

2019 Telephony Upgrade Report

TO: Chair and Members of the Board of Health

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Recommendations

It is recommended that the Board of Health:

1. Receive this report for information.

Key Points

- Wellington-Dufferin-Guelph Public Health (WDGPH) requires a telephone system upgrade to mitigate the risks and business impact associated with a system failure.
- A next-generation telephony system will improve on simplicity, flexibility, reliability and productivity for WDGPH.
- The planning phase of the telephony system upgrade project will begin in Q4 2019 and executed in Q1 2020.

Discussion

Current State

The telephony system, which controls all telephones at WDGPH, has been in use for more than 12 years. This system is integral to the services WDGPH provides in its day-to-day functions to the communities served.

The telephony system is a key component at WDGPH for effective and efficient communication among key stakeholders. The risks and impacts associated with failure of the existing telephony system will be discussed further in this report.

Critical Risk

Currently, there is no back-up telephony system in place to mitigate any risks of system failure. The impact to WDGPH due to a system failure can be significant. System failure will result in the following disruptions:

1. No externally initiated incoming or internally initiated outgoing calls;
2. No internal calls among staff at the Guelph office;
3. No inter-office calls among all WDGPH offices; and
4. No fax to e-mails - critical to the current Reportable Disease communication process.

If a major telephony system failure did occur, it would be difficult to find replacement parts due to the age of the system, which could result in a prolonged system outage. This risk and the associated impacts can cripple a key mode of communication, both to internal business processes and to clients, which can also negatively affect the reputation of WDGPH.

Business Impact

The aging current system adversely affects business operations in the following systems: (i) lack of business analytic reporting; (ii) increased complexity in administration; (iii) limited supplier availability; (iv) lack of available system documentation; and (v) lack of inter-operability with new and emerging technologies.

These deficiencies limit the decision-making process for staffing call centers and the monitoring of staff performance over time. Additionally, the WDGPH Incident Management System (IMS) has been impacted by the lack of access to and the timely application of vendor licensing to the telephony system. This lack of scalability in the system can affect response times to clients during an outbreak.

Furthermore, the lack of local expertise on the telephony system restricts timely repair and maintenance. The technical complexity and lack of available online training documentation on the current telephony system restricts IT from administering the system in an effective manner.

Emerging Trends

WDGPH is currently embarking on new collaborative systems such as: Microsoft Office 365; Skype for Business; and Enterprise Resource Planning software to improve on the integration of business operations. The antiquated telephony system lacks the functionality to be inter-operable with these emerging technologies.

Recent trends indicate a shift from on-premise telephony solutions to cloud-based solutions, also known as hosted PBX solutions.¹ Cloud-based solutions have benefits such as decreased upfront costs, no IT intervention for upgrades, and opportunities for business continuity to remediate any associated risks to the business.¹ While positive drivers do exist for both on-premise and cloud-based solutions, there are negatives to each.² IT will evaluate each of the alternatives according to predefined business requirements to ensure the best option for the agency is chosen.

The increasing use of mobile communications and sophisticated smartphones also paves the way for enhanced productivity across organizations. Mobile-centric employees are enabled to work anywhere, anytime, communicating with any device by integrating with next-generation telephony systems.

Future State

As WDGPH pursues digital transformation initiatives, it is the vision of IT to shift to a modern unified communications call processing solution. In other words, implement a flexible telephony system that can sustainably support the evolving needs of the organization.

Key considerations such as improved call handling, accessibility, call quality, enhanced internal communications, redundancy, and call reporting are high areas of interest for determining the final solution. From a business continuity lens, IT will be considering both on premise and cloud-based solutions and will ensure that disaster recovery is part of the analysis.

In ensuring that IT examines all viable options, in 2019, a comprehensive environmental scan of current telephony solutions will be performed. A deep-dive to evaluate all possible telephony options will occur in Q4 2019 and the implementation of a new telephony solution will occur in Q1 2020.

Financial Implications

A new telephony system, whether it be cloud-based or hosted internally, can be a significant expenditure for an organization. A dedicated IT reserve budget was developed and is adequately funded to ensure that this expenditure is financially supported within the existing resources of the agency.

Conclusion

To ensure WDGPH has a comprehensive and reliable infrastructure that supports the strategic direction of Organization Capacity, reliable communication technologies must be at the forefront. With digital transformation on the rise, there are a variety of options available to meet and exceed the telephony requirements of the organization.

In summary, it is pivotal to ensure that both a sustainable and integrated next-generation telephony system be procured and implemented for WDGPH in order to continue to deliver exceptional service to all stakeholders.

WDGPH Strategic Direction(s)

- Health Equity:** We will provide programs and services that integrate health equity principles to reduce or eliminate health differences between population groups.
- Organizational Capacity:** We will improve our capacity to effectively deliver public health programs and services.
- Service Centred Approach:** We are committed to providing excellent service to anyone interacting with WDG Public Health.
- Building Healthy Communities:** We will work with communities to support the health and well-being of everyone.

References

1. Primus Business Service. Hosted vs. on-premise phone system. [Internet]. 2015. [cited 2019 March 19]. Available from: https://primus.ca/business/media/content-hub/en/whitepapers/Whitepaper_Hosted-VS-On-Premise-PBX.pdf
2. Hosted PBX vs on premise PBX. [Internet] [cited 2019 March 19]. Available from: <https://www.voip-info.org/hosted-pbx-vs-on-premise-pbx/>

Appendices

None.