Impact of Social Behavior to the New Normal of ICT Structure During COVID-19 Period in Developing Country

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Agenda

1. Introduction
2. Objectives
3. Research Methodology
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1. Introduction

- During the pandemic period, Songkhla Rajabhat University, Thailand, closed for work from home activities.
- This paper proposes the impact of the crisis which plays an important role in the network traffic statistics and application demands in the university network.
- The impact constructs the new normal of social behavior of ICT and duality of structure.
2. Objectives

- This research frames the outcome of the increasing use of the ICT during Covid19 pandemic at Songkhla Rajabhat University.
- To understanding the social behavior of the institution faculty, staff, and students, the change in structure is proven to be evident in technology used.
2. Research Methodology

- In this research, the Giddens diagram, see Figure 1, for the dimensions of the duality of a structure is used to interpret organizational response and internal social interactions — to map the route of institutional structural change by the availability of existing technology implementation.

- In this diagram, Giddens highlights the duality of structuration dimension, interaction dimension, and different modalities between dimensions.
The duality of a structure
3. Results

- Since 17 March 2020, the university is closed by Thai Government. This let all students, teachers, workers need to work from home. The overall traffics in the campus decreasing dramatically

**Figure 2.** Network traffic from SKRU gateway
3. Results

- Figure 3 shows the number of active users for 6 months all Google+ services in 1-day, 7-day, and 30-day, respectively. In April, there were the maximum number of active users for all Google+ Services in 7-day and 30-day even in that period university is closed due to the end of second semester and start for the summer semester.

**Figure 3.** Number of active users for all Google+ Services
3. Results

- It shows that the active user using video Hangouts in March 2020 is increasing dramatically. Moreover, in April after lockdown period, the number of active users in that month still increasing more than March even the university is closed. The active users using video Hangouts in April are still very high more than usual. Figure 4 shows the continued increasing of number of active users for video hangouts.

**Figure 4.** Number of active users for video hangouts
Figure 5 shows that number of devices increase in March and April both Android and iOS sync.
3. Results

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For the last 3 months, from 1 February 2020 to 30 April 2020, the weekly active users use total 793,831 email, increase 11%. File added 2.1 Megabyte, increase 20% and Video hangouts 2416, increase 24060%.

Figure 6 shows application usage activity one month during Covid-19 after lockdown in the university. The period is between 1 April 2020-30 April 2020. The applications include Gmail, Drive, Calendar, Google+ and Classroom.
3. Results

- Figure 7 also shows that last one month the total emails decrease 15%, Files added decrease 23%, however, video hangouts is increase 219%.

**Figure 7. Apps usage activity**
3. Results

- Figure 8 shows File sharing activity in two types, external shares in total 145,608 shares, and internal shares in total 667,793 shares. The external shares include Public (41,531), Anyone with the link (54,339), and Outside domain (49,738).

- The data is during the Covid-19 lockdown period between 1st April 2020 and 30th April 2020. The internal shares include Anyone in domain (348), Anyone in domain with link (34,862), Within domain (22,776) and Private (609,807).

![Figure 8. File sharing activity](image)
3. Results

- Figure 9 shows 14-day active classes of the university. In March 2020 has the highest active classes in 14 days, 7636 classes. In January 2020 has the lowest active classes in 14 days, 4570 classes.

**Figure 9.** 14-day active classes
4. Discussion

- From Table 1, the network traffic in the university decreases dramatically from the effect of the lockdown. From using Gidden's approach to understanding the social behavior of the institution faculty, staff, and students, the change in structure is proven to be evident in technology use, from the timeframe of November 2019 to April 2020.

- From the structuration theory, the change in structure in an institution is the amount of social interaction proportional with time and dependent on location [10]

- Thus, the change in the structure during the Covid-19 pandemic in an educational institution could be explained in-depth with the diagram for the dimension of the duality of structure, proposed by Giddens.

- Three separate routes for the agency (the university) participants (students, faculty, and staff) to reach the structuration could be distinguished using the diagram. From the data obtained, the dimensions that are considered dynamic during the allotted timeframe is the social interaction dimension of communication.
4. Discussion

- On the other hand, the data shows the varying change in structuration, apparent in the dimension of domination, which is where the allocated resources are distributed and established a survival plan for the institution during the crisis. While communications among participants are increasing, the power interaction is relatively constant and definitive. There are two types of power structuration of the agency during the pandemic: the government, and the university’s administrators.

- During the lockdown, the government presented a superior authority over any university operating leaders, which dictates a minimal sanction dimension variation. This overrules the normality and normalization process of all educational institutions in Thailand, which would be the lockdown, the work from home policy, and the online learning for students; hence, this normalization process is inevitable.
4. Discussion

- From Figure 8, the number of acting classes is steadily the same for the whole period of structuration. This proves that the organization is automatically driven to the normalization process due to the government’s power sanction exertion. Participants acted swiftly to ensure the continuity of the organization when the pandemic hits, exercising the new normal and reach the structuration change of legitimization during the process of the lockdown.

**Figure 8.** File sharing activity
4. Discussion

- The second participant of the power dimension is the university administrators. Unlike the government assertion of sanction power, the administrators hold the role of allocating resources and facilities within the agency.

- The facilities in this case scenario are the available technology of the Google Application platform used by members of the institution, while the existence of the resources and the facility aids the domination of overall structuration. The number of application usage, storage, file sharing activities, video call, and IOS and Android device sync increases supports the ease of domination structuration.

- Therefore, a successful structuration process depends on the facilities and allocation of resources with precision and knowledgeable capability, also relative to the timeframe.
4. Discussion

Communications dimension interaction is also present in this data collection, especially with the increase in emails and video hangouts. The number of video calls does not solely dictate the number of classes online during the pandemic; however, it is accountable for meetings of staff, faculty, and administrators; the same deal is the increase of emails. This increase supports the interaction in the dimension of communications, which aids interpretive schemes. The understanding of the situation becomes more evident to the members of the agency due to an increase in communications.
4. Discussion

- The structuration of significance is created through this process; the situation and action needed during the crisis became vivid. Therefore, the significant dimension affects the maturation of dominance by the cooperation of those adapted to the institution's situation. Singularity relations do not define these straight routes, but duality. The duality of structure means that the structure also influences human interaction. However, these interactions are hard to assume from the data obtained; since these data only shows the formation of structuration dependent on human interaction. A study of the case by case scenario of each group of participants in the institution would be able to understand the impact of structure structuration on the interaction dimension during a crisis.
4. Discussion

- The results show that structuration occurs within the university through a collective assertion of social interaction between groups of participants during the COVID-19 pandemic.

- The data is matched with a structure dimension of domination, where technology is seen as a display of successful structuration.

- The interaction dimension of communications is evident in the data to support the domination structuration process.

- From understanding these relations, it is proven that technology could be used as a measuring tool to quickly evaluate the institution’s structuration process during an ongoing crisis, which might aid the response tactics for the survival of the organization in the future.
5. Conclusion

- The impactful case of the social behavior of institutional members at Songkhla Rajabhat University has displayed a consequential ideology that the existing technology (facilities and resources) in the institute proves to build structuration of the organization during the time constraint of the COVID-19 pandemic crisis.

- The structuration process helps to understand any society type of change in the agency during any crisis.

- Administrators must make informed decisions and initiate needed preparations based on the understanding of these societal changes, especially the integration of technology.

- The evidence of technology integration and structuration of Songkhla Rajabhat University during the Covid-19 Pandemic have matched Anthony Gidden’s Model for the Dimension for the Duality of Structure.
5. Conclusion

- The integration of technology application has proven that structure in the agency does not have to be defined by physical space, but the process could be seen online.

- The case scenario presented a unique case of ICT being applied to structuration theory during a pandemic.

- This proves that immense structuration in an institution could happen through societal contribution, entirely in an online presence — defining a New Normal for the society.

- The base of this structuration ICT response could be applied to other institutions, and any other scale of society such as a city, a municipality, or even the government sector for a deeper understanding of societal changes and allocation of resources within organizations during a crisis or reforms of organizational structure.
Q & A