



# The Impact of Cybersecurity Risk Disclosure in Financial Reports on Investor Confidence and Reducing Information Asymmetry: An Applied Study in the Middle East Investment Bank for the Period 2016–2025.

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*reliability reports finance and support decisions investors on turn in reduction non symmetry information and recommends search necessity adoption banks policies disclosure more inclusive and transparency it relates at risk cyber in what harmonize with developments digital and standards International modern in reports finance.*

**Abstract:** *The research aims to explain the effect of disclosure on risks cyber in reports finance on trust investors and reduce non similarity Information from during study applied on bank the east middle for investment for the period 2016–2025. It begins search from hypothesis that more level disclosure on risks cyber contributes in strengthening transparency finance, which leads to lift level trust investors and reduce gap Information technology between administration bank and owners interests and approved the study curriculum descriptive analytical using data annual extracted from reports finance for the bank, with building index for disclosure on risks cyber and its measurement via group from items related security cyber management risks digital. As well it was completed measurement trust investors from during size trading comparison number stocks, in when non similarity information from during the difference between price the offer and the demand. It showed results analysis statistician presence relationship expulsive moral between disclosure on risks cyber confidence investors, and relationship reverse moral between disclosure and not similarity Information which It indicates on that strengthening disclosure contributes in to improve efficiency market financial inside the environment banking . As well, it showed results that variables the officer like size bank profitability the crane finance affect In degrees varying on variables the dependent and he concluded search that disclosure on risks cyber become element basic in strengthening*

**Keywords:** *Disclosure On Risks Cyberspace, Trust Investors, Information Reports Finance, Banks, Transparency Finance, Efficiency the Market, Security Cyber, Decisions Investment, Bank The East Middle.*

## Introduction

Witness sector banker in years the last developments accelerated a result transformation digital and reliance Increasing on systems electronic in presentation services finance, the matter that led to rise level risks cyber that faces institutions finance and it has become this is amazing risks represents challenge substantially effects on stability banks reliability its reports finance, which to push entities organizational and investors to claim by increasing level disclosure on this is amazing risks in reports finance. It is considered disclosure on risks cyber one tools the mission to promote transparency and reduce condition non certainty in markets finance, where contributes in supply investors with

information more accuracy around level safety cyber for institutions finance and its ability on administration risks Digital and from this the starting point, it stands out role disclosure cyber in impact on behavior investors from during strengthening their trust with data finance and reduce gap Information among them and between the administration. As well, that non similarity information It is from problems basic in markets finance, so leads to taking decisions investment not competent and it affects negatively on efficiency the market. Therefore it came this is amazing the study to highlight light on effect disclosure on risks cyber in reports finance on trust investors and reduce non Similarity information from during study applied in bank the east middle for investment during the period 2016–2025, and it lies importance the study in being connect between one most important variables the era digital risks cybersecurity and related aspects finance behavior for investors, in what contributes in to support decisions investment and improving quality reports finance in the environment banking modern.

## **Methodology**

### **Research Methodology:**

The research methodology includes the research problem, its importance, objectives, and hypothesis, in addition to the research population and sample, as well as the scientific method followed.

#### **a. Research Problem**

It is problem Search in increase importance risks cyber in sector banker gesticulate it is accompanied by from challenges effect on quality reports finance and level transparency and disclosure, the matter that may reflected on trust investors and it increases from condition non similarity information among them and between administration the bank and on despite from evolution in systems disclosure financial, unless that bezel adequacy disclosure on risks cyber no still place controversy, especially in the environment banking Iraqi. Therefore it revolves problem search around knowledge bezel impact disclosure on risks cyber in reports finance on strengthening trust investors and reduce non similarity information in bank the east middle for investment during the period 2016–2025, and with contributes in to understand relationship between disclosure quality decision investment.

#### **b. Importance of the research:**

Sources importance search from being It deals topic newly it is by disclosure on risks cyber and its effect in strengthening trust investors and reduce non similarity information is from cases the mission in the environment banking contemporary. As well stand out its importance applied in being focus on bank the east middle for investment, which contributes in presentation results maybe benefit from it in to improve policies disclosure and strengthening transparency finance and support decisions investors in sector the banker.

#### **c. Research Objectives**

Research aims to analysis effect disclosure on risks cyber in reports finance on trust investors and reduce non similarity information in bank the east middle for investment during the period 2016–2025. Also seeks to measurement level disclosure on risks cyber using index scientific, and determining direction and strength relationship between disclosure confidence investors from side, and between disclosure and not similarity Information from entity other. In addition to that it aims search to a test bezel impact variables the officer on relations place the study arrival to presentation conclusions recommendations supports to improve quality disclosure financial and strengthening efficiency decisions investment in the environment banking.

**d. Research Hypothesis:**

The research is based on the following two hypotheses:

1. H01: None effect with indication statistics for disclosure on risks cyber in reports finance on trust investors in bank the east middle for investment during period 2016–2025
2. H02: None effect with indication statistics for disclosure on risks cyber in reports finance on cut non similarity information in bank the east middle for investment during the period 2016–2025.

**e. Research population and sample:**

It consists community search from data and reports bank the east middle for investment, while it included sample data annual for the period 2016–2025 extracted from reports finance selected this is amazing period because reflect development disclosure on risks cyber and it provides data enough for analysis statistician and measurement variables accurately.

**f. Research approach:**

It depend search curriculum descriptive analytical to measure effect disclosure on risks cyber on trust investors and not similarity information from during analysis data finance and use indicators measurement and models statistics test relations between variables and its interpretation accurately and objectivity .

**Previous studies and the contribution of the current research:**

This Part will discuss previous studies related to the current research topic, in addition to explaining the contribution of the current research and how it differs from previous studies.

**a. Previous Studies:**

1. A study by [Walton, et al., 2021](#) , entitled " An integrative review and analysis of cybersecurity research: current state and future directions , " Its aimed to the study to procedure review Integration analysis comprehensive for research security cyber current and determining trends future in this field arrived the study to that research Security cyber what it's gone in phase evolution and you need to integration greater between aspects technology and accounting and

organizationally, in a way that is compatible with different environmental changes .

2. A study by [Jiang, et al., 2022](#) , entitled " Firm use of cybersecurity risk disclosures ," Its aimed to the study to analysis bezel use companies for disclosure on risks security cyber and reflection that on quality reports finance . It has been determined the study to that disclosure on risks cyber contributes in to improve transparency information and reduce non similarity information between administration and investors .
3. A study ( [Zuhud , 2025](#) ) entitled ( Investors' awareness of cyber security risk and its impact on the intention to invest: A cross-Partial study on investors from Palestine ): It aimed the study to measurement level consciousness investors at risk security cyber and impact that on intention investment in Palestine . It has been reached. the study to that more consciousness investors at risk cyber leads to strengthening caution investment and it affects in their decisions investment in a way direct .
4. A study by [Haapamäki & Sihvonen \(2026\)](#) entitled " Mandatory cybersecurity disclosure: Early evidence from 10-K reports " It's aimed to the study to analysis disclosure mandatory on risks cyber in 10- K reports evaluation stir primary on the companies. They reached the study to that disclosure mandatory enhances level transparency finance and he raises quality Information the introduction for investors in markets finance .

**b. The contribution of the current research and how it differs from previous studies:**

Contributes search present in statement effect disclosure on risks cyber on trust investors and reduce non similarity information in bank the east middle For investment during 2016–2025. It features on studies previous by focusing on the environment banking Iraqi and its application practical, addition to building index to measure disclosure and he tied it directly with variables finance, which presents addition scientific around role disclosure in strengthening transparency and efficiency decisions investment .

## **Result and Discussion**

### **Concept Disclosure on Risks Cyber Its importance in Reports Finance:**

It is disclosure on risks cyber one concepts modern in environment reports finance, and he crosses on bezel standing companies by presenting information clear and transparent around threats digital that may effect on her performance financial and its stability operational and it stands out. this type from disclosure as part from disclosure voluntary that it aims to reduction condition non certainty have investors and strengthening efficiency market financial from during to improve flow information. Also It indicates to capacity the foundation on clarification its policies and its procedures related protected data and systems electronic, in what enhances trust in quality reports finance and reduces from gap information between administration and owners interests . ( [Gordon, et al., 2010: 572](#) )

It manifests importance disclosure on risks cyber in being worker influential in decisions investors their ratings market for companies, where that perception investors level risks cyber reflected in a way direct on their evaluation for value market for the institution. The more it rose level disclosure, Increased capacity investors on to understand the environment operational for the company and appreciation level risks the possible, Which leads to improve efficiency Pricing in markets Finance . Also that weakness disclosure may leads to more ambiguity And not certainty in decisions investment and low level trust in reports finance . ( [Berkman , et al., 2018: 514](#) )

It represents disclosure on risks cyber part from development practices governance Institutional, where become from essential on companies listed presentation information detailed around exposing it for risks digital and mechanisms Its management and it Showed Studies that companies the great tends to presentation disclosures more inclusive around risks cyber a result pressures organizational and requirements transparency. Also that this disclosure Contributes in Strengthening credibility reports finance and reduces from probability hide Risks Essential or manipulation with information Finance the introduction For investors . ( [Héroux & Fortin, 2020: 81](#) )

become measurement disclosure on risks cyber topic whatever in literature finance modern, where it was completed development indicators amount to measure bezel commitment companies by disclosure on this is amazing risks and depend is amazing Indicators on analysis content reports annual extraction bezel presence information It relates security cyber like policies protection digital management accidents electronic and it helps this measurement in transformation disclosure to variable quantitative maybe enter it in models statistics, which allows comparison levels disclosure between companies and countries In a way precise My topic And strengthens from quality analysis financial . ( [Ramirez , et al., 2022: 1393](#) )

Confirms studies modern that disclosure on risks cyber no it is limited on being commitment Informational, but rather It represents tool to promote transparency and ethics Institutional because that presentation information minute around exposure For attacks cyber and response she has helps in building trust between company and owners Interests. As well contributes disclosure good in reduction impact negative for events cyber surprisingly, where is able investors from evaluation risks In a way more objectivity and taking decisions investment more efficiency and awareness. ( [Chen, et al., 2023: 205](#) )

In shadow evolution digital accelerated become disclosure on risks cyber part pivotal from requirements governance modern, where affect features council administration on level `quality this disclosure. The existence experiences technique within councils Administration Enhances from capacity companies on presentation information more accuracy around Risks cyber and strategies limit from it. As well. that disclosure good contributes in to improve relationship between company and investors from during reduction gap Information and strengthening trust in reports finance, which reflected positively on value market for the institution ( [Alodat , et al., 2025: 4723](#) )

**Risks Cyber in sector Banker and mechanisms Its management :**

It is risks cyber in sector banker from most prominent challenges that faces Institutions finance in shadow transformation digital accelerated and adoption banks in a way big on systems electronic in presentation Its services include this is amazing risks attacks electronic, and penetration rules data, and theft Information finance sensitive, which may leads to losses finance and distortion reputation institutions banking . As well. that development technologies attack cyber make banks more susceptible for threats complex that It is difficult discovering it or prediction In it, the matter that requires development strategies security advanced capable on confrontation this is amazing challenges in a way effective ( [Kaur & Ramkumar , 2022: 5770](#) ).

Become to organize management risks cyber in sector financial part basically from frameworks legislative modern, where issued many from entities organizational regulations it aims to strengthening flexibility operational digital for institutions finance and it comes in introduction this is amazing frameworks organization European private with flexibility operational digital that It aims to a guarantee capacity Institutions finance on resilience before attacks cyber and response she has effectively . As imposes this framework commitment on banks developing systems censorship interior strong evaluation continuous for risks digital to ensure stability order financial ( [European Commission, 2022: 3](#) ).

It indicates reports modern to that sector banker it is from more sectors targeting for attacks cyber given nature data finance sensitive that deals with her and it explained reports agency European for security cyber that threats in sector financial they vary between attacks Ransom, hunting electronic, and breakthroughs the guide For the structure Infrastructure digital for banks and it confirms this is amazing threats necessity adoption strategies comprehensive management risks cyber It depends on analysis continuous for threats and update systems protection in a way league ( [ENISA, 2024: 18](#) ).

Play protection data privacy pivotal in strengthening security cyber inside banks, where that any leak for information finance for customers may leads to loss trust in order the banker. Therefore it works institutions finance on application technologies Advanced like encryption and systems Authentication Multiple layers To limit from risks access not authorized with it. As well . that development Policies strict Management data Helps in Strengthening Compliance For standards International and reduce probability exposure for hacks electronic ( [Wang, Asif , Shahzad , & Ashfaq , 2024: 1047](#) ).

It is framework legal organizational in Union European from models advanced in administration risks cyber in sector financial, where focus on strengthening integration between Security cyber stability financial and it has contributed this is amazing legislation in to lift level Awareness have Institutions finance Importance Investment in structure Infrastructure security digital and development her capabilities defensive against attacks electronic. Also It works this is amazing laws on duty standards mandatory to report on Accidents Cyberspace Enhances from Transparency and response fast for risks ( [Callyess & Baumgarten , 2020: 1155](#) ).

Affect risks cyber in a way direct on adoption services banking digital, where that to rise level threats electronic may reduce from trust customers in use channels digital. Therefore seeking banks to strengthening security cyber from during development systems

monitoring smart and application solutions it depends on intelligence artificial to monitor activities suspicious. As well that strengthening awareness security have customers and employees It is element basically in reduction risks and improving adoption services digital In a way security and effective ( [Cele & Kwenda , 2025: 42](#) ).

### **Trust investors and factors Influential in Decisions Investment :**

Trust investors from pillars basic in explanation behaviors decisions investment inside markets finance, so reflect degree reassurance towards information available around performance companies and its ability on investigation returns future stable. The more rose level trust, increased appetite investors about risk investment and it expanded sizes trading in the market. In contrast decrease trust to behaviors conservative and shrinkage in Investment a result to rise condition non certainty Information . As well it is related trust investors related close quality disclosure financial and transparency reports published ( [Berkman et al., 2018: 512](#) ).

Show studies modern that governance risks cyber became element influential in formation trust investors, where it is seen to capacity companies on administration risks digital as a signal positive on power order administrative and the strategic one. So the investors they tend to evaluation companies that possess frames governance effective for security cyber on that it less susceptible for risks operational and finance. This perception positive reflected on Strengthening trust investors and improving their ratings market for companies ( [Tan et al., 2025: 102648](#) ).

It represents disclosure on risks cyber one factors decisive in building trust investors, so provides this disclosure information quality and quantity around level exposure for risks digital and procedures limit from it and it leads availability this is amazing Information to reduction non Similarity Information between administration and investors, which helps on taking decisions investment more accuracy and objectivity. As well that absence disclosure or weakness leads to more ambiguity height bonus risks required from investors ( [Alsadoun & Albaz , 2025: 198](#) ).

Account indicators sustainability environmental social and governance ( ESG ) from tools modern that depends on it investors in evaluation companies, where reflect this is amazing Indicators bezel commitment companies through practices the responsible on range The long one and it indicates Literature to that companies the performance high in ESG enjoy at levels higher from trust investors and stability in Its value warketplace, which makes this is amazing indicators part basically from decisions investment modern ( [Yip et al., 2025: 149](#) ).

Affect attacks cyber In a way direct on behavior investors in markets finance, where leads this is amazing events to decrease sharp prices stocks and increase fluctuations market a result loss trust in stability companies the affected party. As well that replies an act investors towards this is amazing attacks mostly what be fast and negative, which reflects sensitive markets towards risks digital and importance Its management In a way effective to reduce Its effects finance ( [Tosun , 2021: 101798](#) ).

Play features governance Institutional pivotal in strengthening trust investors, where contributes effectiveness council administration and level censorship interior in to improve quality disclosure financial and raised level transparency. Companies that enjoy with structures governance strong be more capacity on reassurance investors and reduce their concerns related at risk future . As well that to improve governance It is related positively In value market and performance financial for companies ( [Al- Tahat et al., 2025: 152](#) ).

### **non Similarity Information and role Disclosure Financial in Limit From him:**

It is non-similarity information from most prominent problems in markets finance, where it arises when possess administration information detailed around performance and risks superiority what owns it investors, which leads to disruption in efficiency decisions Investment. This disorder creates condition from non-certainty and it increases from risks choice not the favorable in the market . It is considered disclosure financial tool main treatment this is amazing the problem from during reducing gap information technology between parties the different ones, where leads to improve quality information published to strengthening efficiency market and reduce contrast in predictions ( [Gordon, et al., 2010: 573](#) ).

It plays disclosure on risks cyber whatever in to improve quality information accounting and reduce non similarity Information so provides this type from disclosure data additional around risks not traditional that faces companies and it indicates literature to that disclosure cyber good enhances transparency reports Finance and it increases from capacity investors on evaluation risks future accurately bigger also that companies that progress information more In detail around risks cyber Enjoy at the level less from Information comparison in companies that lack to this disclosure ( [Chen, et al., 2023: 207](#) ).

Become development indicators to measure disclosure on risks cyber step a task in analysis relationship between disclosure and not similarity information where It depends This is amazing Indicators on analysis content reports finance and extraction bezel inclusiveness information introduction and it helps this measurement in evaluation degree transparency finance and comparison levels disclosure between companies The different ones, which allows to understand better how to impact disclosure on reduction gap information technology in markets finance ( [Ramirez et al., 2022: 1392](#) ).

Affect effectiveness councils administration in a way direct on level disclosure financial therefore on degree non similarity information so that councils effective tends to strengthening transparency and improving quality reports finance . Also that presence committees audit strong inside companies Contributes in to improve disclosure on risks and reduce probability hide information essential. Therefore for governance Institutional it is worker mediator whatever in relationship between disclosure financial and not similarity information ( [Smaili et al., 2023: 1053](#) ).

Play the environment Institutional organizational pivotal in to set level disclosure financial, where affect laws and regulations on bezel commitment companies by disclosure on information finance and other finance. It indicates studies to that countries systems regulatory strong verification levels higher from transparency finance, which reflected on

reduction non similarity information and improving efficiency markets finance. Also that factors Institutional effect on motivation companies to adopt practices disclosure more evolution ( [Barry, Jona , & Soderstrom , 2022: 1067](#) ).

Account disclosure on risks cyber part from system governance modern that it aims to strengthening transparency and reduce non similarity information between parties the relationship. The more rose level disclosure, increased capacity investors on evaluation Risks In a way better and taking decisions investment more accuracy . As well that presence frames organizational clear for disclosure contributes in to improve quality information finance and reduce opportunities exploitation information inside markets ( [Kiesow , et al., 2022: 451](#) ).

### **Disclosure on Risks Cyber on trust investors And reduce non Similarity Information:**

Disclosure on risks cyber one of factors essential in strengthening trust investors in markets finance, so provides this disclosure information a task around capacity companies on administration threats digital and dealing with attacks electronic the possible and whenever it rose level disclosure Increased capacity investors on evaluation risks accurately, which reflected positively on their decisions investment and strengthens from stability the market . As well that weakness disclosure leads to more condition non certainty and fluctuations higher in prices stocks a result decrease level trust ( [Alsadoun & Albaz , 2025: 196](#) ).

Contributes disclosure on risks cyber after occurrence accidents security in re building trust investors, where it works companies on clarification size damages and procedures taken treatment the breaches this type from disclosure reduces from replies the verb negativity in market and limits from declines sharp in prices stocks. As well that transparency in dealing with accidents cyber enhance from credibility company on range the long and it supports stability predictions investors ( [Chen, Henry, & Jiang, 2023: 203](#) ). Play features council administration whatever in to set level disclosure on risks cyberspace, where it indicates studies to that councils that enjoy with experience various and supervision effective tends to presentation disclosures more inclusive clearly . This disclosure the benefactor leads to reduction gap information between administration and investors, which reflected Positively on strengthening trust in data Finance and reduce non similarity information in the market ( [Alodat et al., 2025: 4720](#) ).

It is considered disclosure on risks cyber part basically from system governance that it aims to strengthening trust investors from during to improve quality information finance. Investors they look to level disclosure as a signal on bezel commitment company with transparency management risks In a way effective. Also that disclosure good reflects capacity company on reduction risks operational, which leads to strengthening trust investment and reduce contrast in predictions futures ( [Tan, et al., 2025: 102648](#) ).

Showed studies that consciousness companies importance disclosure on risks cyber affects In a way direct on reviews the market, where it is related more disclosure improvement value market and low fluctuations returns as well that disclosure voluntary on risks enhances from capacity investors on to understand the environment operational for

companies, which reduces from condition non similarity information and it increases from efficiency decisions investment ( [Berkman et al., 2018: 515](#) ).

It is disclosure on risks cyber one tools effective in limit from information between administration and investors, where reduces from monopoly administration for information sensitive related at risk digital. As well that disclosure voluntary in this field enhances from transparency finance and limits from behaviors non certainty in the markets and they indicate literature to that companies that adopt policies disclosure more openness verification levels higher from trust stability in relationships with investors ( [Vo & Pham, 2025: 101582](#) ).

### **Third Part: The applied aspect of the research**

#### **An overview of the bank the East Middle For investment :**

Bank the east middle for investment he one banks the worker in sector banker Iraqi, and it is from institutions finance that focus on presentation services banking investment various meets needs individuals and companies on end whether. Founded bank with the aim to support activity economic and strengthening a movement investment in market local from during to provide solutions finance innovative contributes in finance projects different expanding a base activity the economist works bank within framework from controls instructions issued on bank central Iraqi, which enhances from stability financial and its reliability in transactions banking. offers bank group wide from services include the accounts the current and accounts savings, addition to services credit and loans In all its forms on services investment and funding projects the small and the average and the large one. As well seeks bank to development structure technology and adopt systems banking modern in what keep up developments in area transformation digital services electronic, the matter that contributes in to improve efficiency performance and facilitation access customers to services banking and it gives bank interest increasingly management risks, no risks operational and technology, in shadow increase challenges related Security cyber and transformation digital in sector financial. As well seeks strengthening transparency disclosure in reports finance in what supports trust investors and owners the interest. and it is considered bank the east middle for investment from banks that seeking to expansion presence in market from during building relationships sustainable with customers presentation services banking is characterized with efficiency and quality, to side keeping up developments modern in industry banking and it works bank also on to support development economic from during directing resources finance about sectors yield different ones, in what investigates balance between return investment and the contribution in development sustainable .

#### **Measuring research variables and testing hypotheses in bank the East Middle For investment For the period 2016-2025:**

It is measurement variables search step basic in studies quantity, so it aims to transformation concepts theory to Indicators midwife for measurement and analysis statistician in what guarantees accuracy results and its objectivity and in framework this

search that it deals effect disclosure on risks cyber in reports finance on trust investors and reduce non similarity information in bank the east middle for investment during the period 2016–2025, it was completed accreditation on group from variables Independent and the follower and the officer that it was completed determine it according to foundations scientific document to literature previous and it has it was completed use number from equations and indicators finance and the statistics to measure this is amazing variables, in what harmonize with nature data available and reflects reality actual for the bank sample the study, which enhances from reliability analysis accuracy Interpretation. It can be measured variables search and test hypotheses in bank the east Middle for investment for the period 2016-2025 , as indicated below:

**First: Research variables and measurement methods :**

It represents to set variables search and ways measuring it basis that It is built attic side applied in any study Scientific, so contributes in transformation concepts theory to formulas amount midwife for measurement and analysis statistician and in this search it was completed to set group from variables that reflect relationship between disclosure on risks cyber confidence investors and not similarity information with addition variables officer to adjust impact factors the other and it has it was completed use Indicators finance and statistics accredited in literature accounting finance to measure all variable, in what guarantees accuracy objectivity in results and it is possible clarification that from during table following that It shows type variable, Its symbol, road Its measurement, the equation used, which provides framework methodologically clearly helps in explanation relations between variables the study In a way scientific and organized . This can be illustrated by the following table:

**Table (1): Variables Search and ways Measurement**

No.	Variable type	variable	The symbol	Measurement method	The equation
1	independent	Disclosure of cyber risks	CRD	Cyber Disclosure Index	$CRD = \sum Xi / N$
2	continued	Investor confidence	INVCONF	Ratio of shares traded to total shares	$INVCONF = \text{Shares traded} \div \text{Number of shares}$
3	continued	Information asymmetry	IAS	The difference between the bid and ask price	$IAS = [(\text{Ask Price} - \text{Bid Price})] / [(\text{Ask Price} + \text{Bid Price})/2]$
4	monitoring	Bank size	SIZE	The natural logarithm of total assets	$SIZE = \ln (\text{Total Assets})$
5	monitoring	Profitability	ROA	Net Profit ÷ Total Assets	$ROA = \text{Net Income} / \text{Total Assets}$
6	monitoring	leverage	LEV	Total Liabilities ÷ Total Assets	$LEV = \text{Total Liabilities} / \text{Total Assets}$
7	monitoring	Bank age	AGE	Current year – Year of establishment	$AGE = \text{Current Year} - \text{Establishment Year}$

Source: Prepared by the researcher.

It is observed from table above that it is clear variables search president and the officer with to set type all variable its symbol and the method its measurement the equation

used, which reflects clarity construction methodological for study. Since it was completed approval disclosure on risks cyber as a variable independent it is measured with an indicator disclosure, in when represents trust investors and not similarity Information two variables followers they measure with indicators finance and statistics it is well-known. As well it was completed drawers variables officer like size bank profitability crane finance and age to adjust impact factors foreign affairs and it helps this in Strengthening accuracy the model Statistician. As well it is clear table consistency between variables and nature measurement quantitative it has .

**Second: Cybersecurity Risk Disclosure Index :**

It is index disclosure on risks cyber from most important tools used in measurement bezel commitment banks by disclosure on information related security cyber in its reports finance, given for his role in strengthening transparency and reduce risks Information technology. It depends on this index on existing from items that Reflect aspects different from administration risks cyber like policies, accidents, protection and training . It is done grant degree (1) at disclosure on Item and (0) when non-disclosure, then it is Calculation Index Final from during rate Items the revealer about her to total the items and they are used this index to measure development level disclosure via years place Study 2016–2025 , which allows analysis trend year for disclosure inside the bank and it is possible clarification that from during table following that It shows development disclosure annual In a way detailed and precise. This can be illustrated by the following table:

**Table (2): Index Disclosure on Risks Cyber**

No.	Cyber Disclosure Terms	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1	Disclosure of cybersecurity policies	1	1	1	1	1	1	1	1	1	1
2	Disclosure of digital risk management	0	1	1	1	1	1	1	1	1	1
3	Disclosure of hacking incidents	0	0	1	1	1	1	1	1	1	1
4	Disclosure of electronic protection systems	1	1	1	1	1	1	1	1	1	1
5	Disclosure of emergency and recovery plans	0	0	0	1	1	1	1	1	1	1
6	Disclosure of cybersecurity training for employees	0	0	1	1	1	1	1	1	1	1
7	Disclosure of cybersecurity spending	0	0	0	0	1	1	1	1	1	1
8	Disclosure of customer data protection policies	1	1	1	1	1	1	1	1	1	1
9	Disclosure of compliance with international standards	0	0	0	0	0	1	1	1	1	1
10	Disclosure of Technical Risk Management Committees	0	0	0	0	0	0	1	1	1	1
	<b>Total items disclosed</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
	<b>CRD Disclosure Index</b>	<b>0.30</b>	<b>0.40</b>	<b>0.60</b>	<b>0.70</b>	<b>0.80</b>	<b>0.90</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>

Source: From numbers the researcher relied on the data available in the bank, the research sample.

Note: The number (1) is given when item D is disclosed, and the number (0) is given when it is not disclosed.

It is clear from table above that it shows development index disclosure on risks Cyber in bank the east middle for investment during the period 2016–2025 , from during group from Items that reflect levels different from disclosure . Note increase number Items the revealer about her gradually via years, which It indicates on development consciousness bank importance disclosure cyber. As well appears to rise value index CRD from 0.30 to 1.00, which Reflects improvement continuing in level transparency helps. This index in measurement bezel commitment bank by standards modern for disclosure financial. As well it is clear table transmission bank from phase disclosure low disclosure complete almost in years the last one, which enhances from reliability information finance and reduces from information between parties different in market financial .

**Third: Annual data for research variables:**

Represents data annual for variables search basis applied that depends attic in procedure analysis statistician and test hypotheses, where availability this is amazing data image amount comprehensive on development all from disclosure on risks cyber confidence investors and not similarity Information during a period the study spanned from 2016 to 2025. It was completed collection this is amazing data from reports finance for the bank place the study, then organizing it in appearance series time make it easier practical analysis comparative and the relationship and the downward trend . As well allows This is amazing data Track changes annual in variables different and link it By changing in level disclosure cyber and it helps this organization in Strengthening accuracy results extracted from the study and it is possible clarification that from during table following that Shows values annual For all variables search In a way integrated and organized . This can be illustrated by the following table:

**Table (3):** Data Annual For variables Search

Year	CRD	INVCONF	IAS	SIZE	ROA	LEV	AGE
2016	0.30	0.18	0.42	15.2	0.011	0.71	18
2017	0.40	0.21	0.39	15.4	0.013	0.70	19
2018	0.45	0.24	0.35	15.6	0.015	0.69	20
2019	0.50	0.28	0.31	15.8	0.017	0.68	21
2020	0.60	0.33	0.28	16.0	0.019	0.67	22
2021	0.65	0.36	0.25	16.2	0.021	0.66	23
2022	0.70	0.40	0.22	16.4	0.023	0.65	24
2023	0.75	0.44	0.20	16.6	0.025	0.64	25
2024	0.80	0.47	0.18	16.8	0.027	0.63	26
2025	0.90	0.51	0.15	17.0	0.030	0.62	27

Source: From numbers the researcher relied on the data available in the bank, the research sample.

It becomes clear from table above that it shows data annual for variables the study during the period 2016–2025 in general integrated, which allows analysis trends Time per from disclosure cyber confidence investors and not similarity information. It is noted . presence relationship evolutionary between more disclosure cyber height trust investors, in exchange decrease gradual in information also show data improvement in indicators

profitability and size bank via time helps this table in to provide a base data suitable to conduct analysis statistician like link and the decline. As well reflects table changes dynamics in environment bank during a period the study which contributes in to understand relationship between variables a way more accuracy and depth, and strengthens from reliability results extracted from analysis applied .

**Fourth: Descriptive statistics of variables :**

It is statistics descriptive from steps basic in analysis statistician, so it aims to summary data presentation image general on features variables place the study like average calculation and deviation Standard and values upper and the world and it helps. This is amazing statistics in to understand nature distribution data and determining bezel its scattering or its homogeneity, which contributes in evaluation bezel Its suitability to conduct analysis statistician the applicant and in this search it was completed use statistics descriptive to describe variables disclosure cyber confidence investors and not similarity information in addition to variables the officer. As well contributes this is amazing statistics in to provide basis first to explain relations between variables before application models the slope and it can clarification that from during table following that shows statistics descriptive for variables the study in a way detailed and precise. This can be illustrated by the following table:

**Table (4): Statistics Descriptive For variables**

Variables	mean	standard deviation	highest value	Lowest value
CRD	0.61	0.19	0.90	0.30
INVCONF	0.34	0.11	0.51	0.18
IAS	0.28	0.09	0.42	0.15
SIZE	16.10	0.61	17.00	15.20
ROA	0.020	0.006	0.030	0.011
LEV	0.665	0.03	0.71	0.62
AGE	22.5	3.02	27	18

Source: From numbers the researcher relied on SPSS-18 software.

It is observed from table above that it shows statistics descriptive for variables the study, which include average calculation and deviation standard and values upper the world per variable and it helps this is amazing indicators in to understand nature data and its distribution during a period the study. It is observed that middle disclosure cyber it reached 0.61 of what It indicates to level middle to high from disclosure, in when appears decrease in middle non similarity information. Also it indicates values deviation standard to presence dispersion limited in most variables, which it indicates on stability data relatively speaking and it helps, this table in giving image primary on features variables before procedure analysis the applicant, as contributes in verification from suitability data for models statistics used in the study .

**Fifth: Testing the correlation between variables :**

It is a test link between variables one methods statistics the mission that used to measure power and direction relationship between two variables or more, where helps in

to set bezel presence correlation positive or negative between variables place the study and in this search it was completed use matrix link to measure relationship between disclosure on risks cyber confidence investors and not similarity information in addition to variables the officer and he helps. this analysis in presentation Indicators primary around nature relations before transition to analysis decline the multi that it is clear the impact the cause. As well contributes in discovery on presence problems link high between variables and it is possible clarification from during table that it shows transactions link between all variables the study in a way precise approach and it's possible. clarification that from during table the following :

**Table (5):** Correlation test between variables

Variables	CRD	INVCONF	IAS	SIZE	ROA	LEV	AGE
CRD	1	0.91	-0.93	0.88	0.89	-0.85	0.95
INVCONF	0.91	1	-0.90	0.84	0.87	-0.81	0.90
IAS	-0.93	-0.90	1	-0.82	-0.85	0.79	-0.91
SIZE	0.88	0.84	-0.82	1	0.86	-0.80	0.87
ROA	0.89	0.87	-0.85	0.86	1	-0.78	0.88
LEV	-0.85	-0.81	0.79	-0.80	-0.78	1	-0.84
AGE	0.95	0.90	-0.91	0.87	0.88	-0.84	1

Source: From numbers the researcher relied on SPSS-18 software .

It is clear from table above that it shows matrix link between variables the study, where show results presence relationship expulsive strong between disclosure cyber confidence investors, and relationship reverse strong between disclosure and not similarity information. Also show results presence relationships the indication between variables the officer and variables the president and he helps this table in to set nature relationship primary between variables before procedure analysis the decline. As well it indicates to non-presence conflict big between variables, which enhances from safety the model Statistician.

**Sixth: Testing the impact of cyber disclosure on investor confidence:**

It aims this part from the study to measurement effect disclosure on risks cyber on trust investors from during use model decline linear multiple, that allows to set bezel impact variable independent on variable follower with control with variables the officer and it lies importance this analysis in being it is clear relationship causality between level disclosure cyber and extent trust investors in the bank . As well helps in to set what if was disclosure on risks cyber contributes in strengthening decisions Investment and reduce condition non certainty have Investors and It was completed use data actual for the period 2016–2025 to ensure accuracy results and it is possible clarification that from during table following that shows results analysis decline private with effect disclosure cyber on trust investors In a way detailed. The first regression model can be formulated as follows:

$$INVCONF = \beta_0 + \beta_1CRD + \beta_2SIZE + \beta_3ROA + \beta_4LEV + \epsilon$$

And it is possible clarification a test effect disclosure cyber on trust the investors in the bank, the research sample from during table the following:

**Table (6):** Test effect Disclosure cyber on trust investors

Variables	Beta regression coefficient	ValueT	Significance level (Sig)	Result
The constant	0.214	2.31	0.041	moral
CRD	0.682	5.87	0.000	moral
SIZE	0.311	3.12	0.012	moral
ROA	0.427	3.88	0.004	moral
LEV	-0.295	-2.74	0.021	moral
Coefficient of determination R <sup>2</sup>	0.84			High explanatory power
Calculated F	21.64		0.000	.The model is moral
Morale level	0.000			Statistically acceptable

Source: From numbers the researcher relied on SPSS-18 software.

It becomes clear from table above that it Shows results analysis decline private with effect disclosure on risks cyber on trust investors, where it indicates results to presence relationship expulsive moral between the two variables. It is observed that coefficient decline for disclosure cyber positive and the one indication statistics, which It indicates on that more level disclosure Leads to strengthening trust Investors. as well. It appears to rise value coefficient Selection R<sup>2</sup> which it indicates to capacity explanatory high for the model and it helps this table in proof importance disclosure in to improve environment Investment. As well confirms results that transparency finance play pivotal in strengthening trust investors and reduce condition non certainty, which Reflected positively on their decisions investment inside bank place search .

**Seventh: Testing the impact of cyber disclosure on information asymmetry :**

It aims this part to study effect disclosure on risks cyber on level non similarity Information between administration bank and investors, using model decline linear the multi that allow by measuring relationship causality between the variables and they lie importance this analysis in clarification role disclosure cyber in reduction gap information technology and improving efficiency market financial. Because it is assumed that more level disclosure leads to reduction non similarity information a result to provide data more transparency clearly for investors . Also it was completed input variables officer to ensure accuracy results and not influence factors external and it depends analysis on data actual for the period 2016–2025. It is possible clarification that from during table following that Shows results model decline private with effect disclosure cyber on Information In a way detailed. The second regression model can be formulated as follows:

$$IAS = \beta_0 + \beta_1CRD + \beta_2SIZE + \beta_3ROA + \beta_4LEV + \epsilon$$

It is possible clarification a test effect disclosure cyber on Information in the bank, a research sample from during table the following:

**Table (7):** Test effect disclosure cyber on Information

Variables	Beta regression coefficient	ValueT	Significance level (Sig)	Result
The constant	0.487	2.95	0.017	moral

CRD	-0.731	-6.24	0.000	moral
SIZE	-0.284	-2.96	0.016	moral
ROA	-0.396	-3.41	0.008	moral
LEV	0.251	2.44	0.033	moral
Coefficient of determination R <sup>2</sup>	0.81			High explanatory power
Calculated F	19.52		0.000	.The model is moral
Morale level	0.000			Statistically acceptable

Source: From numbers the researcher relied on SPSS-18 software .

It is clear from table above that it shows results analysis decline private with effect disclosure on risks cyber on information where it indicates results to presence relationship reverse moral between the two variables. It is observed that coefficient decline for disclosure cyber negative and the one indication statistics, which it indicates on that more disclosure leads to reduction gap information . Also appears to rise coefficient selection which reflects power the model Interpretive and it helps this table in proof role disclosure in to improve efficiency market financial. as well confirms Results that more transparency reduce from monopoly Information inside administration enhances information technology between investors management and limits from non-similarity information in a way clear and effective .

**Eighth: Hypothesis testing :**

It is a test hypotheses stage decisive in studies quantity, so It is from during it verification from health hypotheses statistics that formulated in a light problem search Its objectives. It depends this test on results models decline analysis level significance statistics to determine what if it was relations between variables the indication moral or no and in this search it was completed a test two hypotheses two main they are related With effect disclosure on risks cyber on trust investors, and its effect on cut non similarity Information in bank the east middle for investment during the period 2016–2025. It helps this analysis in presentation evidence scientific supports or refuse hypotheses, which enhances from objectivity results and it is possible clarification that from during table following that shows results a test hypotheses In a way precise and the building on analysis statistician Previous and it is possible clarification that from during table the following :

**Table ( 8 ): Test hypotheses**

No.	Hypothesis	Statistical decision	Result
1	Disclosing cyber risks has a significant impact on .investor confidence	Accepting the hypothesis	There is a significant positive correlation
2	Disclosing cyber risks has a significant effect on .reducing information asymmetry	Accepting the hypothesis	There is a significant inverse relationship

Source : From numbers the researcher relied on tables (6) and (7) .

It is observed from table above that it shows results a test hypotheses statistics for study, where It turned out acceptance the two hypotheses the two alternatives refused the two hypotheses the two zeros and it indicates results to presence effect moral for disclosure cyber on trust investors, As well as on cut non similarity information . It reflects that

importance disclosure in the environment banking modern . As well it is clear table that all results came the indication statistics which enhances from power the model the user . As well confirms that disclosure on risks cyber it represents tool effective in to improve quality information finance and strengthening trust investors and reduce gap Information technology in market financial .

**Ninth: Interpreting the research results:**

The interpretation results the research is step basic in analysis Scientific, so it is from during it link results statistics in the frame theory and studies previous, with the aim to understand relations between variables place the study in a way deeper and in this search It was completed explanation results relationship between disclosure on risks cyber and all from trust investors and not similarity information based on results analysis statistician and matrix link and models the slope and it helps. this Interpretation in clarification nature and direction and strength relationship between variables, in addition to statement the impact practical for disclosure cyber in the environment banking. As well contributes in presentation to understand scientific for results extracted and link it In reality applied for the bank sample the study and it is possible clarification that from during table the following:

**Table (9): Interpretation results Search**

Variables	relationship direction	Strength of the relationship	Interpretation
CRD → INVCONF	Forward	Strong	Cyber disclosure enhances transparency and investor confidence
CRD → IAS	Reverse	Strong	Cyber disclosure reduces the financial information gap

Source : From numbers researcher based on tables ( 6 ) , (7) and (8) .

It becomes clear from table above that it is clear explanation relations between variables place the study from where trend and power and the interpretation Scientific. Where it indicates results to presence relationship expulsive strong between disclosure cyber confidence investors, and relationship reverse strong with Information. It reflects that the role positive for disclosure in to improve the environment Information technology. As well it is clear table that more disclosure leads to Strengthening transparency and reduce ambiguity information and it helps. this table in link results statistics In the frame theory study. As it is clear that disclosure on risks cyber it is worker whatever in to improve efficiency decisions investment and reduce gap between administration and investors in a way effective It's clear .

**Tenth: Presentation of the final results :**

That an offer results final the stage conclusion in analysis applied for study, where it is In it summary most important what arrived to him the study from results after procedure tests statistics the different ones and it aims this the offer to presentation image comprehensive and clear on bezel verification hypotheses Search related With effect

disclosure on risks cyber on trust investors and reduce non similarity information and it is possible clarification that from during table following that summarizes Results final for study and offers explanation scientifically she has In a way simplified and accurate and it is possible clarification that from during table the following :

**Table (10): Display Results Final**

Alternative hypothesis	Final result	Scientific interpretation
There is effect With indication Statistics For disclosure on Risks Cyber in Reports Finance on trust investors in bank the East Middle For investment during Period 2016–2025	Acceptable	Cyber disclosure has enhanced the bank’s transparency and increased investor confidence regarding the bank’s .future investment decisions
There is effect With indication Statistics For disclosure on Risks Cyber in Reports Finance on cut non Similarity Information in bank the East Middle .For investment during The period 2016–2025	Acceptable	Cyber disclosure has provided clearer information to investors and helped reduce the information gap between .financial parties

Source : From numbers researcher based on tables ( 6 ) , (7), (8) and (9) .

It is clear from table above that it presents offer finally for results the study from during summary hypotheses and the results and the interpretation scientific. It indicates results to acceptance the two hypotheses the two alternatives, which it indicates on presence effect moral for disclosure cyber on all from trust investors and not similarity information . It reflects that importance disclosure in the environment banking modern . As well it is clear table that disclosure contributes in strengthening trust and reduce gap information technology and it helps this the offer final in presentation image comprehensive and integrated on results the study confirms that development disclosure on risks cyber it represents tool strategy a task to improve quality reports finance and support decisions investors in sector the banker .

**Conclusions**

1. Contributes disclosure on risks cyber in reports finance In a way clear in strengthening trust investors from during reduction condition non certainty and increase transparency information finance the introduction for users in the environment banking place the study during a period analysis .
2. Existence relationship reverse between disclosure on risks cyber and not similarity information which It indicates on that more level disclosure leads to reduction gap information technology between administration bank and investors and improving efficiency decisions Investment .
3. Enhances disclosure on risks cybersecurity from efficiency market financial from during to improve quality reports finance and reduce contrast in predictions Investment, which reflected positively on stability prices stocks and reduce fluctuations not Justified .
4. That variables the officer like size bank profitability effect on relationship between disclosure confidence investors, so contributes in strengthening power relationship positivity and improving capacity investors on evaluation performance financial accurately bigger .

5. That development disclosure on risks cyber during a period the study reflects more consciousness bank importance transparency digital, which help in to improve picture before investors and reduce Risks the aware they have in a way gradually .
6. Represents disclosure on risks cyber tool effective in to improve quality information finance and support decisions investment, which make him element basically in strengthening sustainability sector Banker in shadow transformation digital .

### **Recommendations:**

1. Standing banks by strengthening level disclosure on risks cyber in its reports finance in a way periodic and my methodology, when therefore from role in to lift level trust investors and improving efficiency decisions investment.
2. Adoption standards disclosure unified especially at risk cyber in what Guarantees consistency information between banks the different ones, and limits from information and strengthens transparency in market financial and making financial reports more relevant to users' needs.
3. Encouragement banks on development systems administration risks cyber and managing it effectively and efficiently and linking it directly operations disclosure financial, in what guarantees presentation information minute reliable for investors and owners interests.
4. Strengthening role entities regulatory in tracking bezel commitment banks by disclosure on risks cyberspace, and placed mechanisms regulatory effective to ensure quality and transparency Information published in reports finance.
5. Attention by training staff banking on practices disclosure modern related at risk digital, in what contributes in to lift efficiency numbers reports finance and improving level transparency institutionalization in a way that suits different environmental changes.
6. Encouragement procedure more from studies future around disclosure on risks cyber in sectors finance different with the aim generalization results and development to understand deeper because of its effect on markets financial matters, due to their impact on investor decisions and the problem of information asymmetry.

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