OMF SPONSORED TELEWORK PILOT

PABLO CHAUVIN

BTS ENTERPRISE ARCHITECTURE

2017

	of workload by bringing on employees (with their consent, of course) on a moment's notice.
Reduced Health Care Costs	Teleworkers use fewer sick leave days, and take advantage of preventative medical care more often. This is primarily due to the convenient access home-based teleworkers often have to medical care facilities, and the fact that they are able to schedule appointments during the work day with much less disruption to the normal work schedule. Office workers, on the other hand, are more likely to have to take several hours off from work in order to have a brief medical appointment.
Accommodation for Americans with Disabilities	The EEOC and the courts have ruled that, on a case-by-case basis, telework may be a reasonable accommodation for individuals with disabilities (Kaplan et al, 2006)
Expanded Talent Pool	According to the State of Virginia, an untapped talent pool of qualified potential employees is unable to drive. Teleworking can alleviate the need for transportation altogether, allowing companies to hire these employees. (Virginia.gov, 2010) In addition to the local benefits, it's possible to hire specialist help from anywhere in the world, thereby avoiding relocation expense and inconvenience for workers and their families, and allowing agencies to hire the best talent available.
For the Employee	
Work-Life Balance	In a study of 1,566 teleworkers at British Telecom (Maruyama et al, 2009), 74 percent of teleworkers surveyed reported a "good" or "very good" work-life balance. Specifically, the study revealed that while teleworkers reported working longer hours, they didn't seem to mind as long as they had control over the hours worked. Having this flexibility contributed to an enhanced work-life balance, they said. This finding also has some implications for teleworker productivity. In a similar study of 1,992 teleworkers at Cisco Systems (Cisco, 2009), 80 percent of participants reported an improved quality of life.
Increased Personal Flexibility	If managed properly, teleworkers can have a great deal of flexibility in scheduling work, personal appointments, and family responsibilities during the day. As long as teleworkers are evaluated on work performed, rather than time expended, this personal flexibility can be very satisfying, contribute to job satisfaction, and increase retention.
Employee Satisfaction	In a survey of 355 federal IT professionals, CDW-G (2007) found that 41 percent of employees who had the option to telework reported that they were "very satisfied" with their job, as opposed to only 32 percent of those with no telework option. Ten percent of those with a telework option and 15 percent without reported that they were "unsatisfied" or "very unsatisfied" with their current job. Other studies have yielded similar results. However, it appears that job satisfaction reaches a plateau as telecommuting increases beyond about two days per week (Golden & Veiga, 2005).

Fewer Sick Days	Teleworkers tend to use fewer sick days than non-teleworkers. If teleworkers feel well enough to work, but do not want to expose co-workers to a potential infection, they may work a full day at home.
For Society	
Increase Demand for Goods and Services	Increased demand for communications, networking, and equipment required for telework.
Reduced Dependence on Foreign Sources of Oil and Reduced Greenhouse Emissions	Cisco employees participating in a telework study reported a cost savings of $10.3 million per year in fuel that would normally be used to commute. Cisco teleworkers reduced greenhouse gas emissions from commuting by approximately 47,320 metric tons. (Cisco, 2009)
On-Site Energy Savings	Agencies may cut energy costs along with the need for office space and real estate. The utility costs associated with teleworkers are typically borne by the teleworker, rather than the employer.

1b. Risks of Teleworking

Table 4: Telework Risks and Mitigation Strategies [Source: www.businessofgovernment.org]

Risk Category	Specific Risk	Mitigation Strategy
Technology Risk	Nonexistent or insufficient technology to support teleworker job duties and expectations	Strategic Technology/Telework Planning, technology checklists and guidelines
	Technology failures/operational issues	Technology support/help desk, peer communications
Operational Risk	Teleworker underperformance	Goal-setting, performance evaluations, clear telework agreements and teleworker expectations
Social Risk	Poor work-life balance/low job satisfaction	Performance monitoring and measurement, goal-setting, appropriate teleworker selection, ability to withdraw from telework
	Adverse reactions from co-workers	Regular communications, monitoring and distribution of all workloads, teleworker training for non-teleworkers
Organization Risk	Management resistance	Pilot programs, education, training, peer pressure, disciplinary action
	Lack of face-to-face communication	Teleconferencing, regular on-site meetings
	Lack of teleworker visibility to management	Career development, regular communication between teleworkers, on site peers and managers, engagement in office activities and recreational opportunities

2. Survey Results

2a. Survey #1 – Participants

Of the 102 pilot participants, there were 88 responses or an 86% response rate.

And the Survey Says

- Primary method intended to use to connect to city resources the majority of the time:
    - RSA token (City computer) – 71.43% (60)
    - RSA token (Personal computer) – 16.67% (14)
    - Office 365 (Outlook online, OneDrive, Skype online) – 11.90% (10)
- Did you get a new laptop for this pilot:
    - Yes – 46.43% (39)
    - No – 53.57% (45)
- Which of the following do you plan on using to connect to city resources (check all that apply):
    - City laptop – 82.14% (69)
    - Personal computer (Windows) – 27.38% (23)
    - Personal computer (Mac) – 10.71% (9)
    - City mobile phone (Email access) – 30.95% (26)
    - City tablet (Email access) – 23.81% (20)
- Were instructions to connect to city resources easy to understand:
    - Yes – 72.62% (61)
    - No – 20.24% (17)
    - N/A – 7.14% (6)
    - Comments: Users still required support.
        - Quote: "I wouldn't have been able to follow the written instructions without someone from IT walking me through them first."
- Did you use the new HelpDesk Telework page:
    - Yes – 27.38% (23)
    - No – 72.62% (61)
- Were you able to successfully connect to city resources from home the first time you tried to use your VPN token:
    - Yes – 64.29% (54)
    - No – 29.76% (25)
    - N/A – 5.95% (5)
- How many days per week are you teleworking:
    - Less than 1 – 15.48% (13)
    - 1 – 57.14% (48)
    - 2 – 25% (21)
    - 3 – 2.38% (2)
- Please list your prior teleworking experience:
    - New teleworker – 58.33% (49)
    - Existing teleworker – 14.29% (12)
    - Ad-hoc teleworker – 27.38% (23)
- What has gone well so far:
    - BTS HelpDesk

- o Reduced commute time
- o Increased productivity
- o Skype for Business
- o Increased flexibility
- ▪ What didn't go well so far:
    - o Culture
        - ▪ Quote: "I also have also noticed that some employees not able to telework are not willing to cooperate with those employees who are able to telework which makes it challenging for this pilot."
    - o Screen size/Monitor
    - o Skype for Business/BT
        - ▪ Quote: "Teleconferences using Skype/BT can be problematic - sometimes the technology fails - dropped calls, screen sharing issues, and on the non-tech side - phone conferencing is more challenging than face to face meetings for a number of reasons."

2b. Survey #2 – Managers

Of the 72 teleworker managers, there were 55 responses or a 76% response rate.

And the Survey Says

- Was the HRAR 4.04 telework agreement form easy to navigate with your employees:
    - Yes – 94.12% (48)
    - No – 5.88% (3)
    - Note: Comments request the form addresses ad-hoc teleworking.
- Are there sections of the HRAR 4.04 form or policy that should be revised or clarified:
    - Yes – 21.57% (11)
    - No – 33.33% (17)
    - I don't know – 45.10% (23)
    - Note: Several comments request addressing ad-hoc teleworking.
- Was it easy to determine teleworker eligibility requirements:
    - Yes – 94.12% (48)
    - No – 5.88% (3)
    - Note: Comments suggests manager/supervisor training on eligibility.
- Two biggest challenges to teleworker productivity in your group:
    - Challenge #1 – 48 Responses & Challenge #2 - 32 Responses
        - Meetings
        - Reliability
        - Culture
            - Quote: "Manager support"
        - Common Telework Processes
        - Training
            - Quote: "Managing productivity"
        - Technology
            - Quote: "Inadequate technology"
        - Skype for Business
            - Quote: "Skype awareness, training, stability"
- Are you using a tool to track work productivity for teleworkers:
    - Yes – Existing tool used for all employees – 23.53% (12)
    - Yes – New tool specifically for teleworkers – 7.84% (4)
    - No – I'm still reviewing options to manage teleworkers – 21.57% (11)
    - No – 47.06% (24)
- Have you seen a change in employee engagement since teleworking started:
    - Positive – 37.25% (19)
    - Negative – 3.92% (2)
    - No change – 58.82% (30)
    - Quote: "Employees feels they are being considered in the overall City goals of teleworking. Often, many employees feel like it is the have vs. the have nots. Even though this is not really a benefit, people perceive it as such and are feeling really positive when they are allowed to participate."
- What do you perceive as the biggest barrier for expanding teleworking in your group:

- o Collaboration needs – 45.10% (23)
- o Cost – 3.92% (2)
- o Eligibility requirements – 5.88% (3)
- o Other – 21.57% (11)
- o No barriers, I'm ready to expand teleworking within my group – 23.53% (12)
- o Notes: (27) comments
  - ▪ Collaboration/video conferencing tools
  - ▪ Moving away from paper based processes/forms
  - ▪ Common tools/process training
- ▪ At the completion of the telework pilot, do you expect your bureau to increase the number of teleworkers or the frequency of teleworking:
  - o Yes – 86.27% (44)
  - o No – 13.73% (7)
  - o Comments (Drivers):
    - ▪ COOP
    - ▪ Space needs
    - ▪ Work/life balance
    - ▪ Productivity
    - ▪ Employee satisfaction
- ▪ Do you plan on using teleworking as a tool for continuity of operations for some employees in cases of office closures:
  - o Yes – I use teleworking as a tool right now – 49.02% (25)
  - o Yes – I plan on having a teleworking strategy in place within 6-months – 5.88% (3)
  - o Yes – I plan on having a teleworking strategy in place within 12-months – 7.84% (4)
  - o Yes – But I don't know when – 19.61% (10)
  - o No – Teleworking is still being evaluated as a continuity of operations tool – 9.8% (5)
  - o No – 7.84% (4)
- ▪ What has gone well so far: (41)
  - o Reduced commute time
  - o Employee morale
  - o Employee engagement
  - o Employee satisfaction
  - o Increased productivity
  - o Increased focus
- ▪ What didn't go well so far: (39)
  - o Culture
    - ▪ Quote: "Some clients and staff prefer face-to-face contact and they will choose to work with someone present rather than someone teleworking."
  - o Collaboration tools
    - ▪ Quote: "Collaboration tools are not as stable or beneficial as we need"
  - o Skype for Business
  - o Meetings
  - o Lack of training
    - ▪ Quote: "Measuring productivity."
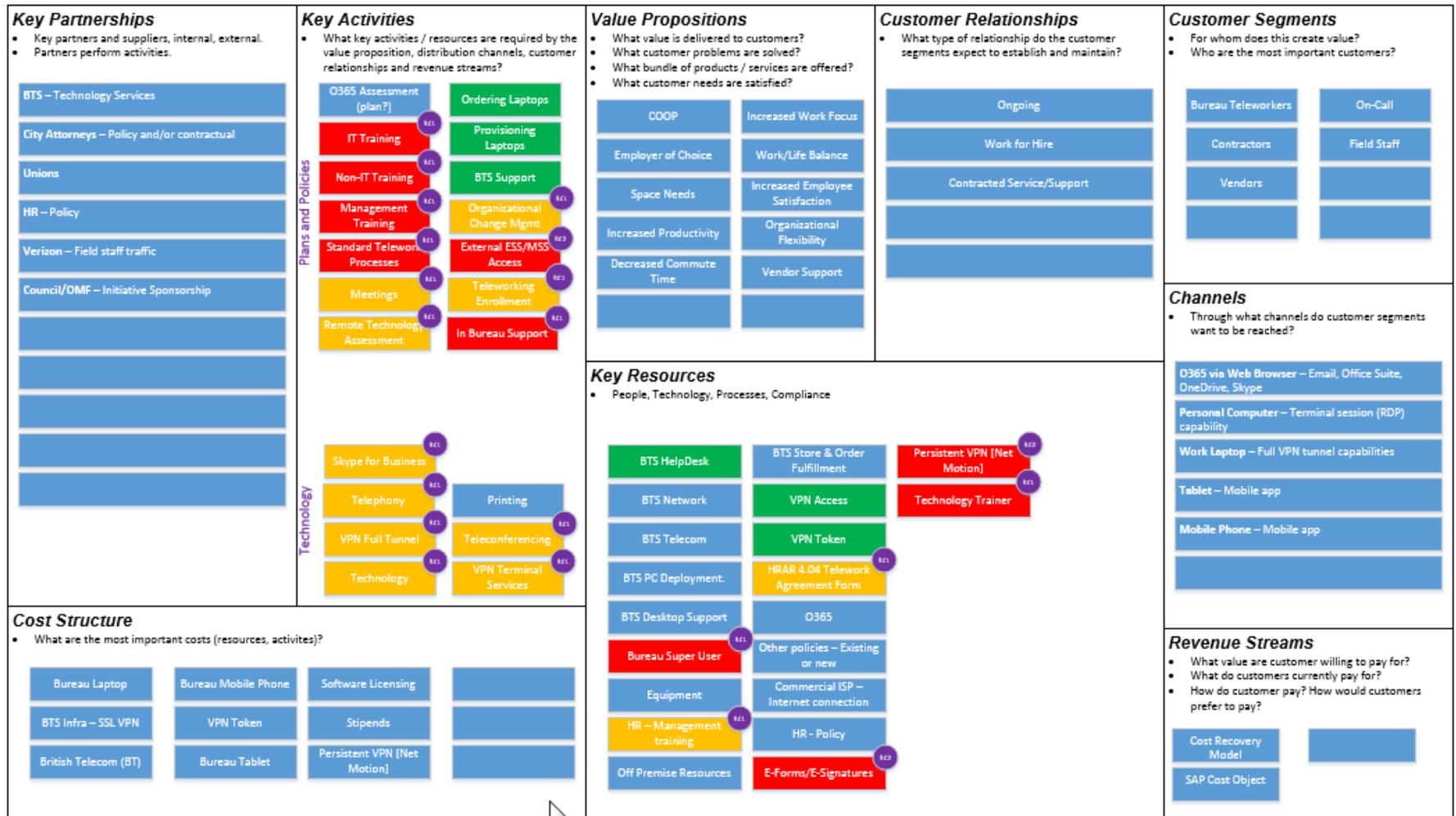
2c. Survey #3 – Participants

Of the 102 pilot participants, there were 79 responses or an 78% response rate.

And the Survey Says

- Primary method used to connect to City resources:
  - 74.36% (58) of users used an RSA token with a City computer.
  - 14.10% (11) of users used an RSA token with a personal computer.
  - 11.54% (9) of users used Office 365.
- A new teleworker called the BTS HelpDesk:
  - 0 – 42.31% (33)
  - 1 – 28.21% (22)
  - 2 to 5 – 24.36% (19)
  - More than 5 – 1.28% (1)
  - Note: 14 of the 29 (48%) comments were specific to first time setup questions and issues.
- The impact of teleworking to meeting schedules:
  - No Impact - 55.13% (43)
  - Impact – 44.87% (35)
  - Note: Several comments indicated hesitation with coworkers to schedule meetings with them while teleworking.
    - Quote: "I've had fewer meetings. Also, people are reluctant to schedule group meetings unless I'm in the office."
- Comfort level in setting up a meeting with somebody teleworking:
  - Comfortable - 78.21% (61)
  - Prefer to wait – 21.79% (17)
  - Note: Comments indicate people that know how to use Skype for Business can use it effectively, however there is a big challenge in that many users either don't use Skype for Business or don't know how.
    - Quote: "Not everyone seems to be on the same page about how/when to use Skype for remote meetings. There is not a clear norm/expectation about whether to try new tools when someone is working offsite, or just to wait until they're back in the office."
- The two biggest challenges for a teleworker:
  - Challenge #1 – 77 Responses & Challenge #2 - 65 Responses
    - Screen size/Monitor
    - Skype for Business
    - Technology Reliability
      - Quote: "Getting the equipment to work reliably"
    - Culture
      - Quote: "Despite offering phone/email/IM/Skype as options to contact me, many people still wait until I'm back in the office to come talk to me about their reporting needs"
    - Training
      - Quote: "No virtual meeting software"

- Phone
- Conferencing
- Most effective communication method with direct manager while teleworking:
    - Email – 78.21% (61)
    - Phone – 12.82% (10)
    - Skype for Business – 8.97% (7)
- Most effective communication method with coworkers while teleworking:
    - Email – 80.77% (63)
    - Skype for Business – 12.82% (10)
    - Phone – 3.85% (3)
    - Note: Comments indicate not all users are using Skype for Business nor are all users familiar with BTS services offered.
        - Quote: "I don't think my work group was presented with an option to try Skype and I think that option would have been welcome."
- What has gone well so far:
    - Fewer interruptions
        - Quote: "Time to focus on projects without interruptions of an office."
    - Higher productivity
        - Quote: "Being able to telework has allowed me to give my full attention to detail on key projects and issues that normally while in the office would have taken me twice as long with the interruptions and my office set up."
    - Increased focus
    - Decreased commute time
    - Increased work/life balance
    - BTS HelpDesk
        - Quote: "BTS help desk is very courteous and considerate."
- What didn't go well so far:
    - Training
        - Quote: "Technology training for everybody."
    - BTS Service Delivery
        - Quote: "I think that Skype should also be proactively offered to employees since I didn't realize until the end that that might have been a useful tool for me."
    - Meetings
        - Quote: "Meetings not set-up with remote access has been the only limiting factor"
    - Reliability
        - Quote: "Having to drive in to work because of losing connectivity to my desktop during bad weather."
    - Conference Room Phones
        - Quote: "conference room technology - can't hear, mostly."
    - Skype for Business
        - Quote "Skype and British Telecom need to be more reliable."

3. Teleworking Business Model

Key Partnerships
- Key partners and suppliers, internal, external.
- Partners perform activities.

- BTS – Technology Services
- City Attorneys – Policy and/or contractual
- Unions
- HR – Policy
- Verizon – Field staff traffic
- Council/OMF – Initiative Sponsorship

Key Activities
- What key activities / resources are required by the value proposition, distribution channels, customer relationships and revenue streams?

Plans and Policies

- O365 Assessment (plan?)
- Ordering Laptops
- IT Training
- Provisioning Laptops
- Non-IT Training
- BTS Support
- Management Training
- Organizational Change Mgmt
- Standard Telework Processes
- External ESS/MSS Access
- Meetings
- Teleworking Enrollment
- Remote Technology Assessment
- In Bureau Support

Technology

- Skype for Business
- Telephony
- Printing
- VPN Full Tunnel
- Teleconferencing
- Technology
- VPN Terminal Services

Value Propositions
- What value is delivered to customers?
- What customer problems are solved?
- What bundle of products / services are offered?
- What customer needs are satisfied?

- COOP
- Increased Work Focus
- Employer of Choice
- Work/Life Balance
- Space Needs
- Increased Employee Satisfaction
- Increased Productivity
- Organizational Flexibility
- Decreased Commute Time
- Vendor Support

Key Resources
- People, Technology, Processes, Compliance

- BTS HelpDesk
- BTS Store & Order Fulfillment
- Persistent VPN [Net Motion]
- BTS Network
- VPN Access
- Technology Trainer
- BTS Telecom
- VPN Token
- BTS PC Deployment.
- HRAR 4.04 Telework Agreement Form
- BTS Desktop Support
- O365
- Bureau Super User
- Other policies – Existing or new
- Equipment
- Commercial ISP – Internet connection
- HR – Management training
- HR - Policy
- Off Premise Resources
- E-Forms/E-Signatures

Customer Relationships
- What type of relationship do the customer segments expect to establish and maintain?

- Ongoing
- Work for Hire
- Contracted Service/Support

Customer Segments
- For whom does this create value?
- Who are the most important customers?

- Bureau Teleworkers
- On-Call
- Contractors
- Field Staff
- Vendors

Channels
- Through what channels do customer segments want to be reached?

- O365 via Web Browser – Email, Office Suite, OneDrive, Skype
- Personal Computer – Terminal session (RDP) capability
- Work Laptop – Full VPN tunnel capabilities
- Tablet – Mobile app
- Mobile Phone – Mobile app

Revenue Streams
- What value are customer willing to pay for?
- What do customers currently pay for?
- How do customer pay? How would customers prefer to pay?

- Cost Recovery Model
- SAP Cost Object

Cost Structure
- What are the most important costs (resources, activites)?

- Bureau Laptop
- Bureau Mobile Phone
- Software Licensing
- BTS Infra – SSL VPN
- VPN Token
- Stipends
- British Telecom (BT)
- Bureau Tablet
- Persistent VPN [Net Motion]

Legend

Not Assessed/Lower Priority	Major Gap	Recommendation - Address for Citywide telework implementation (High-Priority)
Mild Gap	No Gap	Recommendation - Address at a later date (Lower-Priority)

Project: Teleworking Pilot

Version	1.0	Teleworking Business Model
Date	06/28/2017	
Author	Pablo Chauvin | BTS Enterprise Architecture	