

IDENTIFYING THE INFORMATION DISSEMINATION METHODOLOGY
USED IN THE SAUDI STOCK MARKET

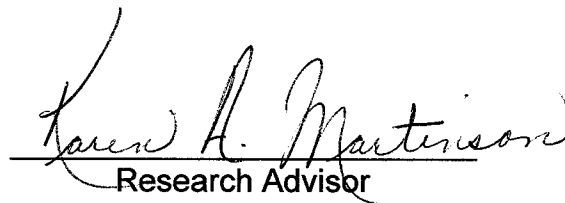
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ABSTRACT

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The history of the Saudi Stock Exchange goes back to the mid 1930's. It became an organized market by the mid of 1980's. With only 69 companies listed and a market capitalization over 80 billion US Dollars, it was considered the 17th best performing market in the year of 2000. The number of trading transactions, volume and value increased dramatically in the Saudi Equity Market between 1990 and 2002. The All Share Index increased by 157% and the market capitalization increased by 189%.

As technology has improved and as information has become more important in our daily lives, it is critical to examine the methodology that the Saudi Stock Market

(Tadawul) uses to disseminates the market information. Timely and accurate information is an important aspect for any investor.

The research will review the general structure of a stock exchange as well as the Saudi Stock Exchange. It will also address the methodology used to disseminate the market information in Saudi Arabia.

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CHAPTER ONE

INTRODUCTION

Background of the Problem:

Information is a critical aspect that organizations rely on in order to make decisions or take actions. In today's business environment, organizations are in desperate need for timely and reliable information that will allow them to cope and compete with the market.

In the financial industry, the key of success is based on the use of financial information, such as market data, and timelines as well. With more relevant information that they receive, lower risk will result in determining what action to take.

Looking at today's financial industry, the main source of information is coming from the Stock Exchange, known also as the Stock Market. The core function of a Stock Exchange is to disseminate market information in order to attract investors to place orders, either buying or selling.

The Saudi Stock Exchange (Tadawul) is no different from any other Stock Exchange. Tadawul disseminates the Market data to local financial institution, in which they work as brokers. These institutions redistribute the market data to the end user, also called investors.

From a continuous improvement stand point; Tadawul should look for new ways and methods to increase the efficiency of disseminating the market information in order to increase the utilization of their services, which will increase their revenues.

Statement of the Problem:

How could the Saudi Stock Exchange (Tadawul) increase the efficiency of disseminating the market information in order to increase the utilization of their service and attract more participants?

Research Objectives:

The objectives of this study are to:

1. Understand general Saudi Stock Market perspective.
2. Understand the general methodology of the information dissemination in the Saudi Stock Market.
3. Determine the future trends of the information dissemination in the Saudi Stock Market.

Significance of the Study:

The research will help Tadawul to formulate a policy based on the local needs of the Saudi market to serve it in the future. The research will also help Tadawul to identify ways in which it can increase the information dissemination penetration. By reaching the widest possible number of investors, Tadawul will increase the revenues.

CHAPTER TWO

LITERATURE REVIEW

The Stock Exchange Industry:

Definition:

A Stock Exchange is a place where trading securities is conducted on an organized system. The Stock Exchange also means an association of people organized to provide an auction market between themselves for the purchase and sale of securities. It is also known as a Stock Market where particular stocks are traded (Webster, 1998).

A survey conducted by Ruben Lee that addressed the accepted meanings of the definition of “Exchange”, “Stock Exchange”, “Future Exchange”, and “Market”. The survey looked at four general and traditional dictionaries and seven others that specialize in finance and economics. From the four general dictionaries, the following eight significant points were understood (Lee, 1998, p. 322):

1. All of the four general dictionaries have more than one definition.
2. The four dictionaries defined the terms “Exchange” and “Stock Exchange” as a building or a place for buying and selling, or for the process of transacting a business.

3. The four dictionaries refer to the items that are traded on a “Stock Exchange” as stocks, shares, or securities.
4. All of the four dictionaries define the term “Stock Exchange” as some sort of an association of people that buy and sell stocks.
5. Three dictionaries out of four refer to a “Stock Exchange” as being centralized in some manner.
6. Out of the four dictionaries, two refer to a “Stock Exchange” as being a market or a marketplace.
7. The four dictionaries define market as:
 1. Where people meet for buying and selling.
 2. A place or a building that is used for such meetings.
 3. Buying and selling.
8. Out of the four dictionaries, two refer to a “Market” as a “Stock Exchange”.

The Role of the Stock Exchange:

In the financial sector, the role of the Stock Exchange is different from an Insurance company, a Bank, or a Brokerage firm. The Stock Exchanges have a unique role that differentiates them from others. They run and operate regulated securities and derivative markets. In order to achieve that smoothly, a Stock Exchange entire value must include the following (World Federation Of Exchanges [WFE], 2003, pp. 3-4):

1. Front-Line monitoring to enforce securities rules.
2. Writing market activity rules.
3. Admitting intermediaries to act on the central market such as banks or brokers.
4. Assuring that the in-house is able to follow intermediaries' positions, and establish enforcement of market rules.
5. Admitting securities to listing.
6. Assuring on-going disclosure of corporate information.
7. Setting up an adequate Information Technology (IT) and communication system facilities.
8. Dissemination of market information to a wide public.
9. Maintaining trade execution.
10. Assuring prompt and final clearing settlement of orders.
11. Providing for securities registry, transfer agent, and depository activities.

Stock Exchanges aim to serve their customers and earn money in order to stay in business and grow. To reach that goal, the following are some important points that the Stock Exchange could do (WFE, 2003, p. 6):

1. Continually improving the staff operation and competency.

2. Improving the IT and telecommunication systems.
3. Connecting markets to more players.
4. Improving the information disclosed on companies and market data.
5. Assuring a good return on capital.

Saudi Stock Exchange:

Background:

The beginning of the Saudi stock joint companies goes back to the mid 1930's, when the first public offering company was established, the Arab Automobile Company. There were 14 public companies in the Kingdom of Saudi Arabia by 1975. In the 1970's, large corporations and joint venture banks were established due to the rapid economic expansion that the country was facing. During that period, major share offerings were made to the public (Saudi Stock Exchange [Tadawul], 2003, para. 1).

The Saudi Stock Market did not become organized until the mid 1980's. The government of Saudi Arabia organized all trading stock by placing them under the control and supervision of the Saudi Arabian Monetary Agency (SAMA). SAMA authorized the commercial banks operating in the country to act as brokers (Al-Jasser, 2002).

The commercial banks operating in Saudi Arabia established the Saudi Share Registration Company (SSRC) in 1984. The goal of such company is to provide central

registration facilities for the joint stock companies. The aim is to settle and clear all the equity transactions.

Later in 1990, SAMA developed and introduced a new system called the Electronic Securities Information System (ESIS). The next generation of such system named Tadawul was introduced in October 2001 (Tadawul, 2003, para. 3).

Management Structure:

The Saudi Stock Market differs from any other stock market in the world in that it is managed by three different government agencies:

1. Ministry of Commerce
2. Ministry of Finance
3. The Saudi Arabian Monetary Agency

Ministry of Commerce:

The Ministry of Commerce was responsible for the formation of companies and the conversion of firms to joint stock companies and initial public offerings (IPO). It sets rules and regulation for such conversion. A company that is interested in converting from a private holding company to a stock joint company must fulfill the five following conditions:

1. The company's net assets should not be less than SR 50 million at the date of change.

2. The company must ensure that the return on shareholder's equity in one year of the three following years should not be less than 7%. The feasibility study should also ensure that the expected return on investments should not be less than 7% in any of the three years from the date of change.
3. The company should be established in five years minimum.
4. At least 40% of the shares should be offered to the public.
5. The company that is interested in converting to a joint stock company should be able to compete in the market. More over, it should have an able administrative system and an efficient internal control system in order to protect its net funds.

Ministry of Finance:

The role of the Ministry of Finance is critical in terms of the national economy. It manages all government finance, which includes the budgeting of all ministries and government agencies. It is the core soul that the national economy depends on and it has a strong influence on the financial system of the country. The ministry controls the Saudi Arabian Monetary Agency (SAMA) that acts as a central bank of the country. SAMA then controls the Stock Market in terms of operation and function.

Saudi Arabian Monetary Agency:

As mentioned earlier, SAMA acts as the central bank of Saudi Arabia that controls and governs the Saudi Stock Market. SAMA currently authorizes the banking institution to be members of the Saudi Stock Market. The members of the Saudi Stock Market (the banking institutions) use the Electronic Securities Information System (ESIS) to place trades between clients/investors and traders.

Operational Structure:

In the past, Market information was disseminated via approximately 400 channels around the country and overseas. In the late 1980's an automated central settlement system was introduced, followed with a new system (ESIS) in 1990. On October 6, 2001 a new trading system was introduced (Tadawul).

The Saudi Arabian Monetary Agency (SAMA) developed a new electronic share-trading system that uses the latest technology and processes. The project adopted by SAMA was called Tadawul. The new system, Tadawul replaced the old ESIS system and other supporting systems within the Saudi Share Registration Company (SSRC). The new system allowed the investor to place orders such as buy/sell from his desktop via an Internet connection. One of the critical features that the new system provides is reducing the processing time significantly through a Straight Through Process (ISP) in which all the networks are inter-linked together. Such networks include banking, trading and custodial/registry systems (Al-Dukheil, 2002).

The Market:

The number of trading transactions, volume and value, has increased dramatically in the Saudi Equity Market between 1990 and 2002 (Table 2-1). The all share index increased by 157% and the market capitalization increased by 189% (Tadawul, 2003, para. 4).

The Saudi Stock Market is the largest market in the Middle East and ranked 30th for the whole world as of 2000. As of September 2002, the market capital was \$80 billion. As for performance, it is the 17th best performing market in the world in 2000 (Al-Dukheil, 2002, p. 17).

Year	Transactions	Shares Traded	Value (SAR) (mn)	Market Cap. (mm)	All Share Index
1990	85,298	16,938,386	4,403,235,482	97.30	979.80
1991	90,559	30,758,077	8,527,306,505	180.80	1,787.70
1992	272,075	35,199,907	13,698,831,745	206.10	1,888.70
1993	319,582	60,307,628	17,360,034,465	197.90	1,793.30
1994	357,180	152,088,434	24,871,076,453	145.10	1,282.00
1995	29,742	116,617,939	23,226,589,738	153.39	1,367.60
1996	283,759	137,832,560	25,397,329,810	171.98	1,531.00
1997	460,056	313,975,338	62,060,355,885	222.70	1,915.80
1998	376,617	294,637,204	51,509,159,076	159.91	1,413.10
1999	438,226	527,505,706	56,578,723,026	228.59	2,028.53

2000	498,135	554,913,443	65,292,885,455	254.46	2,258.29
2001	605,035	691,828,307	83,601,314,148	274.53	2,430.11
2002	1,033,669	1,735,838,067	133,787,078,591	280.73	2,518.08

Table 2-1

The New Structure:

The Saudi Council of Ministers passed on June 16, 2003; a new Capital Markets Law, which lays out the framework for the capital market. The new law established the Saudi Arabian Securities Commission (SEC), which will protect investors' interests, ensuring orderly and equitable dealing in securities business and promoting and developing the capital market. The new law empowers the new commission to license non-bank financial intermediaries and authorize the offering of securities to the public. It also established the Saudi Arabian Stock Exchange (SASE) incorporating the national securities depository center. The cabinet said that the new Capital Market Law would increase the efficiency and transparency of the market.

Five commissioners appointed by a royal decree will govern the Saudi Arabian Securities and Exchange Commission (SEC). The proposed commission will be developing and regulating a capital market that is dynamic, fair, transparent and efficient. To achieve the objectives of investor protection and capital market development the SEC will (WFE, 2003, pp. 15-16):

1. Regulate the investment and securities business in Saudi Arabia.

2. Register and regulate the Saudi Arabian Securities Exchange, which includes the national securities depository.
3. Register securities to be offered for subscription or sale to the public.
4. Organize training programs and promote high ethical standards.
5. Register and regulate non-bank financial intermediaries including members of the Exchange, and employees of these, and others involved in the organization and operation of the capital market including custodians of securities and credit rating agencies.
6. Protect the integrity of the securities market against abuses arising from the practice of insider trading.
7. Review, approve and regulate mergers, acquisitions and all forms of business combinations,
8. Provide investor education and promote investor awareness,
9. Prevent fraudulent and unfair trade practice relating to the securities industry,
10. As received, perform such other functions and exercise such other powers not inconsistent with the law as necessary, or expedient for giving full effect to the provisions of the law.

The Saudi Arabian Cabinet of Ministers said that the SASE would be a private sector company. The board will initially consist of nine members, three from the government (Ministries of Finance, Commerce, and the SAMA) and six from the shareholders of the exchange. The proposed SASE will be the only stock exchange

operating in the kingdom and will perform the following tasks (Saudi Information Resource, 2003):

1. Ensure fairness and transparency of the markets operated by the exchange,
2. Admit members, both brokering and clearing,
3. List and explain the requirements and conditions for the listing securities,
4. Promote high ethical standards among members, their employees and market participants,
5. Promote high standards of corporate governance,
6. Ensure timely and accurate dissemination of market information,
7. Establish and operate a wide system for securities trading, settlement clearing and depository in order to protect investors and maintain fair and orderly markets; and
8. Provide modern communication and data processing facilities in order to foster efficiency, enhance competition, and increase the information available to market participants.

Information Dissemination:

Background:

A stock exchange must disseminate market data and information in order to attract investors. It is a pivotal factor for a stock exchange to disseminate price and quote information to reach the end user. The exchange must know what type of

information it should disseminate, when and to whom? Among the data that a Stock Exchange may disseminate are (Lee, 1995, p. 9):

1. Price of the last trade
2. Quantity of last trade
3. Time of last trade
4. Identities of parties to last trade
5. High, low, opening, and closing trade prices
6. Aggregate price data and price indices
7. Cumulative trade volume
8. Best bid and ask prices
9. Quantities at best bid and ask
10. Identities of parties who placed those orders
11. Bid and ask prices behind the best prices
12. Quantities at those prices
13. Identities of parties who placed those orders
14. High, low, opening, and closing mid-quote prices
15. Request for quotes

16. Identities of parties who requested quotes

17. Number of individuals logged onto system

18. Identities of those individuals.

Each Stock Exchange has its own identity based on the need of the market.

Based on that not all Stock Exchanges are able to deliver all these different types of information (Lee, 1995).

Stock exchanges were allowed to reach a broad access of customers due to the globalization of markets, the separation of data vendors' information, which is combined with the reduced cost of the communication. Stock Exchanges are gaining significantly from disseminating sensitive price and market data information (Gallai, 2002).

Access to the exchange quotes and prices, and the level of fees charged by the exchange are the two main areas of concern in the dissemination of information. The governance structure of an exchange is an important factor influencing the decisions made by the exchange (Lee, 1995). The market participants determine the value of a set of price and quote data disseminated by an exchange from the following three main criteria (Lee, 1998):

1. The contents of the data itself. The more types of information the exchange released, the higher value that will be placed on the exchange's information.

2. Time is a critical factor. In most cases, the faster the information is disseminated the more valuable it is.
3. The extent of the information disseminated by the exchange is thought to accurately reflect the market.

Revenue:

The dissemination of market data and information has become a profitable source of income for exchanges. That is due to the increasing value of real-time information on securities price movements, the size of trade executed, and on significant corporate news. It has represented one of the most important sources of revenue for the exchange groups at the World Federation of Exchanges (WFE) in 2001. The total income from such service was USD 933 million in 2001 comparing to USD 875 million in 2000 (Gallai, 2002).

Saudi Stock Market:

The Saudi Arabian Securities Market (Tadawul) provides the market information via three different channels: (Al-Dukheil, 2002)

1. Through SASM website (Tadawul), investors may find live market information.
2. Real time market information via Tagged Ticker gateway to news agencies and services such as Reuters and Bloomberg.
3. Market information via member gateway for the banks for their own use and dissemination through their own systems.

In early 2003, the Saudi Capital Market reached an agreement with the National Technology Group (NTG) to disseminate real-time stock data on a subscription basis, the first of its kind in Saudi Arabia. The service is called UniQuotes.

The system is a real-time market data feed that enables subscribers to watch and follow market movement in real-time from the comfort of their homes. Subscribers and investors would be able to view on their computer screens real-time updating of stock information and data such as prices, time and sales, news, charts, market depth, alerts, portfolios, top gainers, losses and much more, in a bilingual format, Arabic and English.

The head of Marketing and Public Relations at the Saudi Stock Market has stated, *"The launch of UniQuotes is central to Tadawul broader strategy of extending Saudi Stock Market into a wider investor base"*. Collaborating with data vendors, such as NTG, to disseminate real-time prices, is the objective of UniQuotes. (Saudi Online, 2003)

UniQuotes:

UniQuotes is an interactive, digital data feed that disseminates real-time Equity market data from the Saudi Stock Exchange to banks, brokers, fund managers, and retail investors. It delivers time-sensitive financial data through four options (UniQuotes, 2003):

1. Private leased lines to the banks so they would be able to re-distribute the information through internal Local Area Network (LAN) and Wide Area Networks (WAN).

2. ADSL links to connect multi user sites.
3. Dial-Up or ADSL links to an active trader on his desktop at home or office.
4. Over Internet to retail investors.

UniQuotes comes in two versions: Workstation Version and a Streamer Version to serve two distinct groups.

The Workstation Version is a high performance service with sophisticated tools and functions targeted at the banks, their investors' lounges (trading rooms located in the Saudi Arabian banks so that investors could trade equities by placing an order through the bank employee) branches and active investors.

The Streamer Version is targeted to the not-so-active investors and retail customers. The Streamer Version is accessed over the Internet and constrained in terms of performance. However, it offers complete flexibility so the user would be able to access from any location having an Internet connection.

Features and Functions:

The following is a list of features that is included in both versions, Workstation and the Streamer:

1. Real-time Symbol snapshot and time and sales.
2. Real-time corporate Actions from Tadawul.
3. Summary Market reports updated throughout the day.

4. Integrated Charting –Intra-day.
5. Multiple Exchanges – Both regional and international; Equity and Derivatives.
6. Dynamically updating real-time prices (Push based not refresh).
7. Symbol look up.
8. UniQuotes electronic mail system that will generate summary market reports daily, weekly, monthly, and annually and mail to registered users.
9. Alert Module (optional).
10. Portfolio Module that allows users to create and maintain their portfolio and obtain real-time valuation (optional).

The features listed below are only available in the Trader Workstation Version:

1. History charting.
2. Real-time news with option to filter and search for historical news.
3. Time and Sales for each stock list and full market.
4. Ticker for each stock list and full market.
5. Dynamic data link to Excel.
6. Data export for future analysis – Excel and MetaStock.
7. Savable workspace for easy access later.
8. Provision for creating multiple portfolios.

9. Real-time news with option to filter and search historical news (Applicable for international only).
10. Customizable market watch that will allow users to monitor the market trade by trade or create a custom stock list to monitor latest information on selected stocks only.
11. Multiple market views that allow the user to view the market multiple ways such as top losers, gainers, most active, or the their own custom stock list.
12. Public Display: this feature is intended to project the market information on large public display system in investors' lounges and wherever the banks might want to display such information. These terminals are non interactive, therefore the application will ensure dynamic change in information and allow the banks to change content as well as playing sequence from an administrator menu.
13. Site Connection Manager (SCM) for multi terminal sites to ensure best utilization of bandwidth.

CHAPTER THREE

METHODOLOGY

Introduction:

This chapter will discuss the qualitative methodology used in the study. It will consist four areas:

1. Methodology definitions and description
2. Sample Selection
3. Data Collection
4. Limitations

Methodology definitions and description:

In order to understand the nature of this qualitative research it is critical to define its central point and its goals. The research seeks an in-depth study regarding the Information Dissemination methodology used in the Saudi Arabian Stock Market (Tadawul). The research also determines the future trends of the information dissemination in Tadawul.

The researcher used two methodologies in order to collect the data. One was used with all the brokerage firms operating in the Kingdom of Saudi Arabia and the other was limited to two senior officials in Tadawul. The researcher believes that the

information will be more valid and accurate if it is collected from both the supplier (Tadawul) and consumer (the brokerage firms).

Sample Selection:

The researcher obtained a list of e-mail addresses of 10 brokerage firms operating in the kingdom from the Saudi Arabian Stock Market (Tadawul). From each brokerage firm, three senior officials contact e-mails were listed.

Data Collection:***Brokerage firms:***

The researcher sent an electronic e-mail to each subject asking him to participate in the survey (Appendix A). The objectives of the research were stated in the e-mail along with a link to a website where the researcher had posted the survey. All subjects must agree to the consent form before viewing the survey. The survey was answered online and sent directly to the researcher's e-mail. This process protected the subject confidentiality; therefore the researcher will not know which subjects' participated.

Tadawul:

The researcher sent two different questionnaires (Appendix B and C) via e-mail, one to the Capital Market Advisor at the Saudi Stock Market and the other to the Information Technology (IT) Director at the Saudi Stock Market. Both subjects agreed

to participate in the survey. They completed the questionnaire and sent it back to the researcher via e-mail.

Limitations:

The survey was posted on a website that could only be accessed through an Internet connection. The ability of the subject to access the site could be considered as a limitation if assumed that the network the subject is accessing from is not working well. That could prevent the subject from participating in the survey.

CHAPTER FOUR

RESEARCH FINDINGS

Introduction:

This chapter is devoted to discussion and analysis of the data gathered. The research was based on a qualitative methodology. The researcher used two methods to gather the data. An online survey was sent to 27 subjects working in the ten different brokerage firms. All the subjects hold positions that deal directly with the issue of information dissemination operating in Saudi Arabia. The researcher received a 26 percent participation level.

The researcher also sent two open-ended questionnaires via electronic mail to two senior officials in the Saudi Stock Market (Tadawul), the Capital Market Advisor and the Information Technology Director. Both subjects participated in the questionnaires.

Information Dissemination:

The researcher in this study was looking for a general understanding regarding the issue of information dissemination in the Saudi Stock Market. The capital market advisor at Tadawul explained it, as "Timely and accurate information is vital to anyone considering an investment and for the well being of a market." He also adds "...investors require information to deter whether or not they are buying or selling at an accurate price reflecting all information available to the public."

Market information could be classified into two different types. The Capital Market Advisor differentiates them, as “Investors need various types of information in order to make an informed investment decision. These can be classified as market information and regulatory information.” He explains market information as “Market information is derived principally from order flow. Information regarding the Central Order Book (“COB”) is disseminated such as the bids and offers, and trade data including the time of trade, volume and price. One item that has been debated strongly is how much of the market depth should be disseminated?” The Capital Market Advisor adds, “In Saudi Arabia we [Tadawul] have opted to disseminate the full market depth. As such investors have access to the same information as intermediaries, this reduces the potential for bad market practice such as front running”.

The Capital Market Advisor defines regulatory information by saying “Regulatory information refers to the disclosures that issuers of securities must make in accordance with regulatory requirements. These can be roughly split between financial reporting and material announcements.” He then discusses the issue of Saudi Arabia “In Saudi Arabia issuers of securities traded on the public market are required to publish annual audited and quarterly unaudited financial statements. These statements are very important as they help the investor determine the financial health and prospects of an issuer.” The issuers are not only required to publish their financial statements but “...are also required to publish to the public details of all material events that may affect the price of securities traded in the public market” he adds.

Methodology:

The Capital Market Advisor described Tadawul's approach in disseminating market information by saying, "...is to provide participants with timely and accurate data, and not to advantage or disadvantage any participants; that is, all participants are privy to the same information, irrespective of geographical location."

On the other hand, the brokerage firms operating in Saudi Arabia showed that some firms receive different types of information than others. Table 4-1 shows what type of information the participants receives based on the options they were given in the survey.

Type of Information	Participants who Chose this Type of Information %
Price of the last trade	100 %
Quantity of last trade	100 %
Time of last trade	86 %
Identities of parties to last trade	14 %
High, low, opening, and closing trade prices	100 %
Aggregate price data and price indices	43 %
Cumulative trade volume	100 %

Best bid and ask prices	100 %
Quantities at best bid and ask	100 %
Identities of parties who placed those order	14 %
Bid and ask prices behind the best prices	86 %
Quantities at those prices	86 %
High, low, opening, and closing mid-quote prices	86 %
Request for quotes	29 %
Number of individuals logged onto system	14 %

Table 4-1

One subject participated in the survey added that their institution receives other information not listed in the survey. Such information he says, "Market Depth, i.e. Market By Order, Market By Price, Market News, Stock Market Trading details, e.g. total traded, amount, total traded volume, 52 week price high/low, ...Market Indices information."

From a network point of view, the Information Technology (IT) Director at Tadawul pointed out that two methods are used to disseminated the market information:

1. Via the national private financial data network usually referred to as SAMA Joint Network (SJN)
2. Direct connectivity between data vendors and Tadawul via leased lines

He also added that, “The SJN connectivity is only available to the banks as it is the primary financial network and carries most of the financial services.”

From an application point of view the IT director described the methodology as:

The Trading Engine generates the market information in real time and sends it to a gateway. The gateway in turn sends to each client via its connection and client application using one of the two protocols... 1) Publish/Subscribe using the industry standard FIX [Financial Information exchange] protocol 2) Broadcasting using a propriety streaming protocol. We are currently phasing out the first method as it consumes the majority of the network bandwidth available to each bank, which in turns impacts the timeliness of the information being disseminated. The second method is lightweight on the network and simple to implement by the banks or brokerage firms in the near future.

Tadawul charges their clients for real time information as the Capital Market Advisor says, “Tadawul does charge information vendors for access to real-time information data feeds, but Tadawul also publishes announcements, financial statements and market data on its website [<http://www.tadawul.com.sa>] where access is free”. He also adds, “Tadawul sells real-time information to information vendors, for onward sale to market participants and investors.” The IT Director adds, “Market data is published on Tadawul website as well (delayed for business reasons).”

A question in the survey sent to the brokerage firms asked: From whom does your institution receive the Saudi Capital Market information. Three options were given: Tadawul, UniQuotes or other. The answers are shown in Table 4-2.

	Percentage of Participants
Tadawul	57 %
UniQuotes	29 %
Both (Tadawul and UniQuotes)	14 %

Table 4-2

Another question was asked in the survey sent to the brokerage firms. The aim of the question was to learn to whom the brokerage firms re-disseminate the market information. Four choices were given: brokers, investors, other users, and not applicable. The results are as shown in Table 4-3.

	Percentage of Participants
Brokers	14.3 %
Investors	57.1 %
Both (Brokers and Investors)	28.6 %
Other Users	0 %
Not applicable	0 %

Table 4-3

Brokerage Firms Critique:

It was critical to the researcher to understand how the brokerage firms evaluate the current methodology that Tadawul uses to disseminate market data. A question was asked to the brokerage firms, “How does your institution evaluate Tadawul current methodology and strategy in terms of disseminating market information (strengths and weaknesses).”

One participant described Tadawul’s strength as, “the disseminated information is very detailed, and contain all info [information] needed by our institution, the performance is also acceptable, and no major concerns to mention.” On the other hand, one participant mentioned that the timing is one of Tadawul’s weaknesses “Not reachable to all investors. [Information].” The same participant adds, “Some times Shares trading are frozen based on this (sic) info [information] which has high impact on the market specially if some investors are aware of this (sic) info [information], and IT is not available to everyone.”

Strategy:

Tadawul strategy regarding information dissemination is to encourage information vendors to provide the service to all market participants. The Capital Market Advisor says regarding this issue:

Tadawul’s strategy is to continue to encourage information vendors to provide services to the market participants and the investing public. We strive to

have information disseminated in various forms including: the Internet, information vendor networks, intermediaries networks and communication channels (e.g. SMS) [Short Messaging Service], television, print media (newspapers and magazines), websites and via conferences and public forums.

From a technological point of view, the IT Director described the short term plan is to upgrade the network infrastructure. He explained that as, “The current and short term plans are to upgrade the network infrastructure to enable more data vendors/participants to subscribe to this service and enhance the disaster recovery facilitation (sic).”

New Capital Market Law:

The Saudi Council of Ministers passed on June 16, 2003 a new Capital Markets Law that lays out the framework for the capital market. The Capital Markets Law was published in the Official Gazette on 29th August 2003. The objectives of the new law were discussed in chapter 2.

The Capital Market Advisor at Tadawul discussed the impact of the new law on Tadawul by saying, “Tadawul's current strategy will be largely unaffected, but Tadawul (to be transformed into the Saudi Arabia Stock Exchange) will be required to abide by the licensing criteria and regulatory requirements of the Capital Markets Authority. Thus some changes may occur.”

The IT director agrees with the Capital Market Advisor that the current strategy will remain the same. “The current strategy will likely remain the same even with the enactment of the CML [Capital Market Law]. However, there will be higher demand for market data as more brokerage firms establish themselves in the market”, the IT Director says.

A question was asked through the survey to the brokerage firms regarding the new capital market law and information dissemination. The question was “What would you like Tadawul to consider in terms of setting up their future plan regarding the capital market information dissemination, keeping in mind the new Saudi Capital Market Law that was announced with a royal decree in June, 2003.” Confidentiality and Transparency were the terms that appeared on almost all the answers. Another participant suggested that if a company doesn’t provide its financial information on time, to be stopped from trading for a certain time.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Introduction:

This chapter summarizes the research objectives and the significant findings and conclusions of the study. Recommendations related to this study and future research regarding the information dissemination in the Saudi Stock Market were addressed as well.

Statement of the Problem:

How could the Saudi Stock Exchange (Tadawul) increase the efficiency of disseminating the market information in order to increase the utilization of their service and attract more participants?

Research Objectives:

The objectives of this study are as follows:

1. Understand general Saudi Stock Market perspective.
2. Understand the general methodology of the information dissemination in the Saudi Stock Market.
3. Determine the future trends of the information dissemination in the Saudi Stock Market.

Discussion of Significant Findings:***Saudi Stock Market Perspective:***

The Saudi Stock Market is the largest market in the Middle East and ranked 30 for the whole world as of 2000. As of September 2002, the market capital was \$80 billion. As of performance, it is the 17th best performing market in the world in 2000. The number of trading transactions, volume and value has increased dramatically in the Saudi Equity Market between 1990 and 2002 (Table 2-1). The Tadawul All Share Index increased by 157% and the market capitalization has increased by 189% (Tadawul, 2003). The current number of companies listed is 69 companies (Appendix D).

Information Dissemination Methodology:

The Saudi Stock Market disseminates full market depth. It disseminates the market information through the following channels:

1. Through Tadawul's website (delayed at least 5 minutes);
2. Real time market information via Tagged Ticker gateway to news agencies and services such as Reuters and Bloomberg;
3. Via member gateway for the banks (brokerage firms) for their own use and dissemination through their own systems;
4. Through the National Technology Group (NTG) via the UniQuotes systems that disseminates real-time market data on a subscription basis.

Future Trends:

The new Capital Market Law that was announced in June 2003 stated many changes and new opportunities to the future Capital Market in Saudi Arabia. To highlight some of the objectives, the Saudi Arabian Securities and Exchange Commission (SEC) will:

1. Regulate the investment and securities business in Saudi Arabia.
2. Register and regulate the Saudi Arabian Securities Exchange, which includes the national securities depository.
3. Register securities to be offered for subscription or sale to the public.
4. Organize training programs and promote high ethical standards.
5. Register and regulate non-bank financial intermediaries including members of the Exchange, and employees of these, and others involved in the organization and operation of the capital market including custodians of securities and credit rating agencies.
6. Protect the integrity of the securities market against abuses arising from the practice of insider trading.
7. Review, approve and regulate mergers, acquisitions and all forms of business combinations,
8. Provide investor education and promote investor awareness,
9. Prevent fraudulent and unfair trade practice relating to the securities industry,

10. As received, perform such other functions and exercise such other powers not inconsistent with the law as necessary, or expedient for giving full effect to the provisions of the law.

Therefore, the Saudi Arabian Capital Market will face new companies requesting to be listed in the exchange. On the other hand, allowing other firms to be involved, such as brokers will increase the demand of market information. That in turn will increase the number of investors and will have a high impact on the market due to the increasing number of companies listed and the level of competition will be increased as well.

The new law also announced that the Saudi Arabian Securities and Exchange will be a private sector company and the only stock exchange operating in the kingdom and will perform the following tasks:

1. Ensure fairness and transparency of the markets operated by the exchange,
2. Admit members, both brokering and clearing,
3. List and explain the requirements and conditions for the listing securities,
4. Promote high ethical standards among members, their employees and market participants,
5. Promote high standards of corporate governance,
6. Ensure timely and accurate dissemination of market information,

7. Establish and operate wide system for securities trading, settlement clearing and depository in order to protect investors and maintain fair and orderly markets; and
8. Provide modern communication and data processing facilities in order to foster efficiency, enhance competition, and increase the information available to market participants.

Since transparency and confidentiality were two remarkable terms the researcher noticed in the survey, it was recognized as the top priority of the new Capital Market. Ensuring timely and accurate dissemination of market information was a major trend that was considered in the new law as well.

Conclusion:

In the last 13 years the Saudi Stock Market has grown dramatically. In 1990, Tadawul All Share Index (TASI) was only 979.80 points. As of December 11, 2003, TASI closed on 4383.47 points (Bakheet Financial Advisors, 2003). With an increasing number of investors and companies listed, the market capitalization increased also.

The Saudi Stock Market could be viewed as an Exchange with limited companies listed and could be traded through only 10 brokerage firms. This limitation was addressed in the new Capital Market Law.

The new Capital Market Law will allow more companies to be listed in the Exchange easily based on certain criteria. This will increase the market capitalization, thus will increase the number of investors. Also allowing new brokerage firms to enter the market will enhance the information dissemination to reach the widest number of investors as possible.

Recommendations:

In a general overview, the Saudi Stock Market is doing well. On the other hand there are some issue that should be discussed further from a strategic point of view. The recommendations made based on the study are as follow:

1. The Saudi Stock Market should provide a clear business plan on how it will handle the increasing number of listed companies and new brokerage firms.
2. The Saudi Stock Market should work closely with listed companies to assure that all financial statements and new market information are disseminated equally to investors.
3. The Saudi Stock Market should encourage investors to learn more about its organization process and the process of trading by providing seminars and conferences. Also encouraging the brokerage firms to spread more awareness to their investors on how to deal with the information they receive.
4. The Saudi Stock Market should monitor the technological capability of the brokerage firms in terms of the fairness of re-disseminating the information. This should be done with assuring that all investors, regardless of their geographical

location, could receive the information in a timely manner and equivalent to other investors.

5. The Saudi Stock Market should look into allowing foreign investors to invest in their market. This will increase the market capitalization and increase the number of traders in the exchange.
6. The Saudi Stock Market may conduct a research to study the idea of disseminating real or delayed (as of their website) market information through television channels to reach the widest number of investors.

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APPENDIX A

Tadawul Interview Questions

CAPITAL MARKET ADVISOR

1. When we say the term “information dissemination”, what does that mean in the exchange industry?
2. How important is it to the stock market and precisely to the Saudi stock market (Tadawul)?
3. What is the methodology that Tadawul follow to disseminate their market information?
4. What is the strategy and long term plan that Tadawul set up in this aspect?
5. Finally, how is the new system that was announced in June by royal decree to restructure the capital market in Saudi Arabia will affect the strategy that Tadawul already have?

APPENDIX B

Tadawul Interview Questions

IT DIRECTOR

1. How does Tadawul disseminate their market information?
2. What technology does Tadawul use to disseminate their market information?
3. What is the relation between Tadawul and National Technology Group (NTG) in dissemination the information through the so-called new system UniQuotes?
4. What is the future plan in improving the technology of the information dissemination used now?
5. How would the new capital market law affect the strategy that is in place regarding the information dissemination?

APPENDIX C

BROKERAGE FIRMS SURVEY

1. How many investors trade Saudi Arabian Securities (Stocks) through your institution:

- | | |
|------------------------------|------------------------------|
| 1. None | 1. 50,000 – 100,000 investor |
| 2. 0 – 5,000 investor | 2. 100,000 – or more |
| 3. 5,000 – 10,000 investor | 3. Confidential |
| 4. 10,000 – 50, 000 investor | |

1. Please Check all the applicable types of information that your institution receives from the Saudi Arabian Capital Market (Tadawul):

- | | |
|--|--|
| 1. Price of the last trade | 1. Identities of parties who placed those orders |
| 2. Quantity of last trade | 2. Bid and ask prices behind the best prices |
| 3. Time of last trade | 3. Quantities at those prices |
| 4. Identities of parties to last trade | 4. Identities of parties who placed those orders |
| 5. High, low, opening, and closing | 5. High, low, opening, and closing |

trade prices

mid-quote prices

6. Aggregate price data and price indices

6. Request for quotes

7. Cumulative trade volume

7. Identities of parties who requested quotes

8. Best bid and ask prices

8. Number of individuals logged onto system

9. Quantities at best bid and ask

9. Identities of those individuals

If your institution receives other market information than what is listed above, please indicate:

--

- 1. From the list above, what information is most important to you?**

--

1. From whom does your institution receive the Saudi Capital Market information:

1. Directly from the Saudi Stock Exchange (Tadawul) 1. UniQuotes 1. Other

If you answered with other, please indicate from whom, in the box below:

--

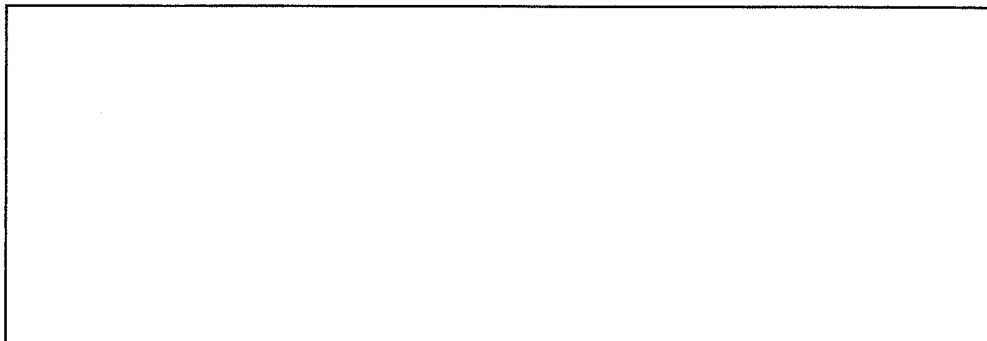
1. Please indicate to whom your institution re-disseminates the market information to:

- | | |
|--------------|-------------------|
| 1. Brokers | 1. Other users |
| 2. Investors | 2. Not applicable |

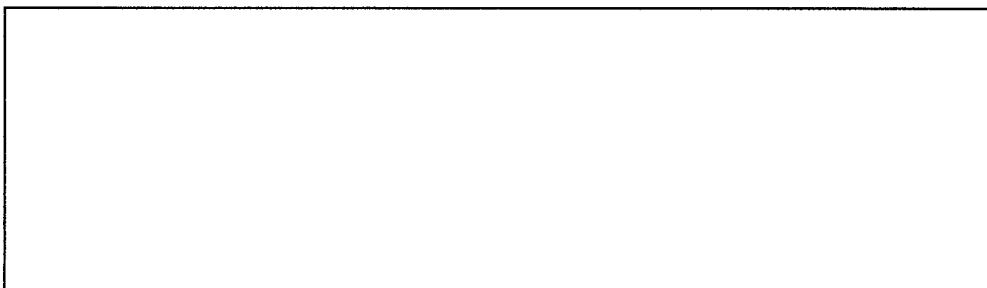
If you answered with other please indicate:

--

- 1. How does your institution evaluate Tadawul current methodology and strategy in terms of disseminating market information (strengths and weaknesses):**

A large, empty rectangular box with a black border, intended for the respondent to provide their evaluation of Tadawul's current methodology and strategy.

- 1. What would you like Tadawul to consider in terms of setting up their future plan regarding the capital market information dissemination, keeping in mind the new Saudi Capital Market law that was announced with a royal decree in June, 2003:**

A large, empty rectangular box with a black border, intended for the respondent to provide their suggestions for Tadawul's future plan regarding capital market information dissemination.