Geography and Time Independent IT-based Service Solutions

Paulo Goes

Operations and Information Management
School of Business
University of Connecticut
Agenda

- Introduction
- Background
- Service Centers Location
  - Outsourcing
  - Virtual Centers
- Seamless Mobility
- Conclusions
• Partnership between UConn and General Electric

• State-of-the-art, high-end IT and eBusiness facility at UConn campus

• Co-locates students, faculty, and business executives

• Environment that engenders new ideas, solutions to live business problems
GE CAPITAL’S E-BIZ FARM TEAM
The company draws on UConn’s tech whizzes

Open for Business:
November 2000
After 3 years

- Close to 50 projects completed
- Over 200 students
- Several GE businesses participated:
  - Financial Services
  - Corporate: IT, Quality
  - Industrial Systems
  - Equipment Management
- Check the site: [www.edgelab.info](http://www.edgelab.info)
Guidelines / Selection Criteria

- Projects should provide tangible financial return (productivity, incremental growth, cost savings) and customer impact.
- Projects should be transferable across multiple GE businesses.
- Projects must follow the quality framework.
- Projects will be reviewed and approved / declined by a steering committee represented by GE and UConn.
- Project Teams will be comprised of students, professors, and a project manager - and supplemented with subject matter experts from GE and UConn faculty.
- Business unit’s management and sponsors must actively participate in the project.
The edgelab project team

Students
- MBA
- UG
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA

Marketing
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA

Finance
- MBA
- MBA
- MBA
- MBA
- MBA

Operations
- MBA
- MBA
- MBA
- MBA
- MBA

IT
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA
- MBA

GE Sponsors
- GE-Bus1
- GE-Bus2
- GE-Bus3
- GE-Bus4

GE On-site
- GE-P M
- GE-Dir

GE/UConn
- SME
- SME

SME’s

UConn Faculty
- UC-Finance
- UC-Marketing
- UC-Operation
- UC-IT

GE On-site
- GE-P M
- GE-Dir

GE/UConn
- SME
- SME

SME’s

UConn Faculty
- UC-Finance
- UC-Marketing
- UC-Operation
- UC-IT
The edgelab project team

**Typical Project Team**

3-5 Cross-Functional Students
2-3 Faculty Members
GE Edgelab Project Manager
GE Business Project Managers / Sponsors
GE / UConn Subject Matter Expert(s)
A recurrent theme: “anywhere anytime computing”

- Several projects:
  - Virtual collaboration
  - m-commerce
  - Biometrics security
  - Digital signatures
  - Sales Force Automation
  - Virtual Service Operations
  - Seamless Mobility

- Geography and Time Independent Solutions
Geography and Time

an old framework?

<table>
<thead>
<tr>
<th>Impact/Value</th>
<th>Efficiency</th>
<th>Effectiveness</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Accelerate Business process</td>
<td>Reduce information float</td>
<td>Create service excellence</td>
</tr>
<tr>
<td>Geography</td>
<td>Recapture size</td>
<td>Ensure global mgmt control</td>
<td>Penetrate new markets</td>
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<tr>
<td>Relationships</td>
<td>Bypass intermediaries</td>
<td>Replicate scarce knowledge</td>
<td>Build umbilical cords</td>
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</table>

Hammer and Mangurian (1987)
16 years later – framework for service sourcing

<table>
<thead>
<tr>
<th>Impact/Value</th>
<th>Efficiency</th>
<th>Effectiveness</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Accelerate business processes</td>
<td>Reduce information float</td>
<td>Create service excellence</td>
</tr>
<tr>
<td>Geography</td>
<td>Cut costs, Scale gains</td>
<td>Ensure global mgmt control</td>
<td>Labor pool from new markets</td>
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<tr>
<td>Relationships</td>
<td>New intermediaries</td>
<td>Replicate scarce knowledge</td>
<td>New forms of partnerships</td>
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</table>
Project I

Call and Service Center
A B2B Specialized Finance Unit
Call Center for Commercial Finance Unit
Business Problem

- Calls vary in complexity level
- Calls originated from external customers and internal constituents
- Business and system knowledge is limited to a few key resources
- Flat staffing model for uneven call center workload
- Agents are allocated to servicing customers by region, yet calls are answered on a first come first serve basis
Goal Statement

- Examine the feasibility of creating a virtual resource pool for call center activities
- Reduce cost to service
- Enhance quality of service to external and internal customers
- Study variable staffing model
- Improve level/quality of employee and expand knowledge resource pool
Underlying Call Routing

India outsourcing used for routine calls

Application programs are complex and legacy-based
Visualization of The Problem

Diagram showing the connections between a Database, GE-CEF, Management, IVR Server, PBX, Support, and a Firewall with Tunnel to the Internet. The diagram also includes PSTN connections to devices like a Computer, Telephone, Customer, and Telecommuter with associated hardware such as DSL/Cable Modem, Phone, Scanner, Fax, and Printer.
Service Centers: decision tree

Center
  - Insource
    - Brick and mortar
      - US
      - Offshore
    - Virtual
  - Outsource
    - Brick and mortar
      - US
      - Offshore
    - Virtual
Service Centers: decision tree

- **Insource**
  - Brick and mortar
    - US
    - Offshore
  - Virtual
    - Captive centers

- **Outsource**
  - Brick and mortar
    - US
    - Offshore
  - Virtual
    - Third party solutions
**Offshore Facts**

- Service Centers have been established in India and other countries by major corporations since early 90’s
- Enabling technologies: enterprise systems and data communication
- 100,000 call center operators in India
- Nature of services has evolved from operational to strategic
- [http://knowledge.wharton.upenn.edu/index.cfm?fa=viewArticle&ID=875](http://knowledge.wharton.upenn.edu/index.cfm?fa=viewArticle&ID=875)
Offshore Considerations

- Revenue Distance
- BPO Types

Source: Aron and Singh 2003
## Offshore options: Captive Centers vs. Market Solutions

<table>
<thead>
<tr>
<th>Governance Parameters</th>
<th>Captive Centers</th>
<th>Third Party Solutions</th>
</tr>
</thead>
</table>
| Funding and ownership         | Fully owned by firm
Occasional JV | 3rd party owned, fully or partly financed by firm |
| Strategic Impact              | Operational to Strategic             | Operational                                               |
| Governance Structure          | Employee contracts                  | Mechanism of price                                         |
| Managerial Control            | Head of outsourced hub reports to senior mgmt
of firm | SLAs with monitoring               |
| Nature of Gains               | Labor Costs
Scale, Scope and Specialization
Reengineering gains | Labor costs
Economies of Scale               |
| Migration Path                | Increasing complexity of processes  | Narrowly defined class of processes                         |
| Information Systems Integration | High Degree                        | Low Level, limited access to client’s system               |

Source: Aron and Singh 2003
Service Centers: decision tree

- **Center**
  - **Insource**
    - **Brick and mortar**
      - **US**
      - **Offshore**
  - **Virtual**
  - **Brick and mortar**
    - **US**
    - **Offshore**
  - **Outsource**
    - **Virtual**
Virtual Operations

- Telecommuting plus on demand service
- Important technologies
  - IP enabled PBX
  - VoIP
  - Broadband
  - VPN
Telecommuting Lessons

Benefits

- No commute
- Sense of “empowerment”
- Less distractions, less stress, more flexibility
- Higher morale
- Telecommuting option is important
- Increased disposable income

Disadvantages

- Lack of interaction and camaraderie
- Physical meetings
- Opportunity for abuse
- Time management
- Training
Distance-based Model for Telecommuting

Capture this as salary difference and/or productivity gains

$\text{Reservation salary}$

$\text{B&M Salary}$

$\text{VO Salary}$

$d_{\text{max}}$ distance
# Benefits to the Organization

<table>
<thead>
<tr>
<th>People</th>
<th>Process</th>
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</thead>
<tbody>
<tr>
<td>• Traffic (40 minute commute = 7 working weeks)</td>
<td>• Operational Efficiencies</td>
</tr>
<tr>
<td>• Attractive to better qualified people</td>
<td>• Improved customer satisfaction rating</td>
</tr>
<tr>
<td>• Reduction in turnover (P&amp;G turnover decreased</td>
<td>• Productivity growth (average 15%)</td>
</tr>
<tr>
<td>by 14%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technology</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Disaster Recovery Strategy</td>
<td>• Property costs cut</td>
</tr>
<tr>
<td></td>
<td>• IT costs cut</td>
</tr>
<tr>
<td></td>
<td>• Reduced emergency leave costs ($789 per</td>
</tr>
<tr>
<td></td>
<td>worker per year)</td>
</tr>
<tr>
<td></td>
<td>• Can be equal/cheaper than offshore</td>
</tr>
<tr>
<td></td>
<td>outsourcng ($12-$18 per hour in India)</td>
</tr>
<tr>
<td></td>
<td>• Government tax exemptions</td>
</tr>
</tbody>
</table>
Technology Feasibility

Administration:
Monitoring
system management,
Support
training

Hardware & Software:
PC, peripheral,
CEF specific software
Standard build software

Security:
VPN access, data encryption

Telecom:
PBX, IVR, Softphone
VPN, Broadband

Management
Support
Software
Hardware
TCO
Network
Telephony
Prototyping Virtual Call Center
# Technology Inventory

<table>
<thead>
<tr>
<th>Network</th>
<th>Current Solution</th>
<th>Proposed Solution</th>
<th>Feasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadband</td>
<td>LAN</td>
<td>Regional ISP</td>
<td>Available in many regions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>✓ Positive</td>
</tr>
<tr>
<td>Security</td>
<td>Employee in GE</td>
<td>Nortel VPN GE Secure ID/Firewall</td>
<td>Solution Exists</td>
</tr>
<tr>
<td></td>
<td>facility, Behind</td>
<td></td>
<td>✓ Positive</td>
</tr>
<tr>
<td></td>
<td>GE Corporate Firewall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application -</td>
<td>Client/Server,</td>
<td>Same</td>
<td>Will work over Broadband/VPN</td>
</tr>
<tr>
<td>specific</td>
<td>Standalone run on</td>
<td></td>
<td>solution ✓ Need Verification</td>
</tr>
<tr>
<td>Software</td>
<td>Client</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard-</td>
<td>Pre-loaded on PC</td>
<td>Same</td>
<td>✓ Positive</td>
</tr>
<tr>
<td>build Software</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardware</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC and Peripherals</td>
<td>PC, Shared</td>
<td>PC, Standalone peripherals</td>
<td>Efficiency ✓ Positive</td>
</tr>
<tr>
<td></td>
<td>Peripherals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Support & System Mgmt

<table>
<thead>
<tr>
<th>Support</th>
<th>Current Solution</th>
<th>Proposed Solution</th>
<th>Feasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help Desk</td>
<td>Phone, In house Staff</td>
<td>Phone, Remote Control Software (PCAnywhere), Additional training</td>
<td>Software via remote control</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>✓ Positive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>✓ Hardware</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>✓ Need Verification (Training)</td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software distribution</td>
<td>SMS (advertised programs)</td>
<td>Same</td>
<td>Existing system</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>✓ Positive</td>
</tr>
<tr>
<td>Performance Monitoring</td>
<td>CMS Focus</td>
<td>Same</td>
<td>Existing system</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>✓ Positive</td>
</tr>
</tbody>
</table>
# Telephony

<table>
<thead>
<tr>
<th>Telephony</th>
<th>Current Solution</th>
<th>Proposed Solution</th>
<th>Feasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBX</td>
<td>Avaya PBX S8700</td>
<td>Telecommuter</td>
<td>Solution Exists</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>✓ Positive</td>
</tr>
<tr>
<td>Phone Features</td>
<td>ACD Phone</td>
<td>Soft Phone/ Home Phone</td>
<td>Solution Exists</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>✓ Positive</td>
</tr>
<tr>
<td>Voice communication</td>
<td>Internal Phone System</td>
<td>PSTN/ Telecommuter Configuration</td>
<td>Solution Exists</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>✓ Positive</td>
</tr>
</tbody>
</table>
## Management Challenges

### Processes

- Focus on results
- Set standards to evaluate employees
- Establish policies and procedures
- Provide training (American Express 5-7 weeks in house training)
- Provide access to all key sources of learning and information

### People

- Self-discipline, dependability
- Enhance communication, deal with disagreements
- Drive to fix their own problems, including technology problems ($100 per hour for third-party repairman)
- Has worked in the company for at least 6 months and been in the position for at least 3 months
- Sets realistic goals and meets deadlines

### Technology

- Use IT to enable remote communication
- Provide high-level of technical support (CMP Media – costs 30% more to support home workers)
Service Centers: decision tree

- Insource
  - Brick and mortar
    - US
  - Virtual
    - Offshore

- Outsource
  - Brick and mortar
    - US
  - Virtual
    - Offshore
Outsourced Virtual Centers
Some Players

- Willow
- White Pajamas
- Alpine-access
- Zoyto
Project Approach

Analysis of As-is Call Center
Feasibility of Transition to Virtual Operation
External Research

Deliverables

TCO
HR

Technological Feasibility
VOC Survey

Decision Model
Call Center Project Lessons Learned and Future

• Technology considerations were the easy part
• Process reengineering should precede virtualization effort
• Lack of good process data and process maps
• Need to be clear about CTQs – current VOC effort going on

• Process simulation tool will be used to assess new call center configurations and worker compensation schemes
Project II

Seamless Mobility – Feasibility Analysis
Joint Project with Vendor
**Agenda**

- Project Overview
- Technology Overview
  - SM phone capabilities and Implementation of solution
    - Industry Specifics
- Cost/Benefit Model Overview
  - Structure and Methodology
  - Results and Conclusions
- Case Study Review and Findings
- Project Methodology
- Recommendations
- Summary
- Q&A
Project CTQ’s

- Technology: Voice switching technology
  - Feasibility study

- Financial: Impact on GE’s bottom line
  - Transfers some high cost cellular calls to a lower cost wireless VoIP
Project Methodology

How did we get here?

- Technology Due Diligence (What is it? How does it work?)
- Comprehensive Cost/Benefit model (Baseline potential user community and current telecomm costs)
- Sample use cases - applied the model to identify potential users
- Model validated
- Completed analysis of potential pilot
- Development/Implementation Recommendations
TECHNOLOGY OVERVIEW

Key Components of Seamless Mobility Technology

- GSM Technology
- GPRS (General Packet Radio Service) Packet Data
- 802.11 Technology
- Smart Network Sensing with WLAN to WAN Handovers
- Session Initiated Protocol Support for On-Site Features
- Large 176 x 220 Active Color Display
- Second External Display for Caller Line Identification
- Win CE-Based Operating System
- WAP 2.2-Enabled Micro-Browser
Conditions for “Seamless” transfer

1. If the call is received inside the WLAN then user roams outside – transfer is made to cellular network (possible to roam back into the WLAN)

2. If the call is received outside the WLAN then SM phone connects to the cellular network – transfer can be made if user roams back into the WLAN

3. If the call is initiated on the cell network then user roams back into the WLAN than no transfer is made

4. If the call is initiated within the WLAN and user is talking to another GE facility – call remains on the WLAN

As long as the call involves the PBX than a seamless transfer can be made.
Technology Overview: Industry Outlook

- More practical and comprehensive approach for combined enterprise and carrier based convergence of user mobile communication at both the network and handheld device levels.

- The interaction between Wi-Fi and cellular network technologies is expected to be a win-win-win benefit for individual users, the enterprise and the wireless carriers.

- Users will have the benefit of manageable, multi-modal, "always-on" communication access at all times.

This type of technology is going to create a new industry standard for enterprises.
Cost Benefit Model Overview

CALLING COSTS

DEVICE COSTS

INFRASTRUCTURE COSTS

CALL PATTERNS

FINANCIAL RESULTS
Facilities

• Inputs:
  • Facility area and number of floors
  • Number of employees
  • Type and number of devices

• back
Device Costs

• Inputs:
  • Device pricing/user (current and additional)
  • CF occurrence frequency
• Outputs:
  • Net benefit CFs

• back
Infrastructure Costs

• Inputs:
  • Additional infrastructure pricing/user
  • MAC charges
  • CF occurrence frequency

• Outputs:
  • Net benefit CFs

back
Call Patterns

• Inputs (%):
  • Cell minutes used inside premise vs. outside
  • Segregation of these to incoming vs. outgoing
  • Segregation of outgoing to local vs. LD

• back
Calling Costs

• Inputs:
  • Average cell rate/min
  • Average ground LD rate/min
  • Average monthly cell minutes/user

• Outputs:
  • Net benefit CFs

• back
Financial Results

- **Inputs:**
  - Discount rate

- **Outputs:**
  - NPV
  - Payback
  - IRR

*back*
Analysis Assumptions: case study

• 100 SM phone users (IT professionals)

• Implementation
  • No need for new IP PBX
  • Infrastructure (capital investment) configured for 100 users

• Costs
  • SM Pricing: per seat pricing

• Benefits
  • Saving from reducing cell phone minutes
  • Saving from reducing MAC charges

• User Profile
  • Cell minutes/month and average cell rate
**Sensitivity Analysis: Calling Pattern Vs. NPV**

### Calling Pattern Sensitivity

<table>
<thead>
<tr>
<th>% calling time Inside Premises</th>
<th>NPV</th>
<th>NPV Function Projection y = 712172x - 144631</th>
</tr>
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<tbody>
<tr>
<td>0%</td>
<td>($144,631)</td>
<td>($144,631)</td>
</tr>
<tr>
<td>10%</td>
<td>($73,414)</td>
<td>($73,414)</td>
</tr>
<tr>
<td>15%</td>
<td>($37,805)</td>
<td>($37,805)</td>
</tr>
<tr>
<td>20%</td>
<td>($2,197)</td>
<td>($2,197)</td>
</tr>
<tr>
<td>25%</td>
<td>$33,412</td>
<td>$33,412</td>
</tr>
<tr>
<td>30%</td>
<td>$69,020</td>
<td>$69,021</td>
</tr>
<tr>
<td>35%</td>
<td>$104,629</td>
<td>$104,629</td>
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<tr>
<td>40%</td>
<td>$140,237</td>
<td>$140,238</td>
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<tr>
<td>45%</td>
<td>$175,846</td>
<td>$175,846</td>
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<tr>
<td>50%</td>
<td>$211,455</td>
<td>$211,455</td>
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<tr>
<td>55%</td>
<td>$247,063</td>
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<td>60%</td>
<td>$282,672</td>
<td>$282,672</td>
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<td>$318,281</td>
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<td>$353,889</td>
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<td>80%</td>
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<td>$425,107</td>
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<tr>
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<td>$460,715</td>
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<tr>
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<td>$496,324</td>
<td>$496,324</td>
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<tr>
<td>95%</td>
<td>$531,932</td>
<td>$531,932</td>
</tr>
<tr>
<td>100%</td>
<td>$567,541</td>
<td>$567,541</td>
</tr>
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</table>

* Break-even % = 20%

>20% of cell phone calls need to be made inside premises to justify cost!
## Sensitivity Analysis: Number of Users Vs NPV & Payback Period

<table>
<thead>
<tr>
<th>Number of Users</th>
<th>NPV</th>
<th>Payback (in year)</th>
</tr>
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<tbody>
<tr>
<td>50</td>
<td>$10,957</td>
<td>4.40</td>
</tr>
<tr>
<td>100</td>
<td>$33,412</td>
<td>4.07</td>
</tr>
<tr>
<td>200</td>
<td>$87,578</td>
<td>3.22</td>
</tr>
<tr>
<td>300</td>
<td>$148,203</td>
<td>2.93</td>
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<tr>
<td>400</td>
<td>$212,783</td>
<td>2.85</td>
</tr>
<tr>
<td>500</td>
<td>$280,193</td>
<td>2.78</td>
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<tr>
<td>600</td>
<td>$349,794</td>
<td>2.73</td>
</tr>
<tr>
<td>700</td>
<td>$421,175</td>
<td>2.69</td>
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<tr>
<td>800</td>
<td>$494,052</td>
<td>2.66</td>
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<tr>
<td>900</td>
<td>$568,215</td>
<td>2.63</td>
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<td>1000</td>
<td>$643,504</td>
<td>2.60</td>
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<tr>
<td>2000</td>
<td>$1,439,057</td>
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<tr>
<td>3000</td>
<td>$2,283,168</td>
<td>2.34</td>
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<td>4000</td>
<td>$3,157,232</td>
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<td>5000</td>
<td>$4,052,828</td>
<td>2.23</td>
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<td>6000</td>
<td>$4,965,151</td>
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<tr>
<td>7000</td>
<td>$5,891,105</td>
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<tr>
<td>8000</td>
<td>$6,828,530</td>
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<tr>
<td>9000</td>
<td>$7,775,840</td>
<td>2.12</td>
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<tr>
<td>10000</td>
<td>$8,731,820</td>
<td>2.10</td>
</tr>
</tbody>
</table>

### Payback and NPV vs Number of Users

Payback: $y = 6.4304x^{0.1261}$

\( R^2 = 0.9326 \)

NPV: $y = 0.0122x^2 + 765.18x - 95614$

\( R^2 = 0.9999 \)
“Go” or “No Go” Decision

- Positive NPV for specific user group
- Realized cost savings simply based on cellular minutes
- See a need for Seamless Mobility capabilities on campus
- Have all of the necessary components to implement the technology
- IT department eager to pilot technology on campus

This is a “Go” Decision and a good candidate to pilot the technology.
Recommendations

- Cost savings are found for specific campuses and/or departments in cellular minutes saved on campus.
- GE has a wide variety of businesses whose communication processes and patterns vary from business to business.
- Efficiency gains might be found in the businesses where hard cost savings are not found.
- Data collection and negotiation with specific businesses is necessary in order to roll-out technology.

For GE the cost savings are found in cellular minutes saved while on campus and not in the “Seamless” transfer.
The edgelab Food Chain

- Vision-oriented projects
  - NPI, product vision, strategic planning, workforce engineering, etc.
  - M&A Strategies, process re-engineering, market-entrance strategies, etc.
  - Website design, marketing campaigns, usability studies, etc.
  - Software evaluation, website critique, log analysis, etc.

- Strategic / long-run projects

- Tactical / Initiative-oriented projects

- Implementation / operational projects
<table>
<thead>
<tr>
<th>Businesses serviced by edgelab to date</th>
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<tbody>
<tr>
<td><strong>Card Services</strong></td>
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<tr>
<td>Global Consumer Finance</td>
</tr>
<tr>
<td>GE Corporate</td>
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<tr>
<td>Industrial Systems – Interlogix</td>
</tr>
<tr>
<td>Commercial Real Estate</td>
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<tr>
<td>Capital Corporate</td>
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<tr>
<td>Industrial Systems – M&amp;ST</td>
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<tr>
<td>Capital Corporate</td>
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<tr>
<td>Global Computer Operations</td>
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<tr>
<td>Specialty Materials</td>
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<tr>
<td>GE Consumer Finance</td>
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<td>Capital Global Risk Management</td>
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<td>Rail Services</td>
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<td>Transport International Pool</td>
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<td>Commercial Finance</td>
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<td>Structured Finance Group</td>
</tr>
<tr>
<td>Capital Equity</td>
</tr>
<tr>
<td>Vendor Financial Services</td>
</tr>
</tbody>
</table>
**Edgelab Partnership Reflections**

- Unique partnership – a “business lab” not replicated anywhere (so far!)

- Two very different cultures but willingness to succeed and overcome obstacles

- Win-win-win situation
Questions?

Discussion