

ICT Complaint Management within a higher Education Institute in Brunei Darussalam: A Case Study

Liza Mariah Haji Azahari
Faculty of Islamic Development
Management,
Sultan Sharif Ali Islamic University
Brunei Darussalam.
mariah.azahari@unissa.edu.bn,

Monica Lesley Anak Ason
Nur Diyana Rossiman
Wong Teck Sion
Nur Annissa Hikmatul Binti Idris
Universiti Brunei Darussalam.
Brunei Darussalam.

Vol.3, Issue 1 | January 2020

KEYWORDS

ICT, Complain
Management, Higher
Education Institute

ABSTRACT

This study focuses on the ICT aspect of Complaint Management System as there is a growing utilization of ICT in every process. The utilization of ICT in the education sector is not only important to enhance the teaching and learning experience of members of the education institute, but also to increase productivity, efficiency and effectiveness of employees within any organization. This study is a case study on a higher education institute in Brunei Darussalam and builds on the knowledge of its ICT Complaint Management System. The purpose of this case study is to gain deeper understanding into the process on how complaints are received, handled and resolved in terms of ICT and equipment maintenance. The research objectives of this case study development are to investigate the internal processes and problems faced by the department that handles ICT related complaints, identify and assess its key problems and suggest recommendations that could improve its efficiency or effectiveness in handling and resolving complaints. The study managed to diagnose several issues in line with the findings namely in terms of decision-making processes, means of communication, and staffing. The study provided several recommendations to address such issues such as designing a systematic decision-making procedure, an assignment of responsibility matrix as well as the installation of an IT Infrastructure Library.

Introduction

This case study development report focuses on the ICT aspect of Complaint Management System as there is a growing utilization of ICT in every process. The utilization of ICT in the education sector is not only important to enhance the teaching and learning experience of members of the university, but also to increase productivity, efficiency and effectiveness of employees in an organization. This case study takes place at a higher education institute in Brunei Darussalam and builds on the knowledge of its ICT Complaint Management System.

The issue stems from an increase in complaints surfaced in light of ICT maintenance and management within the university. The increase in complaints also affected daily teaching lessons which disrupted the learning process for students, in which students complained of a lack of wifi access, inoperability of projectors among other issues associated with ICT. Further to this, issues relating to the ICT maintenance, students complained of inaction of a slow response to handling their complaints. Thus, due to this issue, the main purpose of the case study is to gain a deeper understanding into the process on how complaints are received,

handled and resolved in terms of ICT and equipment maintenance. The research objectives of this case study development are to investigate the internal processes and problems faced by the ICT Department that handles the related complaints, identify and assess its key problems and suggest recommendations that could improve its efficiency or effectiveness in handling and resolving complaints. The research used mixed methods. A quantitative sample of 100 students were taken from the higher education institution and qualitative data was derived via an interview with the director of the ICT Department of the said institute. Qualitative data endeavoured to explore the internal processes and problems being faced by the department as the 'provider' of the service. Qualitative data explored the level of satisfaction and feedbacks on the complaint management system as the user or receiver of the service.

The paper will discuss several issues that were identified from the findings on qualitative and quantitative data were mainly decision-making process, means of communication and staffing. These issues will be analyzed and recommendations will be provided based on relevant literature on management. The recommendations given to improve efficiency and effectiveness of ICT Complaint Management System were through the incorporation of technology and specific framework in decision-making process, Responsibility Assignment Matrix and Information Technology Infrastructure Library.

Methodology

There are two methods of data collection being used to develop this case study to gain further understanding in the processes and problems being faced with regards to its ICT complaint management system. The triangulation method used is a combination of online survey for quantitative data and semi-structured interview for qualitative data. Triangulation research method (Omar & Hamid, 2020) can be depicted below:

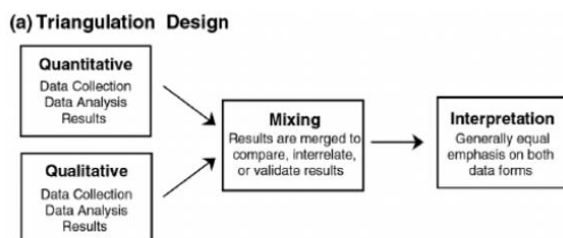


Figure 1: Research Design

Quantitative data was collected via an online survey that was created on *Google Forms* with the survey link being shared through social media (Facebook and Whatsapp Messenger) to take advantage of the benefit of using a paperless survey that is capable of

reaching large number of respondents. The sample for this survey are the teaching staff and students of the higher education institute who are the direct 'users' of the services provided by ICT department. The questionnaires are crafted to gain insights on the satisfaction and perception of the 'user' on the subject matter using ordinal Likert scale and several open-ended questions. The theme of questions will focus on three main themes which are: (1) Procedural Justice; (2) Interactional Justice; and lastly (3) Distributional Justice. A target number of 100 respondents were reached within 2 weeks of survey distribution that was conducted in early October 2017.

On the other hand, qualitative data collection was done via a semi-structured interview with the head of the ICT Department. The purpose of the interview was to gain further insights on the internal processes and problems being faced by the department and university in handling and resolving the complaints in addition to its overview of ICT Complaint Management System.

The limitation of this research was that the respondents were mostly students who have spent less than a year in the university which limits the insights on the 'user' experience for the system. In addition, the assigned university representative disclosed only limited amount of information that are related to turnaround time, efficiency of process and the effectiveness of current system.

Findings

The Quantitative data looked at (1) Procedural Justice; (2) Interactional Justice; (3) Distributional Justice; as well as open-ended responses on overall opinion towards ICT complaint management.

i. Results from survey data collection

The demographic of respondents shows that majority of the respondents are female at 79.6% in comparison to male at 20.4%. The respondents ages from 18 to 45 with 30% of the respondents are within their twenties and that 80.6% of the respondents are current students of the institution. Furthermore, responses indicate that the largest group of respondents at 49% have spent less than a year either working or studying within the institution.

The responses on Procedural Justice which concerns with the fairness and transparency of the decisions made by ICT department on complaints management were mostly leaning towards dissatisfaction or uncertainty regarding the process. The results have shown that majority of the respondents rarely complain with half of the respondents are unsure of

where and how to lodge a proper complaint. Moreover, it was found that complaints are generally lodged through forms or informally through university staff. 63.1% of the respondents believe that the institution does not have a well-developed process for recording customer complaints which could be the reason behind 72.8% of the respondents saying that the progress of their complaints is not informed.

Two other main areas being questioned in the online survey are interactional justice which concerns about the 'user experience' that focuses on interpersonal treatment and distributive justice that concerns about resource allocation particularly on the satisfaction of the outcome on complaints. The rating scales have shown that majority of the respondents are indifferent or neutral towards the two processes.

Despite not being able to gain much insights towards the satisfaction level, the open-ended questions have deeper insights on the 'user experience'. Out of 36 responses, several areas are identified to group common feedbacks. There seems to be a high frequency of dissatisfaction surrounding the areas of:

- lack of maintenance that leads to persistent problem and complaints
- inefficient management that affects the ability to resolve complaints in timely manner
- chosen means of complaints that hinders effectiveness and transparency
- perceptions on the attitude and work ethics of the staff handling complaints that affects the interactional justice.

ii. Results from interview data collection

The interview was responded by the Director of the ICT Department from which the information regarding the complaints handled by the office were obtained and used for this case study discussion.

Also discussed is the organization structure, an ICT director at the top leads the department, there are two senior system engineer analysts from EGNC (E-Government National Centre) and below them are System Engineer, System Analyst, Programmer & Education Officer. The lower rank will be Assistant Education Officer, Office Assistant and Clerk Administration.

However, the issue raised is regarding not sufficient employees as there are only 10 permanent staffs in the department and additional help from interns and attachment students for managing the inquiry and ICT tasks for the whole campus. In addition, the

staffs had undergone very scarce training but nevertheless, they do provide internal trainings for the students and staffs at the institute on ICT related matter.

The department practices 'open communication' through phone calls, walk-ins or social media (specifically Whatsapp Messenger) for lodging complaints. All information details of major complaints and critical problems are lodged using forms which are recorded and tracked using excel spreadsheet for future reference. All the complaints & inquiry are fronted and handled internally with the support from EGNC and intern students. There is a service desk where any complaints or inquiry will be handled, however staff are often not available. Instead, there is a bell placed to ring the staff for any walk-in requests. Complaints and inquiries are often lodged by students, and staffs. It was estimated that around 20-30 inquiries are encountered daily, which includes borrowing items, complaints, inquiry for assisting with IT staff.

In handling critical problems, there are manuals provided by vendors as a reference to follow but if the problems still persist they will get help from the vendors. Engaging with vendors takes time as there are procedures to follow (eg. Quotation), therefore updating the status of their problem to the client (eg. teacher) is the most important thing.

Moreover, there are Standard Operating Procedure (SOP) and Escalation Chart in place and implemented for any complaints & inquiry received. If the complaints involved email or network, it will be then escalated to the Technical unit. All the findings about the problems, time, root cause, and the progress will be updated to the director. For maintenance of ICT equipments, there is routine check-up but limited to once every semester.

There are three budgets allocated to the ICT Department which are internal fund, and external fund (From the Ministry of Education) and EGNC (specifically for ICT equipment & Infrastructure). In addition, the director will usually share the problems faced by the department to the top management which comprise of the higher level executive management. Information is communicated through social media or most commonly known as Whatsapp as it is considered one of the fastest and efficient ways for communication especially within this era of industry 4.0. The problems shared are usually associated with budget issues wherein they will seek advice and ask for solution via Whatsapp. If there's a decision from the top management, they will execute the decision immediately without having to wait for a meeting.

According to the director of ICT, currently, there are no plans yet on implementing an online complaint system for the complaint management in the ICT

department because it depends on the types of complaint being made. In moving forward to become more efficient, the director feels that the department needs an additional of five more employees in order for him to adjust accordingly to the specific tasks under the ICT department where an expert programmer is required to update the Online Education System as the system changes frequently due to the introduction of new Academic programmes. Additionally, to reduce the staff from multitasking, experts for specific job are necessary to work effectively.

Discussion & Analysis

Based on the issues highlighted within the findings, several areas of management are highlighted to resolve the issues including improvements in decision-making process, means of communication, and staffing.

i. Decision-making process

These days the organization treat their employees as part of a working team to accomplish the business's goals and decision making is one of the important elements needed to optimize performance. Decision-making is known as "fundamental function in management and reflects the success and failure of the organization that mainly concentrate upon the quality of decision" (Elayyan, 2015). Therefore, the decision-making styles may reflect on each individual's characteristics based on their knowledge skills in terms of identifying alternative options and consequences of the decision, leadership and experience. However, the ICT department has limited staffs which leads to work overload, hence, role conflict occurs when there is unclear roles and the area of the jobs may not match their skills. This could affect the decision-making of ICT staffs since they can make the decision for minor problems without approval from top management.

In some cases, the staffs may make an unsuitable decision to meet minor complaints. Every staff considered every task given to them is important. Thus, they cannot identify which one is critical and this result in poor time management to perform the tasks given. Consequently, they tend to lose control decision-making and it became inefficient in seeking problem solution (Ombudsman Western Australia Publications, 2010).

Moreover, the ICT department has limited resources that the staffs may need to borrow equipment such as projectors, which affects the decision making process. It became a complex process for them to decide and the need to find alternative ways whether

to lend their resources to their staffs and students when an event is ongoing.

In handling complaints from students and educators, they have recorded the complaint issues written in a logbook, however, the lack of proper procedures on both verbal and nonverbal complaints caused the delaying of the decision-making process on the problem resolution. Due to limited resources and employees, the conflict arise as only critical complaints are taken seriously while considering the minor issues in other time. The multitask staffs could immediately seek solution on the minor issues without properly identifying the steps required when complaints are received, to whom they addressed to, the complaints being assessed within time period and seek recommendation or solution (Gouws, 2000)

According to the interview, ICT department has stated that they will always keep informing the complainants regarding the problem handling process status once complaint is filed and managed to settle most of the issues. However, there are few answers from the open ended survey we conducted that in general they are not well-informed, or to be heard for their concern, lack of proper forms provided when the staffs unavailable at offices and not providing a suggestion box in every faculty departments. This shows that there still exists a lack of proper procedures or clear framework of complaint handling process, as well as handling the struggles of making decision and communication between departments.

ii. Means of communication

Communication is an important element to achieve effective complaints management system (Aziz, 2016). The findings from the interview found that the communication style adopted in the ICT department is an open communication. However, the various modes of communicating the complaints were observed as somewhat not viable because this would cause confusion and contradicting channels for the receiver's end. It would also pose some difficulties to track the complaints. Hence, there should be a clearly defined mode of communication to make complaints based on its severity and urgency. Managers tend to concentrate and spend more time and attention to those who complain directly while they are still at the place of the encounter (Berry et al., 2014). Consequently, this leads to a lack of attention to those who complained through other modes or channels (Berry et al., 2014). In addition, the different complaint channels are somewhat not equally monitored by the receiver (Berry et al., 2014). Therefore, it is necessary to have the knowledge of preferred complaint channels as this will help universities to improve the efficiency of

their complaint management system (Hart and Coates, 2011).

Although they seemed to have an open communication system, there is lack in progress updates amongst staff in the department as well as between complainants. In addition, based on the findings from the survey, most of the respondents were not informed of the progress of their complaints. There were no feedback mechanisms and announcements to notify the progress on the complaints being made. The lack of transparency leads to dissatisfaction for the parties involved. Complainants should be informed of the status of their complaints regardless of the progress as this would serve as a form of feedback to the complainants (Van et. al., 2012). This also creates some sort of reliability or trust between complainants and the service provider. One of the standard processes urged by the management services department of the Prime Minister's Office is the evaluation and the follow up stage, where decisions are made to act on the complaints and ensure recurring problems do not appear again in the future (Aziz, 2016). This results in the reduction of the cost of staff time spent to deal with complaints in the future (Brennan and Douglas, 2002). Therefore, there is a need in which outcomes or progress of the complaints are to be communicated to the complainant to ensure full accountability and closure (Aziz, 2016).

Moreover, there is an absence of employees attending the designated desk counter. It is vital that employees are present as they are the first point of contact for walk-in complainants. This initial contact can prevent the risk of a complainant being passed on from one staff to another to resolve his or her problem (Bendall-Lyon and Powers, 2001). In that event, good communication skills have to be embedded with the attitude of the frontline employees. One of the essential features of good communication skills in the context of complaint handling is listening to the complainants (Brennan and Douglas, 2002). Public services tend to not want to listen to complaints and resulting in complainants being transferred to one member of staff to another and this is supported by one of the feedbacks received regarding attitude of staff (Brennan and Douglas, 2002). This would cause an organization to lose the opportunity to make improvements on their service as information received from complaints are feedback from consumers that can be incorporated to the management policy (Brennan and Douglas, 2002).

Finally, as half of the complainants felt that the interaction and treatment of the staff handling their complaints were more or less satisfactory in terms of courtesy, friendliness and responsiveness, this is where interactional justice comes into play that

involves the employee attitude towards handling complaints, which is hardly foreseeable (Aziz, 2016). Employee attitude plays a role in the interactional stage of the complaint handling process (Aziz, 2016). Considerably, it is considered to contribute to the effectiveness of complaint management as argued by Larivet and Brouard (2010) in their study. In addition, complainants generally prefer contact employees to treat them fairly and courteously (Estelami, 2000; Aziz, 2016). Thus, a positive interaction between the staff and the complainants is crucial in handling complaints and the key to this, is good employee attitude and communication (Grubert et. al., 2009; Aziz, 2016). Also, developing a better understanding of how complainants create and lodge their complaints should give service providers with the right means to improve their service and other measures when complaints are made (Susskind, 2006).

iii. **Staffing**

According to the case study of complaint management system in ICT department, some of the problems they encountered came from their management process of HR staffing issues.

Firstly, the department does not have enough employees to run the whole department in the campus which can be identified as understaffing issue. A refined definition of understaffing is when a situation in an organization where there are too few employees to perform essential tasks and essential functions of a unit (e.g., Greenberg, 1979; Srivastava, 1974).

Understaffing often identified as worker's main pressure in their work lives (Hudson and Shen, 2015). According to Coffey et al. and Poulston, understaffing often considered as one of the most difficult area of the job for employees. While most researcher consider understaffing to happen when there are low number of group members to carry out the necessary tasks and functions in a working department or unit.

The respondent mentioned that currently the department have 10 permanent staffs and additional temporary staff from interns and students in which he wishes to have another at least five employees to run the department efficiently. Although the employees are among qualified staff with respective degrees, with insufficient number of employees, they have to do multitasking at the same time. Tasks are done according to the availability of the staffs and they are responsible of dividing the tasks among themselves accordingly. This also known as manpower understaffing which means that employees in the department generally have the necessary knowledge, skills, abilities and other attributes (KSAOs) to accomplish a certain tasks and

responsibilities of the group but there are insufficient employees to complete the amount of work requires to adequate group performance (Hudson and Shen, 2015). This practice will lead to inefficiency in completing tasks within a given time and delayed in completion of work given.

Another problem raised is the lack of expertise such as expert programmer to update their system every time. There is no proper training conducted to train the employees hence no specialization and staff is not learning new skills. As they cannot solve the problem on the spot, they are giving out to the vendors instead which will lead to vendor dependent and outsourcing a lot.

These problems are among the reasons that will lead to poor performance of the department and have a great impact to the workplace outcome. Without taking into account the temporal dynamics of the staffing situation, the director cannot design appropriate solutions. One of the ways he can do is by hiring additional employees, changing employees with those with the requisite (necessary knowledge, skills, abilities and other attributes) KSAOs or giving them additional training to develop needed expertise and skills (Hudson and Shen, 2015).

In addition, with multitasking and no proper division of work, the employees could be overworked which will have impact towards the employee's customer service as well as their motivation to work. Although they are using KPI metric for calculating efficiency of the department, there is no record history or performance charts for the employees. Employees are not rewarded according to their efforts and contribution that they give. Overall this can result to poor performance of the employee and the organization's output and productivity as a whole.

When motivation is poorly managed, they have possibility to severely limit the organizational growth and threaten the capability of an organization. Employee's presence and contribution are the core factors and highly important to determine the success or failure of an organization (Osabiya, 2015). A major study by Proud Foot Consulting revealed that mainly the crucial reason for productivity loss was poor working morale (Mullins, 2005), which includes the absence of positive group spirit, low motivation, and no sense of belonging, feeling undervalued and inadequately rewarded.

Conclusion and Recommendation

As there has been a growing utilization of ICT within the education sector, particularly at an educational institution in which education is relying more and more on ICT within the era of industry 4.0. With high volume of ICT utilization by members of the

institution, software issues or equipment failures tend to occur and complaints are lodged to ICT Department for further action to resolve the matter. The purpose and objective of this case study is to gain deeper insights into the process of ICT Complaint Management System within higher education system and how it can further be improved to support the growing number of complaints through identification of problems and solutions.

From collecting quantitative and qualitative data, the result section has provided insights from both the 'provider' of the service and the 'user' of the service to gain valuable perspectives to identify the main problems and areas for improvements. One of the main problems identified is in its decision-making process that rises from various internal issues that could be caused by the lack of proper framework as a guideline. The second main problem identified is means of communication where 'open communication' concept has yet to show positive result due to various issues particularly in the lack of accountability and transparency. The third main problem is regarding staffing, particularly in the lack of sufficient number of staff to handle the complaints and lack of skilled expertise to resolve the issue faster and efficiently.

The case study has been able to identify key issues and these problems are a result of internal issues that affect the outcome of the process which further affects the experience of teaching staff and students to be in a conducive environment. These issues are related to the concept of industry 4.0 as according to Petra & Marko (2019) it is all about including contemporary technologies for processes of automation and real-time data exchange which provides a basis for designing the communication layer of an institute's value chain depending on the usage scenario within the Industry 4.0 concept.

Recommendation 1: Changes to current decision-making process

As mentioned earlier, there are several problems raised due to ineffective decision-making to solve the problem. Therefore, a solution relies on setting routine rules, policies and procedures to deal with these problems, known as programmed decision-making is recommended. As mentioned by one of the respondents in their comments, a set of clear rules or guidelines on how to use and maintain the equipment can help users to take care of it and prevent it from breaking down.

If there is a lack of staff to efficiently deal with the complaint, studies indicate that management can integrate customers' contribution towards services also known as service innovation. In business management, external knowledge integration plays a

vital role to stimulate service innovations. (Meik J. & Brock C., 2016) For this case study, students and staffs' ideas should be considered to foster innovations and increase customer satisfaction of the equipment being used.

It was observed that there was no specific framework to address the problems arising from the complaints. If they were communicated to the authorities in charge, there is a delay in response to this complaint. An effective decision-making process must focus on what is important, logical and consistent. It must take into account analytical as well as intuitive thinking and among other factors, it must be flexible. In this sense, the organization has to be able to adapt to the rapid changes in technology as well as changes within the education system. Therefore, flexible decisions will be able to accommodate such changes when the need arises. (Robbins & Coulter, 2001)

For the issue of role conflict, the role of group involvement should be considered in decision making which is said to be consistent with the current trends toward site-based management and total quality management. A study on group decision-making states that decisions that can be helped with quick results through rapid polling and immediate feedback with real time results can be enriched through a system called the Electronic Meeting System. This would allow medium-sized groups to work together efficiently, generate ideas and communicate sensitive issues anonymously. This technology will be able to facilitate group problem solving and consensus building through voting systems and prioritization (Spuck et.al., 1997). Incorporating technology will allow the Director of ICT to enhance their ICT Complaints Management System (Nasr & Alkhider, 2015)

Recommendation 2: Responsibility Assignment Matrix

Communication plays an important role for group decision making efficacy (Randy, 1990). Responsibility Assignment Matrix is a model, also known as RACI model (PMI, 2013) which caters for this function. RACI acronym stands for Responsible, Accountable, Consulted & Informed and this model layout the involvement of key roles in completing tasks or deliverables for a project or business process (Tiziana, 2010). For this case study, the RASCI model has been recommended, an extension of RASCI model as seen below (Baker & Dean, 2009):

- R - Responsible – Person in charge of completing a task.
- A - Accountable – Person who are ultimately accountable for the correct and thorough completion of the deliverable or task, and

the one to whom Responsible is accountable. There must be only one Accountable specified.

- S - Support – Resources assigned to Responsible. Those who may provide input to the task, and assist in completing the task.
- C - Consulted – Those who are not directly involved in a process but provide inputs and whose opinions are sought.
- I - Informed – Those who receive outputs from a process or are kept up-to-date on progress, often only on completion of the task or deliverable.

Based on the organization structure, top management may assign different roles according to the model. With this model, each of the people involved will have specific role and functions to achieve the objectives, and at the same time, the communication flow and information passed to each level will be more organised and for the purpose of each level. The Director do not need to know the problem or solutions but an overview or statistic of the handled complaints or inquiry of each week or month, the SLA, average response and resolution time. This model can also be adapted for planning softwares such as Knowledge EngineeringWeb Interface (KEWI) modelling automated planning tasks in a semi-formal framework. The conceptual model used to represent the declarative and procedural knowledge in KEWI is described formally. The model consists of three layers: a rich ontology, a model of basic actions, and more complex methods. It is this structured conceptual model based on the rich ontology that facilitates knowledge engineering (Gerard and McCluskey, 2014). Moreover, It is well known that in the era of industrial revolution, the role of certain staff have become minimal such as data input clerks, accountants, among other clerical duties are now being replaced by a smart human cognitive system, smart machines, and their shared communication systems.

Recommendation 3: Information Technology Infrastructure Library (ITIL)

Another recommendation is that the ICT department could implement Information Technology Infrastructure Library (ITIL) which is one of the best practices for IT Service Management framework, specifically on Service Operation which include the day-to-day operation activities and management of technology needed to deliver and support services (Axelos, n.d). It reduces the risk of reduced availability and uptime of service. The ITIL framework assists to improve on Incident

Management, Request Fulfillment and Problem Management.

With reference to Appendix 1 on Incident Management Process Flow, a service desk can be assigned which represents the single point of contact for any complaints or inquiry and identified as level 1 support (BMC Incident Management, n.d). Incident management focuses on doing whatever necessary to solve the issues which often requires the use of a temporary fix, or workaround. There are few important tools used for the diagnosis of incidents like Known Error Database (KEDB) and Incident Model.

While in Problem Management Process Flow (Appendix 2), it refers to any unknown cause of one or more complaints and focus of finding the root cause and remove that cause (BMC Problem Management, n.d). This is where they are able to organize their resources on focusing the main cause which create the complaints, rather than performing fire-fighting work every day.

While for those inquiry like changing password, borrowing IT equipment, the system can implement Request Fulfillment process which will separate it from complaints or issues (BMC Request Fulfillment, n.d & Axelos, n.d).

Lastly, a maintenance management for developing and implementing preventive maintenance plan which inspects equipment regularly as it will further improve the user experience and create high utilization of IT (Kans & Ehsanifard 2012).

References

- Axelos. (n.d). *Axelos Global Best Practice*. Retrieved on 10th October 2017 from <https://www.axelos.com/>
- Aziz, R. B. H. A. (2016). *The effectiveness of public service complaint management processes in contexts of autocratic governance: the case of Brunei Darussalam* (Doctoral dissertation, University of Birmingham).
- Baker, Dean (2009). *Multi-Company Project Management: Maximizing Business Results Through Strategic Collaboration*. J Ross. p. 58. ISBN 1-60427-035-7.
- Bendall-Lyon, D. and Powers, T. (2001). *The Role of Complaint Management in the Service Recovery Process*. *The Joint Commission Journal on Quality Improvement*, 27(5), pp.278-286.
- Berry, R., Tanford, S., Montgomery, R. and Green, A. (2014). *How we complain: The effect of personality on consumer complaint channels*. *Journal of Hospitality & Tourism Research*, 5(1).
- Brennan, C. and Douglas, A. (2002). *Complaints procedures in local government*. *International Journal of Public Sector Management*, [online] 15(3), pp.219-236. Available at: https://www.researchgate.net/profile/Alex-Douglas/publication/238325372_Complaints_procedures_in_local_government_Informing_your_customers/links/00b4952259cd2c25b5000000.pdf [Accessed 20 Oct. 2017].
- BMC. (2016). *BMC.com*. Retrieved on 10th October 2017 from <http://www.bmc.com/>
- Coffey, M., Dugdill, L., & Tattersall, A. (2004). *Stress in social services: Mental well-being, constraints and job satisfaction*. *British Journal of Social Work*, 34, 735–746.
- Elayyan, A., & Shra 'ah, M. Al. (2015). *The impact of decision making styles on organizational learning: An Empirical Study on the Public Manufacturing Companies in Jordan*. *International Journal of Business and Social Science*, 6(4), 54–62.
- Estelami, H. (2000). *'Competitive and Procedural Determinants of Delight and Disappointment in Consumer Complaint Outcomes'*. *Journal of Service Research* 2(3). pp. 285-300.
- Gouws, E., Smit, B., & Kotzee, A. (2000). *Client's Complaints Procedure Manual Complaint. Momentum Securitates*. Retrieved on 12th October 2017 from <https://www.momentum.co.za/wps/wcm/connect/securities/00f1f5c4-df90-4607-a444-cb4b1f623e27/Client+Complaints+Procedure.pdf?MOD=AJPERES>
- Greenberg, C. (1979). *Toward an integration of ecological psychology and industrial psychology: Undermanning theory, organization size, and job enrichment*. *Environmental Psychology and Nonverbal Behavior*, vol 3, pg 228–242.
- Gruber, T., Szmigin, I. and Voss, R. (2009). *'Handling Customer Complaints Effectively - A Comparison of the Value Maps of Female and Male Complainants'*. *Managing Service Quality*, 19 (6). pp. 636-656.
- Hart, D. and Coates, N. (2011). *International student complaint behaviour: Understanding how East-Asian business and management students respond to dissatisfaction during their university experience*. *The International Journal of Management Education*, [online] 9(4), pp.57-66. Available at: <http://nrl.northumbria.ac.uk/7113/1/IJME380.pdf>

- Hafidz & Omar (2020) *Effective Supervision Workshop*. UNISSA.
- Hudson, C. and Shen, W. (2015). *Understaffing Organizational Psychology Review*. Retrieved on 25th October 2017 from <http://journals.sagepub.com/doi/pdf/10.1177/2041386615576016>
- Larivet, S. and Brouard, F. (2010). 'Complaints Are A Firm's Best Friend' *Journal of Strategic Marketing* 18(7). pp. 537-551.
- Meik J., Brock C. (2016) *A Conceptual Contribution to Research on Stimulating Service Innovation – The Interrelation of Service Innovation and Customer Complaint Management*. In: Plangger K. (eds) *Thriving in a New World Economy. Developments in Marketing Science: Proceedings of the Academy of Marketing Science*. Springer, Cham (Accessed on 25/10/2017: <https://link.springer.com/search?query=Customer+Complaint+management>)
- Mullins, L.J. (2005). *Management and Organisational Behaviour*. Prentice hall. UK 7th Ed. 88(431):1052-1058.
- Kans, M., Ehsanifard, K. & Moniri, A. (2012). *Criteria and model for assessing and improving information technology maturity within maintenance*. *Journal of Physics : Conference Series* 364 012097.
- Nasr, O. & Alkhider, E. (2015). *Online Complaint Management System*. *International Journal of Innovative Science, Engineering & Technology*, Vol 2 (6). ISSN 2348-7968
- Ombudsman Western Australia Publications. (2010). *Effective handling of complaints made to your organization*. Retrieved on 16th October 2017 from <http://www.ombudsman.wa.gov.au/Publications/Documents/guidelines/Effective-handling-of-complaints-made-to-your-organisation.pdf>
- Osabiya, B. (2015). *The effect of employees' motivation on organizational performance*. Retrieved on 25th October 2017 from http://www.academicjournals.org/article/article1433502383_Osabiya.pdf
- Poulston, J. (2008). *Hospitality workplace problems and poor training: A close relationship*. *International Journal of Contemporary Hospitality Management*, vol 20, pp 412–427.
- Randy Y. Hirokawa (1990) *The Role of Communication in Group Decision-Making Efficacy: A Task-Contingency Perspective*, Vol 21, Issue 2, pp. 190 - 204.
- Spuck, D.W et. al. (1997) *Technological facilitation for decision-making in education*. In: Fung A.C.W., Visscher A.J., Barta BZ., Teather D.C.B. (eds) *Information Technology in Educational Management for the Schools of the Future*. IFIP — The International Federation for Information Processing. Springer, Boston, MA. (Accessed on 25/10/2017: https://link.springer.com/chapter/10.1007/978-0-387-35090-5_6)
- Srivastava, R. K. (1974). *Undermanning theory in the context of mental health care environments*. In D. H. Carson (Ed.), *Man environment interactions, Part II* (pp. 245–258). Stroudsburg, PA: Dowden, Hutchinson, & Ross.
- Susskind, A. M. (2006). *An examination of guest complaints and complaint communication channels: e medium does matter!* *Cornell Hospitality Report*, 6(14), 6-12.
- Tiziana, M. (2010). *Leveraging Applications of Formal Methods, Verification, and Validation: 4th International Symposium on Leveraging Applications, Isola 2010, Heraklion, Crete, Greece, October 18–21, 2010, Proceedings, Part 1*. Springer. p. 492. ISBN 3-642-16557-5.
- Van Vaerenbergh, Y. et al. (2012). *The Impact of Process Recovery Communication on Customer Satisfaction, Repurchase Intentions, and Word-of-Mouth Intentions*. *Journal of Service Research*, 15(3), pp.262-279.

