Implementing an Internal Work Area Recovery Site

Lessons learned from start to finish and beyond
Work Area Recovery - Definition

**Work Area Recovery**

People/process recovery, only

No recovery of the underlying application technology infrastructure

Employees in seats with PC’s and phones to connect to the application servers in our Technology Center (Data Center)

We have a disaster recovery plan and a separate back-up data center for the loss of our Technology Center

**People are separate from Technology**

Either a people recovery problem or a technology recovery problem

Analysis to plan for either one was not complicated by the presence of the other

If you have a technology center co-located with a main employee work site, you need to make sure you separate the two issues in your analysis
Previous Recovery Strategy

**Internal Relocation/Displacement**

Move critical staff from one site into non-critical staff locations at another site

Utilized PC equipped training rooms as well.

**Limitations of this strategy**

Limits testing capabilities (Scope, Timing, Depth, & Frequency)

Re-stacks within recovery space add continual risk and considerable additional internal costs

Displacement creates disruptions for displaced business functions (2 disasters)

Limits ability to respond to all scenarios – i.e., loss of entire OM campus

**Used limitations to make the case for relocation site**
## Requirements at 30,000 ft

<table>
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<tr>
<th>Scenario/Building</th>
<th>Win 4 Hours</th>
<th>Day 1-3</th>
<th>Day 4-5</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
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<tbody>
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<td>100</td>
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<td>186</td>
<td>244</td>
<td>281</td>
</tr>
</tbody>
</table>

**Scenario 1. Total Campus**

- Week 2: 827 (highlighted)
- Week 4: 1194

**Scenario 2. Total Hdqtrs**

- Week 4: 774 (highlighted)
Requirements at 30,000 ft

**Recovery Needs**
Immediate business continuity needs for all sites in headquarter region
Prolonged recovery support for our remaining large US sites (Day 4 and beyond)
1 Hr RTO for 1 mission critical process (covering three business units)
4 Hr RTO for nearly all other processes

**Seat Definitions**
All Day 1-3 seats are Hot Seats (desk, chair, wiring, PC, phone)
1 HR RTO Hot Seats would be dedicated to business unit
4 HR and Day 1-3 RTO Hot Seats = shared between business units and scenarios
All Day 4-5 Seats
- Warm Seats (desk, chair, wiring, no technology)
- Shared between business units and scenarios
Internal vs. External

Vendor Pros/Cons

Do not have to maintain your own building
- Security/Facilities
- Infrastructure
- Balance Sheet

Less expensive overall
Less functional due to lack of control and other limitations
Not able to truly meet our RTO’s with just shared solution.

Internal Owned Pros/Cons

Have it your way – “Sorry, Burger King”
- 1 Hour RTO for mission critical business units
- Right location
- Total Control

At least 2.5 times vendor cost
Lease vs. Buy

Many factors: very few were closely related to BC
Balance sheet
Income statement
Corporate culture

Not a battle I cared about except:
Any decision should reflect a LONG TERM commitment to the strategy
Should not involve thoughts about using the site for anything else
Decision: 10 year lease with optional 5 year extension
Location

Pure BC decision, but more complicated than you think

Distance: How far is too far or too close? A: It depends
- Risk factor vs. production sites
- BC objectives, (immediate or worst case use, RTO’s, etc.)
- Appropriate available locations (space, infrastructure, real estate partners)
- Corporate culture

Transportation
Multiple roads, adequate parking, public transportation

Expandable site

Food/Hotels
And it’s never just a pure BC decision

Politics: Your partners have to like the solution
  - Technology
  - Facilities/Security/Real Estate

More Politics: Your important clients have to like the solution
  - Global Trading
  - Executive Sponsor

Decision: Linthicum, MD
  - 12 miles from DT Headquarters
  - 25 miles from suburban campus
  - Accessible from several major highways and Light Rail.
  - Next to BWI Airport – hotels, food, easy access for recovery of remote sites
Site: Linthicum, MD:

385 hot seats (166 dedicated to Investments - 1 hour Recovery Time Objective)

315 warm seats (Ready by Day 4)

Support for 100 wireless users

EOC, 10 offices, copiers/printers/faxes, mail room, pantry, 14 meeting rooms

Technology Rooms
  - NDC
  - PC Build Out Rooms

Full site on the TRP WAN sonnet ring

Back-up generators

UPS for NDC and dedicated seats

Recovery Seat: 30” desk, phone, PC, monitor (flat), chair, pedestal
Pictures – Raw inside
Site Design

How much space do you need?

T. Rowe: 700 seats required 55,000 sq feet. Could be done in a smaller space, but:
- Regulations dictate occupancy limits and how much bathroom space
- Need offices, meeting rooms, copiers, printers, storage space.
- Go with flexible design, you can add more seats for a long term outage

Should it look like a corporate site?

Corp standard = higher $’s

Not the “Taj Mahal”.
- Waste of money
- Increase push to use for production

But employees must not feel like it’s punishment to be sent there

“Goldilocks approach” or the Frank Lloyd Wright Principle
- Basic but appealing
- Form follows function – i.e., It’s for emergencies, only.
- Doesn’t look like where they normally work
Pictures - Reception
Pictures – Recovery Seat
Pictures – Mechanicals
Site Design - continued

What to put in there?

Keep your requirements in focus or wish list requests will skyrocket
- no one can accuse you of empire building/overspending
- Use testing to justify future upgrades

Infrastructure - (Wiring, electrical, power, networking, environmental)
- Advice: Don’t cut corners on quality, save money on the look
- Compatible with production infrastructure, but flexible & easily scaleable

Common space? (offices, meeting rooms, mail room, pantry)
- Senior managers expect offices
- More reasons than ever for needing meeting rooms
- EOC, Mail, Reception – reduces confusion
- Pantry: Employees leaving to get lunch during a recovery?

You can’t please all of the people all of the time… BUT Big Dogs Eat First
- Mission critical business units should be included in design
- If they don’t like it they wont use it and If they don’t use it you don’t have a job
Pictures – Common Space

Mail Center

Office

Printer/Copier

Storage
Pictures - Pantry
Location of hot seats & warm seats
Review requirements of each scenario best design to fit all needs
Business units should grow contiguously as much as possible

Common areas
Reception, Mail, Pantry: should be in central location
Bathrooms, Offices, Meeting, Printer/copier: dispersed

Double check the details
Will save you headaches and your reputation
Ex: call center phones

Internal signage
“Hotel Floor” model to direct employees to their seat
What to call the pantry?
Pictures – Dedicated Hot Seats
Pictures – Shared Hot Seats
Atypical site = atypical implementation
Who’s in charge? You, RE Project Mgr, Construction Mgr? That Depends…
  • Are you a control freak?
  • Is the REPM or CM any good?
  • If in doubt, get your executive sponsor to put you in charge

Get ready for more emails and phone calls than you’ve ever dreamed possible
  • Non-standard fittings and infrastructure
  • Others will think they know what’s best

Document, document, document
Questions kept getting revisited: “I know we answered this before”
What decisions should be run through you
You will not be able to remember it all

How long to implementation?
12 months from conception to finish
4-5 months for actual construction
Atypical site must have typical support

Because BC staff is usually small and use of site is infrequent, everyone must pitch in to keep the site ready for use.

- Technology
- Facilities
- Business Unit Coordinators

All routine maintenance and technical support of the building must be integrated into normal production processes.
Site Implementation – Go Live

**Corporate Announcement**

**Documentation**
Seating charts for each scenario – Huge jig-saw puzzle
Invocation check list, phone listing, testing schedule
FYI (usage, travel directions, access, internal navigation, technology, facility, help)
Note: Have it but don’t expect everyone to read it

**Signage**
Dedicated seats – DO NOT USE
Peripherals
Storage/Supplies

**Key Card Access**
24/7 to support staff (Tech, Facilities) and all crisis management members
Testers, Recovery staff at TOE
Security – protect what’s there

**When not active**
Essentially only protecting assets, not people
Remote monitoring and sensors are sufficient
Real estate management does manned perimeter check

**When activated**
Tests – guard present at reception for duration of test
  - Testers feel safe
  - Know they are at correct site
  - Can assist with test logistics

Invocation – guard present 24/7
  - Workers coming and going all day
  - Internal/external elements less likely to “take advantage” of chaos of recovery
Testing

Walk before you run
Builds confidence in the site
Find show stoppers before you have a big exercise

Too many small tests are not good either
Too much preparation
A lot of additional support costs
What do you mean there’s… ANTS?

Advice:
Realize that you are far better then you were
Find an initial balance and build up to larger more realistic exercises
Testing

Use testing to build awareness & goodwill for site
Make it easy for the testers
Internal Signage
Documentation – FYI, Seating charts, etc.

Be prepared for tester feedback: 80/20 rule
20% intelligent and worthy of consideration
80% unimportant, minor, petty, or moronic
Actually you can reduce the 80% by properly managing expectations
Site Design – Revisited

You think you got all the requirements, right?
Wrong: You’ve got all the requirements for your old strategy

Realize now you won’t get it 100% right
Never done this type of building before
Thousands of considerations
  - Skylight shades
  - Noise reduction

New requirements will emerge because of the new strategy
Voice recording
Special printing (Blue sheets, Checks printing)
CD R/W drives
Color scanners
Site Design – Revisited

Discover during implementation, some during testing

Q: “Why wasn’t it in your requirements?”
A: “Making due or didn’t realize until now”
Ex: Fed Wire, Scanner, Macs, Check Printers, Locking storage
Back-up PC’s at the site to replace malfunctioning dedicated workstations

One-offs need to be justified

Should do triple duty. aka: three-offs
Ex: Scanner for Trading, Finance, Marketing
Ex: Macs for Client Reporting, Doc Publishing, Corp Marketing
Ex: Check printing for Retail, Retirement, Finance
Bad news: Some will want to use it for production

“It’s just sitting there, right?”

Educate: They don’t understand BC and the true purpose

CYA: Head these requests off at the pass, i.e., escalate

Good News: Draw a line in the sand

Early, often, and loud. “No use of this site for regular production!”

Brand the site with name to reflect its purpose

- MD Business Continuity Recovery Site, instead of “Linthicum site” or “BWI site”

Make purpose clear in all documentation

Do a road show for business unit heads to explain and set expectations
If you build it they will come

**Bad news: Eventually you may have to give in**

Good fit for the site

Must not interfere with the BC readiness (i.e., no use of hot seats)

Examples:
- PC build outs
- Furniture storage
- People skills training class

**Good News: You’ll look like a hero**

Taking one for the team

Mitigates those who feel site a waste of time and money
Other Issues

Prepare to Educate

The “How much does it cost for something we’ll never use?” question
FYI document and add site info into business unit continuity plans
Internal road show with pictures
Add to Facilities on-line site information
Give lots of tours to stakeholders: Managers and Executive Admins
Clients should understand it’s internal not through vendor
  - Information sheet
  - Detailed specifics included in your recovery program statements
What to expect over time

**Higher expectations for your program**
Need to get it right.. No excuses

**Floor plan will change**
Re-orgs and re-stacks ultimately reflect at the site
Requirements change (traders need 2 CPU’s)

**More extensive testing**
Fewer but larger
More comprehensive
Surprise

**Continued pressure to use for alternate purposes**
Never goes away
Increases during lean times
What more to expect

**Signage is key! Without it ……**
Testers and visitors will use any seat they want
No one will be able to find the bathroom
Caution tape for dedicated seating

**Facilities support**
Make sure maintenance knows about tests – A/C flush, roof walkers
Keep it clean, especially if you have food

**Keeping documentation up to date**
Seating charts & builds
Floor plan changes
Driving directions

**Chargeback scheme**
Invocations

October 2008: Contingency
Market conditions spurred a huge increase in service center calls
Able to add additional call reps to day time shift by moving back-office processing to recovery site

April 28th, 2009: Water main break near Hdqtrs
Water pressure declining at our high-rise headquarters
7:30 am: potential evacuation of the building required
Crisis Management Team invoked without hesitation
Surprise test in December (Trading), announced test in March (whole building)

September 2011: Baltimore Grand Prix
Headquarters is on the race course
Barriers along course set up in advance
Likely to invoke planned use of site for at least 3 days
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