability Goals** for clear and accurate implementation of proposed systems/solutions
- **Ecommerce / Database Integration** and development

The goal of the evaluation was to complete an assessment that focuses on mission-based technology planning for JCR. Aside from a custom Web-based database application, ISD Group also analyzed previously-identified infrastructure-based data collection, communication, and IT management/staffing.

### *Evaluation Goals*

Our goal was to create a strategic technology plan that identifies ways that JCR can improve delivery of their services, programs and operations and to better serve their mission and constituency, both directly and indirectly, through technology.

The evaluative process is the foundation of the technology plan and addresses external and internal connectivity and communications challenges. As a comprehensive technology plan will be key tool for advocacy and articulation for JCR to be successful in reaching their fundraising goals related to IT development, ISD Group will further assist JCR in developing a case statement and funding guidance and support to meet the development requirements to actuate the plan.



Our process consisted of:

- Understanding and evaluating the **current state** of IT infrastructure, data collection and communication systems
- Defining the **desired state** of what systems and integrated solutions / approaches would best meet JCR's needs and culture
- Analyzing the **gap** between these states
- Recommending an **actionable plan** to move from the current state to the actionable state

### *Change Management - Protecting Your Investment*

In addressing and understanding the problems that a client faces and crafting the appropriate answer goes beyond simply offering solutions. One must take the **process improvement approach**. This is a mission-centered strategic approach that takes short term as well as long term planning into consideration without forgetting the client's IT sustainability and self-governing issues.

Proposing how problems can effectively be resolved is a process for the consultant of managing change for their client. At ISD Group, we need to make sure that the processes used to achieve the IT goals of the client are well coordinated. Change must happen thoughtfully and come compete with open-ended schematics. This includes not only the technical goals, but the technical requirements, foundation, and people investments necessary to make it all come together.

IT is a huge commitment and investment for the client, and must be protected and nurtured. Our job as consultants is to manage that change and create meaningful and intentional results.



## DEFINING THE CURRENT STATE: RESEARCH & REVIEW

Our first step in this process was to do our homework and research / review past evaluative efforts at JCR.

The **current collection model** at JCR is comprised a series of data sources, each with its own set of data, and does not cross-reference without manual intervention or actualization. These include:

<b>Source</b>	<b>Uses</b>	<b>Shortcoming</b>
<b>Access Databases</b>	<ul style="list-style-type: none"> <li>▪ Contributions</li> <li>▪ Mailings</li> <li>▪ Donations</li> <li>▪ Events</li> <li>▪ Program Participants</li> </ul>	<ul style="list-style-type: none"> <li>▪ No cross-referencing</li> <li>▪ Manual maintenance</li> </ul>
<b>Excel Charts</b>	<ul style="list-style-type: none"> <li>▪ Accounting</li> <li>▪ Volunteer Tracking</li> <li>▪ Mailings</li> <li>▪ Reporting</li> <li>▪ AccPac integration</li> <li>▪ Program organization</li> <li>▪ Outreach development</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not cross-referencing</li> <li>▪ Used as reporting tool – inadequate</li> <li>▪ Not integrated</li> <li>▪ Limited User capabilities</li> </ul>
<b>Outlook</b>	<ul style="list-style-type: none"> <li>▪ Email</li> <li>▪ Contacts</li> <li>▪ Coordination of communications and outreach</li> <li>▪ Calendar</li> <li>▪ Meeting planning</li> <li>▪ Category listings</li> </ul>	<ul style="list-style-type: none"> <li>▪ Excessive, bogging down the network</li> <li>▪ Reaching capacity</li> <li>▪ Not cross-referencing</li> <li>▪ Does not back-up on local level</li> </ul>
<b>RMT</b>	<ul style="list-style-type: none"> <li>▪ Direct mailings</li> <li>▪ Contact management tool</li> </ul>	<ul style="list-style-type: none"> <li>▪ Stiff</li> <li>▪ Not operationally coordinated</li> <li>▪ Creates additional workload to meet their system</li> <li>▪ Data not in-house</li> </ul>
<b>Manual Forms</b>	<ul style="list-style-type: none"> <li>▪ Budgeting / reporting</li> <li>▪ Volunteer organization</li> <li>▪ Feedback forms</li> <li>▪ Interdepartmental communication</li> </ul>	<ul style="list-style-type: none"> <li>▪ Non-trackable</li> <li>▪ Duplication of effort</li> </ul>



**General problem areas include:**

- Many sources allow for very confused data integrity
- No defined methodology or accepted data collection model
- Data use and verification is staff-dependent
- Low acceptance of database use
- Manual reporting being employed across all areas
- Mailings outsource dependent
- No real security levels
- Narrative areas need to be cross-referenced for viable data

## IT SOLUTIONS INTEGRATION MODEL

### *Desired Results & Goals*

The success of the programs and the resulting accountability, quantification, tracking, and reporting capabilities they generate become self-perpetuating and advantageous to the client mission. To that end, an integrated solution model will coordinate:

- **IT Upgrade Requirements & Sustainability Goals** for general IT issues and future systems/solutions, including hardware, software, Web connectivity improvements, networking capabilities, etc.
- **Staff/Departmental** integration for maximized communications and end-user success and system acceptance
- **Data System Design & Management** with support and improvement of internal/external tracking and quantification
- **Staff Training & Development** for improved operational flow and standardization of skills and abilities, including the development of key in-house staff to assist in deferring continued dependence on outsourced system maintenance
- **ECommerce Development** for maximum Web capture with secure enduser development and integration.

JCR has worked with ISD to determine the goals, scope, risk factors and desired outcomes of this project.



### *JCR-Defined Project Goals*

- Return data entry to an in-house project without the use of RMT for mailers and contact management
- Truly integrated data management system
- Development of a JCR report library as well as properly defined ad hoc reporting capabilities
- Move eCommerce from an inferior off-the-shelf solution to one that is secure, properly integrated, and effective
- Minimize end-product maintenance to be in-house and outsource balanced for maximum control over changing needs on the data for JCR
- Development of the “Johnson Cell Research Way” and approach to operational dataflow and information tracking / usage

### *JCR-Defined Project Needs*

- Appropriate Timetable that is appropriate to the cultural and functional needs of JCR to be given the opportunity for successful system acceptance and integration
- Coordination with operational software and hardware sets
- Coordination and development of appropriate in-house IT capabilities
- Clearly defined needs and goals that will control “wish lists” and scope creep
- Compression of data entry points and systems conflicts
- Clear cut and solid security
- Single-set customization to fit many needs, with easy-to-use GUI interfaces for maximum acceptance
- Change management with buy-in at all levels of development
- Reduced duplication and increased synchronization efforts
- Fast performance – “snappy”
- True multi-user environment with carefully defined data sharing in real-time

### *JCR Involvement*

JCR has developed a list of staff members that will serve as the working team for this project. They include:

- Jim Smith, Project Lead
- Tom Johnson, Webmaster
- Peter Malkai, IS – Advise and Consult
- Kelley Schwartz, Management Oversight

Furthermore, it will be important to have a set of stakeholders in the approval of this project, such as a key member of the Board of Directors, as well as the Executive Director involved on the approval stages of the project.

JCR will be needed to work with ISD to develop regular meeting schedules and defined tasks and team requirements to keep the project on-track.

## DESIRED OUTCOMES AND FEATURES

### *Reporting*

The reporting capabilities of a Web-based data collection model would allow for:

<i>Fundraiser compliance reporting</i>	<ul style="list-style-type: none"> <li>▪ Relating information to grantors</li> <li>Demographics and statistics</li> </ul>
<i>Publishing Outcomes</i>	<ul style="list-style-type: none"> <li>▪ Publishing white papers on JCR related studies</li> <li>Heralding successes</li> </ul>
<i>Demographic Reports</i>	<ul style="list-style-type: none"> <li>▪ Fundraising assets</li> <li>Communications/PR assets</li> </ul>
<i>Program Management / Development</i>	<ul style="list-style-type: none"> <li>▪ Reporting on Program needs</li> <li>▪ Tracking of outreach programs</li> <li>▪ Organization of current efforts</li> <li>Planning for newer proposed programs and services</li> </ul>
<i>Claiming / Heraldng Successful Outcomes</i>	<ul style="list-style-type: none"> <li>▪ Program according to client outcomes</li> <li>▪ Review mechanism for program goal reviews and development of scope of services</li> </ul>



*Process Improvement Features*

<i>Online Interaction with Constituent Base</i>	<ul style="list-style-type: none"> <li>▪ Volunteer sign-up</li> <li>▪ Program participant feedback</li> <li>▪ Outreach development beyond regional boundaries</li> </ul>
<i>Online Emergency Resources</i>	<ul style="list-style-type: none"> <li>▪ Online for reference and medical alert</li> <li>▪ Emergency sheets</li> </ul>
<i>Contact Management</i>	<ul style="list-style-type: none"> <li>▪ Real-time contact sharing</li> <li>▪ Single-set grouping and categorization of contact base</li> </ul>
<i>Staff Training and Coordination</i>	<ul style="list-style-type: none"> <li>▪ Online meeting planning</li> <li>▪ Resource sharing</li> <li>▪ API Outlook interfaces</li> </ul>
<i>Real-time Communication</i>	<ul style="list-style-type: none"> <li>▪ Real-time group scheduling</li> <li>▪ Task and announcement listing assigned to both staff person and project</li> </ul>

*Data Tracking*

<i>Fundraising Tracking</i>	<ul style="list-style-type: none"> <li>▪ As PR</li> <li>▪ Grantor information</li> </ul>
<i>Outreach Communications</i>	<ul style="list-style-type: none"> <li>▪ Letters</li> <li>▪ Email blasts</li> <li>▪ Fax Blasts</li> <li>▪ eNewsletter components</li> </ul>
<i>Program Participants</i>	<ul style="list-style-type: none"> <li>▪ Participation tracking</li> <li>▪ Statistics</li> <li>▪ Volunteer Management</li> </ul>
<i>Raw Data</i>	<ul style="list-style-type: none"> <li>▪ Studies</li> <li>▪ Program Statistics</li> </ul>



*Other Advantages*

<i>Quality Improvement Aspect</i>	<ul style="list-style-type: none"> <li>▪ Alerted when certain procedures not followed             <ul style="list-style-type: none"> <li>○ Email with link</li> </ul> </li> <li>▪ Administrating/reviewing program results, fundraising results</li> <li>▪ Defines productivity and time allocation</li> </ul>
<i>Compliance Reporting</i>	<ul style="list-style-type: none"> <li>▪ Questions from funders</li> <li>▪ Captures transaction reporting on Web-based fundraising efforts</li> </ul>

*Mission-Centered Advantages*

True tracking and support of the JCR service model in a streamlined and self-accountable system. The data collected would also serve to herald the successes of JCR, and allow for a clear dissemination of the message and mission of the agency.



## WEB-BASED DATA COLLECTION SYSTEM

Given the wide physical locations/area of the agency, multi-user needs and various skill sets inherent across departments, the best solution would be to utilize a Web-based Data Collection System.

### *Framework*

It is important to establish proper phasing and establishment of a solid framework and blue print for the entire proposed JCR intranet system. Such design principles would best allow for expansion.

### **Features**

Web-based Data Collection System allows for:

- Security Levels – see only what you need to/should see
- Easy interfaces – drop-down boxes for data integrity and query reliability
- Strong API for Outlook functionality integration
- Strong back-end reporting
- Cross-platform capabilities (MAC and PC)
- Built-in Communications systems
- Coordination between departments and users
- Conduit programs and data synchronization (with Accounting, Outlook with Exchange Server, etc.)
- Utilization of existing forms and form structures with field reporting
- Real-time customization and deployment
- Re-sizing capabilities (scalability)
- Online training and support
- Remote access administration
- User tracking
- Expandability
- Modularization & True Phasing

Additionally, the system should allow for departmental and position-specific data tracking and viewing limitations constructed as a subset of forms defined by position and task relevance. At any given time, a relational system would allow for case file viewing and tracking, general population demographic review, management review of staff performance, property-by-property analysis, or inter-departmental reporting.



**Process**

An example of the process for the development of the Web-based data system would consist of:

Staging	ISD Staffing	JCR Staffing	Goals/Needs	Schedule
<i>Design &amp; Programming</i>	1 Designer 2 Programmers 1 Project Manager	1 Team Member or Administrator to work with ISD to develop appropriate systems & interfaces	All design and programming of forms, reports, development of prototype	3-4 months to build to prototype and over 780 billable hours
<i>Prototype Testing</i>	1 Programmer 1 Project Manager	Weekly meetings with dedicated staff liaison, plus at least 3 other department staffers to test the prototype	Installation and testing of prototype system, data integration	2-3 months and over 220 billable hours
<i>Refinement</i>	1 Programmer 1 Project Manager	Weekly meetings with dedicated staff liaison, plus at least one review session with department testing group	Refinement of the prototype to spec changes and data flow analysis	1-2 months and over 160 billable hours
<i>Installation &amp; Training</i>	1 Trainer 1 Documentation Writer 1 Programmer 1 Project Manager	Weekly meetings with dedicated staff liaison, plus 1 training session with entire department, other staff that would access the system, special training with on-site staff	Installation and Deployment of revised system, all training* of staff on uses	1 month and 210 hours of billable time
<i>Maintenance, Support &amp; Upgrades</i>	1 Trainer 1 Programmer 1 Project Manager	Monthly meetings with dedicated JCR staff liaison	Ongoing support of database and Web interface, includes on and off-site training, data management, and upgrades to the system as needed	Ongoing, monthly fee, greater in the first 3-6 months, with an emphasis on bringing maintenance, in-house

6 ISD Staff

6-10 months +  
Maintenance

**Timetable**

M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Design & Programming											
				Prototype Testing							
							Refinement				
									Installation & Training		
										Maintenance, Support & Upgrades →	

**Time Budget**

Planning & Design through Installation and Training:

- 6 ISD Group staff
- Up to 10 months plus maintenance
- Over 1,300 billable hours
- 18-month phasing capability

**IT UPGRADE NEEDS**

As a major key component to getting any and all of the solutions resolved in this document, there exists a strong need to upgrade the IT systems. As a part of the design phase, a general review of the needs based on the review analysis will be done to endure the proper installation, operations, and maintenance systems are in working order.

*Process*

After the Blueprints have been created and approved, a new foundation for JCR must be established. This new base infrastructure is the foundation on which all of the new services of JCR will operate. Without a strong IT system and a dedication to the sustainability models discussed herein, any further systems installation will be hampered and unreliable. It is important to note that IT, as a major investment for your organization, requires proper support, staff training, and network and infrastructure.



### *Basic System Requirements*

SQL Server 2003 running on a Win 2003 Based server machine, Win 2003 Based Server OS running on separate machine, reporting software

#### **Materials Budget**

Depending what can be run on current machines onsite at JCR and without Non-profit considerations, the hardware and software can run in the \$6,000 - \$8,000 range.

## JCR STAFF TRAINING & STANDARDIZATION

### *Overview*

It is vital that the JCR staff and volunteers have a clear and measurable ability to operate within the guidelines of the new system, once operational. This would include the development of skill set standards, new hire training procedures, and online training reference materials on the data site.