

THE HANG SENG UNIVERSITY OF HONG KONG

IT Advisory Committee

ITSC Business Continuity Plan

Purpose

1. This paper discusses how ITSC may support HSUHK to continue its core functions and operations in case of a disaster or an unplanned disruption of service.

Background

2. Business continuity planning (BCP) refers to the creation of systems and practices to deal with potential threats to an organization. The threats can be natural disasters (e.g., typhoons, floods), human-related disasters (e.g., fire, power failures), health-related (e.g., pandemic) and IT-related (e.g., cyberattacks and system failures).
3. Regardless on the scale of threats, BCP handles two kinds of disruptions that ITSC needs to provide support for HSUHK to continue its operations:
 - a. **Campus suspensions** - Some staff and students may not come back to campus.
 - b. **IT disruptions** - Some IT systems may fail to provide relevant services.

Campus Suspensions

4. ITSC provides the following services to staff and students during campus suspensions.

Teaching and Learning		Support for business continuity
a.	Enterprise Messaging and Groups	The use of Microsoft Teams to support: <ul style="list-style-type: none">- Online teacher/student chatgroups- Online video meetings
b.	Online Learning	The use of Moodle to support: <ul style="list-style-type: none">- Announcements to students- Learning resources and activities- Q&A forums with students- Collection of online assessments from students
c.	Lesson recording	The use of Powerpoint “Recording” function to do screen recording with voice over. ITSC will provide web cameras to teachers.

d.	Lesson video channel	Teachers may upload their video lessons to Microsoft Streams, an enterprise cloud-based video channel service.
e.	Project video submission	Students may upload their video file to Google Drive. In Moodle, student can select the uploaded file for assignment submission.
f.	Video lesson	Teacher may use Zoom/Microsoft Teams to host an online video lesson. ITSC has subscribed 10 seats for holding up to 10 meetings simultaneously.
g.	Video webinar	Departments may use Zoom Webinar or Microsoft Teams to host a large-scale online seminar. Functions such as question/poll are available.
IT Support		Support for business continuity
c.	Online Meetings	Departments and offices may use Microsoft Teams to facilitate: <ul style="list-style-type: none"> - Online messaging/chatgroups - Online video meetings
a.	Online Support	LiveChat - ITSC has set up an online chat function on the ITSC website. It allows ITSC colleagues to respond to online questions immediately, within or outside campus.
b.	Video Meeting	ITSC may use Zoom/Teams to hold consultation meetings with staff or students.
d.	Remote Access	Staff may use Jumpbox (https://jumpbox.hsu.edu.hk) to remote access their campus computers. Student may use VPN to access to campus virtual machines and online resources.
e.	Campus Softphone	Staff may install and use softphone that they can call and receive calls from other colleagues via campus extensions.
f.	Help Desk (x160)	The ITSC helpdesk (x160) will be forwarded to ITSC colleagues' mobile phones.

IT Disruptions

5. There are six kinds of IT interruptions:
 - a. Facilities failures – power failures, server room flooding, campus fire, etc.
 - b. Server failures – hardware failure, software failure, etc.
 - c. Network failures – Wifi, Internet, VPN, remote access, etc.
 - d. Account failures – Google and Windows accounts, etc.

- e. Application failures – Cyber DDoS attacks, hacking, system overloading, etc.
- f. Cyberattacks – DDoS, ransomware, virus attack on client computers, etc.

6. ITSC provides the following support to IT interruptions:

IT Interruptions		Support for business continuity
a.	Facilities failures	ITSC has two data centers with failover capabilities. ITSC also migrated our university websites and some applications to the Google Cloud Platform.
b.	Server failures	All servers are hosted by virtual machines. ITSC could recover or migrate virtual machines to resume the server operations.
c.	Network failures	HSUHK has dual Internet links and a fault-tolerant campus network. In case a core switch or gateway fails, the traffic would be forwarded to another Internet link.
d.	Account failures	HSUHK provides Windows and Google Suite accounts. ITSC will handle account failures as early as possible. Office 365 will be used as a backup service to Google.
e.	Application failures	The application team would monitor all applications and recover the applications as quickly as possible.
f.	Cyberattacks	All the teams of ITSC will work together to combat with cyberattacks and resume our IT services as early as possible.

7. ITSC has assigned the following teams and staff to handle IT interruptions:

IT Interruptions		Teams	Staff Contacts
a.	General Enquiries	User Support Team	Helpdesk (x160)
a.	Facilities failures	Network and System Team (Leader: Mike Ching)	1 st Contact: Danny Lau 2 nd Contact: David Koo
b.	Server failures	Network and System Team (Leader: Mike Ching)	1 st Contact: Danny Lau 2 nd Contact: David Koo
c.	Network failures	Network and System Team (Leader: Mike Ching)	1 st Contact: Mo Leung 2 nd Contact: Danny Lau
d.	Account failures	Network and System Team (Leader: Mike Ching)	1 st Contact: Ricky Lam 2 nd Contact: Mike Ching
d.	Application and website failures	Application Team (Leader: Prof. P.C. Wong)	Admin Apps: Stephen Wan Service Apps: Joe Tsui

			Websites: Dennis Shum
e.	Cyberattacks	ITSC (Leader: Prof. P.C. Wong)	1st Contact: Mike Ching 2nd Contact: Samuel Shum

Way Forward

8. Members are welcomed to offer feedback to the business continuity plan.

ITSC

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