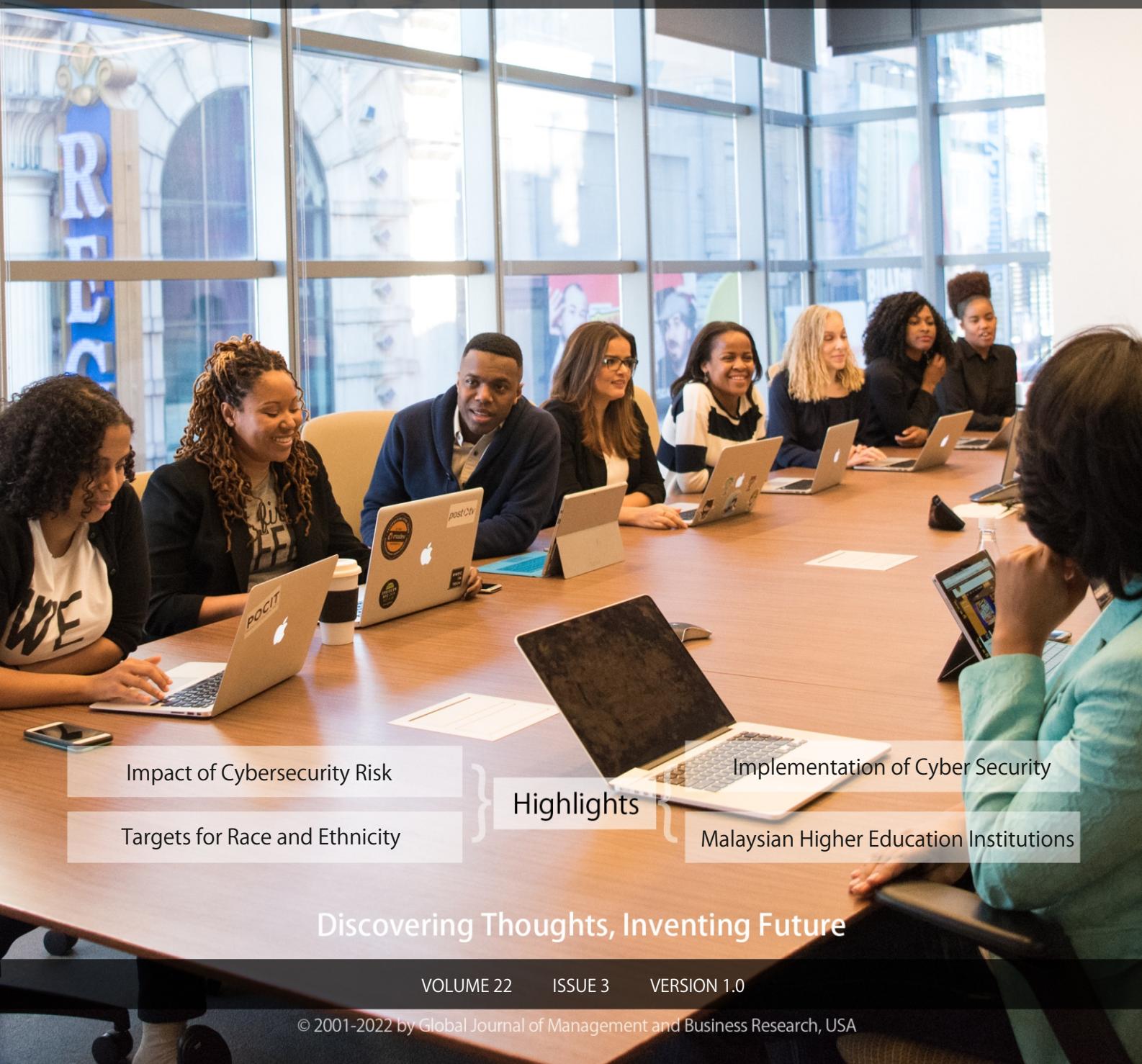


GLOBAL JOURNAL

OF MANAGEMENT AND BUSINESS RESEARCH: A

Administration and Management



Discovering Thoughts, Inventing Future

VOLUME 22 ISSUE 3 VERSION 1.0

© 2001-2022 by Global Journal of Management and Business Research, USA



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A
ADMINISTRATION AND MANAGEMENT

GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A
ADMINISTRATION AND MANAGEMENT

VOLUME 22 ISSUE 3 (VER. 1.0)

OPEN ASSOCIATION OF RESEARCH SOCIETY

© Global Journal of
Management and Business
Research. 2022.

All rights reserved.

This is a special issue published in version 1.0
of "Global Journal of Science Frontier
Research." By Global Journals Inc.

All articles are open access articles distributed
under "Global Journal of Science Frontier
Research"

Reading License, which permits restricted use.
Entire contents are copyright by of "Global
Journal of Science Frontier Research" unless
otherwise noted on specific articles.

No part of this publication may be reproduced
or transmitted in any form or by any means,
electronic or mechanical, including
photocopy, recording, or any information
storage and retrieval system, without written
permission.

The opinions and statements made in this
book are those of the authors concerned.
Ultraculture has not verified and neither
confirms nor denies any of the foregoing and
no warranty or fitness is implied.

Engage with the contents herein at your own
risk.

The use of this journal, and the terms and
conditions for our providing information, is
governed by our Disclaimer, Terms and
Conditions and Privacy Policy given on our
website <http://globaljournals.us/terms-and-condition/>
[menu-id-1463/](#)

By referring / using / reading / any type of
association / referencing this journal, this
signifies and you acknowledge that you have
read them and that you accept and will be
bound by the terms thereof.

All information, journals, this journal,
activities undertaken, materials, services and
our website, terms and conditions, privacy
policy, and this journal is subject to change
anytime without any prior notice.

Incorporation No.: 0423089
License No.: 42125/022010/1186
Registration No.: 430374
Import-Export Code: 1109007027
Employer Identification Number (EIN):
USA Tax ID: 98-0673427

Global Journals Inc.

(A Delaware USA Incorporation with "Good Standing"; **Reg. Number: 0423089**)
Sponsors: [Open Association of Research Society](#)
[Open Scientific Standards](#)

Publisher's Headquarters office

Global Journals® Headquarters
945th Concord Streets,
Framingham Massachusetts Pin: 01701,
United States of America
USA Toll Free: +001-888-839-7392
USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

Global Journals Incorporated
2nd, Lansdowne, Lansdowne Rd., Croydon-Surrey,
Pin: CR9 2ER, United Kingdom

Packaging & Continental Dispatching

Global Journals Pvt Ltd
E-3130 Sudama Nagar, Near Gopur Square,
Indore, M.P., Pin:452009, India

Find a correspondence nodal officer near you

To find nodal officer of your country, please
email us at local@globaljournals.org

eContacts

Press Inquiries: press@globaljournals.org
Investor Inquiries: investors@globaljournals.org
Technical Support: technology@globaljournals.org
Media & Releases: media@globaljournals.org

Pricing (Excluding Air Parcel Charges):

Yearly Subscription (Personal & Institutional)
250 USD (B/W) & 350 USD (Color)

EDITORIAL BOARD

GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH

Dr. John D. Theodore

American Military University
JDT Management Consultants, President.
D.B.A., Business Economy
University of South Africa
Ph.D. Aristotelian University
Business Administration
Ph.D. Administration, University of Kansas
USA

Dr. R. Allen Shoaf

B.A., M.A., Ph.D. Cornell University
Cornell University, Teaching Assistant in the English
Department,
University of Florida, US

Dr. Mehdi Taghian

Senior Lecturer
Faculty of Business and Law
BL Deakin Business School
Melbourne Burwood Campus
Australia

Dr. Agni Aliu

Ph.D. in Public Administration,
South East European University, Tetovo, RM
Asociater profesor South East European University,
Tetovo, Macedonia

Dr. Wing-Keung Won

Ph.D., University of Wisconsin-Madison,
Department of Finance and
Big Data Research Center
Asia University,
Taiwan

Prof. Mojji Moatamed

Honorary Vice Chair
Ph.D., at The University of Sheffield,
MBA, Manchester Business School
University of Manchester
UK

Professor Maura Sheehan

Professor, International Management
Director, International Centre
for Management & Governance Research (ICMGR)
Ph.D. in Economics
UK

Dr. Carl Freedman

B.A., M.A., Ph.D. in English, Yale University
Professor of English, Louisiana State University, US

Dr. Tsutomu Harada

Professor of Industrial Economics
Ph.D., Stanford University, Doctor of Business
Administration, Kobe University

Dr. Xiaohong He

Professor of International Business
University of Quinnipiac
BS, Jilin Institute of Technology; MA, MS, Ph.D.,
(University of Texas-Dallas)

Dr. Carlos García Pont

Associate Professor of Marketing
IESE Business School, University of Navarra
Doctor of Philosophy (Management),
Massachusetts Institute of Technology (MIT)
Master in Business Administration, IESE, University of
Navarra
Degree in Industrial Engineering,
Universitat Politècnica de Catalunya
Web: iese.edu/aplicaciones/faculty/facultyDetail.asp

Dr. Bassey Benjamin Esu

B.Sc. Marketing; MBA Marketing; Ph.D Marketing
Lecturer, Department of Marketing, University of Calabar
Tourism Consultant, Cross River State Tourism
Development Department
Co-ordinator, Sustainable Tourism Initiative, Calabar,
Nigeria

Dr. Ivona Vrdoljak Raguz

University of Dubrovnik,
Head, Department of Economics and Business
Economics,
Croatia

Dr. Charles A. Rarick

Ph.D.
Professor of International Business
College of Business
Purdue University Northwest
Hammond, Indiana US

Dr. Albrecht Classen

M.A. (Staatsexamen), Ph.D. University of Virginia,
German
Director, Summer Abroad Program, Medieval Europe
Travel Course

Dr. Söhnke M. Bartram

Department of Accounting and Finance
Lancaster University Management School
Ph.D. (WHU Koblenz)
MBA/BBA (University of Saarbrücken)
Web: lancs.ac.uk/staff/bartras1/

Dr. Dodi Irawanto

Ph.D., M.Com, B.Econ Hons.
Department of Management
Faculty of Economics and Business
Brawijaya University
Malang, Indonesia

Dr. Yongbing Jiao

Ph.D. of Marketing
School of Economics & Management
Ningbo University of Technology
Zhejiang Province, P. R. China

Yue-Jun Zhang

Business School,
Center for Resource and
Environmental Management
Hunan University, China

Dr. Brandon S. Shaw

B.A., M.S., Ph.D., Biokinetics, University of Johannesburg,
South Africa
Professor Department of Sport and Movement Studies
University of Johannesburg, South Africa

CONTENTS OF THE ISSUE

- i. Copyright Notice
- ii. Editorial Board Members
- iii. Chief Author and Dean
- iv. Contents of the Issue

- 1. Implementation of Cyber Security Risk Management Frameworks in Malaysian Higher Education Institutions. **1-10**
- 2. Charismatic Leadership Style to Overcome Employee Resistance to the Management of Organizational Change Process. **11-18**
- 3. Dilution of Ownership and Disciplinary Control of the Manager within Companies in Cameroon. **19-26**
- 4. Impact of Cybersecurity Risk Management Frameworks on Malaysian Public Universities Business Performance. **27-34**
- 5. Establishing Diversity Targets for Race and Ethnicity in the Organization. **35-38**

- v. Fellows
- vi. Auxiliary Memberships
- vii. Preferred Author Guidelines
- viii. Index



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A
ADMINISTRATION AND MANAGEMENT

Volume 22 Issue 3 Version 1.0 Year 2022

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Implementation of Cyber Security Risk Management Frameworks in Malaysian Higher Education Institutions

By Dioubate, Balla Moussa & Wan Daud, Wan Norhayate

Universiti Sultan Zainal Abidin

Abstract- This study aims to identify the current practice of cybersecurity risk management frameworks in Malaysian institutions of higher learning that address the security defies. This research employs a qualitative approach using a semi-structured interview to identify the current frameworks. Therefore, the thematic analysis of the information and the literature review on cybersecurity risk management in Malaysian higher education institutions is done. It expects to find the list of frameworks applied in the higher learning institutions. Moreover, this allows covering a wide range of cybersecurity risk management problems within the system of higher education institutions. It is hoped this study will make significant contributions to cybersecurity risk management literature theoretically and practically.

Keywords: cybersecurity, Cybersecurity risk management; risk management frameworks.

GJMBR-A Classification: DDC Code: 378.5 LCC Code: LA1058



IMPLEMENTATION OF CYBERSECURITY RISK MANAGEMENT FRAMEWORKS IN MALAYSIAN HIGHER EDUCATION INSTITUTIONS

Strictly as per the compliance and regulations of:



RESEARCH | DIVERSITY | ETHICS

Implementation of Cyber Security Risk Management Frameworks in Malaysian Higher Education Institutions

Dioubate, Balla Moussa ^a & Wan Daud, Wan Norhayate ^a

Abstract- This study aims to identify the current practice of cybersecurity risk management frameworks in Malaysian institutions of higher learning that address the security deficits. This research employs a qualitative approach using a semi-structured interview to identify the current frameworks. Therefore, the thematic analysis of the information and the literature review on cybersecurity risk management in Malaysian higher education institutions is done. It expects to find the list of frameworks applied in the higher learning institutions. Moreover, this allows covering a wide range of cybersecurity risk management problems within the system of higher education institutions. It is hoped this study will make significant contributions to cybersecurity risk management literature theoretically and practically.

Keywords: cybersecurity, Cybersecurity risk management; risk management frameworks.

I. INTRODUCTION

Every year, a university's development process suffers as a result of a weak cybersecurity risk management plan. (Grajek, 2020). According to Gordon (2015), many administrators of higher education institutions consider that cyber security attack is tremendously a critical problem confronted by their institutions. One of the main problems for colleges and universities is the difficulty of discovering a peer group enthusiastic about sharing high standards of risk management and losses suffered due to weak risk management. Loss or circulation of confidential information may provoke property damage, loss of pecuniary, and the university's reputation loss (Boranbayev et al., 2015). Thus, the threat to cybersecurity generated by the institution is questioning the ethical integrity of the organization's provision of services. However, it is believed that only technical resolutions are not adequate to solve cybersecurity problems in higher education institutions as it does not adequately address the human aspect (Siponen, 2000; Spears & Barki, 2010).

Another issue found in higher education institutions is the lack of cybersecurity risk management standards and best practices. Consequently, organizations need appropriate cybersecurity risk

management standards (ISO/IEC 27005:2018). There is still room for more vigorous enforcement of risk management policy and standards in higher education institutions (Kotulic & Clark, 2004). The increase of cybersecurity issues occurrences in academic environments shows the need to apply a recommended security management standard. On the other hand, one of the challenges for higher education institutions in implementing a cybersecurity policy effectively based on risk analysis by following the organization's requirements. It is revealed that, in case of security breaches or violations in universities, it is less likely to enforce regulations due to incomplete or incomprehensible security policies document (Ghazvini et al., 2018). The existence of varied methods, principles, rules, and risk assessment specifications has led the organization to face a frightening task in determining the most appropriate way to meet its needs. Therefore, there is a need to implement cybersecurity risk management standards as information security threats, national security rules, and specific business motives (Sari et al., 2016).

However, cybersecurity risk management is one of the requirements of security management, and it is significantly essential in understanding the entire security profile of organizations. It is also crucial in information technology governance (Talet et al., 2014; Webb, Ahmad, Maynard, & Shanks, 2014). Hence, recognizing the significance of managing cybersecurity risk to higher education institutions is essential. This study aims to discover more about cybersecurity risk management frameworks in Malaysia's higher education institutions. This paper will organize into the following sub-topics. Firstly, the introduction and the literature review will explain. Following with the research method, results & discussions, and conclusion. Finally, this paper concludes with some limitations and suggestions for future study.

II. LITERATURE REVIEW

a) Cybersecurity

Clinch (2009) postulated that security is the dynamic safety of information, whether it is stored or carried. Nunes (2018) revealed that sensitive business information should be shielded from harm, and that's the

Author ^a: Faculty of Business and Management, Universiti Sultan Zainal Abidin. e-mail: ballamoussa1508@gmail.com

purpose of cybersecurity with its three base pillars protect confidentiality, honesty, and availability of information. Cybersecurity deals with information not being revealed to unauthorized individuals and is usually achieved by encryption. The integrity of information invalidates data tampering and destruction. Therefore, the complete information could be promptly obtainable to those with an authorized demand vital for company efficiency. Information security is not always considered in the design and development of information systems (Nunes, 2018).

Any unintentional or deliberate incident that could cause any harm to the computer system, causing content, financial or other losses to the organization, is considered to be a threat (Gómez, 2014). Cybersecurity is seen as a discipline that deals with tangible and intangible asset protection (Quintero et al., 2019). It was allowing other characteristics to be included, such as authenticity, traceability (accountability), non-repudiation, and reliability (Escrivá et al., 2013), taking into account that the controls aim to attempt to ensure these characteristics (Peso & Ramos, 2015). In other words, by applying its principles, security measures capable of counteracting the threats to which the organization's digital assets are exposed will be embedded in computer systems, information, hardware, and software components. Cybersecurity requires the design and implementation, in very complicated ways, of a series of interrelated security measures (Álvarez & Pérez, 2004).

However, the cybersecurity that can be achieved through technical way is handled and could be ineffective if not indorsed by information security management system (ISO/IEC 2013). The accurate assessment of cybersecurity risks can be more complicated than assessing other types of risks because the data on the likelihood and costs associated with cybersecurity risks are usually limited, and the risks factor often keeps changing as well (Boltz, 1999). Information security's best-practice standards, such as the ISO/IEC (2013) series, suggest various managerial and technical controls to protect information resources. The standards admit that the level of security risks exposure must guide an organization's selection of rules. Therefore, organizations are advised to adopt a cybersecurity risk management approach (Webb et al., 2014; Talet et al., 2014).

b) Cybersecurity Risk Management

Cybersecurity risk management is the precondition of security management and is greatly meaningful in understanding the whole security profile of organizations. It is also one of the main functions of information technology governance (Talet et al., 2014; Webb et al., 2014). A successful information technology security requires an effective risk management process that provides an appropriate E-business atmosphere, as

information technology systems are characterized by high degrees of risks (Boltz, 1999; Talet et al., 2014). The international standards ISO/IEC 27001 and ISO/IEC 27002 are involved in designing a cybersecurity management system by referring to cybersecurity risk assessment (Clinch, 2009).

In the view of Hashim & Razali (2019), the cyber security risk management process allows many enterprises to perform, in the most cost-efficient manner, a mitigate level of business risks. Therefore, an effective control strategy that can implement is to accept the risks and their assets without protection (safeguard) or control, prevent or avoid risks, apply rules to mitigate risks, or transfer risks to third parties. Besides, risk management practices are formulated to incorporate control (safeguard) or safety measures based on a risk assessment judgment. According to the standard ISO/IEC (2018), the cybersecurity risk management processes are illustrated as follows: context establishment, risk assessment, risk treatment, risk acceptance, risk communication and consultation, and risk monitoring and review.

Risk Context Establishment, this background of the study made by Nunes (2018), includes the concept of specific risk management principles. The external and internal context for cybersecurity risk management should be created, which defines the scope and bounds of cybersecurity risk management and develops an appropriate organization to operate the information security risk management. The company should limit cybersecurity risk management (ISO/IEC 27005).

Risk Assessment categorizes and measures the different types of risks to facilitate the decision-making process. Therefore, it requires information about assets and the threats they are exposed to (Bojanc & Jerman-Blažič, 2012; PCI Security Standards Council, 2012). As a step of risk management, risk assessment is a mechanism that identifies assets and risks, including the anticipated frequency and potential for risk occurrence, by determining risk acceptance requirements, assessing risk levels, and defining impacts (Hashim & Razali, 2019). Risk assessment is a risk management step that defines suitable control methods for reducing or eliminating those risks. Therefore, it is categorized by the following three steps: risk identification, risk analysis, and risk evaluation. It shows a significant role in risk management in the organization, especially when there is a high dependency on information technology (ISO/IEC 27005; Wang & Liao 2008).

Risk Treatment, according to ISO/IEC 27005:2018, cybersecurity risk treatment options are selected following the consequence of the risk assessment, the expected cost for applying these options, and the potential benefits from these options. A risk treatment design should be described that identifies the priority arranging in that individual risk treatment. Preferences can be instituted employing various

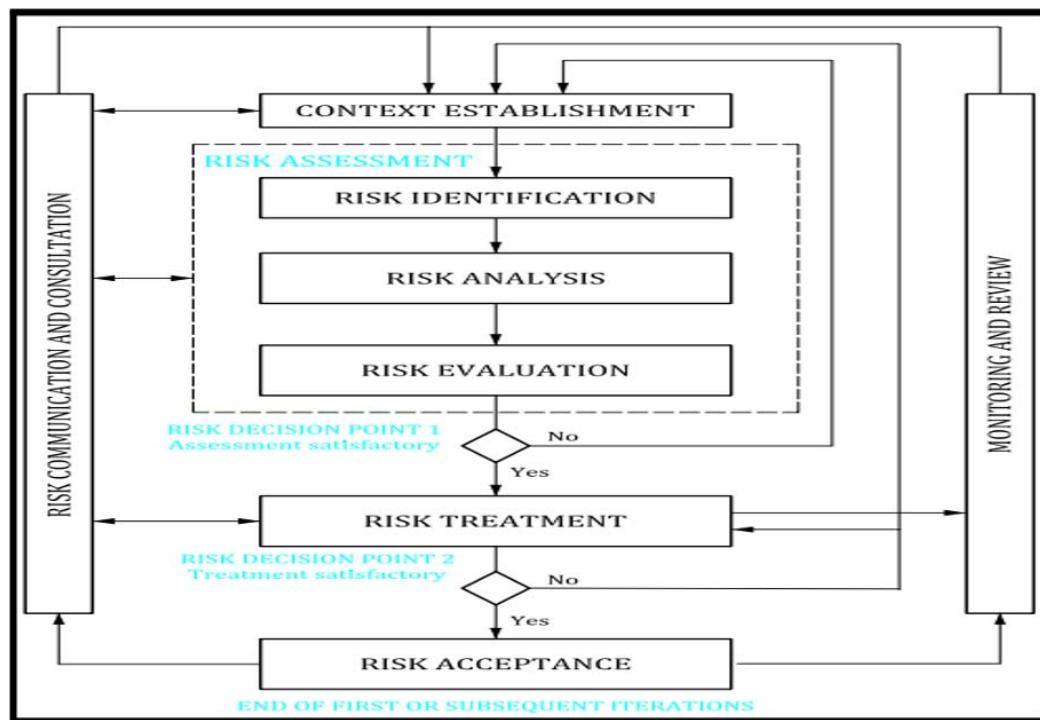
methods, encompassing risk ranking and cost-benefit analysis (ISO/IEC 27005). In consultation with the Risk Treatment Plan, this decision should be taken by the company's top management. Communication and consultation on cybersecurity are processes that should always be present to reach an agreement on effective communication between stakeholders on the risk management strategy (Nunes, 2018).

Risk Acceptance, risk treatment plans should specify how to evaluate risks to fulfill risk acceptance criteria. Responsible management must examine and approve proposed treatment programs and residual risks and document any conditions connected with such approval. Risk acceptance criteria can be more sophisticated than assessing if a residual risk is more than or less than a single threshold. In certain situations, the degree of residual risk does not fulfill risk acceptance requirements because the criteria used do not take current conditions into account. Risk acceptance requirements are specifically associated with the goals and strategies of the company and take into account the needs of the stakeholders (ISO/IEC 27005:2018). However, rapid revision of the risk acceptability criteria is not always achievable. Decision-makers can accept risks that do not fulfill standard acceptance criteria in such situations. If this is required, the decision-maker should openly remark on the dangers and provide reasons for the choice to deviate from standard risk acceptance criteria (ISO/IEC 27005:2018).

Risk Communication, risk communication is an activity that involves decision-makers and other stakeholders discussing and sharing risk information to reach an agreement on how to manage risks. The report covers the existence, type, form, likelihood, severity, treatment, and acceptability of hazards, among other things. Effective communication among stakeholders is critical because it may have a significant influence on decision-making. Communication ensures that individuals in charge of risk management and others with a vested interest understand the reason for decisions and why certain measures are necessary (ISO/IEC 27005:2018).

Risk Monitoring and Review, ongoing monitoring, and evaluation are required to ensure that the context, the conclusion of the risk assessment and treatment, and management strategies remain relevant and suitable to the conditions. The organization should ensure that the cybersecurity risk management methodology and related activities remain ideal in the current conditions and are followed (ISO/IEC 27005). Furthermore, the organization should regularly confirm that the criteria used to assess risk and its components are relevant and aligned with corporate objectives, plans, and policies. It should also ensure that changes in the business context are taken into account appropriately during the cybersecurity risk management process regularly (ISO/IEC 27005).

Figure 1 below shows an illustration of an information security risk management process



Source: ISO/IEC 27005:2018

Figure 1: Illustration of an information security risk management process

III. RESEARCH METHODOLOGY

The qualitative research method is employed to complete the studies concerning different areas, including the preferences, in plain and customary terms (Yin, 2011). According to Creswell (2009), qualitative research examines and interprets the significance that individuals or groups are assigned to a social or human issue. The study method includes emerging problems and techniques, data usually collected in the participant's environment, inductively developing data interpretation from data to general themes, and the researcher interpreting the significance of the data. The final written report is organized in a versatile manner (Creswell, 2009). This study considered the qualitative holistic multiple case study design due to the need for the researcher's getting responses from professionals in cybersecurity risk management regarding the current method used in higher educational institutions. The holistic multiple case study approach was the main fitting research design since this study investigated strategies utilized to manage the risks related to cybersecurity in Malaysian public universities. This study aimed to identify the current cybersecurity risk management frameworks used in Malaysian public universities. This study included a multiple-case design of 10 cases of public universities in Malaysia.

The population is essential for solving the research problems because higher education intuitions have greater compliance with cybersecurity policy (Feehan, 2013). Therefore, the population for this research was mainly the twenty (20) public universities in Malaysia. The sampling of 10 public universities and 12 cybersecurity risk management officers from the departments in charge of cybersecurity risk management contributed to this study. The data provided were enough to reach data saturation. Thus, the sample frame of this study was drawn from 10 accredited public universities in Malaysia. The researcher collected information until no new information was accessible to attain data saturation, which means the repetition of data started, and no further information was available. Therefore, no new themes emerged after conducted interviews with 12 participants from 10 public universities in Malaysia.

Table 1: Research Question, Themes, Sub-Themes, Sources, and References exported from NVivo 12 software

Research Question	Themes	Sub-Themes	Sources	References
What are the cybersecurity risk management frameworks used in Malaysian higher education institutions?	Risk Management Frameworks	Frameworks Implementation Issues	3	10
		Frameworks Identification and Implementation	4	11
		Types of Frameworks	8	37

Interviews founded the primary source of data, whereas the secondary source of data includes observations and records. The research design, data collection technique, and implementation of data collection methods were appropriate to answer the research question (Okoye, 2017). In this study, the interview was conducted with selected experts (cybersecurity risk management) to receive feedback on their current cybersecurity risk management methods. The interviews with participants from the department in charge of cybersecurity risk management in Malaysian higher education institutions were recorded and transcribed word-to-word. The transcribed interview for each participant was categorized by a portion of the speech, associated with the code number of each participant (The pseudonyms P (1) to P (10) represented the 10 participants accordingly) to locate each portion of the interview transcript.

Moreover, advanced coding utilizing the NVivo 12 computer program is valuable. Therefore, Houghton et al. (2013) famous that the NVivo 12 computer program is advantageous as data management that can give a comprehensive audit trail to delineate decisions made within the research procedure. Thomas (2015) used auto-coding in the NVivo 12 computer program to code qualitative data. The researcher used NVivo 12 software for coding based on the transcripts made from the interview record, documents, and observations to identify the words used by respondents during the interview. The researcher applied the auto coding method to categorize data based on research questions.

IV. FINDINGS

The investigation results come from the interview of 12 participants who experience in-depth, face-to-face interviews, which were conducted on cybersecurity risk management officers from 10 public universities of Malaysia. This section highlights the interview findings from the ten universities samples presented in Table 1. The two themes answered the research question: What cybersecurity risk management frameworks are used in Malaysian higher education institutions?

	Risk Management In Education Institutions	Management	9	24
		Risk Management	5	13

a) *Themes 1: Risk management Frameworks*

The theme Risk Management Approaches discussed the different frameworks and models currently used in the public universities of Malaysia and those in the implementation process. The theme allowed us to know about the identification and implementation issues of practicable cybersecurity risk management frameworks in public higher education institutions. The theme, risk management Frameworks, included the following subthemes: Type of Frameworks, Frameworks Identification and Implementation, and Framework Implementation Issues.

i. *Sub-theme 1a: Type of Frameworks*

Public Universities in Malaysia are using different frameworks by following the real environment of the institution as mentioned by the following participants:

We started by using something called " Hazard Identification and Risk Assessment Framework (HIRA)".. and also we have used the framework of "The Malaysian Public Sector Cybersecurity Risk Assessment System (MYRAM)"... But later this university has started to look at The Information Security Management System (ISMS)" and also ISO 27000 related (ISO 27001:2013) to Information Security Management... (P9).

We have 2 frameworks in place now one is ISO9000, It's a quality management system. Because we implemented the Quality Management System (QMS), specifically for data security we have another one that we call Information Security Management System (ISMS). ... and ISO 27000 the certification framework to judge our security management (P3)

We have 3 main documents frameworks; these frameworks are ... ISO 9001:2015 that framework combined with ISO 27001:2013 so these two frameworks combined to become the university risk management framework ... Also, another document we refer to is enterprise risk management briefly two frameworks basically, the enterprise risk management is just additional (P6).

Ok, currently we are using... ISO27001:2013 this one is the information security risk management system (P11).

we used a framework that had been introduced by SIRIM known as IEC/ISO27001:2013 Information Security Management System (ISMS) (P7 and P8).

"We are using the ISMS and information security management system ISO 27001: 2015... We have

ISO 27001: 2015 ...for financial and Australian standard template use to manage the risks including the cybersecurity risk" (P10).

I think even though in many places there is no specific one. We use a certain component in the framework from a different framework because some might be suitable some might not be suitable (P12).

According to the above statements from the participants, it can be concluded that the main framework utilized by the majority of the participants was the ISO 27001: 2013 international standard used as a specification for ISMS. However, some universities have migrated from one framework to another, whereas others have combined different frameworks to develop the current framework they are using. The List of additional frameworks used by Malaysian public universities is MYRAM, HIRA, ISO 27000 related to Information Security Management, ISO9000 (QMS), ISO9001:2015, Enterprise risk management framework, ISO 27001: 2015 for financial and (SIRIM).

ii. *Sub-theme 1b Frameworks identification and implementation*

The identification and implementation of the framework follow the policies and principles stated by the Malaysian government through the Malaysian Administrative Modernization and Management planning unit (MAMPU).

We have been asked by the government especially the Ministry of Higher Education and also directives from "MAMPU" the Malaysian Administrative Modernization and Management Planning Unit, they have asked universities to start using "ISMS" ... know the framework for implementation (P9).

One of the latest requirements of the "ISMS" is that the information security risk must be process basis rather than scoping it into related assets to "I.T." but it's supposed to support a complete process (P9)

MAMPU, it's not enforced. They just suggested doing it because to enforce us to do the ISO 27001 once we are doing that one. So we have to identify and we have to follow the auditor from certifying body that certifies body will be SIRIM and Cyber Security Malaysia. (P10)

it is a dilation from the government... Every government university must use ISMS it is mainly used for security management, for risk management on IT on data security ... So that's mean we are not choosing it is a direction from the government" (P3).

The Malaysian Government instructed the implementation of risk management frameworks through the Malaysian Administrative Modernization and Management planning unit (MAMPU). The Government instructed the public university to implement Information Security Management System frameworks (ISMS), with the ISO 27001:2013 as support.

iii. *Sub-theme 1c Frameworks Implementation Issues*

The process of framework implementation instructed by the Malaysian Government faced some issues while applying. These are the university environment, the understanding of the guidelines, and the management structure of the institutions.

I think to implement we need to give awareness to the staff which is quite difficult even the fact that we are not sure clear on how the because you need to know that ISMS they are categorizing the risk using the asset which is four categories...The process is really difficult because we need to identify... That was I think that was the difficult and challenges in part of that my face it the awareness is really difficult The challenges we encounter were the negative perception towards risk and what kind of awareness we should implement in educating (P7 and P8).

Ok, the first thing is to understand all the documents under ISO 27001, ok you to understand I think that is a challenge because we are from technical so we have to understand what it means for each of the annexes there 114 annex ... and also how to measure I think our challenges now is how to measure the control" (P11)

All these ISO is only a guideline and this guideline sometimes is only general so in terms of practicality you know that's why you need to try to adapt and try to look from a realistic perspective..., you must understand all the terms guidelines... (P6).

They may be familiar with the quality management standard which is you know ISO 9000 for example. But when it comes to information security standards ISO27000 or "ISMS". This is going to be new for them... and for many of them, this idea plus time dealing with this kind of new requirement so they had to learn (P9).

So because of budget we cannot do all of we cannot say all universities, we cannot say all the ICT services security protection is under ISMS no. We don't have enough money, manpower everything to do that (P3).

We need money, for example, we need a new type of server to Install a new technology that can strengthen the infrastructure of the security (P12).

I mean the main issue is cost. And you know the public university all rely on the government's funding. We are not like a private university. ... So we need the allocations from the governments (P1).

The framework's implementation issues mainly focus on lack of training and awareness, the understanding of standards, misunderstanding of the list policies. This is followed by the limitation of the budget for government universities to finance innovative projects in the institutions.

b) *Themes 2: Risk management in education institutions*

The theme risk management highlighted the core process involve in monitoring cybersecurity risk in Malaysian Public Universities. The theme discussed the steps of risk management from people, processes, and technology. The sub-themes of Management and risk management were discussed.

i. *Sub-theme 2a Management*

The Management planned the creation of a risk management team and the appointment of the risk managers to each department. The internal and external audit was scheduled for the framework control and evaluation

The management of the framework covered other aspects including ICT, information system, security, and also other things especially for our operation our planning of our safety risk so that is the framework that we used (P6).

We have a management review meeting ... Basically on the people and the financial part. you can see a commitment... convincing the management, management influences. The management interference regarding the simulation to make sure the process is up and running (P10).

Okay. The macro management for the framework started with the risk treatment plan. Okay, we must implement a risk treatment plan. ... they have what we call management meetings. So we must report to the management meeting to the top-level vice-chancellor to our CEO (P3).

We give knowledge to all the known university people, staffs, of course, we have appointed risk managers for each department indicating they are the one that will be responsible to identify the risk ablated to their departments at our office." (P6)

Our risk management team also has our risk management team from our technical staff this is from where they understand the system, the server stores the network so we have a set of a team, a team of risk management (P11).

The department invites us to give them a thought, we give them a thought face to face which is we think that was the most effective and then we do the face to face and at the first time we also appoint risk officer at all PTG (P7 and P8).

Participants highlight the importance of having management support and teams. This explained how

the risk management staff is organized in each faculty, managers were assigned to control, and a quarterly meeting was arranged. The participant talked about the necessity to have support from the management. This makes easy the adoption of a new framework in the university risk management system.

ii. Sub-theme 2b Risk Management

The general management of the framework is the crossways of the technology. It covers different aspects such as information and communication technology (ICT), information system, operation planning, management team, and security.

So from the data center management, we analyze what's the current situation risk for our data center...

So in the end, the result is you know your risk levels with the three parameters; Low, Medium, and High.... Which part we are medium, which part we are low (P3).

I consolidate all the risk reports read, register and we bring to this board to discuss to endorse or to make decisions ... you can look from one quantitative perspective sometimes you can look from the qualitative perspective how you measure risk (P6).

The risk was categorized: "Definitely it is something very positive. Because we have categorized the risk according to some categories. We have the financial aspects, operation risk management aspects and then we have the government aspects, that government aspect" (P4 and P5).

By identifying that we are going to categorize and then we are going to determine whether the asset has a high risk or low risk.". (P7 and P8).

Different system admin different have their different perspective of the risk ...level office... The level of risk depends on the level of understanding (P10).

We are a novice... To be a success on the journey we need to have support from management that one should be number one because we already first thing first we need to get a blessing from management and once they bless then only you can move (P11).

The management influenced the execution of the risk management process from risk identification to risk treatment. Participants identified the different types of risk from strategic, human, compliance, and operation risks. The participants talked about the other risk management teams in the university. The particularity is the risk management team was built from the technical staff of the university.

V. DISCUSSION ON RISK MANAGEMENT FRAMEWORKS

The respondents from the study consist of nine (9) public universities out of ten (10) samples

represented in this study. The Malaysian government generalized and recommended the framework implementation to plan and insert ISMS in all public universities of Malaysia. However, according to Shamala et al. (2015), the risk mitigation model involves the risk mitigation mechanism and the risk decision process informed by the technological and organizational risk elements and metrics. The system is also assisted by information mapping and software agents that help practitioners make risk decisions. Joshi & Singh (2017) proposed a structure for universities and higher education institutions with a multi-disciplinary community. It is based on the most common OCTAVE risk system, the model-based risk assessment methodology (Joshi & Singh, 2017).

Innovation is critical for all sorts of businesses, and economists, researchers, and practitioners have universally agreed that 'innovation is power' (Lind et al., 2018; Ibrahim et al., 2020). Therefore, organizations adopting the ISRM system or standards should consider the organizational structure and make the appropriate organizational adjustments as they wish to incorporate additional frameworks (Özçakmak, 2019). However, according to the participants in this study, an essential list of cybersecurity risk management frameworks was used in Malaysian public universities, which are: Security Risk Assessment System (MYRAM), Hazard Identification and Risk Assessment Framework (HIRA), ISO 27000 related to Information Security Management, ISO 9000 related to the quality management system (QMS), ISO 9001:2015, Enterprise risk management framework, ISO 27001: 2015 for financial, Australian standard template for risk management, and Standard and Industrial Research Institute of Malaysia (SIRIM). Moreover, some universities have frameworks related to the data center to identify and treat risks associated with the data center.

However, the public universities mainly depended on the government. Therefore, there was a demand from the authority to implement cybersecurity risk management in public universities for security purposes. The implementation of risk management in educational institutions is hindered because they do not have the required organizational and administrative regulations and documents, complicating the analysis and control of risks (Suray et al., 2019). The head of the organization must prepare all the documentation required to ensure the report's development and guideline is structured, and the vital regulatory documents for the risk control of the educational institution should include (Suray et al., 2019; Najwa et al., 2019). On the contrary, this study showed the positivity of implementing Information Security Management Systems (ISMS) by following the government recommendation to implement cybersecurity risk management frameworks and standards (ISO 27001: 2013).



Based on the review from participants and literature, it can summarize that the public universities in Malaysia are using different types of frameworks based on the need and environment of the institutions. Some universities are using both standard ISO 27000 series, especially the version ISO 27001, and other frameworks created based on the environment of the university. However, the ISO/IEC 27001-based Information Security Management System (ISMS) preparation mandates the responsible handling of risks directed at the confidentiality, honesty, and availability of information or any other sort of critical assets.

VI. DISCUSSION ON RISK MANAGEMENT AND EDUCATION INSTITUTIONS

This participant also said that the implication of management influenced the execution of the risk management process to facilitate the whole procedure from risk identification to risk treatment. However, risk management processes require continuous improvement in managerial competencies. That is why the risk reduction management system should be a constant phase of development for administrative qualifications, combined with diagnostics and forecasting, which eventually not only minimizes management risks but also dramatically improves the efficacy of management activities (Suray et al., 2019). Top management trust in the technical staff would also improve due to using resources only to mitigate the real risks (Özçakmak, 2019).

However, a previous study from Hommel et al. (2015) indicated that IT security governance had not been wholly accepted. Several large companies have not had CISOs before their IT security breaches. Also, the organizational frameworks that promote IT security management are still very complex, as shown by the various reporting structures, despite the evidence of the strategic role of IT security in creating business value. In publicly traded companies, the Board is responsible and accountable to the shareholders and must ensure that the company generates business value for the stakeholders. Thus, the CEO appoints an official, CISO, to oversee IT security management via direct reporting/communication (Hommel et al., 2015).

In general, the feedback from this research displayed the management procedure in the universities, the management influence, the process of risk treatment, the internal and external audit, the organization of the risk management team, and the appointment of risk managers to each department. The management could plan to create a strong risk management team in the structure and the position of the risk managers to each department. However, some universities started the risk management comity, gave staff a permanent training session, and appointed the risk management officer. Though, risk control and

reporting processes can be more explicitly communicated to senior management. It is crucial to develop this value that will contribute significantly to IT security's effective and efficient management. As such, it is in the best interest of the management staff, especially the CEO, as an agent of the Board and stakeholders to ensure that IT resources are protected because of IT security.

Based on MS ISO 31000:2010, the risk management process includes contextualization, risk assessment, risk management, monitoring and analysis, and contact and consultation. Three practices are included in the risk evaluation, namely risk recognition, risk analysis, and risk assessment. Many of these risk management mechanisms are addressed in the following section (Shoki et al., 2014). Effective risk management is good governance. However, the participants talked about identifying the top risk from the university as a pre-preliminary condition, the misunderstanding of the risk, the risk identification, and categorization. The different stages involved in the analysis are from risk identification to risk treatment: the evaluation and the implementation of the primary recommended risk management method ISMS by the government.

VII. CONCLUSION

The findings revealed that the main framework used by most of the participants was the ISO 27001: 2013 international standard used as a specification for ISMS. Leseure et al. (2004) suggested that adopting management practices that address real problems is more likely to improve performance. ISRM standards such as ISO 27000 series are utilized as best practices to secure IT systems. To monitor the ISMS, these standards employ a wide range of policies. Hence, higher education institutions need to stress how a cybersecurity risk management framework will help solve the institution's challenges.

Furthermore, the higher education institutions should encourage implementing an adapted framework based on the environment of the university to increase efficiency in areas such as risk evaluation, risk management, decision-making, and reporting that assists the organization in achieving its strategic goals and increase institutional efficiency. Both participants agreed that written policies, implementing cybersecurity risk management framework initiatives across university systems are just as critical. The study's future aim will be to examine the impact of the cybersecurity risk management frameworks on the business performance of the higher education institutions in Malaysia. It will also propose update cybersecurity risk management processes into the university's entire management cycles that can be used in the university environment. The difficulties ahead are establishing risk management

processes, frameworks, or methodologies that are understandable and cost less to respond to university governance.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Álvarez G and Pérez P 2004 Seguridad informática para empresas y particulares (Madrid: McGraw-Hill).
2. Bojanc, R. (2012). Quantitative model for information security risk management (pp. 267–275).
3. Boltz, J. (1999). Informational Security Risk Assessment: Practices of Leading Organizations. DIANE Publishing.
4. Boranbayev, A., Mazhitov, M., &Kakhanov, Z. (2015). Implementation of Security Systems for Prevention of Loss of Information at Organizations of Higher Education. 2015 12th International Conference on Information Technology - New Generations, (Itng), 802–804.
5. Clinch, J. (2009). ITIL V3 and Information Security. Best Management Practice.
6. Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: SAGE Publications.
7. Escrivá G, Romero R, Ramada D and Onrubia R 2013 Seguridad informática (Madrid: Macmillan Iberia S.A.).
8. Feehan. P (2013). Higher Education IT Compliance through the Prism of Risk Controls | EDUCAUSE.
9. Ghazvini, A., Shukur, Z., & Hood, Z. (2018). Review of information security policy based on content coverage and online presentation in higher education. International Journal of Advanced Computer Science and Applications, 9(8), 410–423. <https://doi.org/10.14569/ijacsa.2018.090853>.
10. Gómez A 2014 Seguridad en equipos informáticos (Madrid: Editorial RA-MA).
11. Gordon, C. J. (2015). Addressing Security Risks For Mobile Devices : What Higher Education Leaders Should Know.
12. Grajek, S. (2020). TOP 10 IT ISSUES 2020: The Drive to Digital Transformation Begins. EDUCAUSE Review, 4.
13. Hashim, R., &Razali, R. (2019). Contributing Factors for Successful Information Security Management Implementation: A Conceptual Model. International Journal of Innovative Technology and Exploring Engineering, 9(2), 4491–4499. <https://doi.org/10.35940/ijitee.b7214.129219>.
14. Hommel, W., Metzger, S., & Steinke, M. (2015). Information Security Risk Management in Higher Education Institutions: From Processes to Operationalization.
15. Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case study research. Nurse Researcher, 20(4), 12-17.
16. Ibrahim, H. I., Mohamad, W. M. W., & Shah, K. A. M. (2020). Investigating Information and Communication Technology (ICT) usage, knowledge sharing and innovative behavior among engineers in electrical and electronic MNCs in Malaysia. Jurnal Pengurusan, 58, 133–143. <https://doi.org/10.17576/pengurusan-2020-58-11>
17. ISO/IEC (2013). Information technology - Security techniques - Code of practice for information security controls, ISO/IEC 27002:2013(E).
18. ISO/IEC. (2018). Information technology — Security techniques — Information security risk management, ISO/IEC 27005:2018 (E).
19. Joshi, C., & Singh, U. K. (2017). Information security risks management framework – A step towards mitigating security risks in university network. Journal of Information Security and Applications, 35(October 2018), 128–137. <https://doi.org/10.1016/j.jisa.2017.06.006>.
20. Kotulic, A. G., & Clark, J. G. (2004). Why there aren't more information security research studies. Information and Management, 41(5), 597–607.
21. Leseure, M. J., Bauer, J., Birdi, K., Neely, A., & Denyer, D. (2004). Adoption of promising practices: A systematic review of the evidence. International Journal of Management Reviews, 5/6(3/4), 169–190. doi:10.1111/j.1460-8545.2004.00102.
22. Lind, C.H., Kang, O., Ljung, A. & Forsgren, M. (2018). MNC involvement in social innovations: The issue of knowledge, networks and power. Critical Perspectives on International Business 16(1): 79-99.
23. Najwa, N. A., Ramly, Z., & Haron, R. (2019). Board Size, Chief Risk Officer and Risk-taking in Islamic Banks: Role of Shariah Supervisory Board. Jurnal Pengurusan, 57. <https://doi.org/10.17576/pengurusan-2019-57-01>
24. Nunes, S. R. (2018). Value-focused assessment of cyber risks to gain benefits from security investments.
25. Okoye, S. (2017). Strategies to Minimize the Effects of Information Security Threats on Business.
26. Özçakmak, F. (2019). Supplementing Isrm Models ByKri Implementation. Nanotechnology, 27(9). <http://dx.doi.org/10.1016/j.cej.2014.10.020%0Ahttp://dx.doi.org/10.1016/j.apcatb.2013.08.019%0Ahttp://dx.doi.org/10.1016/j.tsf.2016.12.015>
27. PCI Security Standards Council. (2012). Information Supplement: PCI DSS risk assessment guidelines.
28. Peso E and Ramos M 2015 La seguridad de los datos de character personal (Madrid: Ediciones Díaz de Santos).
29. Puspita Kencana Sari, Nadiailhaq Nurshabrina, C. (2016). Factor Analysis on Information Security Management in Higher Education Institutions Puspita. Higher Education, 1–5.
30. Quintero, N. A., Pérez, T. V., & Silva, H. C. (2019, June). Information security model. Case study

higher education institution. In *Journal of Physics: Conference Series* (Vol. 1257, No. 1, p. 012014). IOP Publishing.

31. Shamala, P., Ahmad, R., Zolait, A. H., & bin Sahib, S. (2015). Collective information structure model for Information Security Risk Assessment (ISRA). *Journal of Systems and Information Technology*, 17(2), 193–219. <https://doi.org/10.1108/JSIT-02-2015-0013>.
32. Shoki, M., Zakuan, N., Tajudin, M. N. M., Ahmad, A., Ishak, N., & Ismail, K. (2014). A framework for risk management practices and organizational performance in higher education. *Review of Integrative Business and Economics Research*, 3(2), 422–432.
33. Siponen, M.T. (2000), “Critical analysis of different approaches to minimizing user-related faults in information systems security: implications for research and practice”, *Information Management & Computer Security*, Vol. 8 No. 5, pp. 197-209.
34. Spears, J.L. and Barki, H. (2010), “User participation in information systems security risk management”, *MIS Quarterly*, pp. 503-522.
35. Suray, N., Karpenko, E., Dubovik, M., Shlyenov, Y., & Sterlikov, F. (2019). Risk Management At Educational Institution* Natal. 7(2), 1171–1184.
36. Talet, A. N., Mat-Zin, R., & Houari, M. (2014). Risk management and information technology projects.
37. International Journal of Digital Information and Wireless Communications (IJDIWC), 4(1), 1–9.
38. Thomas, S. J. (2015). Exploring strategies for retaining information technology professionals: A case study (Doctoral dissertation). Retrieved from Pro Quest Dissertations and Theses database. (UMI No. 3681815).
39. Wang, Y., & Liao Y. (2008). Understanding individual adoption of mobile booking service: An empirical investigation. *Cyber Psychology & Behavior*, 11(5): 603-605. doi:10.1089/cpb.2007.0203.
40. Webb, J., Ahmad, A., Maynard, S. B., & Shanks, G. (2014). A situation awareness model for information security risk management. *Computers & Security*, 44, 1–15.
41. YIN, R. K. (2011). Qualitative Research from Start to Finish. *Animal Genetics* (Vol. 39).



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A ADMINISTRATION AND MANAGEMENT

Volume 22 Issue 3 Version 1.0 Year 2022

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-4588 & Print ISSN: 0975-5853

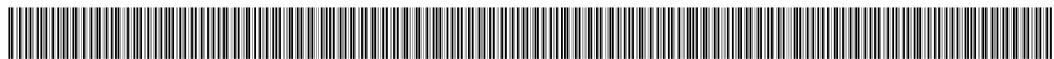
Charismatic Leadership Style to Overcome Employee Resistance to the Management of Organizational Change Process

By Fawwaz Tawfiq Awamleh

Abstract- This study aims to clarify a theoretical model to explore how a charismatic leadership style can overcome employee resistance to the organizational change process. A qualitative method is used in a case study based on "Queen Alia International Airport" where a charismatic leadership style is observed in defending the organization's position in overcoming employee resistance against the chosen organizational change. The results suggest that charismatic leaders employ a set of coherent communication strategies in bringing up change in organizations and on the control of individuals and groups. Understanding the role of charismatic characteristics and features of leadership style gives us important insights into the role of the charismatic leader as well as his influence on his followers and their perceptions. Perhaps more importantly, it helps us understand how leaders can use, or at least take advantage of, organizational change processes and control of individuals and groups.

Keywords: *charismatic leadership, employee resistance, followers, organisational change process.*

GJMBR-A Classification: DDC Code: 303.4833 LCC Code: HM851



CHARISMATIC LEADERSHIP STYLE TO OVERCOME EMPLOYEE RESISTANCE TO THE MANAGEMENT OF ORGANIZATIONAL CHANGE PROCESS

Strictly as per the compliance and regulations of:



RESEARCH | DIVERSITY | ETHICS

Charismatic Leadership Style to Overcome Employee Resistance to the Management of Organizational Change Process

Fawwaz Tawfiq Awamleh

Abstract- This study aims to clarify a theoretical model to explore how a charismatic leadership style can overcome employee resistance to the organizational change process. A qualitative method is used in a case study based on "Queen Alia International Airport" where a charismatic leadership style is observed in defending the organization's position in overcoming employee resistance against the chosen organizational change. The results suggest that charismatic leaders employ a set of coherent communication strategies in bringing up change in organizations and on the control of individuals and groups. Understanding the role of charismatic characteristics and features of leadership style gives us important insights into the role of the charismatic leader as well as his influence on his followers and their perceptions. Perhaps more importantly, it helps us understand how leaders can use, or at least take advantage of, organizational change processes and control of individuals and groups.

Keywords: *charismatic leadership, employee resistance, followers, organisational change process.*

I. INTRODUCTION

The organizational change process is a critical issue, it has a huge drawback on employee performance (Kavanagh and Ashkanasy, 2006). Companies are observed to rely on their leaders to control these changes to minimize the risk and to restrain the resistance of the employees (Melhem and Ibrahim, 2008). Failing in managing the consequences of the change process may harm the company's performance and interrupt the consistency of the brand promise (Bateh et al., 2013).

A charismatic leader is an effective person with superior forms and characteristics in influencing followers and individuals (Mhatre and Riggio, 2014). A leader is followed by people who see him/her as an extraordinary person, supernatural or superhuman, or at an extraordinary minimum (Weber, 1976). Thies and Nadler (2001) put it that there is not enough qualitative analysis carried out on the role of leadership in the application process of organizational change for long-term success. Walter and Bruch (2009) argued that previous research lacks input on charismatic leadership characteristics and has gaps in its development and investigations. There is also insufficient interest in

previous studies in studying the role of charismatic leadership in looking for and managing organizational change (Abbasiyannejad et al., 2015).

Employees' resistance to change is a personally constructed phenomenon that is created and interpreted by interaction, where the employees' use of self-promotion strategies in reaction to a menace to them makes company identity stronger (Van Dijk and Van Dick, 2009). The success of employee resistance to change and maintaining the status quo is due to managers' failure to guide change (Paais & Pattiruhu, 2020). The leader has to consider the relevance of the organization to fit the goals of change and to achieve them through a successful leader seeking for change based on the beliefs of the organization arising by education and training (Pardo et al., 2003).

Previous studies on charismatic leadership style and employee resistance to organizational change process have targeted companies in developed countries (Abbasiyannejad et al., 2015). Such results may not be generalized for third-world countries because of cultural, economic, social, political, and religious differences (Wanasida et al., 2021). This study is a source of subsequent studies on the role of charismatic leadership style in overcoming "employee resistance" in the management of organizational change processes in the context of a developing country's business environment. Thus, the problem addressed in this study is to determine whether charismatic leadership might be an effective factor in overcoming employees' resistance to change and defending the sustainability and success of any institution in this context an environment (Saleh et al., 2022). Based on the above argument, the questions of the study could be framed as:

1. Does a charismatic leader enhance or impede the organizational change process?
2. Does a charismatic leader enhance or impede "employee resistance" to organizational change?
3. Does a charismatic leader enhance or impede followers to the organizational change process?
4. How does a charismatic leader augment the organizational change process and the two jointly have a positive effect, to enhance the ability to influence followers then increase control over

"employee resistance" to achieve organizational change desired?

This study proposes a theoretical model to explore how a charismatic leadership style can overcome employee resistance to the organizational change process. Accordingly, the case study approach has been conducted. The data was collected by the fieldwork observation at Queen Alia International Airport in Jordan for one year.

II. LITERATURE REVIEW AND HYPOTHESES

The leader must be qualified and trained enough to make changes in an organization to ensure that the employees accept the changes applied by the change process (Kavanagh and Ashkanasy, 2006). Leaders, who aim for organizational change, seek to overcome the difficult challenges they face to gain the consent of the employees (Michela and Burke, 2000). The interface between successful leaders arises in identifying many propositions that find solutions that support their goals within the organization by understanding the problems and challenges that stand as a solid barrier in the way of change (Awamleh & Ertugan, 2021). In previous studies, the "great person" theory of successful leadership skills has been adopted and has had a significant impact on success in many organizations (Judge et al., 2002).

Every leader moves organizational members from the present to the future to achieve the desired vision and change where charismatic leaders can classify lack in current circumstances and express an idea that represents the power of exiting current circumstances and making their idea a source of inspiring insights to the achieve desired change (Kavanagh and Ashkanasy, 2006). These trends of charisma are explored on an equal footing with the change of society in the individual but this model provides an insight into the behavior of perceived leaders who are often passionate about adhering to charismatic qualities effective leadership and the role of the charismatic leader in generating a vision and personal emotional support will influence their followers to facilitate the change process, as leadership intensifies training skills for employees that generate a positive sense of change (Oreg and Berson, 2011). To formulate this into a testable proposition, we need to take into account all the possible types of charismatic leadership discussed in this paper:

Proposition 1: If a charismatic leader is chosen in the stage of change, then the role of the leader to motivate the organizational change process will lead to positive outcomes for the organizational interests as a whole.

Many studies conclude that resistance to change is one of the most important problems faced by those involved in the change process. However, it can be noted that there is no consensus on clarifying the

resistance to change as past researchers studied the concept from diverse perspectives. The phenomenon of employee resistance to change, defined as a measure to protect the individuals from the effects of change like actual or supposed action, identifies resistance as an act to maintain the current situation (Senge, 2006). Leaders are advised to distinguish between the causes of resistance and the resulting symptoms of it (Melhem and Ibrahim, 2008). Among the most prominent symptoms of the resistance of the employees include complaints about a particular method or procedures followed in the organization, attacking new proposals and ideas. They can be frequent criticisms, spreading rumors, non-compliance with work rules and procedures, high turnover, absenteeism rates or low rates output, also individuals' insistence that change is not fair or that many questions are asked of employees and some indifferent to change, in addition to some individuals trying to influence others by convincing them that staying on the status quo is better than change (Petrini and Hultman, 1995). This leads to a second proposition:

Proposition 2: If there is strong employee resistance to organizational change threatening the interests and values of the organization then the role of the charismatic leader will be to defend, change and manage that situation.

Change processes in organizations face employee resistance for personal reasons or fear of change. Successful management is needed to overcome such resistance. This can be achieved by managing the actions of individuals through controlling their emotions and behavior (Erwin and Garman, 2010). The charismatic leader rejects traditional attitudes in seeking the status quo and doesn't search for new commitments in the workplace. The task of the leader is to change and strive for the best whilst working in the most charismatic way. He/she doesn't hesitate in breaking tradition or negative habits to keep up with the present and achieve future growth. Charisma is a supernatural power as it is the ability to control the minds of people, changing their thoughts and beliefs from fear of the unknown; by redirecting them in the right way.

This simple idea of charisma has been developed and revised in many ways. To illustrate this, it has been suggested that charismatic leaders transfer and reorganize the standards of their followers using their influential characteristics (Seyranian and Bligh, 2008). It has also been suggested that charisma is a common vision and which best illustrates how its followers succeed by overlapping interactions with unrepresented characters (Ladkin, 2006). This leads to a third proposition:

Proposition 3: If there is a talented leader with a convincing vision on the benefits of organizational

change then there will be no fundamental difference in the relationship between the leader and his followers to defend the organizational change process.

The employee assessments and the effectiveness of change will affect the employees themselves in the context of the organization they work for. A good assessment procedure will provide opportunities for the employees, while a poor assessment will make the employees feel their position at risk and often suffer from depression and abuse (Van Dijk and Van Dick, 2009). Both Cartwright and Cooper (2014) point out that during periods of change in an organization the rapid development or change in operations will tighten control systems imposing restrictions and pressure on employees. Leaders face resistance to change in different ways while restructuring the organization. The details of employee resistance to change and its consequences must be understood well to develop effective strategies against any resistance (Senge, 2006).

The application of loyalty performance measuring tools has different effects on employee performance. This is due to the possessiveness in conservative practices of some companies with management perspectives that resist change. Such practices lead to a defensive state in organizations which may result in low confidence and a cultural shock. Employee interactions can be analyzed by four stages: Discomfort; chaos and then boredom; trying to bargain, and approval (Van Dijk and Van Dic, 2009). Galvin et al. (2010) argued that the use of charismatic leadership style helps to understand, or at least benefit from, social networks and flow of information in organizations. This perceptive may provide an insight into how large relationships are linked between individuals and leaders.

Seyranian and Bligh (2008) underlined the compatibility of the relationship between the leader and his followers. Charismatic leadership can also be inspired by the influence of society and its orientation towards change. Effective leadership strategy is observed when vision and personal emotional support of followers facilitate the change process. The characteristics of the charismatic leader are innovation, cooperation, and participation in new decisions (Paulsen, et. al., 2009). Trust is created via influential innovations coming from the followers. The results of this study also show that the exploitation of the emotion of the followers creates an effective change in their behavior to follow the charismatic leader on new strategies (Michaelis, et. al., 2009). Bateh et al. (2013) underlined the importance of leadership effectiveness suggesting that creating employee participation through training and creating awareness of change enables managers to reduce conflict and increase collaboration to overcome employee resistance to change.

It can be underlined that the reasons for internal integration and acceptance of processes and procedures of change are until the "leader" begins to change himself shaping out the needed steps for leading the change and his power and his will to possess and apply the chosen strategies that are going to differentiate the organizational through the chosen change process (Pardo et al., 2003; Wikangas and Okumura, 1997). As Van Knippenberg and Hogg (2003) argued, it is important to acknowledge that change begins with the leader himself by setting an example for change, which motivates the employee to follow the leader. There are a lot of causes to encourage the expectation that shift and change through charismatic leadership style. This will enhance the employee's ability to accept change. The charismatic leadership style has gone beyond normative exchange to accept those who wish to, by establishing systems of unique importance to representatives (Gardner and Avolio, 1998). Moreover, successful leaders have become a change model and encouraged followers to think about current methods in a variety of ways; to motivate them; to outweigh their principles, behavior, and thinking (Van Dijk and Van Dick, 2009; Oreg and Berson, 2011; Seyranian and Bligh, 2008).

Charisma is an essential social style that influences and strengthens employee thinking, in a period of strategic change. The interdependence amongst individuals and their leaders will affect the inevitable ability to lead and the success of the chosen change process and its application (Paais & Pattiruhi, 2020). The unnatural style of a charismatic leader is built on manipulation of disbelief; thus, the resistance of the employee is expected to be overcome by perceiving the employee's attitude on the process, implementing different strategies on a perceptual basis (Saleh et al., 2022). Thus, have a successful positive outcome of the process. This leads to a final proposition:

Proposition 4: If a leader has an influential personality and ability to influence "followers" then it is likely to increase control over "employee resistance" who see it as a threat to their value and personal interests to achieve organizational change desired.

a) Conceptual framework

In formulating its propositions, this study has taken into account all that supported the organizational change process, charismatic leader, followers, and employee resistance as in the conceptual model in "Figure 1" below.

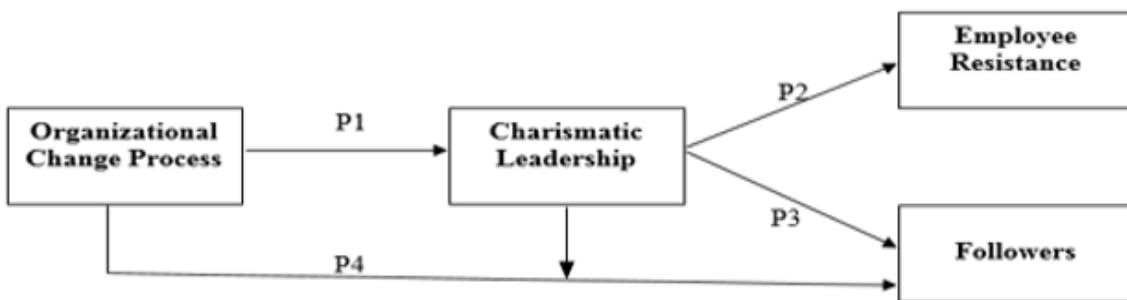


Figure 1: Conceptual Model

III. METHODOLOGY

The epistemological perspective is an interpretive perspective based on beliefs in multiple realities of the social world. Data collection methods have led to collect rich details of phenomena that have been studied. Data were collected over a year of observation and a set of qualitative in-depth telephone interviews with the organization. In addition, to investigate the participants' subjectivity of the study propositions have been constituted.

Both primary and secondary data were used in this study. The primary data were collected from "Queen Alia International Airport" by personal observation of the researcher during the work period of one full year, conducting several telephone interviews and using data via the Internet for the official airport sites. Whereas the secondary data is collected from a theoretical framework based on available information and documented in books, references, and published articles, as well as studies in different periodicals. International electronic databases such as Ebsco, Emerald, and ProQuest were also used.

a) Case Study Description

Queen Alia International Airport belonged to a traditional Jordanian family. The structure of the airport organization was also developed traditionally. In years, the family owning the organization decided to sell half of the shares to a private French company. The reason to share the company was that the traditional management facilities drove the family business to complex problems and financial conflicts. The management responsibility was given to the French partner; who decided to change the management style of the airport. The aim was to widen the location, have more international and internal flights and increase the capacity for profit. The change process was activated after hiring a French CEO who investigated one year the situation and the structure of the company. After one year, the change process was activated officially and faced resistance where the buy-in was located; the resistance came from the employees who were used to be managed by the traditional Jordanian organizational culture.

The CEO of Queen Alia International Airport seemed to be a prominent and distinguished figure who

built a good reputation and a convincing personality in his field. He was the founder of the change process. More specifically, the chosen change process included the expansion of an organizational structure, transformation from traditional work programs to electronic and online work programs, conversion of the scope of work of the organization's employees to outsource companies on annual contracts, shifting the scope of employees from employees with different tasks in the workplace to one function or quality control and monitoring the commitment of the outsource companies with whom they had contracts. Also, new restrictions were imposed on employees not familiar with employees' previous management style as a fingerprint device to monitor employees during working hours and intensifying surveillance cameras to monitor the work procedures in the right way and took the old job of the account of contracted companies, which lost the employee the right to dispose of the scope of his old work. In addition, the employees of the outsourcing companies did not allow the airport employees to interfere in their work procedures which resulted in skirmishes, problems, chaos, and negative expression and have been shaped like a "non-acceptance, resistance to the change process".

To overcome the situation a positive intervention from the senior management was carried out on the order of the Chief Executive Director (CEO); to hold educational sessions and absorb the anger of the employees in a manner that is desirable by motivating and persuading employees to work promising the employees a better future through change and improvement. It has been explained clearly that traditional work generates boredom, problems and reduces profits, and attracts fewer passengers, which results in low salaries and the risk of loss of work for many employees.

The chosen process of change has achieved positive results which improved the physical and social status of the employees and the organization in general. The CEO served as a father to the employees and convinced them as he was coming down on the field of work and helping the employees in their formal work, which enticed passion and instilled awareness and will to work.

b) Case Study Analysis

The case was analyzed based on seven core viewpoints. These viewpoints comprise our understanding of how a charismatic leadership style can defend an organization's position in overcoming "employee resistance against the chosen organizational change style" and supports the interests and objectives of the organization they work for. The importance of the change and who is responsible in addition to what motivates them. These viewpoints draw a crystal clear image about the subject on who is doing the change. While the on other hand, the responsibilities, who to deploy the change, the role of senior management, and the actual change will draw the missing puzzle of the conscience of the change process on the organization. Finally, the study sought another alternative to deal with such changes.

First core viewpoint, why the change was necessary: Queen Alia International Airport belonged to a traditional Jordanian family. The organizational structure was thus developed traditionally. In years, the family owning the organization decided to sell half of the shares to a private company. The reason to share the company was that the traditional management facilities drove the family business to become too complex to solve problems and financial conflicts.

The second core viewpoint, who initiated the change: The change process was started by the French company, by the French CEO. The CEO of Queen Alia International Airport seemed to be a prominent and distinguished figure who built a good reputation and who was a convincing personality in his field.

The third core viewpoint, how it was introduced and by whom: the change process was activated after hiring a French CEO who investigated the situation and the structure of the company for one year. After one year the change process was activated officially and faced resistance when the buy-in was located; the resistance was from employees who were used to be managed by traditional Jordanian organizational culture.

The fourth core viewpoint, how the responsibilities for implementation were allocated: the management responsibility was given to the French partner who decided to change the management style of the airport. The aim was to widen the location, have more international and internal flights and increase the capacity for profit.

The fifth core viewpoint, how "buy-in" to new ways of working were achieved: the chosen change process included the expansion of an organizational structure, transformation from traditional work programs to electronic and online work programs, conversion of the scope of work of the organization's employees to outsource companies on annual contracts, shifting the scope of employees from employees with different functions in the fields to multi to one function or quality control and monitoring the commitment of the outsource

companies with whom they had contracts. To overcome resistance to change, a positive intervention from the senior management was carried out on the instructions of the Chief Executive Director (CEO); to hold educational sessions and absorb the anger of the employees in a manner that is desirable by motivating and persuading employees to work promising the employees a better future through change and improvement. It has been explained clearly that traditional work generates boredom, problems and reduces profits, and attracts fewer passengers, which results in low salaries and the risk of loss of work for many employees.

The sixth core viewpoint, the level of "buy-in" achieved: The chosen process of change has achieved positive results which improved the physical and social status of the employees and the organization in general. The CEO served as a father to the employees and convinced them as he was coming down on the field of work and helping the employees in their formal work, which enticed passion and instilled awareness and will to work.

The seventh core viewpoint, how the whole process may have been handled differently: The Chief Executive Officer and his followers used to provide influential phrases and future offers to the employees that benefit their position, and training courses were also intensified to raise awareness among employees. Therefore, the employees' opposition to change was overcome using the preferred leadership style or the charismatic leadership to defend the change to achieve the interests and objectives of the company.

IV. DISCUSSION

The case study above and the literature review carried out on the previous studies analyzed leadership. Choosing a charismatic leadership style on organizational change processes and overcoming employee resistance to change can be considered as an effective decision for maintaining the sustainability, and success of the company.

The change process was started by the French company, by positioning the French CEO. As shown above, the charismatic leader is a catalyst for change. It has been shown in Proposition 1: that choosing a charismatic leader in the stage of change is motivational and defends the organization's goals in general. This is in agreement with Weber (1976) and Mhatre and Riggio (2014). Effective charisma is an influential basis for social change, and also corresponds to a concept of charismatic leadership style that corresponds as a power for change and is adopted by most of the researchers in the field (eg. Shamir and Howell, 1999; Waldman and Javidan, 2013; and Beyer, 1999). It differs from Levay (2010). The character of the charismatic leader in maintaining the status quo has been emphasized as distinct by most of them.

Proposition 2: the consequences of the charismatic leader have an effective role in confronting resistance and persuading employees about the benefits of the change and the company as a whole. The leader had a strong diplomatic orientation and effective rhetoric in negotiating with employees and enticing their passion in a sufficiently effective manner to defend the organization's goals and overcome employees' opposition to change and convince them that this change was beneficial to the organization as a whole. This is in agreement with Van Dijk and Van Dick (2009) who mentioned a leader's interactions with the employee through four stages. They are considered as discomfort that begins with disapproval and fear; Chaos and then boredom; Trying to bargain; then Approval. As Bateh et al. (2013), argued about leadership effectiveness by creating employee participation as an initiator of change through training and creating awareness of change enables managers the management to reduce conflict and increase collaboration around employees. The results of a study conducted by Oreg (2006), show that the reason for the domination of employees on the organization by creating negative feelings of resistance, generated as a result of a collective intention to leave the job, can be summarized as the lack of strong leaders capable to defend and motivate the desired change.

Proposition 3: It turns out that the processes of influencing acts of the leader individually and the exercise of his activities that haven't been done before affected the emotional status of the followers and also affected the values and their perceptions about their company identity. This was the work of guidance and job description of the new system adopted. This provides an opportunity to develop in future cases an example to reduce the shock and vision of the employees of organizations that suffer cases of resistance by creating objections before the occurrence. Therefore, the study carried out needs a proposition for a solution: A leader attracts the group, which tends to the leaders of the commander through his decision to provide a convincing vision. This point is in agreement with the finding of Wikangas and Okumura (1997) and Pardo et al. (2003), who found that the lack of skill of the leader in motivating followers to change their behavior will lead to failure in the procedure of change as an outcome of resistance of individuals to this change. They underlined the reasons for internal integration and acceptance of processes and procedures of change that are dependent on the leader. The leader begins to change his behavior and the power of the leader then his will to possess high charismatic perceptive features on employee' develops the change. Several studies have also shown the power of the charismatic leader to influence his followers to help him in the organizational change process, creating a common relationship to

seek the desired change. (Eg. Michaelis, et al. 2009; Oreg and Berson, 2011; Seyranian and Bligh, 2008). Van Knippenberg and Hogg (2003) argued and stated that change begins with the leaders themselves first by setting an example for change, which is going to motivate the employee to follow their leader's charismatic characteristics. The consequences of the study proved that the leader enjoys characteristics such as the innovative, imaginative, visionary, inspiring, and personal power that affects all members of the firm and that successful and satisfactory results can be visible to the company. The perception of employees on the process and their emotional commitment will switch the entire organization to a positive outcome.

Proposition 4: Through the above-mentioned case of the Queen Alia International Airport, the leader, and his followers had a strong enough position in the organization to overcome the employee's resistance to change convincing them in a gracious and sophisticated manner that this change was beneficial to the organization as a whole and was making them successful. This is in agreement with Erwin and Garman (2010) who mentioned the procedures of change developed under the control of a charismatic leader. According to the Charisma theory (Weber, 1978; Abbasiyannejad, et. al., 2015), charismatic leaders have a better power level and understand better the ideas and expectations of the employee due to emotional capability and close relations (less power distance). Paulsen and his colleagues (2009) showed that one of the characteristics of a charismatic leader is innovation, where he seeks successful change and creates opportunities for his support to change and dominate the organization and control followers to achieve successful results of the change.

There are some limitations and opportunities for future studies. Consequently, this phenomenon should be studied in future research, and proposals that summarize the results of this study should be developed as a guide. In addition, similar studies in different environments should be carried out to test the propositions developed by this study under different circumstances. This study was a single leadership style that did not take into account other leadership styles to compare results and analyze leadership roles and their impact on change processes and the need to intensify studies and create gaps in organizations that are a barrier to change processes in business organizations.

V. CONCLUSION

Understanding the role of charismatic characteristics and features of leadership style gives us important insights into the role of the charismatic leader as well as his influence on his followers and their perceptions. Perhaps more importantly, it helps us understand how leaders can use, or at least take

advantage of, organizational change processes and control of individuals and groups. Specifically, looking at the characteristics and behaviors of the leader provides insights into how to identify the employee reasons for resistance to change and how to control them by the ability of the leader to influence the organization by creating awareness and training to can get sustainability and keep up with the development of social change. The charismatic characteristics here are more subtle and pluralistic than the homogenous strategy described by previous researchers, and they support in influencing "devote followers and employee resistance to accepting the desired change". However, this study has described potentially strong influences on organizations and perceptions of followers. This understanding may provide greater clarity for individuals who have no direct interaction with the leader may develop with the same strength and consistency of the leader's perceptions as those individuals who have a great interaction. At the macro level, this understanding may provide insights into how large-scale movements are associated with charismatic leaders to achieve desired change process and control over individuals and groups across organizations, communities, and cultures.

REFERENCES

1. Abbasiyannejad, M., Silong, A.D., Ismail, I.A., Othman, J., and Abd. Wahat, N.W. (2015). Charismatic Leadership and Society. *International Research Journal of Social Sciences*, 4(1), pp. 68-73.
2. Awamleh, F., & Ertugan, A. (2021). The relationship between information technology capabilities, organizational intelligence, and competitive advantage. *SAGE Open*, 11 (2), 21582440211015201.
3. Beyer, J. M. (1999). Taming and promoting charisma to change organizations. *The Leadership Quarterly*, 10(2), 307-330.
4. Bateh, J., Castaneda, M. E., & Farah, J. E. (2013). Employee resistance to organizational change. *International Journal of Management & Information Systems (Online)*, 17(2), 113.
5. Cartwright, S., & Cooper, C. L. (2014). *Mergers and acquisitions: The human factor*. Butterworth Heinemann.
6. Erwin, D. G., & Garman, A. N. (2010). Resistance to organizational change: linking research and practice. *Leadership & Organization Development Journal*, 31(1), 39-56.
7. Fishman, N., & Kavanagh, L. (1989). Searching for your missing quality link. *Journal for Quality and Participation*, 12(4), 28-32.
8. Gardner, W. L., & Avolio, B. J. (1998). The charismatic relationship: A dramaturgical perspective. *Academy of management review*, 23(1), 32-58.
9. Galvin, B. M., Balkundi, P., & Waldman, D. A. (2010). Spreading the word: The role of surrogates in charismatic leadership processes. *Academy of Management Review*, 35(3), 477-494.
10. Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: a qualitative and quantitative review. *Journal of applied psychology*, 87(4), 765.
11. Judge, T. A., Fluegge Woolf, E., Hurst, C., & Livingston, B. (2006). Charismatic and transformational leadership: A review and an agenda for future research. *Zeitschrift für Arbeits- und Organisationspsychologie A & O*, 50(4), 203-214.
12. Kavanagh, M. H., & Ashkanasy, N. M. (2006). The impact of leadership and change management strategy on organizational culture and individual acceptance of change during a merger. *British Journal of Management*, 17(S1), S81-S103.
13. Ladkin, D. (2006). The enchantment of the charismatic leader: Charisma reconsidered as aesthetic encounter. *Leadership*, 2(2), 165-179.
14. Levay, C. (2010). Charismatic leadership in resistance to change. *The Leadership Quarterly*, 21(1), 127-143.
15. Michela, J. L., & Burke, W. W. (2000). Organizational culture and climate in transformations for quality and innovation. *Handbook of organizational culture and climate*, 225-244.
16. Mhatre, K. H., & Riggio, R. E. (2014). Charismatic and transformational leadership: Past, present, and future. *The Oxford handbook of leadership and organizations*, 221-240.
17. Michaelis, B., Stegmaier, R., & Sonntag, K. (2009). Affective commitment to change and innovation implementation behavior: The role of charismatic leadership and employees' trust in top management. *Journal of Change Management*, 9(4), 399-417.
18. Melhem, Y. S. and Ibrahim, M. S. (2008). Strategies and causes of resistance in industrial companies: an applied case to Jordanian companies. *Jordanian Journal of Business management*, 4(2).
19. Nadler, D. A., Thies, P. K., & Nadler, M. B. (2001). Culture change in the strategic enterprise: Lessons from the field. *CL Cooper, S. Cartwright and PC Earley, the International Handbook of Organizational Culture and Climate*. John Wiley & Sons Ltd, Chichester.
20. Oreg, S., & Berson, Y. (2011). Leadership and employees 'reactions to change: the role of leaders' personal attributes and transformational leadership style. *Personnel psychology*, 64(3), 627-659.
21. Oreg, S. (2006). Personality, context, and resistance to organizational change. *European journal of work and organizational psychology*, 15(1), 73-101.
22. Paulsen, N., Maldonado, D., Callan, V. J., & Ayoko, O. (2009). Charismatic leadership, change and

innovation in an R & D organization. *Journal of Organizational Change Management*, 22 (5), 511-523.

23. Pardo Del Val, M., & Martínez Fuentes, C. (2003). Resistance to change: a literature review and empirical study. *Management decision*, 41(2), 148-155.

24. Paais, M., & Pattiruhu, J. R. (2020). Effect of motivation, leadership, and organizational culture on satisfaction and employee performance. *The Journal of Asian Finance, Economics, and Business*, 7(8), 577-588.

25. Petrini, C., & Hultman, K. E. (1995). Scaling the wall of resistance. *Training & Development*, 49 (10), 15-18.

26. SALEH, T. A., MEHMOOD, W., KHAN, J., & JAN, F. U. (2022). The Impact of Ethical Leadership on Employees Turnover Intention: An Empirical Study of the Banking Sector in Malaysia. *The Journal of Asian Finance, Economics and Business*, 9(2), 261-272.

27. Seyranian, V., & Bligh, M. C. (2008). Presidential charismatic leadership: Exploring the rhetoric of social change. *The Leadership Quarterly*, 19(1), 54-76.

28. Shamir, B., & Howell, J. M. (1999). Organizational and contextual influences on the emergence and effectiveness of charismatic leadership. *The Leadership Quarterly*, 10(2), 257-283.

29. Senge, P. (2006). *The Fifth Discipline: The Art and Practice of the Learning Organization*, Currency and Doubleday, New York.

30. Wikangas, L., & Okumura, A. (1997). Why do people follow leaders? A study of a US and a Japanese change program. *The Leadership Quarterly*, 8(3), 313-337.

31. WANASIDA, A. S., BERNARTO, I., SUDIBJO, N., & PRAMONO, R. (2021). Millennial transformational leadership on organizational performance in Indonesia fishery startup. *The Journal of Asian Finance, Economics, and Business*, 8(2), 555-562.

32. Van Knippenberg, D., & Hogg, M. A. (2003). A social identity model of leadership effectiveness in organizations. *Research in organizational behavior*, 25, 243-295.

33. Van Dijk, R., & Van Dick, R. (2009). Navigating organizational change: Change leaders, employee resistance and work-based identities. *Journal of change Management*, 9(2), 143-163.

34. Walter, F., & Bruch, H. (2009). An affective events model of charismatic leadership behavior: A review, theoretical integration, and research agenda. *Journal of Management*, 35(6), 1428-1452.

35. Weber, M. (1978). *Economy and Society*, edited by Guenther Roth and Claus Wittich. Berkeley.

36. Waldman, D. A., & Javidan, M. (2013). Charismatic leadership at the strategic level: Taking a new look at upper echelons theory. In *Transformational and Charismatic Leadership: The Road Ahead 10th Anniversary Edition* (pp. 201-227). Emerald Group Publishing Limited.



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A
ADMINISTRATION AND MANAGEMENT
Volume 22 Issue 3 Version 1.0 Year 2022
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Dilution of Ownership and Disciplinary Control of the Manager within Companies in Cameroon

By M. Gorsou Mohay Paye Patrick Arthur, M. Djouberou Jean-Louis
& M. Djobsia Emmanuel

L'université de Maroua Cameroun

Abstract- The traditional agency conflict between shareholders and managers reflects the existence of a control body within companies. Thus, the Board of Directors, because of its efficiency, can be used to defend the interests of shareholders. This leads us in the context of this research to focus on the analysis of the influence of the dilution of ownership on the effectiveness of the board, more specifically in terms of disciplinary control of managers. In view of the importance of the board of directors in corporate governance, the purpose of this work is to attempt to demonstrate through a hypothetico-deductive research, the existing relationship between the dilution of ownership and the disciplinary control of the manager. Within companies. The result obtained on a sample of 61 companies confirms the presupposed link between these two groups of variables and suggests the need for companies to engage in a truly proactive approach in terms of dilution of ownership.

Keywords: *board of directors, dilution of ownership, disciplinary control.*

GJMBR-A Classification: *DDC Code: 346.410666 LCC Code: KD2100*



Strictly as per the compliance and regulations of:



Dilution of Ownership and Disciplinary Control of the Manager within Companies in Cameroon

Dilution de la propriété et contrôle disciplinaire du dirigeant au sein des entreprises au Cameroun

M. Gorsou Mohay Paye Patrick Arthur^a, M. Djouberou Jean-Louis^a & M. Djobsia Emmanuel^b

Abstract- The traditional agency conflict between shareholders and managers reflects the existence of a control body within companies. Thus, the Board of Directors, because of its efficiency, can be used to defend the interests of shareholders. This leads us in the context of this research to focus on the analysis of the influence of the dilution of ownership on the effectiveness of the board, more specifically in terms of disciplinary control of managers. In view of the importance of the board of directors in corporate governance, the purpose of this work is to attempt to demonstrate through a hypothetico-deductive research, the existing relationship between the dilution of ownership and the disciplinary control of the manager. Within companies. The result obtained on a sample of 61 companies confirms the presupposed link between these two groups of variables and suggests the need for companies to engage in a truly proactive approach in terms of dilution of ownership.

Keywords: *board of directors, dilution of ownership, disciplinary control.*

Résumé- Le traditionnel conflit d'agence entre actionnaires et dirigeants traduit l'existence d'un organe de contrôle au sein des entreprises. Ainsi, le Conseil d'Administration (CA), du fait de son efficacité peut être utilisé pour la défense des intérêts des actionnaires. Ce qui nous amène dans le cadre de cette recherche à nous orienter sur l'analyse de l'influence de la dilution de la propriété sur l'efficacité du CA, plus précisément en matière de contrôle disciplinaire des dirigeants. Au regard de l'importance du CA dans la gouvernance d'entreprise, le but de ce travail est de tenter de démontrer au travers d'une recherche hypothético-déductive, la relation existante entre la dilution de la propriété et le contrôle disciplinaire du dirigeant au sein des entreprises. Le résultat obtenu sur un échantillon de 61 entreprises confirme le lien présupposé en ces deux groupes de variables et suggère la nécessité pour les entreprises à s'engager dans une démarche véritablement proactive en matière de dilution de la propriété.

Mots clés: *conseil d'administration, dilution de la propriété, contrôle disciplinaire.*

Author a: Doctorant en Sciences de Gestion, enseignant assistant à l'Ecole National Supérieure des Mines et des Industries Pétrolières de l'université de Maroua Cameroun. courriel: gorsouarthur@gmail.com

Author b: Docteur en Sciences de Gestion, enseignant assistant à la Faculté des Sciences Economiques et de Gestion de l'université de Maroua Cameroun. courriel: jeanlouisdjouberou82@yahoo.fr

Author p: Docteur en Sciences de Gestion, enseignant assistant à la Faculté des Sciences Economiques et de Gestion de l'université de Maroua Cameroun. courriel: djobsone@yahoo.fr

I. INTRODUCTION

Dans le domaine de la gouvernance et du management stratégique, la performance est le résultat des efforts des différentes parties prenantes de l'entreprise. L'intervention du Conseil d'Administration dans la gestion stratégique de l'entreprise a été régulièrement inscrite dans l'agenda des débats professionnels et des recherches académiques au cours des deux dernières décennies. La pertinence de ces débats s'est révélée à la bourse de Toronto à la suite de la faillite de nombreuses sociétés canadiennes à travers la question ultime : « *Where were the directors ?* ». La faillite du siècle d'Enron (2001) aux Etats-Unis, le scandale de Bernard Madoff en décembre 2008, les tragédies financières de Vivendi Universal en 2002 entre autres sont autant d'exemples vivants qui témoignent de la portée de cette question et des conséquences de l'inefficacité du contrôle disciplinaire effectué par le CA. Mfouapon et Feudjo (2013) affirment que dans le contexte camerounais, le capital est encore très concentré entre les mains d'hommes d'affaires certes fortunés mais moins instruits. Le choix des administrateurs par ces derniers remet en cause la qualité de la structure de détention du capital. Les efforts sans succès des pouvoirs publics, allant des politiques de promotion des grandes firmes, des PME/PMI, aux privatisations auxquels s'ajoutent les pressions extérieures fait de la structure de l'actionnariat dans les entreprises camerounaises un enjeu important de l'efficacité du CA (Tajer et al., 2021).

Cette étude effectuée dans le contexte camerounais se propose donc de répondre à la question de savoir quelle est l'influence de la dilution de la propriété sur le contrôle disciplinaire du dirigeant ?

Ainsi, le présent papier est organisé en trois points. Premièrement, il sera question de présenter le cadre conceptuel et les hypothèses de la recherche (1). Deuxièmement, la méthodologie de la recherche sera abordée (2), et troisièmement, les différents résultats seront exhibés puis discutés.



a) *Le contrôle disciplinaire du dirigeant résultant d'une dilution de l'actionnariat: cadre conceptuel et hypothèses*

L'étude des mécanismes de gouvernance d'entreprise assigne au Conseil d'Administration une place centrale. Chargé de représenter les intérêts des actionnaires, il apparaît comme l'organe privilégié de contrôle des dirigeants. Le Conseil d'Administration peut être plus ou moins efficace selon le type de société et la géographie du capital.

Demsetz (1983), Shleifer et Vishny (1997) et Yougang (2018) suggèrent que la concentration du capital est un gage d'efficacité du contrôle de la gestion des dirigeants par les actionnaires. En effet, dans une firme dont le capital est très dispersé, aucun des propriétaires n'est incité à investir dans le contrôle des dirigeants car il sera seul à en supporter le coût alors que l'ensemble des actionnaires bénéficiera de cette action. Il est donc possible d'observer des comportements de « *free rider* » au sein d'un actionnariat diffus et par conséquent des dirigeants peuvent laisser libre cours à leur opportunisme dans la gestion de la firme.

En revanche, les actionnaires détenant une part significative du capital pourront trouver un intérêt à assumer le contrôle des dirigeants dans la mesure où ils s'approprieront une part non négligeable des bénéfices supplémentaires ainsi réalisés. Ils seront donc incités davantage à l'activisme de façon à orienter la stratégie de l'entreprise dans le sens d'une meilleure valorisation de leurs titres et défendant ainsi l'intérêt commun des actionnaires. Leur incitation à agir constitue la meilleure garantie de leur efficacité et probablement la moins onéreuse en termes de coût d'agence. Ces actionnaires majoritaires disposent également d'avantages importants par rapport à un ensemble d'actionnaires minoritaires isolés. D'abord, ils peuvent mobiliser plus aisément des moyens importants pour contrôler les dirigeants et protéger leurs investissements.

De plus, le nombre des voix qu'ils possèdent leur permet d'influencer les votes lors des assemblées générales ou éventuellement convaincre les petits actionnaires d'adhérer à leurs décisions et de les soutenir en cas d'opposition avec la direction de l'entreprise (Mtanios et Pasquerot, 1999). Ces arguments avancés dans le cadre de la théorie de l'agence montrent bien que la présence d'actionnaires majoritaires constitue un facteur très important pour une bonne gouvernance d'entreprise (Bimene et Ngouen, 2020). De ce fait, on peut s'attendre à ce que le pouvoir disciplinaire du Conseil d'Administration soit faible dans les sociétés dont le capital est concentré, puisque la discipline sera assurée directement par les actionnaires dominants, à moins que ces derniers fassent partie intégrante du CA; ce qui est pour la plupart évident.

Par ailleurs, Jensen et Meckling (1976) et Moungou Mbenda (2017) affirment que plus la part du

capital détenue par les dirigeants est importante, plus la divergence entre leurs intérêts et ceux des actionnaires est faible. En d'autres termes, le dirigeant détenant une portion élevée des actions a peu d'intérêt à maximiser sa richesse personnelle par des comportements opportunistes préjudiciables pour le patrimoine de la société, puisqu'il en subit les contrecoups (baisse de la valeur de ses actions). De ce fait, on peut s'attendre à ce que le rôle disciplinaire du Conseil d'Administration soit moins important dans les entreprises où la propriété managériale est élevée (Hermalin et Weisbach, 1991; Mbaduet et al., 2019).

La structure de propriété de l'entreprise peut également influencer la taille du conseil et ce dernier à une influence sur l'efficacité du CA. Celle-ci devrait être plus faible dans les entreprises de type familial et plus importante dans les sociétés contrôlées. Charreaux et Pitot-Belin (1987), de façon descriptive, ont mis en évidence que la taille est fonction de la catégorie à laquelle appartient la société. L'étude de Kini et al. (1995) illustre l'effet de la structure de propriété sur la taille du Conseil d'Administration. Le changement dans la structure de propriété de l'entreprise à la suite d'OPA disciplinaire (avec changement de dirigeant) et non disciplinaire (sans changement de dirigeant) se traduit par une réduction de la taille du conseil, réduction qui touche plus les administrateurs externes que les administrateurs internes. Selon Charreaux et Pitot-Belin (1990), les administrateurs externes peuvent utiliser leurs compétences particulières et leur détachement pour apporter une vision critique des problèmes ou projets soumis par les dirigeants. De même, ces derniers fournissent leur point de vue de manière indépendant et impartial. Ceci leur permettant d'exercer un jugement objectif de la performance des dirigeants.

Ainsi, le pourcentage de capital détenu par les administrateurs externes met en relief les incitations de ces administrateurs en tant qu'actionnaire à remplir efficacement leur fonction de contrôleur (Alexandre et Paquerot, 2000). Cet avis est partagé aussi par Kini et al. (1995) qui affirme que le meilleur moyen pour qu'un administrateur s'apparente dans son comportement à un actionnaire c'est d'être lui-même un actionnaire. Ceci peut s'expliquer par le fait qu'un administrateur ayant une participation importante au capital est susceptible de défendre plus ardemment ses intérêts et donc de contester les propos de la direction car ces décisions auront un impact sur sa propre richesse (Feudjo et Tchankam, 2018). Dans le même sens, Jensen (1993) avance que la détention d'un pourcentage du capital de l'entreprise constitue un moyen permettant d'aligner les intérêts des administrateurs avec ceux des actionnaires et d'exercer ainsi un contrôle efficace de la gestion de l'entreprise.

Plus l'engagement financier des administrateurs externes est important, plus la marge de manœuvre du dirigeant sera faible. Or, en cas de dilution de propriété,

le pourcentage de capital détenu par les administrateurs va significativement diminuer; ce qui entraînera un conflit d'intérêt entre les administrateurs et les actionnaires. Tout ceci nous conduit à formuler les hypothèses suivantes:

H1: Plus la part du capital revenant au principal actionnaire est faible plus le nombre d'administrateurs externes est élevé.

H2: Plus le capital est dispersé, plus le Conseil d'Administration dispose de comités spécialisés de contrôle.

II. MÉTHODOLOGIE

a) Cadre d'échantillonnage et taille de l'échantillon

Compte tenu de la particularité de ce sujet devant étudier l'impact de la dilution de la propriété sur le

Tableau 1: Répartition de l'échantillon par régions

Villes	Questionnaires					
	Administrés		Récupérés		Exploitables	
	Effectifs	%	Effectifs	%	Effectifs	%
Douala	48	55,82	37	54,41	34	55,74
Yaoundé	28	32,55	21	30,88	19	31,15
Maroua	10	11,63	10	14,71	8	13,11
Total	86	100	68	100	61	100

Source: Auteurs

b) Opérationnalisation des variables

i. Opérationnalisation des variables relatives à la dilution de la propriété

Il s'agit principalement de la part du capital revenant au principal actionnaire et la dispersion du capital.

Pour ce qui est de la variable « part de capital revenant au principal actionnaire », celle-ci est mesurée à l'aide d'une échelle d'intervalle et recherche à savoir s'il existe un groupe d'actionnaires détenant une part significative du capital mettant en évidence le niveau de

contrôle disciplinaire du dirigeant, la démarche hypothético-déductive est adoptée d'une part, et un choix raisonné a été fait en faveur des S.A et S.A.R.L d'autre part. Etant donné que l'échantillon sera confronté à certains tests statistiques, une enquête a été réalisée dans le but d'obtenir un échantillon dont la taille est d'au moins trente (30) individus exploitables. Aussi, sachant qu'un échantillon de grande taille reproduit avec plus de précision les caractéristiques de la population, 61 S.A et S.A.R.L des villes de Douala, Yaoundé et Maroua ont été interrogées.

Le tableau suivant retrace l'administration du questionnaire dans les trois Régions:

	(+1)	(+2)	(+3)	(+4)	(+5)
Il n'existe pas un actionnaire ou groupe d'actionnaires majoritaires					
L'ouverture du capital est significative					
Le capital est dispersé entre les mains de plusieurs actionnaires					
Aucun actionnaire n'a un pouvoir de contrôle et de vote significatif					

ii. Opérationnalisation des variables relatives au contrôle disciplinaire du dirigeant

Le contrôle disciplinaire repose sur la présence de comités spécialisés de contrôle et sur le nombre d'administrateurs externes et indépendants.

La présence de comités spécialisés de contrôle est une variable qualitative dichotomique cherchant à mettre en évidence l'existence de comités spécialisés qui travaillent en collaboration avec le Conseil d'Administration. Elle prend la valeur 1 dans le cas où il existe au moins un comité et 2 dans le cas où le Conseil d'Administration fonctionne sans comité.

dilution de la propriété. Elle prend la valeur 1 pour un niveau de détention de moins de 20% et la valeur 2 pour plus de 20%.

En revanche, pour la variable « dispersion du capital », elle est mesurée à l'aide d'une échelle nominale à 5 modalités visant à mettre en évidence le niveau de dispersion du capital. Ce niveau de dispersion est mesuré à l'aide d'une échelle de Likert avec supports sémantiques à cinq points: (+1) Absolument pas d'accord, (+2) Pas d'accord, (+3) Neutre, (+4) D'accord, (+5) Tout à fait d'accord.

Pour ce qui est du nombre d'administrateurs externes et indépendants, cette variable quantitative est mesurée à l'aide d'une échelle d'intervalle permettant de savoir le nombre d'administrateurs externes et indépendants. Cette variable est codée de la manière suivante: elle prend la valeur 1 pour moins de 3 et la valeur 2 pour plus de 3.

c) Les outils d'analyse

Pour tester nos hypothèses formulées, certaines méthodes statistiques nous ont servi d'outils d'analyse. Il s'agit principalement du tri à plat, la méthode des scores, le test du Khi-deux et mesure



d'association et de la régression linéaire simple. Ces analyses sont effectuées à l'aide du logiciel SPSS et les données ont été recueillies au préalable à l'aide d'un questionnaire adressé aux entreprises à Conseil d'Administration.

d) Les caractéristiques de l'échantillon

Les entreprises de l'échantillon se caractérisent par une prédominance de celle relevant du secteur des services. Ainsi dans la répartition, on a 31,1% d'entreprises de l'échantillon exerçant dans le domaine commercial, 11,5% dans le secteur industriel, 57,4% dans le secteur des services.

De même, suivant la forme juridique, les entreprises de l'échantillon sont à majorité sont des S.A (72,1%) suivies des S.A.R.L à 27,9%.

Pour ce qui est du statut juridique de notre échantillon, 73,8% des entreprises appartiennent aux sociétés indépendantes, 19,7% appartiennent aux sociétés filiales et 6,6% aux sociétés mères.

Concernant le capital, il ressort de l'analyse que 63,9% de notre échantillon ont plus de 500 millions

comme capital tandis que 36,1% de l'échantillon ont moins de 500 millions.

Les statistiques sur les types de répondant de notre questionnaire précisent que 54,1% des répondants sont des dirigeants, 29,5% sont des administrateurs et 16,4% sont des actionnaires.

III. RÉSULTATS ET DISCUSSIONS

a) L'influence de la part du capital revenant au principal actionnaire sur le nombre d'administrateurs externes et indépendants

Il s'agit donc de procéder au test de l'hypothèse en question. L'idée qui sous-tend cette relation est que plus la part du capital revenant au principal actionnaire est faible plus le nombre d'administrateurs externes et indépendants est élevé.

Il s'agit d'effectuer d'abord un tableau croisé entre ces deux variables afin de ressortir le lien existant entre eux, ensuite nous analyserons le lien existant entre ces deux variables à l'aide des tests statistiques.

Tableau 2: Relation entre la part du capital revenant au principal actionnaire et le nombre d'administrateurs externes et indépendants

			Nombre d'administrateurs externes et indépendants		Total
			Moins de 3	Plus de 3	
Part du capital en pourcentage qui revient au principal actionnaire ou groupe d'actionnaire	Plus de 20%	Effectif	23	5	28
		Effectif théorique	15,1	12,9	28,0
		% dans la part du capital en pourcentage qui revient au principal actionnaire ou GA	82,1%	17,9%	100,0%
		% dans nombre d'administrateurs externes et indépendants	69,7%	17,9%	45,9%
		% du total	37,7%	8,2%	45,9%
	Moins de 20%	Effectif	10	23	33
		Effectif théorique	17,9	15,1	33,0
		% dans part du capital en pourcentage qui revient au principal actionnaire ou GA	30,3%	69,7%	100,0%
		% dans nombre d'administrateurs externes et indépendants	30,3%	82,1%	54,1%
		% du total	16,4%	37,7%	54,1%
		Effectif	33	28	61
		Effectif théorique	33,0	28,0	61,0
		% dans part du capital en pourcentage qui revient au principal actionnaire ou GA	54,1%	45,9%	100,0%
		% dans nombre d'administrateurs externes et indépendants	100,0%	100,0%	100,0%
		% du total	54,1%	45,9%	100,0%
Total					
χ^2 cal = 16,393		ddl = 1	prob = 0,000	phi = 0,518	C = 0,460

Source: nos enquêtes

Parmi les 33 entreprises dont la part du capital revenant au principal actionnaire est de plus de 20%, 5 soit 17,9% ont plus de 3 administrateurs externes et indépendants. En revanche, 23 CA soit 82,1% ont moins de 3 administrateurs externes et indépendants. La

valeur de χ^2 cal (16,393) avec ddl=1, est fortement supérieure à la valeur du χ^2 théorique (3,84) au seuil α de 0,05. La probabilité de significativité associée est de 0,000 donc bien inférieur à 0,05. Selon ce test, cela nous conduit à confirmer l'hypothèse de dépendance

des variables et à rejeter par conséquent celle d'une absence de lien entre la part du capital revenant au principal actionnaire et le nombre d'administrateurs externes et indépendants. De même, les valeurs de phi et de C respectivement de 0,518 et de 0,46 viennent confirmer cette existence des liens. Tous ces éléments du tableau ci-dessus nous conduisent à confirmer avec

un risque de 5% de se tromper de notre hypothèse H1. Il reste cependant à vérifier la relation entre ces différentes variables par la régression linéaire simple.

Par ailleurs, l'analyse de la régression simple entre la part du capital revenant au principal actionnaire et le nombre d'administrateurs externes et indépendants vient confirmer le test du Khi-deux.

Tableau 3: Analyse de la régression entre la part du capital revenant au principal actionnaire et le nombre d'administrateurs externes et indépendants

Récapitulatif du modèle^b

Modèle	R	R-deux	R-deux ajusté	Erreurs standard de l'estimation
1	,901 ^b	,812	,809	,2189

b. Valeurs prédictives: (constantes), part du capital en pourcentage qui revient au principal actionnaire ou groupe d'actionnaires

ANOVA^a

Modèle	Somme des carrés	ddl	Moyenne des carrés	F	Sig.
Régression	12,222	1	12,222	255,097	,000 ^b
Résidu	2,827	59	4,79		
Total	15,049	60			

a. Variable dépendante: nombre d'administrateurs externes et indépendants

b. Valeurs prédictives: (constantes), part du capital en pourcentage qui revient au principal actionnaire ou groupe d'actionnaires

Coefficients^a

	Coefficients non standardisés		Bêta	t	Sig.
	A	Erreurs standard			
(Constante)	,173	,098	,901	,000	1,000
1 part du capital en pourcentage qui revient au principal actionnaire ou groupe d'actionnaires	,898	,056		15,972	,000

a. Variable dépendante: nombre d'administrateurs externes et indépendants

Source: Auteurs

Le premier modèle obtenu est significatif ($p<0,000$). En effet, le coefficient de détermination ou R-deux (R^2) du modèle de régression linéaire donne une valeur qui est nettement très satisfaisant (0,812) puisque supérieur à 0,5. Il est confirmé par le test de la robustesse du modèle dans la mesure où la valeur F est égale à 255,097 et est significative au seuil de 0,000 pour 1 et 59 degré de liberté. Le modèle de régression entre la part du capital revenant au principal actionnaire (X) et le nombre d'administrateurs externes et indépendants (Y) se présente de la façon suivante:

$$Y = 0,173 + 0,901 X + \epsilon$$

(15,972)

Comme on peut le constater, le coefficient de régression de la variable explicative (part du capital revenant au principal actionnaire) pour ce modèle a une valeur (t) de student supérieure à 2, soit 15,972. On note par ailleurs que ce coefficient de régression est significativement différent de zéro comme l'atteste le test de la valeur de (t). En effet, ce coefficient est différent de zéro au seuil de 0,000. On peut alors

conclure que le nombre d'administrateurs externes et indépendants est lié à la part du capital revenant au principal actionnaire des entreprises camerounaises. L'hypothèse H1: plus la part du capital revenant au principal actionnaire est faible, plus le nombre d'administrateurs externes est élevé est validé. Ceci vient confirmer les propos de Charreaux et Pitot-belin (1990) qui affirment que lorsqu'aucun actionnaire ne détient une part significative du capital, les administrateurs externes et indépendants sont nombreux et efficaces.

b) *L'influence de la dispersion du capital sur la présence des comités spécialisés au sein du CA*

Il s'agit d'effectuer un tableau croisé entre ces deux variables afin de ressortir le lien existant entre ces deux variables.

Tableau 4: la relation entre la dispersion du capital et la présence de comité spécialisé au sein du CA

			Le CA dispose des comités spécialisés		Total	
			Oui	Non		
Dispersion du capital	Faible	Effectif	15	20	35	
		Effectif théorique	20,7	14,3	35,0	
		% dans dispersion du capital	42,9%	57,1%	100,0%	
		% dans le CA dispose des comités spécialisés	41,7%	80,0%	57,4%	
		% du total	24,6%	32,8%	57,4%	
	Forte	Effectif	21	5	26	
		Effectif théorique	15,3	10,7	26,0	
		% dans dispersion du capital	80,8%	19,2%	100,0%	
		% dans le CA dispose des comités spécialisés	58,3%	20,0%	42,6%	
		% du total	34,4%	8,2%	42,6%	
Total		Effectif	36	25	61	
		Effectif théorique	36,0	25,0	61,0	
		% dans dispersion du capital	59,0%	41,0%	100,0%	
		% dans le CA dispose des comités spécialisés	100,0%	100,0%	100,0%	
		% du total	59,0%	41,0%	100,0%	
$\chi^2 \text{ cal} = 8,865$		ddl = 1	prob = 0,003	phi = -0,381	C = 0,356	

Source: nos enquêtes

Parmi les 28 entreprises ayant un capital fortement dispersé, 5 soit 19,2% n'ont pas de comités spécialisés au sein de leur CA. Par contre, 21 soit 80,8% ont au moins un comité spécialisé au sein du CA.

Dans le sous-ensemble des entreprises ayant un capital faiblement dispersé, 20 soit 57,1% n'ont pas de comités spécialisés au sein du CA. Par contre, 15 soit 42,9% ont au moins un comité spécialisé au sein du CA. Il reste cependant à vérifier la relation entre ces différentes variables. La valeur de χ^2 cal (8,865) avec $\text{ddl}=1$, est fortement supérieure à la valeur du χ^2 théorique (3,84) au seuil α de 0,05. La probabilité de significativité associée est de 0,003 donc bien inférieur à

0,05. Cela nous conduit à confirmer l'hypothèse de dépendance des variables et à rejeter par conséquent celle d'une absence de lien entre la dispersion du capital et la présence de comités spécialisés au sein du CA. De même, les valeurs de phi et de C respectivement de -0,381 et de 0,356 viennent confirmer cette existence des liens malgré le fait que les deux variables évoluent en sens inverse comme l'indique le Phi. Tous ces éléments du tableau ci-dessus nous conduisent à confirmer avec un risque de 5% de se tromper notre hypothèse H2. Il reste cependant à vérifier la relation entre ces différentes variables par la régression linéaire simple.

Tableau 5: Analyse de la régression entre la dispersion du capital et la présence de comité spécialisé au sein du CA

Récapitulatif du modèle^b

Modèle	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
2	,876 ^a	,768	,764	,2424

b. Valeurs prédictes: (constantes), dispersion du capital

ANNOVA^a

Modèle	Somme des carrés	ddl	Moyenne des carrés	F	Sig.
Régression	11,451	1	11,451	194,893	,000 ^b
2 Résidu	3,467	59	5,876		
Total	14,918	60			

a. Variable dépendante: le CA dispose des comités spécialisés

b. Valeurs prédictes: (constantes), dispersion du capital

Coefficients^a

	Coefficients non standardisés		Bêta	t	Sig.
	A	Erreur standard			
(Constante) 2 dispersion du capital	,133 ,867	,098 ,062	,876	,000 13,960	1,000 ,000

a. Variable dépendante: le CA dispose des comités spécialisés

Source: Auteurs

En effet, l'analyse de la régression simple entre la dispersion du capital et la présence de comités spécialisés au sein du CA vient confirmer le test d Khi-deux. Le tableau ci-dessus montre que le coefficient de détermination ou R-deux (R²) du modèle de régression linéaire donne une valeur qui est nettement très satisfaisant (0,768) puisque supérieur à 0,5. Il est confirmé par le test de la robustesse du modèle dans la mesure où la valeur F est égale à 194,893 et est significative au seuil de 0,000 pour 1 et 59 degré de liberté. Le modèle de régression entre la dispersion du capital (X) et la présence de comités spécialisés au sein du CA (Y) se présente de la façon suivante:

$$Y = 0,133 + 0,876 X + \epsilon$$

(13,96)

Comme on peut le constater, le coefficient de régression de la variable explicative (taille du CA) a une valeur (t) de student supérieure à 2, soit 13,96. On note par ailleurs que ce coefficient de régression est significativement différent de zéro comme l'atteste le test de la valeur de (t). En effet, ce coefficient est différent de zéro au seuil de 0,000. Pour cela, l'hypothèse H2: plus le capital est dispersé, plus le CA dispose de comité spécialisé pour contrôler les comportements managériaux des dirigeants est validé. Ceci vient infirmer les propos de Paquerot et Mtanios (1999) qui pensent que dans une firme dont l'actionnariat est dispersé, un actionnaire seul n'est pas incité à engager des ressources (créer des comités spécialisés) pour exercer un contrôle sur la gestion. En effet, il pense être seul à supporter les coûts ainsi que les risques alors que l'ensemble des actionnaires bénéficiaient de cette action.

Ces résultats viennent remettre en cause les travaux de Omri et Mehri (2003) et Mtanios et Pasquerot (1999). En effet, Omri et Mehri (2003) ajoutent que dans les entreprises à actionnariat diffus, les actionnaires minoritaires ne sont pas généralement incités à contrôler les dirigeants afin de les amener à gérer l'entreprise de façon à augmenter sa valeur. Mtanios et Pasquerot (1999). pensent que dans une firme dont l'actionnariat est dispersé, un actionnaire seul n'est pas incité à engager des ressources pour exercer un contrôle sur la gestion car il sera seul à supporter les coûts ainsi que les risques alors que l'ensemble des actionnaires bénéficiaient de cette action.

IV. CONCLUSION

L'analyse du rôle et des caractéristiques du Conseil d'Administration dans l'entreprise est de nos jours une thématique d'une grande importance pour les chercheurs en sciences de gestion. L'objet de ce travail était d'analyser l'influence d'une dilution de l'actionnariat sur le contrôle disciplinaire du dirigeant dans les entreprises camerounaises.

Les résultats obtenus permettent en effet de relever l'influence de la dilution de l'actionnariat non seulement sur le nombre d'administrateurs externes (H1) mais aussi sur la disposition de comités spécialisés de contrôle au sein du Conseil d'Administration (H2) et donc une influence sur le contrôle disciplinaire du dirigeant.

En effet, les entreprises camerounaises étant en majorité à structure de propriété concentrée doivent revoir la géographie de leur capital en l'ouvrant à de nouveaux actionnaires. Cela permettra en effet d'acquérir une diversité de ressources et d'équilibrer le pouvoir des différents actionnaires. Toutefois, les entreprises dans ce contexte, à la suite des résultats obtenus doivent adopter une structure de propriété plus diluée pour parvenir à une meilleure efficacité de leur Conseil d'Administration et par conséquent à une meilleure performance.

RÉFÉRENCES BIBLIOGRAPHIQUES

1. Alexandre H. et Paquerot M. (2000), « Efficacité des structures de contrôle et enracinement des dirigeants », *Finance Contrôle Stratégie*, Vol. 3, N 2, PP.5-29.
2. Bimene B.I. et Ngouem U.M.T (2020), « Le rôle de la bonne gouvernance d'entreprise dans la communication des informations comptables et financières: une nécessité au Cameroun », *Revue Africaine de Management*, Vol.5(1), pp.17-34.
3. Charreaux G. et Pitot- Belin J.P. (1987), « Enquête nationale sur le Conseil d'Administration des entreprises françaises », Etude PeatMarwick.
4. Charreaux G. et Pitot- Belin J.P. (1990), « Le Conseil d'Administration », Vuibert, Gestion.
5. Demsetz H. (1983), « The structure of ownership and the theory of the firm », *Journal of Law and Economics*, Vol.16, PP. 375-390.
6. Feudjo J.R. et Tchankam J.P. (2018). L'implication des actionnaires institutionnels dans la gouvernance



des entreprises: le cas d'une économie en développement. *Recherche en Sciences de Gestion*, N°0, p. 157- 182

7. Hermalin B. et Weisbach M., (1991), « The determinant of board composition », RAND, *Journal of Economics*, Vol. 19, PP. 589-606.
8. Jensen M.C. (1993), « The modern industrial revolution exist, and the failure of internal control systems », *Journal of Finance*, N 3, PP. 831-880.
9. Jensen M.C. et Meckling (1976), « Theory of the firm: managerial behavior, costs and ownership structure », *Journal of Financial economics*, Vol. 3, PP. 305-360.
10. Kini o., Kracaw W. et Mian S. (1995), « Corporate takeovers, firm performance and board composition », *Journal of Corporate Finance*, Vol. 1, N 3-4, PP. 383-412.
11. Mbaduet, J. F., Nanfoso, R. A. T., Wamba, L. D., Sahut, J. M., et Teulon, F. (2019). Pouvoir du dirigeant, gouvernance et performance financière des entreprises: le cas camerounais. *Gestion 2000*, 36(2), 61-82.
12. Mfouapon G.K et Feudjo J.R. (2013). L'efficacité du conseil d'administration dans les sociétés anonymes au Cameroun: une lecture par l'hétérogénéité des administrateurs. *La Revue Gestion et Organisation*, vol. 5, N°2, p. 196-202
13. Moungou Mbenda S.P (2017), « Le pouvoir du dirigeant dans la relation d'agence: cas des entreprises publiques au Cameroun », Association Internationale de Management Stratégique, XXVIe Conférence Internationale de Management Stratégique, Juin.
14. Mtanios, R., et Paquerot, M. (1999). Structure de propriété et sous-performance des firmes: une étude empirique sur le marché au comptant, le règlement mensuel et le second marché. *Finance contrôle stratégique*, 2(4), 157-179.
15. Omri A. et Mehri (2003), « Conseil d'Administration et performance des entreprises tunisiennes, *African administrative Studies*, N 60, PP. 20-36.
16. Shleifer A. et Vishny R.W. (1997), « A survey of corporate governance », *Journal of finance*, Vol.52, PP. 737-783.
17. Tajer, A., Ouberka, B., et Rigar, S. M. (2021). Structure de l'actionnariat et performance financière des entreprises marocaines cotées en bourse. *Revue Française d'Economie et de Gestion*, 2(8).
18. Yougang B. (2018), « Mécanismes internes de gouvernance et pérennité des établissements de micro finance au Cameroun », *Revue Africaine de Management*, Vol.3(2), p. 134-152.



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A
ADMINISTRATION AND MANAGEMENT
Volume 22 Issue 3 Version 1.0 Year 2022
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Impact of Cybersecurity Risk Management Frameworks on Malaysian Public Universities Business Performance

By Dioubate, Balla Moussa & Wan Daud, Wan Norhayate

Universiti Sultan Zainal Abidin

Abstract- The existence of many risk management procedures helps institutions to cope with challenges and select acceptable risk management techniques. Cybersecurity risk management is one of the requirements of security management and it is significantly important in understanding the entire security profile of the institution. The aims of this study is to evaluate the impact of the cybersecurity risk management process applied in Malaysian higher education institutions. It will assess the effectiveness of existing cybersecurity risk management frameworks in Malaysian higher education institutions to monitor cybersecurity risk. The method of data collection utilised in this study is a semi-structured qualitative interview. Therefore, the sampling of 10 public universities and 12 cybersecurity risk management officers from the departments in charge of information security risk management contributed to this study and the data provided were enough to reach data saturation.

Keywords: cybersecurity, cybersecurity risk management; risk management frameworks.

GJMBR-A Classification: DDC Code: 332 LCC Code: HG106



IMPACT OF CYBERSECURITY RISK MANAGEMENT FRAMEWORKS ON MALAYSIAN PUBLIC UNIVERSITIES BUSINESS PERFORMANCE

Strictly as per the compliance and regulations of:



RESEARCH | DIVERSITY | ETHICS

Impact of Cybersecurity Risk Management Frameworks on Malaysian Public Universities Business Performance

Dioubate, Balla Moussa ^a & Wan Daud, Wan Norhayate ^a

Abstract- The existence of many risk management procedures helps institutions to cope with challenges and select acceptable risk management techniques. Cybersecurity risk management is one of the requirements of security management and it is significantly important in understanding the entire security profile of the institution. The aims of this study is to evaluate the impact of the cybersecurity risk management process applied in Malaysian higher education institutions. It will assess the effectiveness of existing cybersecurity risk management frameworks in Malaysian higher education institutions to monitor cybersecurity risk. The method of data collection utilised in this study is a semi-structured qualitative interview. Therefore, the sampling of 10 public universities and 12 cybersecurity risk management officers from the departments in charge of information security risk management contributed to this study and the data provided were enough to reach data saturation. The information gathered from respondents is transcribed and coded word by word to identify themes and sub-themes. As a result, a thematic analysis of the data is performed based on the information collected from participants. It expects to discover the strengths and deficiencies of the present frameworks used in higher education institutions. However, the participants from all the universities visited for this study deliberated that the cybersecurity risk management frameworks were considered as one of the most successful innovations in the area of higher education institutions in Malaysia. It is believed that this study would contribute significantly to understanding the performance and usefulness of cybersecurity risk management frameworks in Malaysian public universities.

Keywords: cybersecurity, cybersecurity risk management; risk management frameworks.

I. INTRODUCTION

According to Boranbayev et al. (2015), the loss or dissemination of sensitive information may result in property damage, financial loss, and harm to the University's reputation, as well as inability to pay or, ultimately, loss of profit. Over the last three years, the Institution of San Francisco has made substantial investments in cybersecurity to protect against the illicit movement of funds away from the University and the theft of student, parent, staff, and alumni data, as well as to improve the development process (Grajek, 2020).

Author ^a a: Faculty of Business and Management, Universiti Sultan Zainal Abidin. e-mail: ballamoussa1508@gmail.com

According to Bandara (2014), universities in the United Kingdom (UK) hold crucial intellectual property across the study and supplementary academic materials that might be tempting targets for cyber-criminals. The universities face a collection of cybersecurity threats. These disrupt the running of a university web, and a targeted attempt to attain valuable information from webs and their users. Universities are also facing an increasing threat from persistent sources of menaces, attacking the sector's economic development in the UK and abroad. Institutions should effectively manage the cybersecurity risks to the success of higher education, and other industries (Universities UK, 2013).

Lane (2007) mentioned that the context of cybersecurity in Australian universities is convoluted and prone to obscurity therefore, a solid foundation is required for the successful implementation of cybersecurity habits in the institutions. The fact that the relevance of cybersecurity is not crucially incorporated and the protection arrangement in the context of both the corporation and the intellectual setting is a difficult balancing act. However, several Australian institutions are waiting to speak with one another about creating competent control over data security.

Kang et al. (2015), the majority of Malaysian higher education institutions (HEIs) do not include ethical hacking in their security development life cycles (SecSDLC). Despite the fact that it has shown its usefulness, these institutions do not trust it. With the fast growth of information technology, hackers are given sophisticated tools, and as a result, preserving information security is becoming a difficult challenge. Using ethical hacking techniques and processes can assist to decrease security concerns. Due to a lack of penetration assessment skills, managers are hesitant to assign this arm to defend their information from opposing hackers. Consequently, it is essential to include the risk management channel retaining knowledgeable and individual assets. Because of that, there is a need for higher education institutions to imbibe a corporate approach to the management of their security information as a component of the current governance structure (Grajek, 2017).



II. LITERATURE REVIEW

Risk attitudes in the context of cybersecurity, are linked to the opportunity for threats to exploit the vulnerabilities of an organization's assets or group of information assets (ISO/IEC, 2011; Chee & Sin, 2020). Because of the interconnectivity of computers and the ease with which many individuals may access information systems in recent years, information systems have been put at danger from accidental operator mistakes as well as natural and man-made calamities (Boltz, 1999; Talet et al., 2014). Risk management is commonly seen as a means of reducing uncertainty and its repercussions, therefore increasing the likelihood of organizational success (Talet et al., 2014). Risk management, according to the Standards Association of Australia and Standards New Zealand, defines the architecture (principles, structure, and method) of successfully managing risks (ISO/IEC, 2009). Risk management is a managerial need as well as an important component of organizational systems, comprising critical checking and management procedures. Furthermore, according to the international standards office ISO/IEC (2011), risk management coordinated actions to reduce and control risks in the company.

Cybersecurity is becoming a big concern for all individuals, including professionals, legislators, and, more broadly, all decision-makers. It has also become a serious challenge for societies that must defend against cybersecurity attacks with both preventative and reactive measures, which need intensive monitoring while still protecting freedom and avoiding mass surveillance (Fadzline, 2020). Computer security, sometimes known as cyber security or IT security, is the protection of computer systems against damage to their hardware, software, or information, as well as disruption or misdirection of the services they provide (Roca et al., 2019). To maintain company continuity, cybersecurity improves the return on investment and business prospects while reducing business risks and knowledge security from diverse threats (Sheikhpour & Modiri, 2012). However, a lack of cybersecurity can result in security breaches and attacks on the organization's records. Therefore, to ensure IS information security management (ISM) is implemented, ISM's key objectives are to avoid and minimize asset loss, maintain the organization's data, and improve the organization's information security (Hashim & Razali, 2019).

Cybersecurity risk management is the precondition of security management and is greatly meaningful in understanding the whole security profile of organizations (Talet et al., 2014; Webb et al., 2014). A successful information technology security requires effective cybersecurity risk management that provides appropriate systems of monitoring (Talet et al., 2014). The international standards ISO/IEC 27001 and ISO/IEC

27002 are involved in designing a cybersecurity management system (Clinch, 2009). According to Hashim and Razali (2019), a cybersecurity risk management approach enables many companies to conduct a mitigate degree of business risks in the most cost-effective manner. Accepting risks and their assets without protection (safeguard) or control, preventing risks, using risk-mitigation procedures, or transferring risks to other parties is therefore an effective control method that may be applied. The selection of controls, on the other hand, is based on management practices that are ideally connected to resources and the power of security solutions in accordance with the organization's commercial activities.

III. RESEARCH METHODOLOGY

Qualitative methodology is used for the scope of the research study. Qualitative research methods aim to relate comprehending social aspects of life and their methods mainly produce words, not numerical data that can be used for analysis (Bricki & Green, 2007; Moriarty, 2011; Dioubate et al., 2015). Qualitative analysts use discourse to acquire information from participants, allowing them to ask how many questions are needed to grasp the phenomena the study addresses rather than how many questions are necessary to understand the phenomenon the research addresses (Cronin, 2014; Dasgupta, 2015). As a result, the focus of this research is to look at the influence of cybersecurity risk management practices on Malaysian higher education institutions.

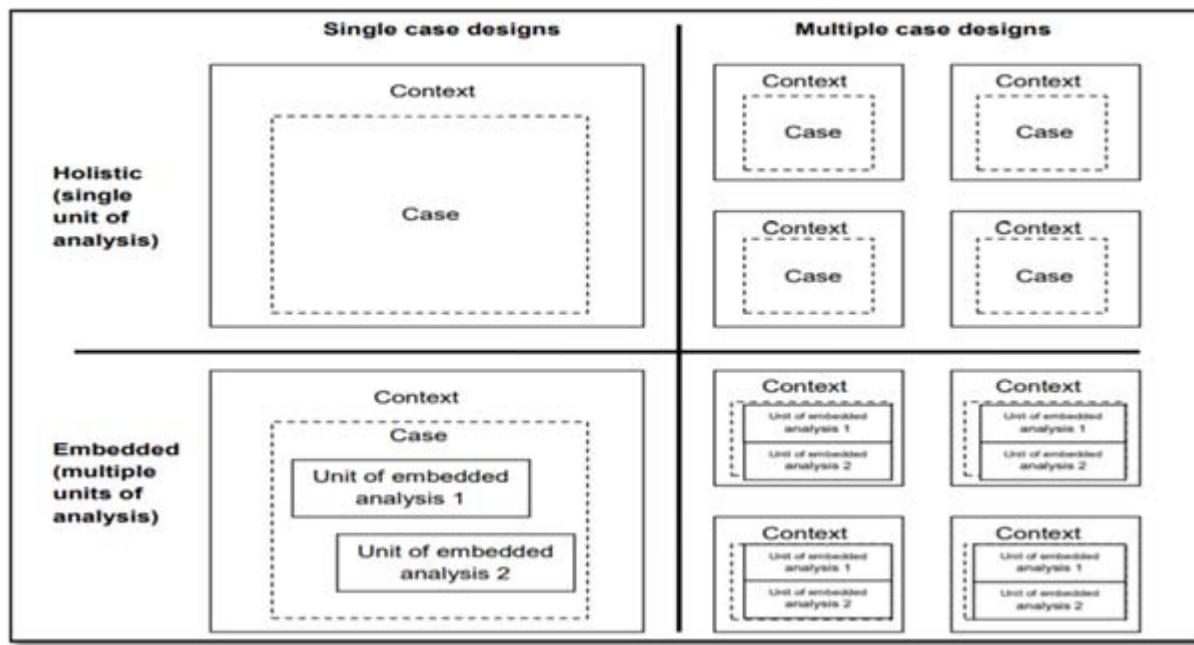
This study's data was gathered through interviews with cybersecurity risk management professionals. Regarding the nature of this study, the researcher used a qualitative case study approach to address the study's aim. The participants in this study were representatives of Malaysia's twenty (20) public institutions. Based on the criteria, the representatives from a sample of 10 public universities have participated in this study. The participants were designated from the department in charge of cybersecurity risk management in the university. The department in charge of strategic planning and risk management in most universities is to manage cybersecurity risks. The executive members of the department represented the university as a unit of the study.

The case study attempts to address how and why the questions are asked, using the participants' reference points instead of the predetermined answers imposed by the researcher (Haworth & Ali, 2001). These include exploratory, explanatory, and descriptive case studies. Before determining the research problem, exploratory case studies, fieldwork, and data collecting might be undertaken. Case studies were classified into single or multiple holistic studies by Yin (2003). Yin (2009) divided the case study's architecture into four

unique forms based on a 2×2 grid. Yin used to represent a four-fold typology.

First and foremost, the matrix demonstrates that every type of design seeks to analyze contextual factors in reaction to an event. The dotted lines indicate that the border between the case and the backdrop is not sharp. The four case study design types that resulted are (Type 1) single-case – holistic designs, (Type 2) single-case

designs, (Type 3) multiple-case designs – holistic designs, and (Type 4) multiple-case designs – embedded designs. Furthermore, Yin (2009) indicated that case studies might be holistic or have embedded analysis units. This is theoretically the product of four separate case study designs. These are shown in the figure below (Figure 1).



Source: (Yin, 2009)

Figure 1: Basic designs for case studies

In summary, the case study's nature was based on holistic multiple cases with a single unit of analysis, i.e. in the upper right quadrant of the matrix. This is where more than one case is included in the same analysis. According to Herriott and Firestone (1983), evidence indicates that multiple cases are perceived to be more stable. The researcher used purposive sampling to ease the selection of participants from the study population with a good understanding of the subject matter. Purposive sampling is a more appropriate technique for a qualitative study, particularly when selecting a participant for specific circumstances. This sampling technique is based on the expert's judgment when choosing cases, or the researcher selects cases with a particular intent in mind (Ishak & Bakar, 2014).

The selected participants have significant knowledge in cybersecurity risk management to answer the interview questions. Doody and Noonan (2013) suggested the use of an interview guide before starting data collection. The researcher utilized the interview method with participants to collect the data. The interviews with participants from the department in charge of cybersecurity risk management in Malaysian

higher education institutions were recorded and transcribed word-to-word. The researcher transcribed the audio-recorded interviews and coded the data sentence by sentence to identify the themes and subthemes (Laurence et al., 2010; Molok et al., 2013). However, in this research, the code was successively given to each participant, starting with the code number P (1) for the first participant until the code number P (10) for the last participant.

The researcher used NVivo 12 software for coding based on the transcripts made from the interview record, documents, and observations to identify the words used by respondents during the interview. The researcher applied the auto coding method to categorize research questions by source types, such as research questions and emerging themes. The evolving themes allowed us to reach the objective of this study which is to examine the impact of the existing cybersecurity risk management frameworks on the business performance of the higher education institutions in Malaysia.

IV. FINDINGS

The investigation's findings are based on interviews with 12 participants who participated in in-

depth, face-to-face interviews with cybersecurity risk management officials from Malaysia's ten public institutions. This section summarizes the interview

outcomes from the ten university samples shown in Table 1.

Table 1: Research Question, Themes, Sub-Themes, Sources, and References exported from NVivo 12 software

Research Question	Themes	Sub-Themes	Sources	References
How is the impact of the cybersecurity risk management frameworks on the business performance of the higher education institutions in Malaysia?	Risk Management Framework and Universities Performances	Framework Evaluation for University	6	10
		Performance	10	19
		Value	3	5
	Security of Information and Data	Information Security	10	53
		Information Data	5	22

a) *Themes 1: Risk Management Framework and Universities Performances*

This theme analyzed systematically the cybersecurity risk management process to find out the contribution by evaluating the frameworks in terms of performance and value. The following sub-themes framework evaluation, the Performance of the framework on the university, and the value were discussed in this section.

Sub-theme 1a: Framework Evaluation for University

Public Universities in Malaysia are using cybersecurity risk management frameworks to facilitate the functioning, the assessment of the current frameworks permitted to know how they influence the risk management process as stated by these participants

I think ISMS implementation in the university has become one of the university development success factors.... Because the university has grown but one of the success factors is (P3).

Evaluation measurement of their effectiveness for risk management sometimes, you can look from one quantitative perspective you can look from the qualitative perspective (P6).

I just identify or measures the effectiveness through how many phones I received asking or seeking help to prepare the ISMS risk register. I consider the level of effectiveness of the framework to increase parallel with the number of phone calls I received (P7 and P8).

The implementation of cybersecurity risk management frameworks was a successful innovation. It has contributed to increase security and reduce the cyberattack that destroys the reputation and economic profit of the universities.

Sub-theme 1 b Performance

The framework is supporting the performance of the university regarding the knowledge base production but mainly the money as profit, which revealed that the

strength was improved, the integrity and the reputation of the school were saved after the implementation of the framework.

It will be better and so on ..., so business-wise business performance for this institution will be positive (P 4 and P 5).

So this is where a framework ... can help strengthen the integrity of information can indirectly also improve the reputation. But reputation is also important (P 9).

So, performance for me is sustaining the performance and also can get more value to keep more value but in terms of money, I'm not sure that because the university is not a production base (P 6).

The performance of the frameworks is linked to the knowledge production, the strength, values increased, and the protection of the institution's reputation. It maintains the sustainability and trustworthiness of the universities.

Sub-theme 1c Value

The process of framework implementation instructed by the Malaysian government contributed to add values to the university operation and management and to maintain the sustainability of the institutions.

The implementation of this framework allows us to learn more about risk related to information systems from experienced and knowledgeable people in this area (P 4 and P 5).

we say that our information security management in the campus is "in the same" place we are save that is the value for the university part of the university success factor (P 3).

I think the main value is sustainability, as I mentioned to your risk is about having a very conducive environment. So, it's about sustainability (P 6).

It gives us positive value, positive value for our institution because IT is quite heavy data protection, people feel that they have secured all the information

supply to us has been secured. The value it can bring is to increase the level of people's trust in our organization (P 7 and P 8).

The effectiveness is shown quantitatively and qualitatively this has improved and brought value and trust to the university. The framework implementation has given a positive value to the university. Therefore, the number of students and income of the university have increased.

b) Themes 2: Security of information and Data

This theme was related to the digital information and data used as a source of communication inside the university. The security of information is very important for the reputation of the university. The safeguard of information should be practical in terms of confidentiality, integrity, and availability (CIA). There is a necessity to protect physical and digital data in the university management system, especially for the examination process. The sub-themes are information security and information data.

Sub-theme 2a Information security

This participant pointed out the importance of having a good cybersecurity system in the university to preserve the integrity of the school and maintain its reputation. The safeguard of sensitive data in terms of confidentiality, integrity, and availability is necessary particularly in the examination process of the university.

We need a bigger example like physical security for example because some of the threats come from physical security... to make sure to secure all of these you know what we call it all physical (P 3).

When we have issues like fraud or previously we have the issue when they attacked our server. But PPKT has done a good job where we have a very secure server (P 1).

We implemented the framework ok. We have to secure the data center. The secure data center that's means we are safe. We are safe in terms of the threats from the internet from outside (P 3)

This is the most factor why do we need to consider implementing this information risk management because we want people not only the student but also the staff to have a high trust, high trust in how we protect the information (P 3).

From the cybersecurity protection perspective, the integrity of information is very crucial and critical in projecting the image and the reputation of the institution (P 9).

Cybersecurity is very technical knowledge and the appropriate right person is very important to look at this information security risk in the institutions (P 6).

The security of information in terms of confidentiality, integrity, and availability are the most part for students and staff. The framework is implemented to secure information and prepare well technical staff to protected digital, physical, and sensitive data.

Sub-theme 2b Information Data

Implementing a cybersecurity system protects data in the university and preserves sensitives data of students and staff against natural disasters and breaching. It has given confidence to universities for their operation

So from the data center management, we analyze what's the current situation risk for our data center. we do the analysis. Then we compare with the statements what we call the ISMS (P 2).

First is university (A3) staff, they must wear their staff ID... For the outsider, we have the IT renders make with something configuration because we have 200 data servers in the data center (P 3).

So we have to define the confidentiality of the information, the availability of the data, and any assets that support the protection... So what we did was limited the scope for one of the most important processes in the academic activities were this high risk of information confidentiality, integrity, and availability especially related to exams and evaluation for example (P 9).

A cybersecurity risk management in the university secures the examination process, students, and staff data which contributed directly to the business performance of the institutions. However, the practice of policy to access and control Datacenter was implemented is to secure vital information for the reputation of the school.

V. RESULTS AND DISCUSSION

a) Discussion on Risk Management and Universities Performances

According to Ismail et al. (2010), Framework Evaluation for University will improve the company's efficiency of having successful cybersecurity risk management. Around the same time, it also helps to accomplish the goals of the organizations. The feedback from participants displayed that the affluence of the use of the framework in the University as proof of the success of the implementation. This has contributed to an increase in new international students' arrival, which has affected the school's income. All of Malaysia's public autonomous universities' risk management activities, including strategy, risk management systems, resources and technology, and quality improvement, are intended to have a positive and important influence on risk management practices (Shoki et al., 2014). Participants in this survey agreed that implementing information security risk management frameworks was one of the most effective innovations in Malaysian higher education institutions. This framework is the safety risk management to ensure an educational environment that recognizes and assesses security risks emerging in the University's computing environment (Joshi & Singh, 2017).

The interviews of the participants in this study showed that in Malaysian higher education institutions, the use of the cybersecurity risk management framework has contributed to increase the security and reduce the cyberattack that destroys the reputation and economic profit of the universities. Another study from Ismail et al. (2010) found that having successful risk management can improve the efficiency of organizations. Around the same time, it also helps to accomplish the goals of the organizations.

According to Shoki et al. (2014), the Enterprise Risk Management Framework (ERM) is a university-wide risk management process applied in a strategic setting across the University, designed to identify potential events that may have a positive or negative impact on the University and designed to manage risks so that they are within the risk appetite (Shoki et al., 2014). Furthermore, additional research has discovered that introducing ERM or successfully executing risk management techniques has an impact on organizational efficiency (COSO, 2004 & Gordon et al., 2009).

Organizations that adopt good risk management have been successful, but those who do not participate in this practice have been ineffective (Salman and Zain Ul-Abideen, 2010). Risk management leads to the verifiable achievement of goals and the improvement of performance (MS ISO 31000:2010). As a result, it is reasonable to expect that good risk management techniques would contribute to organizational performance at Malaysia's public autonomous institutions.

Universities are education-based institutions. Therefore, one of the most critical processes is the examination which required a high level of security in terms of confidentiality, integrity, and availability. A cybersecurity risk management in the University secures the examination process, students, and staff data, which contributed directly to the business performance of the institutions. Therefore, the implementation of the frameworks is directly linked to the outcome of the University in terms of knowledge production, the strength and values increased, and the protection of the institution's reputation. The framework's effectiveness is shown quantitatively and qualitatively, and it brought value and trust to the University. It should contribute to the growth of the new students' arrival, which has increased the income and rank of the University.

b) Discussion on Risk Management and Education Institutions

ISO/IEC 27001 includes components such as security policy, cybersecurity agency, asset management, and so on. Human capital, physical and environmental protection, connection and operational management, access control, information system procurement, installation, and maintenance,

cybersecurity incident management, business continuity management, and enforcement (Ismail et al., 2010).

The interviewees informed that cybersecurity gave the importance of implementing the framework to secure information in terms of confidentiality, availability, and integrity. They also mentioned the importance of having a while prepared technical staff secure digital and physical data to preserve the university's reputation. This showed the importance of implementing a safe framework to protect information and have trained technical staff to secure digital and physical data and preserve sensitive data. This study deliberated the protection of information data in terms of confidentiality, integrity, and availability. Therefore, in some universities, there was a policy to access the Datacenter implemented by the management to secure vital information stored inside. This was done to increase the university's reputation, which is very important because it is tough to repair once it is damaged.

The dissemination of information to external stakeholders will result in conclusions regarding their perception of this danger. The point of view of the company's principles and challenges differs from the point of view of internal understanding. This might offer management with new information that they had not previously suspected (Suray et al., 2019). Thus, the participants showed that the precautions practiced by managing to secure data by making policies contributed to maintaining the status of the university high. The cybersecurity policy outlined the safeguards for information data in terms of confidentiality, integrity, and availability.

VI. CONCLUSION

The purpose of this research is to evaluate the impact of the cybersecurity risk management approach utilized in Malaysian institutions. The study's goal was to assess the efficiency of Malaysian higher education institutions' existing cybersecurity risk management systems. As a result, once such programs are implemented, the institutional practice of integrating risk management into university culture and business operations is improved. Another piece of evidence provided by participants indicated that cybersecurity risk management frameworks had a beneficial influence on institutions. advises that higher education institutions improve their cybersecurity risk management practices (Higher education institutions). Although some higher education institutions may adopt a risk management framework simply because the government requires it, evidence from the findings show that institutions that adopt the framework primarily to control cybersecurity risk end up with programs that rely heavily on management strategies. Therefore, the issues of universities' performances can be solved by adopting a framework to improve the risk management practices,

decision-making processes, and crisis planning. In the future, this study will consider the recommendation made by a participant to develop an updated cybersecurity risk management framework.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Abdul Molok, N. N. A., Chang, S., & Ahmad, A. (2013). Disclosure of organizational information on social media: Perspectives from security managers.
2. Bandara, I., Ioras, F., & Maher, K. (2014). Cyber Security Concerns in E-Learning Education. Proceedings of ICERI2014 Conference, (November), 728–734.
3. Boltz, J. (1999). Informational Security Risk Assessment: Practices of Leading Organizations. DIANE Publishing.
4. Boranbayev, A., Mazhitov, M., & Kakhanov, Z. (2015). Implementation of Security Systems for Prevention of Loss of Information at Organizations of Higher Education. 2015 12th International Conference on Information Technology - New Generations, (Itng), 802–804.
5. Bricki, N., & Green, J. (2007). A guide to using qualitative research methodology.
6. Chee, L. C., & Sin, T. S. (2020). The significance of personal value, risk attitude and trust on life insurance ownership in the northern regions of Malaysia. *Jurnal Pengurusan*, 58, 67–78. <https://doi.org/10.17576/pengurusan-2020-58-06>
7. Clinch, J. (2009). ITIL V3 and Information Security. Best Management Practice.
8. Committee of Sponsoring Organizations of the Treadway Commission. (2004). Enterprise risk management—Integrated framework: Executive summary. New York, NY: Author.
9. Cronin, C. (2014). Using case study research as a rigorous form of inquiry. *Nurse Researcher*, 21(5), 19-27. doi:10.7748/nr.21.5.19.e1240
10. Dasgupta, M. (2015). Exploring the relevance of case study research. *Vision: The Journal of Business Perspective*, 19, 147-160. doi:10.1177/0972262915575661
11. Dioubate, B.M., Molok, N.N.A., Talib, S. and Tap, A.O.M., 2015. Risk assessment model for organizational information security. *ARPN Journal of Engineering and Applied Sciences*, 10(23), pp.17607-17613.
12. Doody, O., & Noonan, M. (2013). Preparing and conducting interviews to collect data.
13. Escrivá G, Romero R, Ramada D and Onrubia R 2013 Seguridad informática (Madrid: Macmillan Iberia S.A.).
14. Fadzline, P. (2020). The Challenges and Solutions of Cybersecurity Among Malaysian Companies. April. <https://doi.org/10.4018/978-1-5225-9078-1.ch005>
15. Grajek, S. (2020). TOP 10 IT ISSUES 2020: The Drive to Digital Transformation Begins. *EDUCAUSE Review*, 4.
16. Gómez. A (2014) Seguridad en equipos informáticos (Madrid: Editorial RA-MA).
17. Gordon, C. J. (2015). Addressing Security Risks for Mobile Devices: What Higher Education Leaders Should Know.
18. Hashim, R., & Razali, R. (2019). Contributing Factors for Successful Information Security Management Implementation: A Conceptual Model. *International Journal of Innovative Technology and Exploring*
19. Herriott, R. E., & Firestone, W. A. (1983). Multisite qualitative policy research: Optimizing description and generalizability. *Educational researcher*, 12(2), 14-19.
20. Ishak, N. M., & Bakar, A. Y. A. (2014). Developing sampling frame for case study: challenges and conditions. *World Journal of Education*, 4(3), 29-35.
21. Ismail, Z., Masrom, M., Sidek, Z., & Hamzah, D. (2010). Framework to Manage Information Security for Malaysian Academic Environment. *Journal of Information Assurance & Cybersecurity*, 2010, 1–16. [https://doi.org/10.5171/2010.305412ISO/IEC.\(2009\).Standard Risk Management — Principles and Guidelines on Implementation](https://doi.org/10.5171/2010.305412ISO/IEC.(2009).Standard Risk Management — Principles and Guidelines on Implementation).
22. ISO/IEC. (2011). Information technology — Security techniques — Information security risk management. Retrieved from http://nsa.wkall.Se/litteratur/iso_iec_27005-2011.pdf
23. Joshi, C., & Singh, U. K. (2017). Information security risks management framework – A step towards mitigating security risks in university network. *Journal of Information Security and Applications*, 35(October 2018), 128–137. <https://doi.org/10.1016/j.jisa.2017.06.006>.
24. Kang, C. M., Josephng, P. S., & Issa, K. (2015). A study on integrating penetration testing into the information security framework for Malaysian higher education institutions. 2015 International Symposium on Mathematical Sciences and Computing Research, ISMSC 2015 - Proceedings, 156–161.
25. Lane, T. (2007). Information security management in Australian universities - an exploratory analysis, (January), 269.
26. Laurence, C. O., Williamson, V., Sumner, K. E., Fleming, J., & others. (2010). Latte rural": the tangible and intangible factors important in the choice of a rural practice by recent GP graduates. *Rural Remote Health*, 10(2), 1316.
27. Moriarty, J. (2011). Qualitative methods overview.
28. MS ISO 31000:2010, Risk management – Principle and Guideline, Department of Standard Malaysia.
29. R. Sheikhpour and N. Modiri, "An approach to map COBIT processes to ISO/IEC 27001 information



security management controls," *Int. J. Secur. its Appl.*, vol. 6, no. 2, pp. 13–28, 2012.

30. Roca, S. K.-L.-D.-V. (2019). Cybersecurity Current Challenges and Inria's research directions. Le Chesnay Cedex, France: Inria.

31. Shoki, M., Zakuan, N., Tajudin, M. N. M., Ahmad, A., Ishak, N., & Ismail, K. (2014). A framework for risk management practices and organizational performance in higher education. *Review of Integrative Business and Economics Research*, 3(2), 422–432.

32. Sum RM and Saad ZM (2017) 3rd Int. Conf. on Qalb-Guided Leadership in Higher Education Institutions 28-42.

33. Suray, N., Karpenko, E., Dubovik, M., Shlyenov, Y., & Sterlikov, F. (2019). Risk Management at Educational Institution* Natal. 7(2), 1171–1184.

34. Talet, A. N., Mat-Zin, R., & Houari, M. (2014). Risk management and information technology projects. *International Journal of Digital Information and Wireless Communications (IJDIWC)*, 4(1), 1–9.

35. Universities UK (2013). Cyber security and universities: managing the risk. Retrieved December 31, 2017, from <http://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2013/cyber-security-and-universities.pdf>

36. Webb, J., Ahmad, A., Maynard, S. B., & Shanks, G. (2014). A situation awareness model for information security risk management. *Computers & Security*, 44, 1–15.

37. Wolf, M., Haworth, D., & Pietron, L. (2011). Measuring an information security awareness program. *The Review of Business Information Systems*, 15, 9-21. Retrieved from <http://journals.cluteonline.com/index.php/RBIS>

38. Yin, R. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage

39. Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage.

40. Yin, R. K. (2013). Validity and generalization in future case study evaluations. *Evaluation*, 19, 321-332. doi:10.1177/1356389013497081.



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A
ADMINISTRATION AND MANAGEMENT

Volume 22 Issue 3 Version 1.0 Year 2022

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Establishing Diversity Targets for Race and Ethnicity in the Organization

By Galina Manahilova

SouthWest University "Neofit Rilski"

Abstract- The demographic misrepresentation in organizations is a key business and social issue across the world in establishments of all kinds. In many institutions and businesses there is a conscious effort to improve diversity, but understanding and calculating what constitutes a diverse workforce is challenging. The purpose of this paper is to provide methodology for calculating diversity parameters for race and ethnicity based on country and business specifics.

Keywords: diversity, analytics.

GJMBR-A Classification: JEL Code: M14, D7



Strictly as per the compliance and regulations of:



RESEARCH | DIVERSITY | ETHICS

Establishing Diversity Targets for Race and Ethnicity in the Organization

Galina Manahilova

Abstract- The demographic misrepresentation in organizations is a key business and social issue across the world in establishments of all kinds. In many institutions and businesses there is a conscious effort to improve diversity, but understanding and calculating what constitutes a diverse workforce is challenging. The purpose of this paper is to provide methodology for calculating diversity parameters for race and ethnicity based on country and business specifics.

Keywords: diversity, analytics.

I. DIVERSITY DEFINITION AND HISTORY

There are numerous definitions of diversity published in dictionaries, publications and books.

The most comprehensive definition is provided by the Global Diversity Practice organization: "Diversity is any dimension that can be used to differentiate groups and people from one another. In a nutshell, it's about empowering people by respecting and appreciating what makes them different, in terms of age, gender, ethnicity, religion, disability, sexual orientation, education, and national origin.". (Global Diversity Practice, 2022).

II. ANALYZING DIVERSITY IN ORGANIZATIONS

Governments and large corporations have been taking actions to improve diversity and inclusion within their organizations. Many of them have formed medium to large teams with high level management and the predominant goal of improving diversity. One of the main data points that they review first is employee structure, in most cases, by gender and ethnicity. This information is usually available as part of the organizations' employee records. The subsequent set of essential data is to establish diversity targets.

Many companies have simply adopted the target of a broader society diversity. These organizations are hence being partial to the following definition by Wah: "Diversity", refers to an employee base that is representative of the differences apparent in the broader society (Wah, 1999, p24-30). If the definition is interpreted as simple as what it states, then, for example, if the USA female population is 50.8% (Census, 2022), subsequently 50.8% of employees

should be female at any level. Through various experiences it has been shown that a majority of larger organizations have made the same assumption and are using the overall population distribution as the diversity target at all levels.

This approach should not be followed as there are factors that have an impact on the population count and distribution. These variables must be considered when diversity targets are created. This paper will review the following two criteria: labor participation rate and completed degree. For better precision other factors can be evaluated including but not limited to geographical distribution, industry requirements, experience, etc.

III. DIVERSITY TARGET CALCULATIONS

For one to calculate the diversity target by level, the starting criteria should always be the national population. Based on Census, the estimated USA populations as of July 2021 is 331,893,745. The base population should be first adjusted with these numbers—6% under 18 and 16.5% over 65—as we are looking for people of working age. The updated population will then be adjusted for participation rate which varies by gender and race, and consequently the college graduate percentages will be applied.

The calculations will be made for Female, Asian Americans (Asian), African Americans (AA), Hispanic and White (Hispanic not included).

When the total population is adjusted for people of working age then the total population is changed from \$332M to \$257M, or a reduction of \$65M. The assumption here is that the 6% under the age of 18 and 16.5% over the age of 65 are the same for all genders and races. An additional level of precision can be added if gender is reduced by the actual percent of under 18 and over 65 years old for each race mentioned above.

The percent split by race and gender remains the same: female 50.8%, AA 13.4%, Asian 5.9%,

The details for the calculations are provided in Table 1.



Table 1: Diversity Calculations

Overall Population		Working W/0 <18 >66	Participation Rate			College Degree		
			159,109,695	163,607,918	56.2% 73,434,611 46.2%	38.3% 28,125,456 47.2%	36.7% 31,442,756 52.8%	
Total Population	331,893,745	257,217,652				59,568,212		
under 18	6%					49,826,147		
>65	16.50%							
Female	50.8%	168,602,022	130,666,567	56.2%	73,434,611 46.2%	38.3% 28,125,456 47.2%		
Male	49.2%	163,291,723	126,551,085	67.7%	85,675,085 53.8%	36.7% 31,442,756 52.8%		
White	76.3%	253,234,927	196,257,069					
AA	13.4%	44,473,762	34,467,165	60.5%	20,852,635 12.7%	25.2% 5,254,864 10.5%		
AIAN	1.3%	4,314,619	3,343,829	61.0%	2,039,736 1.2%			
Asian	5.9%	19,581,731	15,175,841	61.0%	9,257,263 5.7%	56.5% 5,230,354 10.5%		
NHO	0.2%	663,787	514,435	61.0%	313,806 0.2%			
Hispanic	18.5%	61,400,343	47,585,266	65.6%	31,215,934 19.1%	18.3% 5,712,516 11.5%		
Two or more races	2.8%	9,293,025	7,202,094	61.0%	4,393,278 2.7%			
White alone	60.1%	199,468,141	154,587,809	61.8%	95,535,266 58.4%	35.2% 33,628,414 67.5%		

Source: Own

a) *Adjustment calculation for Participation Rate by gender and race*

The labour force participation rate is the percentage of the working-age population — the civilian noninstitutional population age is 16 or older — in the labour force. The labour force measures how many Americans are working or are actively seeking work — it's the sum of the employed population and the unemployed population. Unemployed is defined by a person who is out of a job but has looked for work in the past month. Meanwhile, anyone who is not employed and has not looked for work in the past month is not considered to be in the labour force. (usafacts.com, 2022).

The data for the analysis in this paper is taken from the Bureau of Labor statistics (bls.gov, 2022). The following are the rates by race and gender: Female 56.2%, male 67.7%, AA 60.5%, Asian 61%, Hispanic 65.6%, and White 65.8%. When these rates are applied to the working age population, the percent for gender and race are adjusted as follows:

Female from 50.8% to 46.2%

Male from 49.2% to 53.8%

AA from 13.4% to 12.7%

Asian from 5.9% to 5.7%

Hispanic from 18.5% to 19.1%

White from 60.1% to 58.4%

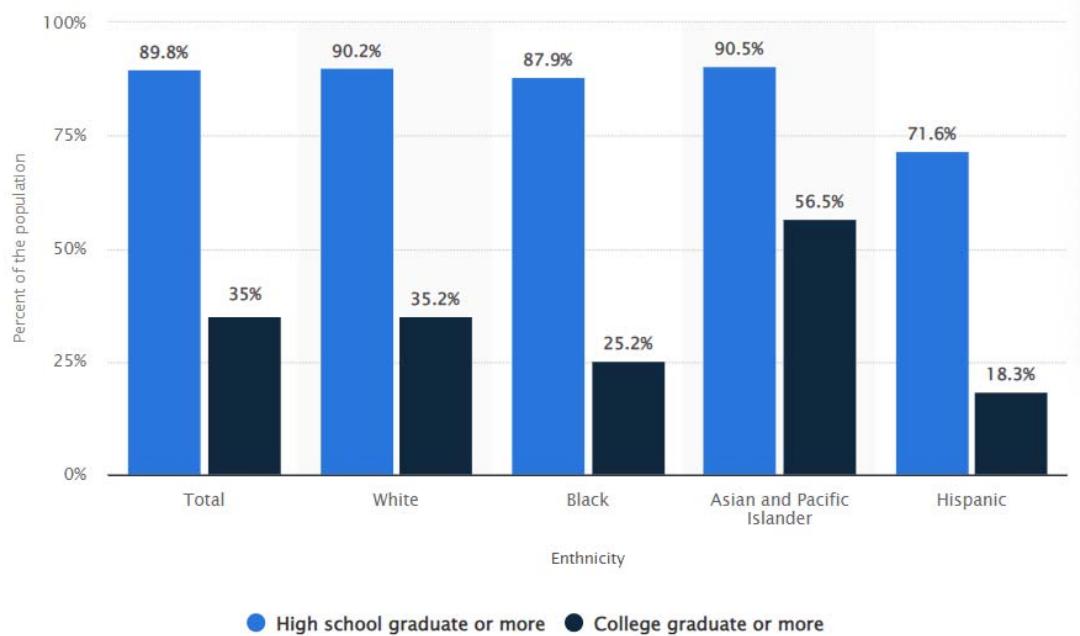
Labour force participation is a dynamic number and should be constantly reviewed and subsequently the diversity calculations should be readjusted.

b) *Adjustment calculation for College Degree by gender and race*

Another important factor that impacts the population base and should be included in the diversity calculation is college attainment. Educational attainment

refers to the highest level of education that an individual has completed.

The data for education attainment in this paper is founded on statista.com (statista.com, 2022)



Source: [statista.com](https://www.statista.com)

Figure 1: College attainment in USA by race

As you can see there are vast variances in education attainment by race.

Those variances have an impact on the population for diversity as follows:

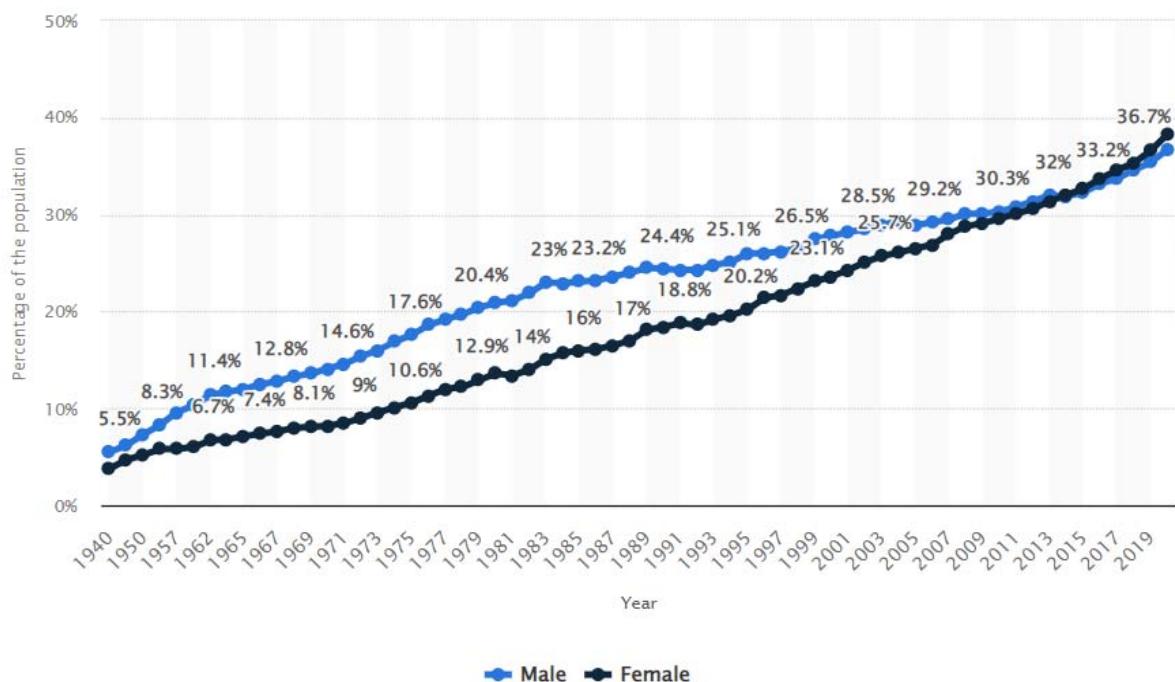
AA from 12.7% to 10.5%

Asian from 5.7% to 10.5%

Hispanic from 19.1% to 11.5%

White from 58.4% 67.5%

There is an impact based on gender and college attainment as well. The data is sourced from statita.com (statista.com, 2022). The most recent data shows that female college attainment is 38.3%, while male college attainment is 36.7%.



Source: [statista.com](https://www.statista.com)

Figure 2: College attainment in USA by gender

Based on gender and college attainment the diversity calculations will change as follows:

Female from 46.2% to 47.2%

Male from 53.8% to 52.8%.

The college attainment by gender number is dynamic, therefore the diversity calculation should be readjusted on a regular basis.

Diversity distribution numbers change whether the factors are population distribution by race and gender or other applied factors such as working population, participation rate and college attainment are adjusted for.

These are the recommended diversity targets based on the factors that were applied:

Female 47.2% (changed from 50.8%)

Male 52.8% (changed from 49.2%)

AA 10.5% (changed from 13.4%)

Asian 10.5% (changed from 5.9%)

Hispanic 11.5% (changed from 18.5%)

White 67.5% (changed from 60.1%)

Unfortunately, while there are more females with higher education than males, female work participation is lower than the forecasted female population that is appropriate for management level roles.

For the AA population and even more so for the Hispanic population, the factor that has the largest impact on reducing the population available for higher roles is their college degree. It is important to consider socioeconomic factors which may have an impact on these results. Therefore, nationwide programs should make higher education available to everyone equally.

On the contrary, increased college degree rates among Asians stand to increase the number of Asians suitable for higher level positions.

There are many other factors that should be considered when calculating diversity. These targets should be calculated by each level (entry, associate, senior) and should be based on each level's unique requirements. Each level will look different in terms of gender and diversity as these factors do not have the same population distribution.

IV. CONCLUSION AND RECOMMENDATIONS

Large organization utilize analytics to make decisions daily, therefore doing these analytics correctly is essential. When analytics is used for sensitive topics such as diversity, it can have a huge impact (negative or positive) on the organization's productivity, legal responsibilities, and moral obligations.

When considering diversity targets there cannot simply be an overall population split that is expected to have the same distribution applied to all levels in the organization. The higher the role, the higher the expectations. Therefore, the job criteria will vary, and

numerous factors should be considered while calculating diversity targets.

This paper does not provide the complete impact of all factors when calculating for diversity, but rather, it aims to show the basics for calculating diversity targets of an organization.

REFERENCES RÉFÉRENCES REFERENCIAS

Journal articles:

1. Wah, L. (1999), "Diversity at Allstate", *Management Review*, Vol. 88 No. 7, pp. 24-30.

Internet technical or research reports:

1. Bureau of Labor Statistics, Civilian Labor Force Participation, Retrieved 19/1/2022, bls.gov
2. Census, USA Population, <https://www.census.gov/quickfacts/fact/table/US/LFE046219>
3. Global Diversity Practice, What is diversity and Inclusion, 2022, Retrieved 19/1/2022, globaldiversitypractice.com/
4. Statista, Gender and Race Labor Participation, Retrieved 19/1/2022, statista.com
5. Usafacts, Labor Force Participation, Retrieved 19/1/2022, usafacts.com

GLOBAL JOURNALS GUIDELINES HANDBOOK 2022

WWW.GLOBALJOURNALS.ORG

MEMBERSHIPS

FELLOWS/ASSOCIATES OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL FMBRC/AMBRC MEMBERSHIPS

INTRODUCTION



FMBRC/AMBRC is the most prestigious membership of Global Journals accredited by Open Association of Research Society, U.S.A (OARS). The credentials of Fellow and Associate designations signify that the researcher has gained the knowledge of the fundamental and high-level concepts, and is a subject matter expert, proficient in an expertise course covering the professional code of conduct, and follows recognized standards of practice. The credentials are designated only to the researchers, scientists, and professionals that have been selected by a rigorous process by our Editorial Board and Management Board.

Associates of FMBRC/AMBRC are scientists and researchers from around the world are working on projects/researches that have huge potentials. Members support Global Journals' mission to advance technology for humanity and the profession.

FMBRC

FELLOW OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL

FELLOW OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL is the most prestigious membership of Global Journals. It is an award and membership granted to individuals that the Open Association of Research Society judges to have made a 'substantial contribution to the improvement of computer science, technology, and electronics engineering.

The primary objective is to recognize the leaders in research and scientific fields of the current era with a global perspective and to create a channel between them and other researchers for better exposure and knowledge sharing. Members are most eminent scientists, engineers, and technologists from all across the world. Fellows are elected for life through a peer review process on the basis of excellence in the respective domain. There is no limit on the number of new nominations made in any year. Each year, the Open Association of Research Society elect up to 12 new Fellow Members.



BENEFIT

TO THE INSTITUTION

GET LETTER OF APPRECIATION

Global Journals sends a letter of appreciation of author to the Dean or CEO of the University or Company of which author is a part, signed by editor in chief or chief author.



EXCLUSIVE NETWORK

GET ACCESS TO A CLOSED NETWORK

A FMBRC member gets access to a closed network of Tier 1 researchers and scientists with direct communication channel through our website. Fellows can reach out to other members or researchers directly. They should also be open to reaching out by other.

Career

Credibility

Exclusive

Reputation



CERTIFICATE

CERTIFICATE, LOR AND LASER-MOMENTO

Fellows receive a printed copy of a certificate signed by our Chief Author that may be used for academic purposes and a personal recommendation letter to the dean of member's university.

Career

Credibility

Exclusive

Reputation



DESIGNATION

GET HONORED TITLE OF MEMBERSHIP

Fellows can use the honored title of membership. The "FMBRC" is an honored title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., FMBRC or William Walldroff, M.S., FMBRC.

Career

Credibility

Exclusive

Reputation

RECOGNITION ON THE PLATFORM

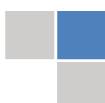
BETTER VISIBILITY AND CITATION

All the Fellow members of FMBRC get a badge of "Leading Member of Global Journals" on the Research Community that distinguishes them from others. Additionally, the profile is also partially maintained by our team for better visibility and citation. All fellows get a dedicated page on the website with their biography.

Career

Credibility

Reputation



FUTURE WORK

GET DISCOUNTS ON THE FUTURE PUBLICATIONS

Fellows receive discounts on future publications with Global Journals up to 60%. Through our recommendation programs, members also receive discounts on publications made with OARS affiliated organizations.

Career

Financial



GJ ACCOUNT

UNLIMITED FORWARD OF EMAILS

Fellows get secure and fast GJ work emails with unlimited forward of emails that they may use them as their primary email. For example, john [AT] globaljournals [DOT] org.

Career

Credibility

Reputation



PREMIUM TOOLS

ACCESS TO ALL THE PREMIUM TOOLS

To take future researches to the zenith, fellows receive access to all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Financial

CONFERENCES & EVENTS

ORGANIZE SEMINAR/CONFERENCE

Fellows are authorized to organize symposium/seminar/conference on behalf of Global Journal Incorporation (USA). They can also participate in the same organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent. Additionally, they get free research conferences (and others) alerts.

Career

Credibility

Financial

EARLY INVITATIONS

EARLY INVITATIONS TO ALL THE SYMPOSIUMS, SEMINARS, CONFERENCES

All fellows receive the early invitations to all the symposiums, seminars, conferences and webinars hosted by Global Journals in their subject.

Exclusive





PUBLISHING ARTICLES & BOOKS

EARN 60% OF SALES PROCEEDS

Fellows can publish articles (limited) without any fees. Also, they can earn up to 70% of sales proceeds from the sale of reference/review books/literature/publishing of research paper. The FMBRC member can decide its price and we can help in making the right decision.

Exclusive

Financial

REVIEWERS

GET A REMUNERATION OF 15% OF AUTHOR FEES

Fellow members are eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get a remuneration of 15% of author fees, taken from the author of a respective paper.

Financial

ACCESS TO EDITORIAL BOARD

BECOME A MEMBER OF THE EDITORIAL BOARD

Fellows may join as a member of the Editorial Board of Global Journals Incorporation (USA) after successful completion of three years as Fellow and as Peer Reviewer. Additionally, Fellows get a chance to nominate other members for Editorial Board.

Career

Credibility

Exclusive

Reputation

AND MUCH MORE

GET ACCESS TO SCIENTIFIC MUSEUMS AND OBSERVATORIES ACROSS THE GLOBE

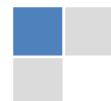
All members get access to 5 selected scientific museums and observatories across the globe. All researches published with Global Journals will be kept under deep archival facilities across regions for future protections and disaster recovery. They get 10 GB free secure cloud access for storing research files.



ASSOCIATE OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL

ASSOCIATE OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL is the membership of Global Journals awarded to individuals that the Open Association of Research Society judges to have made a 'substantial contribution to the improvement of computer science, technology, and electronics engineering.

The primary objective is to recognize the leaders in research and scientific fields of the current era with a global perspective and to create a channel between them and other researchers for better exposure and knowledge sharing. Members are most eminent scientists, engineers, and technologists from all across the world. Associate membership can later be promoted to Fellow Membership. Associates are elected for life through a peer review process on the basis of excellence in the respective domain. There is no limit on the number of new nominations made in any year. Each year, the Open Association of Research Society elect up to 12 new Associate Members.



BENEFIT

TO THE INSTITUTION

GET LETTER OF APPRECIATION

Global Journals sends a letter of appreciation of author to the Dean or CEO of the University or Company of which author is a part, signed by editor in chief or chief author.



EXCLUSIVE NETWORK

GET ACCESS TO A CLOSED NETWORK

A AMBRC member gets access to a closed network of Tier 2 researchers and scientists with direct communication channel through our website. Associates can reach out to other members or researchers directly. They should also be open to reaching out by other.

Career

Credibility

Exclusive

Reputation



CERTIFICATE

CERTIFICATE, LOR AND LASER-MOMENTO

Associates receive a printed copy of a certificate signed by our Chief Author that may be used for academic purposes and a personal recommendation letter to the dean of member's university.

Career

Credibility

Exclusive

Reputation



DESIGNATION

GET HONORED TITLE OF MEMBERSHIP

Associates can use the honored title of membership. The "AMBRC" is an honored title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., AMBRC or William Walldroff, M.S., AMBRC.

Career

Credibility

Exclusive

Reputation

RECOGNITION ON THE PLATFORM

BETTER VISIBILITY AND CITATION

All the Associate members of ASFRC get a badge of "Leading Member of Global Journals" on the Research Community that distinguishes them from others. Additionally, the profile is also partially maintained by our team for better visibility and citation. All associates get a dedicated page on the website with their biography.

Career

Credibility

Reputation



FUTURE WORK

GET DISCOUNTS ON THE FUTURE PUBLICATIONS

Associates receive discounts on the future publications with Global Journals up to 60%. Through our recommendation programs, members also receive discounts on publications made with OARS affiliated organizations.

Career

Financial



GJ ACCOUNT

UNLIMITED FORWARD OF EMAILS

Associates get secure and fast GJ work emails with 5GB forward of emails that they may use them as their primary email. For example, john [AT] globaljournals [DOT] org..

Career

Credibility

Reputation



PREMIUM TOOLS

ACCESS TO ALL THE PREMIUM TOOLS

To take future researches to the zenith, fellows receive access to almost all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Financial

CONFERENCES & EVENTS

ORGANIZE SEMINAR/CONFERENCE

Associates are authorized to organize symposium/seminar/conference on behalf of Global Journal Incorporation (USA). They can also participate in the same organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent. Additionally, they get free research conferences (and others) alerts.

Career

Credibility

Financial

EARLY INVITATIONS

EARLY INVITATIONS TO ALL THE SYMPOSIUMS, SEMINARS, CONFERENCES

All associates receive the early invitations to all the symposiums, seminars, conferences and webinars hosted by Global Journals in their subject.

Exclusive





PUBLISHING ARTICLES & BOOKS

EARN 60% OF SALES PROCEEDS

Associates can publish articles (limited) without any fees. Also, they can earn up to 30-40% of sales proceeds from the sale of reference/review books/literature/publishing of research paper.

Exclusive

Financial

REVIEWERS

GET A REMUNERATION OF 15% OF AUTHOR FEES

Fellow members are eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get a remuneration of 15% of author fees, taken from the author of a respective paper.

Financial

AND MUCH MORE

GET ACCESS TO SCIENTIFIC MUSEUMS AND OBSERVATORIES ACROSS THE GLOBE

All members get access to 2 selected scientific museums and observatories across the globe. All researches published with Global Journals will be kept under deep archival facilities across regions for future protections and disaster recovery. They get 5 GB free secure cloud access for storing research files.



ASSOCIATE	FELLOW	RESEARCH GROUP	BASIC
<p>\$4800 lifetime designation</p> <p>Certificate, LoR and Momento 2 discounted publishing/year</p> <p>Gradation of Research 10 research contacts/day</p> <p>1 GB Cloud Storage</p> <p>GJ Community Access</p>	<p>\$6800 lifetime designation</p> <p>Certificate, LoR and Momento</p> <p>Unlimited discounted publishing/year</p> <p>Gradation of Research Unlimited research contacts/day</p> <p>5 GB Cloud Storage</p> <p>Online Presense Assistance</p> <p>GJ Community Access</p>	<p>\$12500.00 organizational</p> <p>Certificates, LoRs and Momentos</p> <p>Unlimited free publishing/year</p> <p>Gradation of Research Unlimited research contacts/day</p> <p>Unlimited Cloud Storage</p> <p>Online Presense Assistance</p> <p>GJ Community Access</p>	<p>APC per article</p> <p>GJ Community Access</p>

PREFERRED AUTHOR GUIDELINES

We accept the manuscript submissions in any standard (generic) format.

We typeset manuscripts using advanced typesetting tools like Adobe In Design, CorelDraw, TeXnicCenter, and TeXStudio. We usually recommend authors submit their research using any standard format they are comfortable with, and let Global Journals do the rest.

Alternatively, you can download our basic template from <https://globaljournals.org/Template.zip>

Authors should submit their complete paper/article, including text illustrations, graphics, conclusions, artwork, and tables. Authors who are not able to submit manuscript using the form above can email the manuscript department at submit@globaljournals.org or get in touch with chiefeditor@globaljournals.org if they wish to send the abstract before submission.

BEFORE AND DURING SUBMISSION

Authors must ensure the information provided during the submission of a paper is authentic. Please go through the following checklist before submitting:

1. Authors must go through the complete author guideline and understand and *agree to Global Journals' ethics and code of conduct*, along with author responsibilities.
2. Authors must accept the privacy policy, terms, and conditions of Global Journals.
3. Ensure corresponding author's email address and postal address are accurate and reachable.
4. Manuscript to be submitted must include keywords, an abstract, a paper title, co-author(s') names and details (email address, name, phone number, and institution), figures and illustrations in vector format including appropriate captions, tables, including titles and footnotes, a conclusion, results, acknowledgments and references.
5. Authors should submit paper in a ZIP archive if any supplementary files are required along with the paper.
6. Proper permissions must be acquired for the use of any copyrighted material.
7. Manuscript submitted *must not have been submitted or published elsewhere* and all authors must be aware of the submission.

Declaration of Conflicts of Interest

It is required for authors to declare all financial, institutional, and personal relationships with other individuals and organizations that could influence (bias) their research.

POLICY ON PLAGIARISM

Plagiarism is not acceptable in Global Journals submissions at all.

Plagiarized content will not be considered for publication. We reserve the right to inform authors' institutions about plagiarism detected either before or after publication. If plagiarism is identified, we will follow COPE guidelines:

Authors are solely responsible for all the plagiarism that is found. The author must not fabricate, falsify or plagiarize existing research data. The following, if copied, will be considered plagiarism:

- Words (language)
- Ideas
- Findings
- Writings
- Diagrams
- Graphs
- Illustrations
- Lectures

- Printed material
- Graphic representations
- Computer programs
- Electronic material
- Any other original work

AUTHORSHIP POLICIES

Global Journals follows the definition of authorship set up by the Open Association of Research Society, USA. According to its guidelines, authorship criteria must be based on:

1. Substantial contributions to the conception and acquisition of data, analysis, and interpretation of findings.
2. Drafting the paper and revising it critically regarding important academic content.
3. Final approval of the version of the paper to be published.

Changes in Authorship

The corresponding author should mention the name and complete details of all co-authors during submission and in manuscript. We support addition, rearrangement, manipulation, and deletions in authors list till the early view publication of the journal. We expect that corresponding author will notify all co-authors of submission. We follow COPE guidelines for changes in authorship.

Copyright

During submission of the manuscript, the author is confirming an exclusive license agreement with Global Journals which gives Global Journals the authority to reproduce, reuse, and republish authors' research. We also believe in flexible copyright terms where copyright may remain with authors/employers/institutions as well. Contact your editor after acceptance to choose your copyright policy. You may follow this form for copyright transfers.

Appealing Decisions

Unless specified in the notification, the Editorial Board's decision on publication of the paper is final and cannot be appealed before making the major change in the manuscript.

Acknowledgments

Contributors to the research other than authors credited should be mentioned in Acknowledgments. The source of funding for the research can be included. Suppliers of resources may be mentioned along with their addresses.

Declaration of funding sources

Global Journals is in partnership with various universities, laboratories, and other institutions worldwide in the research domain. Authors are requested to disclose their source of funding during every stage of their research, such as making analysis, performing laboratory operations, computing data, and using institutional resources, from writing an article to its submission. This will also help authors to get reimbursements by requesting an open access publication letter from Global Journals and submitting to the respective funding source.

PREPARING YOUR MANUSCRIPT

Authors can submit papers and articles in an acceptable file format: MS Word (doc, docx), LaTeX (.tex, .zip or .rar including all of your files), Adobe PDF (.pdf), rich text format (.rtf), simple text document (.txt), Open Document Text (.odt), and Apple Pages (.pages). Our professional layout editors will format the entire paper according to our official guidelines. This is one of the highlights of publishing with Global Journals—authors should not be concerned about the formatting of their paper. Global Journals accepts articles and manuscripts in every major language, be it Spanish, Chinese, Japanese, Portuguese, Russian, French, German, Dutch, Italian, Greek, or any other national language, but the title, subtitle, and abstract should be in English. This will facilitate indexing and the pre-peer review process.

The following is the official style and template developed for publication of a research paper. Authors are not required to follow this style during the submission of the paper. It is just for reference purposes.



Manuscript Style Instruction (Optional)

- Microsoft Word Document Setting Instructions.
- Font type of all text should be Swis721 Lt BT.
- Page size: 8.27" x 11", left margin: 0.65, right margin: 0.65, bottom margin: 0.75.
- Paper title should be in one column of font size 24.
- Author name in font size of 11 in one column.
- Abstract: font size 9 with the word "Abstract" in bold italics.
- Main text: font size 10 with two justified columns.
- Two columns with equal column width of 3.38 and spacing of 0.2.
- First character must be three lines drop-capped.
- The paragraph before spacing of 1 pt and after of 0 pt.
- Line spacing of 1 pt.
- Large images must be in one column.
- The names of first main headings (Heading 1) must be in Roman font, capital letters, and font size of 10.
- The names of second main headings (Heading 2) must not include numbers and must be in italics with a font size of 10.

Structure and Format of Manuscript

The recommended size of an original research paper is under 15,000 words and review papers under 7,000 words. Research articles should be less than 10,000 words. Research papers are usually longer than review papers. Review papers are reports of significant research (typically less than 7,000 words, including tables, figures, and references)

A research paper must include:

- a) A title which should be relevant to the theme of the paper.
- b) A summary, known as an abstract (less than 150 words), containing the major results and conclusions.
- c) Up to 10 keywords that precisely identify the paper's subject, purpose, and focus.
- d) An introduction, giving fundamental background objectives.
- e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition, sources of information must be given, and numerical methods must be specified by reference.
- f) Results which should be presented concisely by well-designed tables and figures.
- g) Suitable statistical data should also be given.
- h) All data must have been gathered with attention to numerical detail in the planning stage.

Design has been recognized to be essential to experiments for a considerable time, and the editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned unrefereed.

- i) Discussion should cover implications and consequences and not just recapitulate the results; conclusions should also be summarized.
- j) There should be brief acknowledgments.
- k) There ought to be references in the conventional format. Global Journals recommends APA format.

Authors should carefully consider the preparation of papers to ensure that they communicate effectively. Papers are much more likely to be accepted if they are carefully designed and laid out, contain few or no errors, are summarizing, and follow instructions. They will also be published with much fewer delays than those that require much technical and editorial correction.

The Editorial Board reserves the right to make literary corrections and suggestions to improve brevity.



FORMAT STRUCTURE

It is necessary that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

All manuscripts submitted to Global Journals should include:

Title

The title page must carry an informative title that reflects the content, a running title (less than 45 characters together with spaces), names of the authors and co-authors, and the place(s) where the work was carried out.

Author details

The full postal address of any related author(s) must be specified.

Abstract

The abstract is the foundation of the research paper. It should be clear and concise and must contain the objective of the paper and inferences drawn. It is advised to not include big mathematical equations or complicated jargon.

Many researchers searching for information online will use search engines such as Google, Yahoo or others. By optimizing your paper for search engines, you will amplify the chance of someone finding it. In turn, this will make it more likely to be viewed and cited in further works. Global Journals has compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

Keywords

A major lynchpin of research work for the writing of research papers is the keyword search, which one will employ to find both library and internet resources. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining, and indexing.

One must be persistent and creative in using keywords. An effective keyword search requires a strategy: planning of a list of possible keywords and phrases to try.

Choice of the main keywords is the first tool of writing a research paper. Research paper writing is an art. Keyword search should be as strategic as possible.

One should start brainstorming lists of potential keywords before even beginning searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in a research paper?" Then consider synonyms for the important words.

It may take the discovery of only one important paper to steer in the right keyword direction because, in most databases, the keywords under which a research paper is abstracted are listed with the paper.

Numerical Methods

Numerical methods used should be transparent and, where appropriate, supported by references.

Abbreviations

Authors must list all the abbreviations used in the paper at the end of the paper or in a separate table before using them.

Formulas and equations

Authors are advised to submit any mathematical equation using either MathJax, KaTeX, or LaTeX, or in a very high-quality image.

Tables, Figures, and Figure Legends

Tables: Tables should be cautiously designed, uncrowned, and include only essential data. Each must have an Arabic number, e.g., Table 4, a self-explanatory caption, and be on a separate sheet. Authors must submit tables in an editable format and not as images. References to these tables (if any) must be mentioned accurately.



Figures

Figures are supposed to be submitted as separate files. Always include a citation in the text for each figure using Arabic numbers, e.g., Fig. 4. Artwork must be submitted online in vector electronic form or by emailing it.

PREPARATION OF ELECTRONIC FIGURES FOR PUBLICATION

Although low-quality images are sufficient for review purposes, print publication requires high-quality images to prevent the final product being blurred or fuzzy. Submit (possibly by e-mail) EPS (line art) or TIFF (halftone/ photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Avoid using pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings). Please give the data for figures in black and white or submit a Color Work Agreement form. EPS files must be saved with fonts embedded (and with a TIFF preview, if possible).

For scanned images, the scanning resolution at final image size ought to be as follows to ensure good reproduction: line art: >650 dpi; halftones (including gel photographs): >350 dpi; figures containing both halftone and line images: >650 dpi.

Color charges: Authors are advised to pay the full cost for the reproduction of their color artwork. Hence, please note that if there is color artwork in your manuscript when it is accepted for publication, we would require you to complete and return a Color Work Agreement form before your paper can be published. Also, you can email your editor to remove the color fee after acceptance of the paper.

TIPS FOR WRITING A GOOD QUALITY MANAGEMENT RESEARCH PAPER

Techniques for writing a good quality management and business research paper:

1. Choosing the topic: In most cases, the topic is selected by the interests of the author, but it can also be suggested by the guides. You can have several topics, and then judge which you are most comfortable with. This may be done by asking several questions of yourself, like "Will I be able to carry out a search in this area? Will I find all necessary resources to accomplish the search? Will I be able to find all information in this field area?" If the answer to this type of question is "yes," then you ought to choose that topic. In most cases, you may have to conduct surveys and visit several places. Also, you might have to do a lot of work to find all the rises and falls of the various data on that subject. Sometimes, detailed information plays a vital role, instead of short information. Evaluators are human: The first thing to remember is that evaluators are also human beings. They are not only meant for rejecting a paper. They are here to evaluate your paper. So present your best aspect.

2. Think like evaluators: If you are in confusion or getting demotivated because your paper may not be accepted by the evaluators, then think, and try to evaluate your paper like an evaluator. Try to understand what an evaluator wants in your research paper, and you will automatically have your answer. Make blueprints of paper: The outline is the plan or framework that will help you to arrange your thoughts. It will make your paper logical. But remember that all points of your outline must be related to the topic you have chosen.

3. Ask your guides: If you are having any difficulty with your research, then do not hesitate to share your difficulty with your guide (if you have one). They will surely help you out and resolve your doubts. If you can't clarify what exactly you require for your work, then ask your supervisor to help you with an alternative. He or she might also provide you with a list of essential readings.

4. Use of computer is recommended: As you are doing research in the field of management and business then this point is quite obvious. Use right software: Always use good quality software packages. If you are not capable of judging good software, then you can lose the quality of your paper unknowingly. There are various programs available to help you which you can get through the internet.

5. Use the internet for help: An excellent start for your paper is using Google. It is a wondrous search engine, where you can have your doubts resolved. You may also read some answers for the frequent question of how to write your research paper or find a model research paper. You can download books from the internet. If you have all the required books, place importance on reading, selecting, and analyzing the specified information. Then sketch out your research paper. Use big pictures: You may use encyclopedias like Wikipedia to get pictures with the best resolution. At Global Journals, you should strictly follow here.



6. Bookmarks are useful: When you read any book or magazine, you generally use bookmarks, right? It is a good habit which helps to not lose your continuity. You should always use bookmarks while searching on the internet also, which will make your search easier.

7. Revise what you wrote: When you write anything, always read it, summarize it, and then finalize it.

8. Make every effort: Make every effort to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in the introduction—what is the need for a particular research paper. Polish your work with good writing skills and always give an evaluator what he wants. Make backups: When you are going to do any important thing like making a research paper, you should always have backup copies of it either on your computer or on paper. This protects you from losing any portion of your important data.

9. Produce good diagrams of your own: Always try to include good charts or diagrams in your paper to improve quality. Using several unnecessary diagrams will degrade the quality of your paper by creating a hodgepodge. So always try to include diagrams which were made by you to improve the readability of your paper. Use of direct quotes: When you do research relevant to literature, history, or current affairs, then use of quotes becomes essential, but if the study is relevant to science, use of quotes is not preferable.

10. Use proper verb tense: Use proper verb tenses in your paper. Use past tense to present those events that have happened. Use present tense to indicate events that are going on. Use future tense to indicate events that will happen in the future. Use of wrong tenses will confuse the evaluator. Avoid sentences that are incomplete.

11. Pick a good study spot: Always try to pick a spot for your research which is quiet. Not every spot is good for studying.

12. Know what you know: Always try to know what you know by making objectives, otherwise you will be confused and unable to achieve your target.

13. Use good grammar: Always use good grammar and words that will have a positive impact on the evaluator; use of good vocabulary does not mean using tough words which the evaluator has to find in a dictionary. Do not fragment sentences. Eliminate one-word sentences. Do not ever use a big word when a smaller one would suffice.

Verbs have to be in agreement with their subjects. In a research paper, do not start sentences with conjunctions or finish them with prepositions. When writing formally, it is advisable to never split an infinitive because someone will (wrongly) complain. Avoid clichés like a disease. Always shun irritating alliteration. Use language which is simple and straightforward. Put together a neat summary.

14. Arrangement of information: Each section of the main body should start with an opening sentence, and there should be a changeover at the end of the section. Give only valid and powerful arguments for your topic. You may also maintain your arguments with records.

15. Never start at the last minute: Always allow enough time for research work. Leaving everything to the last minute will degrade your paper and spoil your work.

16. Multitasking in research is not good: Doing several things at the same time is a bad habit in the case of research activity. Research is an area where everything has a particular time slot. Divide your research work into parts, and do a particular part in a particular time slot.

17. Never copy others' work: Never copy others' work and give it your name because if the evaluator has seen it anywhere, you will be in trouble. Take proper rest and food: No matter how many hours you spend on your research activity, if you are not taking care of your health, then all your efforts will have been in vain. For quality research, take proper rest and food.

18. Go to seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.

19. Refresh your mind after intervals: Try to give your mind a rest by listening to soft music or sleeping in intervals. This will also improve your memory. Acquire colleagues: Always try to acquire colleagues. No matter how sharp you are, if you acquire colleagues, they can give you ideas which will be helpful to your research.

20. Think technically: Always think technically. If anything happens, search for its reasons, benefits, and demerits. Think and then print: When you go to print your paper, check that tables are not split, headings are not detached from their descriptions, and page sequence is maintained.



21. Adding unnecessary information: Do not add unnecessary information like "I have used MS Excel to draw graphs." Irrelevant and inappropriate material is superfluous. Foreign terminology and phrases are not apropos. One should never take a broad view. Analogy is like feathers on a snake. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grown readers. Never oversimplify: When adding material to your research paper, never go for oversimplification; this will definitely irritate the evaluator. Be specific. Never use rhythmic redundancies. Contractions shouldn't be used in a research paper. Comparisons are as terrible as clichés. Give up ampersands, abbreviations, and so on. Remove commas that are not necessary. Parenthetical words should be between brackets or commas. Understatement is always the best way to put forward earth-shaking thoughts. Give a detailed literary review.

22. Report concluded results: Use concluded results. From raw data, filter the results, and then conclude your studies based on measurements and observations taken. An appropriate number of decimal places should be used. Parenthetical remarks are prohibited here. Proofread carefully at the final stage. At the end, give an outline to your arguments. Spot perspectives of further study of the subject. Justify your conclusion at the bottom sufficiently, which will probably include examples.

23. Upon conclusion: Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium through which your research is going to be in print for the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects of your research.

INFORMAL GUIDELINES OF RESEARCH PAPER WRITING

Key points to remember:

- Submit all work in its final form.
- Write your paper in the form which is presented in the guidelines using the template.
- Please note the criteria peer reviewers will use for grading the final paper.

Final points:

One purpose of organizing a research paper is to let people interpret your efforts selectively. The journal requires the following sections, submitted in the order listed, with each section starting on a new page:

The introduction: This will be compiled from reference material and reflect the design processes or outline of basis that directed you to make a study. As you carry out the process of study, the method and process section will be constructed like that. The results segment will show related statistics in nearly sequential order and direct reviewers to similar intellectual paths throughout the data that you gathered to carry out your study.

The discussion section:

This will provide understanding of the data and projections as to the implications of the results. The use of good quality references throughout the paper will give the effort trustworthiness by representing an alertness to prior workings.

Writing a research paper is not an easy job, no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record-keeping are the only means to make straightforward progression.

General style:

Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear: Adhere to recommended page limits.

Mistakes to avoid:

- Insertion of a title at the foot of a page with subsequent text on the next page.
- Separating a table, chart, or figure—confine each to a single page.
- Submitting a manuscript with pages out of sequence.
- In every section of your document, use standard writing style, including articles ("a" and "the").
- Keep paying attention to the topic of the paper.



- Use paragraphs to split each significant point (excluding the abstract).
- Align the primary line of each section.
- Present your points in sound order.
- Use present tense to report well-accepted matters.
- Use past tense to describe specific results.
- Do not use familiar wording; don't address the reviewer directly. Don't use slang or superlatives.
- Avoid use of extra pictures—include only those figures essential to presenting results.

Title page:

Choose a revealing title. It should be short and include the name(s) and address(es) of all authors. It should not have acronyms or abbreviations or exceed two printed lines.

Abstract: This summary should be two hundred words or less. It should clearly and briefly explain the key findings reported in the manuscript and must have precise statistics. It should not have acronyms or abbreviations. It should be logical in itself. Do not cite references at this point.

An abstract is a brief, distinct paragraph summary of finished work or work in development. In a minute or less, a reviewer can be taught the foundation behind the study, common approaches to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Use comprehensive sentences, and do not sacrifice readability for brevity; you can maintain it succinctly by phrasing sentences so that they provide more than a lone rationale. The author can at this moment go straight to shortening the outcome. Sum up the study with the subsequent elements in any summary. Try to limit the initial two items to no more than one line each.

Reason for writing the article—theory, overall issue, purpose.

- Fundamental goal.
- To-the-point depiction of the research.
- Consequences, including definite statistics—if the consequences are quantitative in nature, account for this; results of any numerical analysis should be reported. Significant conclusions or questions that emerge from the research.

Approach:

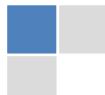
- Single section and succinct.
- An outline of the job done is always written in past tense.
- Concentrate on shortening results—limit background information to a verdict or two.
- Exact spelling, clarity of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else.

Introduction:

The introduction should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable of comprehending and calculating the purpose of your study without having to refer to other works. The basis for the study should be offered. Give the most important references, but avoid making a comprehensive appraisal of the topic. Describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will give no attention to your results. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here.

The following approach can create a valuable beginning:

- Explain the value (significance) of the study.
- Defend the model—why did you employ this particular system or method? What is its compensation? Remark upon its appropriateness from an abstract point of view as well as pointing out sensible reasons for using it.
- Present a justification. State your particular theory(-ies) or aim(s), and describe the logic that led you to choose them.
- Briefly explain the study's tentative purpose and how it meets the declared objectives.



Approach:

Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done. Sort out your thoughts; manufacture one key point for every section. If you make the four points listed above, you will need at least four paragraphs. Present surrounding information only when it is necessary to support a situation. The reviewer does not desire to read everything you know about a topic. Shape the theory specifically—do not take a broad view.

As always, give awareness to spelling, simplicity, and correctness of sentences and phrases.

Procedures (methods and materials):

This part is supposed to be the easiest to carve if you have good skills. A soundly written procedures segment allows a capable scientist to replicate your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order, but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt to give the least amount of information that would permit another capable scientist to replicate your outcome, but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section.

When a technique is used that has been well-described in another section, mention the specific item describing the way, but draw the basic principle while stating the situation. The purpose is to show all particular resources and broad procedures so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step-by-step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

Materials may be reported in part of a section or else they may be recognized along with your measures.

Methods:

- Report the method and not the particulars of each process that engaged the same methodology.
- Describe the method entirely.
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures.
- Simplify—detail how procedures were completed, not how they were performed on a particular day.
- If well-known procedures were used, account for the procedure by name, possibly with a reference, and that's all.

Approach:

It is embarrassing to use vigorous voice when documenting methods without using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result, when writing up the methods, most authors use third person passive voice.

Use standard style in this and every other part of the paper—avoid familiar lists, and use full sentences.

What to keep away from:

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings—save it for the argument.
- Leave out information that is immaterial to a third party.

Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part as entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Use statistics and tables, if suitable, to present consequences most efficiently.

You must clearly differentiate material which would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matters should not be submitted at all except if requested by the instructor.



Content:

- Sum up your conclusions in text and demonstrate them, if suitable, with figures and tables.
- In the manuscript, explain each of your consequences, and point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation of an exacting study.
- Explain results of control experiments and give remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or manuscript.

What to stay away from:

- Do not discuss or infer your outcome, report surrounding information, or try to explain anything.
- Do not include raw data or intermediate calculations in a research manuscript.
- Do not present similar data more than once.
- A manuscript should complement any figures or tables, not duplicate information.
- Never confuse figures with tables—there is a difference.

Approach:

As always, use past tense when you submit your results, and put the whole thing in a reasonable order.

Put figures and tables, appropriately numbered, in order at the end of the report.

If you desire, you may place your figures and tables properly within the text of your results section.

Figures and tables:

If you put figures and tables at the end of some details, make certain that they are visibly distinguished from any attached appendix materials, such as raw facts. Whatever the position, each table must be titled, numbered one after the other, and include a heading. All figures and tables must be divided from the text.

Discussion:

The discussion is expected to be the trickiest segment to write. A lot of papers submitted to the journal are discarded based on problems with the discussion. There is no rule for how long an argument should be.

Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implications of the study. The purpose here is to offer an understanding of your results and support all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of results should be fully described.

Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact, you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved the prospect, and let it drop at that. Make a decision as to whether each premise is supported or discarded or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."

Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work.

- You may propose future guidelines, such as how an experiment might be personalized to accomplish a new idea.
- Give details of all of your remarks as much as possible, focusing on mechanisms.
- Make a decision as to whether the tentative design sufficiently addressed the theory and whether or not it was correctly restricted. Try to present substitute explanations if they are sensible alternatives.
- One piece of research will not counter an overall question, so maintain the large picture in mind. Where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.



Approach:

When you refer to information, differentiate data generated by your own studies from other available information. Present work done by specific persons (including you) in past tense.

Describe generally acknowledged facts and main beliefs in present tense.

THE ADMINISTRATION RULES

Administration Rules to Be Strictly Followed before Submitting Your Research Paper to Global Journals Inc.

Please read the following rules and regulations carefully before submitting your research paper to Global Journals Inc. to avoid rejection.

Segment draft and final research paper: You have to strictly follow the template of a research paper, failing which your paper may get rejected. You are expected to write each part of the paper wholly on your own. The peer reviewers need to identify your own perspective of the concepts in your own terms. Please do not extract straight from any other source, and do not rephrase someone else's analysis. Do not allow anyone else to proofread your manuscript.

Written material: You may discuss this with your guides and key sources. Do not copy anyone else's paper, even if this is only imitation, otherwise it will be rejected on the grounds of plagiarism, which is illegal. Various methods to avoid plagiarism are strictly applied by us to every paper, and, if found guilty, you may be blacklisted, which could affect your career adversely. To guard yourself and others from possible illegal use, please do not permit anyone to use or even read your paper and file.



CRITERION FOR GRADING A RESEARCH PAPER (COMPILED)
BY GLOBAL JOURNALS

Please note that following table is only a Grading of "Paper Compilation" and not on "Performed/Stated Research" whose grading solely depends on Individual Assigned Peer Reviewer and Editorial Board Member. These can be available only on request and after decision of Paper. This report will be the property of Global Journals.

Topics	Grades		
	A-B	C-D	E-F
<i>Abstract</i>	Clear and concise with appropriate content, Correct format. 200 words or below	Unclear summary and no specific data, Incorrect form Above 200 words	No specific data with ambiguous information Above 250 words
	Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited	Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter	Out of place depth and content, hazy format
<i>Introduction</i>	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
	Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake	Complete and embarrassed text, difficult to comprehend	Irregular format with wrong facts and figures
<i>Methods and Procedures</i>	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring
<i>Result</i>	Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake	Complete and embarrassed text, difficult to comprehend	Irregular format with wrong facts and figures
	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
<i>Discussion</i>	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring
<i>References</i>	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring

INDEX

A

Appetite · 32
Autonomous · 31, 32

V

Vainfluential · 13

B

Boredom · 13, 14, 15, 16

C

Calamities · 28
Conscious · 35
Contrary · 7, I

M

Moriarty · 28, 33

N

Nutshell · 35

P

Pecuniary · 1
Pseudonyms · 4

R

Rhetoric · 16, 18

S

Skirmishes · 14

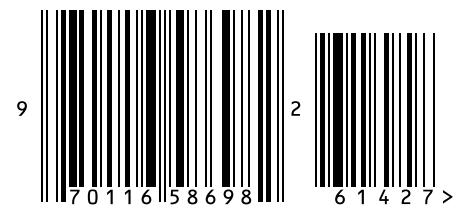


save our planet

Global Journal of Management and Business Research



Visit us on the Web at www.GlobalJournals.org | www.JournalofBusiness.Org
or email us at helpdesk@globaljournals.org



ISSN 9755853

© Global Journals