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TRAN THI QUYNH GIANG

**COMPLETING THE ACCOUNTING INFORMATION
SYSTEM IN STEEL MANUFACTURING ENTERPRISES
OF VIETNAM STEEL CORPORATION**

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DOCTOR THESIS SUMMARY

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INTRODUCTION

1. The urgency of the topic

As a country with a developing economy, Vietnam has been gradually entering the global economic integration. International economic integration is a useful and important condition for our economy to develop. Besides, the market economy with its harsh laws also has a great impact on existing and development of Vietnamese enterprises. Steel enterprises in Vietnam is not out of that challenge.

In order to improve operational capacity, competitiveness, managers need to use management tools, including a very important tool is accounting information system (AIS). The AIS provides necessary information on the financial and economic activities of enterprises in a timely and accurate manner for the subjects in need. A well-organized AIS will provide the most appropriate information to meet the needs of accounting information users.

AIS has a very important role and significance for the existence and development of all enterprises, including steel manufacturing enterprises. In fact, the role of AIS in the steel manufacturing enterprises is not effective today. The AIS does not fully, timely and accurately reflect the information needed to meet the diverse information needs of different stakeholders in the economy. In the steel industry, the information system is mainly focused on the establishment and supply of financial accounting information, while the administrative accounting information system has not been exploited so the information source that the steel manufacturing enterprises supply is not effective for the operation of enterprises. In order to develop Vietnamese steel enterprises, it is necessary to have the support of accounting information. Therefore, the completion of the AIS in the steelmaking business will be a necessary issue, opening a new direction for managers to make the right decision for the development of their business. Starting from this reason, the author selected the topic "*Finalizing the accounting information system in the steel enterprises under the Vietnam Steel Corporation*" as his Ph. D research topic.

2. Overview of related research works at home and abroad

2.1. Studies on accounting information system

The accounting information system has been studied by different authors in different features, from the perspective of financial accounting (FA), management accounting (MA) or the combination of FA and MA. Currently, research works on accounting information system are mainly based on three approaches, namely: accessing to information processing process of AIS; accessing to the components of the AIS and access to the application of technical means in AIS.

Study AIS according to the information processing

When studying AIS according to the information processing both domestic and foreign authors agrees that AIS includes the process of collecting information, processing information and analyzing information according to the methods that have been defined to provide information to the users.

The author Hoang Van Ninh (2010) studies on "*Organization of Accounting Information System for Management in Economic Corporations in Vietnam*" [22]. By Tran Thi Nhung (2016) with the theme "*Completing accounting management information system*

at tea enterprises in Thai Nguyen province" [21]. Nearly, Nguyen Thi Thu Thuy (2017), with the theme *"Completing the accounting information system in joint stock companies listed on the Vietnamese stock market"* [32].

Author Hongjiang Xu, University of Southern Queensland, Australia, with a thesis on *"Critical Success Factors for Accounting Information Systems"* (2003) studied key success factors for data quality in AIS [46]. Senin (2011) with the study *"The purpose of management Accounting Information and Process of management Accounting"* considers that the AIS process includes collecting, measuring, storing, analyzing, supplying information and controlling information [61]. The group of authors of Marija Tokic, Mateo Spanja, Iva Tokic and Ivana Blazevic (2011), with the study *"Functional structure of entrepreneurial accounting information systems"*, suggest that the model of AIS is the process of data collection, analysis and processing according to principles, standards, policies, methods, recording tools to collect accounting information, provide information for the users' needs, especially state agencies, the state, lenders, suppliers, associations, supervisory boards, shareholders and others [51].

These studies are the basis for the author to inherit and clarify the theoretical foundation of ASI in the processing information including the process of receiving, processing, providing accounting information. From there, the researcher investigated this situation in the surveyed enterprises.

Study the ASI according to the elements of the ASI

Authors Nguyen Huu Dong (2012) studied on *"Completing the accounting information system in Vietnamese public universities"* [8]. The author Ho My Hanh (2014) studied on the topic *"Accounting information system cost organization in Vietnam garment enterprises"* [14]. The author Huynh Thi Hong Hanh (2015) studied *"Analysis and design of accounting information system in public hospitals"* [13]. Author Vu Ba Anh (2015) studied the topic *"Accounting information system organization in business enterprises in the conditions of applying information technology"* [1]. In the same view with these authors, Le Thi Hong (2016) with the topic *"Finalizing the accounting information system cost in processing paving stones enterprises in Vietnam"* [16].

Overseas studies such as, *"The effectiveness of accounting information systems in Jordanian private higher education institutions"* written by Thaer Ahmad Abu Taber, Jadara University studied the effective factors to AIS in Jordan Private Universities [64].

Study ASI applying technical means

Research projects applying the technical means show that it is necessary to have the support of accounting software and technical means for the effective operation of the internal accounting system to apply the resource planning system. At the present the research works in Vietnam is not much enough, including Nguyen Bich Lien (2012) with the study *"Identifying and controlling factors affecting the quality of accounting information in the application environment enterprise resource planning system in Vietnamese enterprises"* [19].

There are some overseas studies on the application of technical means in AIS. Ashari, Diponegoro University, with his thesis *"Factors affecting Accounting Information*

Systems, successes in implementation" (2008) studied the factors affecting ASI in small and medium enterprises in Central Java [38]. Author Ali Alzoubi studied *"The Effectiveness of the Accounting Information System under the Enterprise Resource Planning (ERP)"*, (2011) studying the effectiveness of the AIS for companies applying the ERP, and its relationship to the output quality of accounting information and internal controls [36]. The author Hazar Daoud, Sfax University with the thesis *"Accounting Information Systems in an ERP"* (2012), studied AIS in an ERP system to test the impact of AIS in an ERP system in operating company [44]. The *"Usage of and Satisfaction with Accounting Information Systems in the Hotel Industry: The Case of Malaysia"* (2013) by Ainon Ramli, Hull University research affecting factors on use and satisfaction with AIS in the hotel industry in Malaysia [37].

In addition to research works related to AIS, the thesis has different approaches, including research articles such as Dinh Thi Mai (2010), *"Improving the quality of accounting information system in public universities and colleges"* published in the Journal of Economics and Development [20]. Nguyen Thi Phuong Thao (2014), *"Building an Enterprise Accounting Information System in Vietnam"* was published in the Financial Journal [30]. The article *"Organization of Accounting Information in Current Enterprises"* by La Thi Thu (2014), published in Financial Journal [31]. Two authors Ngo Thi Thu Hang and Nguyen Thi Thuy Dung (2015) studied *"Building Intelligent Accounting Information System in An Phu Hung Joint Stock Company"* published in the Journal of Science and Development [10].

2.2. Works about Steel field

Currently, there are a number of studies in this field including: Do Thi Hong Hanh (2015), *"Finalization of revenue and cost accounting in steel enterprises in Vietnam Steel Company"*, the author just focused on cost and revenue accounting, determine the results of sales and service activities, financial activities in the steel enterprises but not to study other activities [12]. The researcher, Dao Thuy Ha (2015), studied *"Finalization of cost management accounting in steel enterprises in Vietnam"*, in her thesis, the author only studied in the steel enterprises on the angle of management accounting to determine the information demand for the planning and decision making of the administrator used inside the enterprise, the information needs for the users outside the company is limited. Therefore, the content of cost accounting information has not been fully covered [9]. The author Dao Manh Huy (2016), with the study *"Finalizing the preparation and presentation of consolidated financial statements in the Steel Association of Vietnam"*, the author focused on how to prepare and present consolidated financial statements in the mother-son company model, then applied and gave solutions to improve the preparation and presentation of consolidated financial statements in Vietnam Steel Association. Thus, the author mainly goes into the study of preparing consolidated financial statements process, order, procedures, techniques of processing and analysis while the content of information is not analyzed [18].

2.3. Conclusions drawn from the researched works

The researched works reviewed by the authors have been approached from a variety of perspectives, mostly in structural or other approaches, with very few authors approached by the means of information processing.

Recent research projects on AIS are mainly focused on issues such as design, construct or organize the AIS with specific types of enterprises. However, the new researches only confirm the important role of AIS affecting economic decision, have not clarified the impact on the specific users, including the internal and external information users.

The researches mainly focused on management accounting system to provide information for business administration, few researches dealt with both the financial accounting information systems and management accounting information system, serving for internal enterprises and for information users inside and outside the enterprise. On the other hand, previous researches have been mainly studied in terms of manual accounting combined with simple technical means, but nowadays with the development of science and technology contributed to comprehensive changes in the field of accounting are most evident in the way data processing and accounting information having a leap with previous manual accounting processes.

Basing on the above comments, the research gap that the author will study in depth is the issue of information technology in the information processing in a comprehensive way, thoroughly both in AIS financial accounting and management accounting in the context of enterprises applying IT, especially in the ERP environment. According to the author, research on AIS problem following information processing is the most comprehensive and appropriate scientific approach. The accounting information provided by the information system is the basic one on the financial and business situation of the enterprise, which will greatly help for users to have decision using information inside and outside the enterprise. Therefore, the topic "*Completing the accounting information system in the steel enterprises of Vietnam Steel Corporation*" is absolutely appropriate and necessary in the context of AIS in the Vietnam Steel Corporation while the supply of useful information with good quality to the users inside and outside the company is not effective, can not meet the information needs.

3. Objectives of the study

Find solutions to improve AIS in the steel production companies under the Vietnam Steel Corporation.

4. Subjects and scope of research

Research subjects

The thesis researches on AIS in manufacturing enterprises in general and the manufacturing steel enterprises of the Vietnam Steel Corporation in particular.

Research scope

- Content: The dissertation focuses on the completion of the AIS in manufacturing steel enterprises under the Vietnam Steel Corporation in a process based on the information processing including the process of acquiring accounting information, the accounting information processing, providing accounting information and controlling information to provide useful and quality information to meet the users' needs. The dissertation studies both two contents financial accounting information system and management accounting information system.

- Space: The thesis only researched at enterprises both manufacturing and trading of Vietnam Steel Corporation.

- Time: The actual survey data in implementing units through 2015, 2016, 2017.

5. Research questions

In order to achieve the aim of studying the reality of AIS in manufacturing enterprises in general and the manufacturing steel enterprises of the Vietnam Steel Corporation in particular, the thesis goes into the research to answer the following questions:

- What are the basic elements of AIS in the manufacturing enterprises when accessing the information system through the information processing?
- What are the characteristics of steel production and trading that affect the AIS?
- Does the state of AIS in the manufacturing steel enterprises of the Vietnam Steel Corporation meet the demand for information?
- What are the solutions needed to complete AIS in the manufacturing steel enterprises of Vietnam Steel Corporation?

6. Research Methodology

The thesis uses the methodology of dialectical materialism combining with historical materialism to present, analyze, and evaluate problems in the relationship between phenomenal things and their concrete history. In addition, the thesis uses synthesis, inductive, interpretive and systematic methods.

Primary data collection method

The author conducted the interview method, in-depth interview with some typical enterprises; submitting questionnaires to questionees who are accountants and administrators in manufacturing steel enterprises

+ *Select enterprises for survey*: Basing on random sample selection, 28 enterprises (10 enterprises in the North, 01 enterprise in the Centre, 17 enterprises in the South in which there are 8 sub-companies, 3 affiliated companies, 17 co-operated companies). These are the specialized companies operating in the field of both steel production and business, covering all three regions of North, Central and South, and there are subsidiaries, affiliated as well as co-operated units. attached. Accordingly, the author makes a list of enterprises surveyed (Appendix 01A).

+ *Identify the objects and content of the survey*: (1) Enterprise managers (directors, deputy directors) to survey the need of using accounting information in enterprises; (2) Accountants to survey the situation of the AIS in the enterprises.

+ *Survey method*: Send survey questionnaires directly to representative leaders, accountants of manufacturing steel enterprises by email, post.

+ *Synthesis, analysis of data and present of survey results*:

With 56 questionnaires sent to 28 companies, after the survey time, the author received 44 votes in accordance with the requirements of the dissertation. Quantitative data collected from the survey questionnaire were synthesized, processed and analyzed using a combination of methods: Statistics, comparison, analysis, forecasting through Excel spreadsheet, then make a summary table report the results of the survey (Appendix 01E).

Collect secondary data

Collected from sources such as: Summary reports, website of Vietnam Steel Association; vouchers, accounting books, financial statements of enterprises according to

survey forms; web pages of the manufacturing steel enterprises of Vietnam Steel Corporation; scientific research works; the thesis in the country and all over the world through the websites of universities and specialized websites providing research articles related to the thesis.

7. Contributions of thesis

Research topic has both theoretical and practical contributions.

8. Structure of the thesis

Apart from the introduction, conclusion, index, list of references and appendices, the thesis is divided into three chapters:

Chapter 1: Theoretical background on accounting information system in manufacturing enterprises.

Chapter 2: The current status of the accounting information system in manufacturing steel enterprises of the Vietnam Steel Corporation.

Chapter 3: Completing the accounting information system in the steel manufacturing enterprises of the Vietnam Steel Corporation

CHAPTER 1

THEORIOTICAL BACKGROUND OF ACCOUNTING INFORMATION SYSTEM IN MANUFACTURING ENTERPRISES

1.1. Overview of the accounting information system in manufacturing enterprises

1.1.1. The nature of the accounting information system

To understand the nature of AIS, we must first understand the role of accounting information in an enterprise. Accounting information is a business resource, like other business resources (raw materials, capital, labor). Accounting information is very important for the survival of business organizations. Accounting information is used to meet the users' need inside and outside the company (James A. Hall) [48].

ConceptSystem: A system is a set of components that combine together and work together to achieve defined goals. A system must serve at least one purpose, when a system no longer serves a purpose, it needs to be replaced. The system can exist at many different levels. A system can be a component in another system and is called a subsystem. A subsystem also has the full features of a system. These subsystems are also set up to have their own goals basing on the organization's overall goals.

According to Boochholdt (1999) and Romney (2012) "Accounting Information System is a system that collects, processes, classifies and reports financial economics events to supply information and make decision "[41]. The data on financial and economic operations arise as inputs of AIS, the process of data processing is the process of recording, synthesizing and analyzing the accounting data. by appropriate accounting methods and the use of technical means of support. The output of the accounting information system is the information product on the accounting report including financial statements and management reports. These accounting reports provide information to users using accounting information to meet the information users' need using information that can make

timely decisions. Objects use information including objects inside and outside of the unit.

Research AIS basing on information processing perspective approach has appeared in Vietnam in recent years (Nguyen The Hung, 2006, Hoang Van Ninh, 2010, Tran Thi Nhung, 2016 ...) and is quite similar to the most popular AIS researches in the world (Boochholdt, 1999; Saira et al., 2010; Romney and Steinbart, 2012; Gelinas, Dull and Wheeler, 2012...). Accordingly, the author Saira et al., 2010; author Emeka-Nwokeji, (2012) states: "AIS is a tool used to collect, store and process accounting financial data and provide information to managers in planning, controlling, evaluating and making decision. "[43]. AIS in the unit performs the tasks such as: collecting, storing data on the activities of the organization regularly, continuously, transferring data into the information that managers can plan, control, and evaluate the organization's activities and then make decisions.

The researches on AIS agreed with the view that the common process of AIS includes: information collection, processing - information analysis and information supply. In the content of the thesis, the author also expressed the view of consensus is: "AIS is a system that includes the process of collecting, systematizing and processing data to generate economic and financial information and support to users in decision making ".

1.1.2. The role of the accounting information system

It can be said that the role of AIS is to manage, monitor, analyze and provide useful information for the management of the unit. They can indicate the role of AIS in the following aspects: (1) AIS for economic managers; (2) AIS for investors; (3) AIS for the management and supervision of the State.

1.1.3. The requirements of AIS in the enterprise

AIS will be considered successful if it satisfies all of the following basic requirements:

- The provided information must be relevant and relevant.
- The provided information must be reliable and timely.
- The provided information must be comparable and consistent.
- Accounting information must be easy to understand and convenient for the users.

1.2. The need for accounting information and the factors that affect AIS

1.2.1. Demand for accounting information from the users

The needed information of the enterprise includes two groups: Financial accounting information and Management accounting information.

When determining the needed information, it is necessary to identify the subjects using accounting information inside and outside the enterprise.

For inside manufacturing enterprises users:

For senior managers: information for planning, decision-making comes from a variety of sources, both internal and external, often complex, depending on capacity, management and vision of the leaders. Therefore, the strategic information provided to senior executives is generally high and has no certain pattern.

For intermediary managers: information at this level is based on the manager's primary duties, often including information used for controlling, decision-making and reporting information to senior managers.

For grassroots managers: The needed information at this level is very detailed,

structured, easily-responsible through reports, tables, schedules available, requirements quotas. In addition, depending on the specific task, the grassroots managers may also have to control the operation of the management department by using the norms and cost estimates to compare with the results to implement the common directions for the operation of the department.

For outside manufacturing enterprises users:

Information for outside manufacturing enterprises users is the statutory financial information. This information is expressed through the system of indicators in the financial reporting system according to the regulations of the accounting system.

1.2.2. Factors affecting AIS

In order to be effective for manufacturing activities and to meet total requirements of managers, it's necessary to have the following factors when building AIS

- (1) Management needs in the enterprise.
- (2) Management ability.
- (3) Characteristics of organization of business activities in the enterprise.
- (4) Level of application of IT equipment in enterprises.
- (5) Qualifications of accounting staff.
- (6) Legal environment.
- (7) Information needs of other related objects.

1.3. Contents of AIS

In the author's view, the AIS consists of four processes: collecting, processing, supplying and controlling information. At the same time, the author studies the AIS in enterprises in the ERP resource planning environment.

1.3.1. Models of AIS in enterprises

Each company has different models of AIS. According to James A. Hall, depending on the level of IT application of the enterprise, the AIS models include:

- Manual process model
- Flat - File Model (Flat - File)
- Database model (Data base)
- REA model
- Enterprise Resource Planning (ERP) model
- Cloud computing model (cloud computing)

1.3.2. The process of acquiring accounting information

Receiving information is the beginning of the entire accounting process, which is critical to the truthfulness and objectivity of accounting information provided to the users and at the same time to ensure the information provided is appropriate and reliable.

1.3.2.1. Received information content

Depending on the characteristics of the production and business activities of each unit, the process of collecting information may be different. In other words, the content of information determines the process of obtaining information. It is possible to generalize the information to be received in an accounting unit at the most general level including: past and future information.

1.3.2.2. Accounting information accessing method

With different received information content, the way to get information is different. Accounting information is recorded through accounting documents, which are used to reflect transactions occurring inside and outside the enterprise such as receipts, bills, bills of sale, invoices.

1.3.2.3. The department acquires accounting information

The initial information acquisition is done by different parts of the enterprise, which depends on the organizational structure, functions, tasks of departments, and the decentralization of responsibilities for ministries in the business.

1.3.3. Accounting information processing

Depending on the content of the information, the needed information users as well as other factors affecting AIS, the process of systematizing and processing accounting information is done by different methods basing on certain goals.

1.3.3.1. Requirements and objectives of processing accounting information

1.3.3.2. Means of accounting information processing

The processing of accounting information is done basing on the general data generated by the acquisition system. To perform accounting information processing, the system uses the methods, including:

Dealing with Financial accounting information

- Processing information by pricing method
- Processing information through accounting account system
- Processing information through the accounting books system

Dealing with management accounting information

- Processing accounting information for planning functions
- Processing accounting information for the function of implementation organizing
- Processing accounting information for controlling functions
- Processing accounting information for decision-making functions

1.3.3.3. The department handles the accounting information

Accounting information after the receipt is processed at the accounting department. Therefore, the processing of accounting information depends on the organizational structure of the accounting system, the level of accounting staff and technical tools used in the accounting work.

1.3.4. Providing accounting information process

Depending on the users' needed information as well as other factors affecting the AIS in the enterprise, the process of providing accounting information is based on the content of the provided information and what is the information supplying way of the system.

1.3.4.1. Information users and provided information content

- Inside the enterprise information users
- Outside the enterprise information users

1.3.4.2. Providing accounting information means

Basing on the need to use the information including financial accounting information and management accounting information, accounting information is provided mainly on two ways:

- Provide information on financial statements
- Provide information on management accounting reports

1.3.5. Controlling accounting information process

Controlling is a process of monitoring activities to ensure that these activities are carried out according to plan and correct important deviations. In COSO's viewpoint: Internal controlling is a process dominated by the manager, board of the directors, staff, established to provide reasonable assurance to achieve the objectives such as (1) The effectiveness and effectiveness of the operation. (2) The reliability of the financial statements. (3) Compliance with laws and regulations.

According to the author, the process of controlling the accounting information of the system is the process towards the control of the quality of accounting information to provide to the users.

The role of accountant in AIS applying ERP model

In the ERP environment, the role of accountant no longer focuses on recording, transferring, calculating data, moving to data analysis, information to support decision makers as well as monitoring, controlling the information quality.

CHAPTER 2

THE REAL SITUATION OF ACCOUNTING INFORMATION SYSTEM IN STEEL MANUFACTURING ENTERPRISES OF VIETNAM STEEL CORPORATION

2.1. Overview of steel enterprises under the Vietnam Steel Corporation

2.1.1. The formation and development process of Vietnam Steel Corporation

Period 1995 - 1999

Period 2000 - 2004

Period 2005 - 2010

Period 2010 up to now

2.1.2. The position and role of Vietnam's steel industry in the national economy

Steel is the base industry of each country. The strong steel industry is the stable and upward stabilization of the economy. Steel products are the main materials, the "food" of many important economic sectors such as mechanical engineering, construction industry; It plays a decisive role in the cause of industrialization and modernization of the country.

2.1.3. Organizational business characteristics and organizational management affect the accounting information system in the steel enterprises of Vietnam Steel Corporation

2.1.3.1. Organization business characteristics in steel manufacturing enterprises

**** Steel production processing organization***

The steel industry has more different characters than the other industries. The technological process consists of four phases: the iron ore mining and processing stage, the billet production stage, the production stage, cast iron stage and finished steel products. Each stage is located in production areas with private machinery, equipment and personnel.

**** Enterprise management needs***

Currently, the steel manufacturing enterprises is facing fierce competition in prices, models, types of steel products from foreign steel companies. Therefore, producing the

highest steel output with the best quality, the cost management factor of steel production is one of the important factors in the current period.

* Management level, resources of the business

According to the survey results, Vietnam Steel Corporation has a management team of fairly uniform level, managers have all university degrees. However, the number of managers trained in management is still very low, most of the management team experienced through practical experience before.

Human resources directly involved in the process of collecting, processing and providing information of the information system in the steel manufacturing enterprises the staff of accounting.

2.1.3.2. Characteristics of management organization steel manufacturing enterprises

* *Management apparatus organization*

The organization of management in large-scale steel plants is typical of Vietnam Steel Corporation, Thai Nguyen Iron and Steel Joint Stock Company, Central Metal Company, Southern Steel Company, Da Nang Steel Company ... according to the online model function. The smaller steel enterprises such as Natsteel Vina steel company, Thu Duc steel company ... in simple model online.

* *Accounting apparatus organization:*

The accounting apparatus in the steel enterprises of the Vietnam Steel Corporation usually apply one of two forms of accounting organization is the accounting organizations such as South Steel Corporation, Phu My Steel Sheet Corporation, Vina Pipe company limited, Nha Be Steel company, Thu Duc Steel company, Bien Hoa Steel company ...; Accounting organizations have focused on scattered companies such as Thai Nguyen Iron and Steel Joint Stock Company, Da Nang Steel Joint Stock Company, ...

2.1.4. Demand for accounting information in steelmaking enterprises of Vietnam Steel Corporation

Information demand of managers in the steel making enterprises:

+ For information needs for planning: the information for business planning mainly refers to the information about estimation and information related to planning in the enterprise.

+ For information to serve the executive: managers are mainly interested in the information on costs, business performance in some parts. Other information related to operation management has not been promoted in enterprises.

+ For information for controlling: mainly information is about cost, turnover, assets ... related to the analysis of changes in cost items, cost ...

+ For decision-making information: information is related to decisions such as: cost minimization solutions for input elements of production processes such as materials, labor, capital, costs consumption, cost management? Which solution to lower production costs, increase sales? Will the order be accepted if the production capacity has been or has not been fully utilized? Which parts, products need to be expanded, narrowed, need to be built or removed?

Information needs of external objects steel making enterprises:

Investors: The need for accounting information serves the main purpose of making the decision whether to invest or not? If you are investing, how should control, manage capital? According to survey results, investors' information needs are often related to information on assets, liabilities, equity, revenues, costs, profitability.

Banks and credit institutions: concern about the solvency and profitability of enterprises, the repayment of capital and interest depends on the profitability.

Authorities, State management agencies: the need for accounting information is mainly for the purpose of monitoring the performance of enterprises, the obligation to pay taxes to the State budget, statistical data enterprises by sector, economic sectors ...

2.2. Status of accounting information system in steel manufacturing enterprises belonging to Vietnam Steel Corporation

2.2.1. The status of the accounting information system model in the steel manufacturing enterprises

The actual survey showed that the surveyed enterprises did not apply the manual processing model in the AIS. All of them applied the database model, in which the accounting work was supported by computer systems that use IT by installing computer software with internal network and internet connection. All enterprises have not applied the ERP model in their operation, but also tend to move gradually.

2.2.2. The status of the process of acquiring accounting information

2.2.2.1. Received information contents

- Background information:

Historical information in the steel manufacturing enterprises is mainly provided from the accounting department and some other related departments. The contents of the accounting information collected by the system are mainly accounting information about transactions and economic activities arising on the performance of business activities of the enterprise is established in departments, teams are transferred according to the regulations of the enterprise including the documents, the table related to property; inventory; debt; wages, production costs; the situation of implementing sales revenue of enterprises ...

- Future information:

In addition to the historical information on economic transactions that have occurred, AIS in the steel manufacturing enterprises also collects information about the future. These are information on the norms and cost estimates of production and business activities of enterprises, which are reflected in the norms such as norms of consumption of raw materials, labor cost norms, cost estimates according to each item cost, revenue estimate. This information may be set up in other departments and transferred to the accounting department for the performance of their business.

2.2.2.2. Accounting information accessing

According to the survey results of steel manufacturing enterprises of Vietnam Steel Corporation, the system of receiving accounting information using the means of accounting documents, related documents to reflect, record the transfer services, economic operations. Simultaneously with the support of tools such as computer systems, accounting software, software support.

2.2.2.3. *Acquiring and receiving accounting information department*

According to the survey results, all parts of the steel manufacturing enterprises are involved in the process of acquiring accounting information such as planning department, accounting department, technical department, human resources department ...

2.2.3. *The status of processing accounting information*

2.2.3.1. *Processing of accounting information target*

- Financial accounting information processing target
- Management accounting information processing target.

2.2.3.2. *Accounting information processing means*

Financial accounting information processing

- Financial accounting information processing by price calculation method

To process, codifying AIS in the steel manufacturing enterprises has used many methods, one of the important method is the price calculation method. The surveyed enterprises are guided by simple methods such as calculation of ex-warehouse price by weighted method (100% of enterprises), straight line depreciation method (100% of enterprises), the calculation of assets directly. Assets calculations, accounting objects in the enterprise do not rely entirely on accounting software, but performs an external manual, which helps to account into the account put the data on the corresponding accounting code on the software.

- *Processing accounting information through accounting account system*

Accounting information in the steel manufacturing enterprises is classified according to accounting objects on the general technical design. According to the results of the survey at steel yards, 22 enterprises (100%) have applied their accounting system in accordance with Circular No. 200/2014 / TT-BTC.

- *About encoding accounting objects:*

Currently, the steel manufacturing enterprises surveyed using accounting software, the software performs the encryption of accounting objects for monitoring management. Encrypted objects are usually: list of accounting accounts, list of materials, list of products, customer list, supplier list ... Each enterprise encodes in its own way, depending on management characteristics of each enterprise and usually depending on the requirements of the software provided.

Accounting accounts are used to classify information according to accounting objects that are encrypted in certain ways on accounting software. Depending on the size, characteristics and management requirements of each enterprise, the technical design system is coded according to private principles. The encryption of account numbers and encryption of detailed objects is completely separate and has a link key, detailed catalogs are built separately, independently with the accounting account system.

- *Processing accounting information through accounting books*

After the accounting information is classified on the accounting account system, it will be processed through accounting books. Depending on the characteristics of production and business, the steel companies choose the method of recording accounting books to suit their units. According to the results of the survey on the accounting forms applied in the

steel manufacturing enterprises of Vietnam Steel Corporation, 10/22 enterprises applied the form of general diary, accounting for 45.4% (Thai Nguyen Iron and Steel Joint Stock Company, Nasteel Vina limited company, Bien Hoa Steel Joint Stock Company ...); There are 7 companies applied the form of recording book, accounting for 31.8% (Vietnam Steel Pipe Company, VPS Steel Limited Company, Vina Steel Steel Limited Company...); There are 5 companies applying the form of journal diary, accounting for 22.7% (Southern Steel Joint Stock Company, Phu My Steel Sheet Joint Stock Company, Vina Kyoeei Steel Limited Company,...).

Management accounting information processing

- Processing information for planning

Survey results show that 17/22 enterprises (77.3%) have implemented information processing for planning through the implementation of norms and estimation. However, the construction norms and estimation in these enterprises just for construction of "Business production plan" for business production activities of enterprises.

- Processing information for implementation

Currently, the steel manufacturing enterprises not pay attention to the design of accounting account system for the collecting, processing and delivery of management accounting information. There are a few companies that have opened detailed accounts for international economic but not synchronized, not satisfied to meet the information requirements in management accounting.

The classification of costs in the current steel manufacturing enterprises, 100% of enterprises are classified by cost item to price, including production costs (direct materials costs, direct labor costs, general cost of production) and non-production costs (sales costs, management costs).

Regarding the method of determining costs at the steel manufacturing enterprises, the costs are determined according to the production process.

- Processing information for controlling

In order to process information for control, steel manufacturing enterprises is mainly based on comparative method, comparison between performance data and estimation data. The steel manufacturing enterprises are now primarily concerned with cost control. The information related to cost control is systematically processed in a way that compares the actual cost information with the estimating cost information, or the actual cost of the reporting period to the previous period to detect the difference. cost. However, in the current steel manufacturing enterprises channel information is not linked to each other.

Research on responsibility accounting in steel manufacturing enterprises, the author uses a number of questions and results that 100% of the steel manufacturing enterprises do not implement the responsibility accounting model. The reason for this is that some companies about 2/22 enterprises don't know this responsibility accounting with 9.1%; some do not understand the role of responsible about 5/22 enterprises accounting for 22.7% and 15/22 enterprises needn't use information from responsibility accounting for 68.2%.

- Processing information for decision making

According to the survey results, the steel manufacturing enterprises must always face up

with decision on selling price, 100% enterprises surveyed about the price frame, there were 16/22 enterprises (accounting for 72.7%) decided to purchase assets of, 10/22 enterprises decided to invest or not (accounting for 45.4%). Furthermore, the enterprises made some other decisions but not as often as the decision to maintain or remove some parts (9.1%), decisions to sell or continue processing (13, 6%), reject or accept orders (18.2%). Of all, the price decision is the most interested.

At present, the determination of the selling price of products transferred internally in the steel manufacturing enterprises is mainly based on actual costs incurred. The cost of producing rolled steel products is based on the production costs of previous periods, such as the extraction period, the production of liquid cast iron, and the steel billet. This pricing method will be detrimental to the final stage, the rolling phase, the waste at the stage of production of cast iron, steel ingot will be pushed to the steel rolling phase.

Real surveys in steel manufacturing enterprises show that 100% companies do not perform the relationship between cost-volume-profit (CVP) to determine break-even and business option.

2.2.3.3. The department handles the accounting information

According to the survey results in the steel manufacturing enterprises, the information after the collection will be processed mainly at the accounting department.

2.2.4. The status of providing accounting information process

2.2.4.1. Information users and provided information content

Information users inside enterprises

- Senior executives: such as board of directors, directors ... 100% surveyed companies show that the information provided to senior managers is the general financial information from the department, branches, subsidiaries.

- Intermediate managers: including managers in the functional departments of enterprises in the superior unit and subordinate units. The results of the survey at steel manufacturing enterprises show that the information used for these objects includes the information reflected in the performance reports of the department such as the departmental cost report, turnover, report on the use of capital, cash flow statement ...

- The grassroots administrators: including the managers in the workshops, the enterprises ... Information provided is the information related to the daily business situation such as information on demand to use materials, the situation of raw materials fluctuations, the situation of labor use, machinery use and equipment for production ...

Information users outside enterprises

According to the survey in the steel manufacturing enterprises, users of information outside the enterprise is the functional management agencies such as the tax authorities, the securities commission, stock exchanges ...; Investors are individuals, organizations such as investment funds, securities companies; Enterprises provide loans such as banks, credit institutions ... Information provided to these objects is mainly information reflected in the annual financial reports of enterprises, information related to use capital, information on financial capacity, documents related to property ...

2.2.4.2. Means of providing accounting information

Situation of preparing and providing information on financial statement:

AIS is presented in the financial statements. Based on the factual survey, the preparation and presentation of financial statements in steel manufacturing enterprises follow VAS 21 accounting standard about financial statement presentation.

The status of making and supplying information on the consolidated financial statement:

Companies operating under the model of mother-son companies such as Vietnam Steel Corporation, Thai Nguyen Iron and Steel Joint Stock Company, also a very specific report, that is "consolidated financial statements" according to Circular No. 202/2014 / TT-BTC on guidance on methods and presentation of consolidated financial statements for the Group's economic model.

Actual state of making and supplying information in management accounting reports:

The survey on the establishment and use of management accounting reports in the steel manufacturing enterprises, 86.4% of enterprises have made management accounting reports. However, when studying the reports made in the companies, the management accounting reports in enterprises are actually the detailed reports of financial statements. They are prepared in accordance with generally accepted accounting principles. The establishment of the management accounting reports at company is only the preparation of cost statements by item, while the reports for the functions of planning, controlling and evaluating are not yet set up and used.

2.2.5. The process of controlling accounting information

- Input controlling: The survey results show that 18/22 enterprises (81.8%) of the steel manufacturing enterprises are well organized in the control of input information, the rest are in the medium level.

- Information process controlling: From the survey results, steel manufacturing enterprises have not implemented the control of information implementation, 12/22 enterprises (54.5%) performed well, left at normal level. However, the comparison between the general ledger and the detail ledger, the general book with the consolidated financial statement, detailed ledger with detailed report has not been implemented closely.

- Output controlling: The process of controlling the output information provided to the users in steel manufacturing enterprises is not almost done. The controlling is only to check the books, the financial statements to ensure the correct implementation of accounting and auditing, the number of reports provided and the time of delivery, and the quality control and reliability of the information provided on the report was not interested, only 5/22 enterprises (22.7%) performed well this stage.

2.3. Assess the actual situation of the AIS in the steel manufacturing enterprises of Vietnam Steel Corporation

2.3.1. Evaluation of survey results and research

2.3.1.1. These achievements

2.3.1.2. Limitations to overcome

- AIS module application:

At present, all steel manufacturing enterprises in Vietnam Steel Corporation use the database model, in which the work of accounting is supported by computer systems that using IT by installing the computer software with internal network and internet connection. This model has certain limitations in terms of operation as well as providing information to the users, which affects the decision-making of the users.

- *The process of collecting information:*

+ The content of information collected is limited to be completed:

The information collected is mainly past information, made from the work of AIS in business. The future information for the estimation is not focused. Collecting information is just gathering information but not categorizing and evaluating the purpose of each information to put into processing information as appropriate for the purpose of planning; performance; controlling; and making decision.

+ The use of documents is limited. In the steel manufacturing enterprises, the acquisition of accounting information is mainly by accounting. In which, the documents can be made manually or on the machine, the documents on the machine do not have the elements to link with accounting system to suit with accounting and classification accounting information on the system.

- *The accounting information processing:*

+ Encoding accounting objects:

Currently, the steel manufacturing enterprises surveyed use accounting software, the software performs encoded objects for management. The encoding objects is done independently in private software in each department, there is no consistency between the departments. Managed objects are mainly implemented accounting objects such as inventory list,

+ Accountancy system:

Building accounting account system reflecting in detail the contents to be monitored for management accounting in real enterprises has not been paid attention or used ineffectively. The opening detailed accounting account to keep track details objects is still small and simple.

+ Accounting books:

The information processed on the accounting book system is also mainly financial accounting information partly due to the impact of poor accounting account system and lack of management requirements. Detailed recording has not been synchronized. Most of the steel manufacturing enterprises have not designed the accounting book for processing information required by the administrator.

+ Information processing for planning:

The standard system in the steel manufacturing enterprises does not meet the requirements for estimating parts, especially the cost norms. The method of setting norms is also imposing. In some small enterprises, they do not have to set up the norm system, thus reducing the level of meeting the demand for accounting information.

Estimating system in the steel manufacturing enterprises is generally incomplete and inconsistent, only meeting the planning information but not for the controlling and evaluation

function.

+ Information Processing:

At the steel manufacturing enterprises surveyed, the costing methodology was mainly based on cost items in cost. The steel manufacturing enterprises have hardly used the cost classification method to control costs in the management accounting information system.

+ Information processing for controlling:

The processing information for controlling in the new steel manufacturing enterprises was rebuilt only at the comparison between the actual data and book of accounting partly, without evaluation, comparison of data plan and implement. The existing accountancy system has not been implemented for controlling enterprise.

+ Information processing for decision making:

The survey results show that most steel manufacturing enterprises do not perform break-even analysis as well as cost-benefit-revenue analysis for decision making.

The pricing of products sold internally in the steel manufacturing enterprises today is mainly based on actual costs incurring. With this pricing method will cause waste of cost, not ensure the correct evaluation of production and business activities of the department. At the same time, it does not promote the business processes in the unit.

- Accounting information providing:

The accounting information provided in the steel manufacturing enterprises is mainly the performance report taken from the Financial Reporting System. The Financial Reporting System has not been specifically designed, only the detailed financial statements, which are mainly composed of some indicators on the financial statements that have not been shown. Thus, it limited the direction function for managers in making decision.

- Accounting information controlling:

The steel manufacturing enterprises surveyed have not built up a complete control system, just control some steps such as input data collection, processing and supplying information is not respected. Enterprises are not interested in risk management in the AIS. The quality of information provided is not guaranteed.

2.3.2. Reasons

Through the actual survey of the steel manufacturing enterprises Vietnam Steel Corporation, the author found that the causes of the shortcomings in AIS of these enterprises are from two sides: information users and information providers.

CHAPTER 3

COMPLETING ACCOUNTING INFORMATION SYSTEMS IN STEEL MANUFACTURING ENTERPRISES UNDER THE VIETNAM STEEL CORPORATION

3.1. The target and development direction of the steel manufacturing enterprises in Vietnam Steel Corporation

3.1.1. Development objectives of the steel production enterprises of Vietnam Steel Corporation

According to the draft adjustment of the steel production system to 2025, orientation to 2035, Stable development of steel industry basing on competitive advantages and ensure environmental friendliness.

3.1.2. Development orientation of steel industry in Vietnam

* Development orientation of production system

* Development orientation of distribution system

3.2. Requirements and principles for completing the AIS in the steel manufacturing enterprises of Vietnam Steel Corporation

3.2.1. Request for completing AIS

The completion AIS in the steel manufacturing enterprises must meet the following basic requirements: (1) Must met with the users' information needs ; (2) Must be consistent with the characteristics of each unit and highly feasible; (3) Must be suitable with the requirements of international economic integration and technology modernization.

3.2.2. Principles for completing AIS

In order to fulfill the requirements of AIS in the steel manufacturing enterprises of Vietnam Steel Corporation, the following principles must be fulfilled: (1) Appropriate principles; (2) Principle of saving, efficiency.

3.3. Solution to complete AIS in the steel production enterprises of Vietnam Steel Corporation

In order to meet the information needs of the users inside and outside the enterprise, the completion AIS in the steel manufacturing enterprises should address the following issues:

3.3.1. Completing AIS model in the steel manufacturing enterprises

Short term: Steel manufacturing enterprises can re-structure the function of AIS in accordance with the ERP model to contribute to improve the quality of the system.

Long term: Steel manufacturing enterprises can apply ERP model basing on cloud computing (Cloud ERP).

3.3.2. Completing the process of acquiring accounting information

Completing the content of collected information

Input information of business includes past and future information. Basing on the different usages to collect the corresponding information produces appropriate reports to serve the information needs of the object. In order to improve the content of the information to be collected, the steel manufacturing enterprises should synthesize information content and source of information collected through the following table.

Summary table of content and sources of information collected

	Information content collected	
Aims	Inside enterprise	Outside enterprise
Information for planning	<ul style="list-style-type: none"> - The estimates of inventory, labor, production costs, revenue-expenditure ... of the previous period. - Production plan. - Related projects. 	<ul style="list-style-type: none"> - Planning documents for development of construction materials in general and steel materials in particular. - Programs and projects related to the steel industry. - Survey on consumer demand for processed steel products. - Report on the survey of inputs such as

		raw materials, labor, machinery, equipment, petrol and electricity prices. - Information on technology of exploiting and processing modern products such as casting technology, steel rolling ... - Information on reserves of steel mines, raw materials and inputs.
Information for implementation	- Documents, books, reports on materials, wages, machinery, equipment, production costs, capital ... in the production department. - Previous period's financial report system. - Cost information in the non-production sector: Enterprises should collect and classify the costs of implementation into variable costs and variable costs. - Document of departments	- State policy information related to steel industry. - Information from the tax office; credit institutions; customer; supplier. - Information on raw materials, labor, machinery and equipment in the steel industry. - Information competitors in the steel industry.
Information for controlling	- Information on the performance on the basis of department reports, cost sheet ... - Documents reflect the difference in the numbers compared with the estimates in the sections.	- Information on the increase, decrease, price fluctuation on inputs such as raw materials, workers' wages, fuel costs ...
Information for making decision	- Information on the implementation of the documents, vouchers, reports on business performance in the department.	- Information on the same type of steel products on the market. - Report on market demand assessment. - Report the price of the inputs.

(Source: Author summarized on research results)

Finalizing the accounting voucher system

Under ERP application conditions, steel manufacturing enterprises should have a plan for effective use of electronic documents; regulations on security documents on the machine; reasonable document encryption mode and set up a document storage mode on the computer.

3.3.3. Finalizing the processing of accounting information

Complete post-acquisition information processing

- Complete the coding system of the main objects

In the case of steel manufacturing enterprises of Vietnam Steel Corporation tend to use the ERP system, the implementation of accounting data encryption is necessary. According to the author, enterprises can use the combination coding method, which can be implemented starting with letters or numbers to represent the characteristics of encrypted objects such as materials, fixed assets, customers, suppliers ... and sequential numbers are encoded objects that have common characteristics to classify and identify some objects.

- Completing the accounting account system

Steel manufacturing enterprises should build a accounting account system with many dimensions of information. Flexible account structure makes it easy for business managers to analyze and manage finances of all sizes.

Basing on the coding of accounting objects, to serve the information supply needs in AIS in the steel manufacturing enterprises, the accounting account system should be

constructed as follows:

Level 1 Account: 3 digits according to accounting account system issued under Decision 15/2006 / QD-BTC, now Circular 200/2014 / TT-BTC.

Secondary Account: shown in the 4th digit, according to economic content

Account with level 3, 4, 5 ...: each level is a number representing management levels of assets, capital, expenses, turnover ... of each enterprise.

In the ERP application environment, the processing of accounting information on the system is done quickly, limited errors, inspection activities, information controlling is carried out regularly, continuously. Each business operation in the business process is recorded by a accounting entry on the system and together with the business process which is divided into different stages, accounting operations are divided into many different accounting entries. To manage related accounting entries in the same business, the ERP system uses the linked intermediate account in each pair of accounting entries and default accounting rules to ensure that these accounting entries are aligned with each other.

- Completing the accounting book system

The steel manufacturing enterprises of Vietnam Steel Corporation should complete the detailed accounting system to systematize information specific to each management object, each department according to the requirements of the steel manufacturing enterprises.

The steel manufacturing enterprises need to open a detailed book to follow input materials according to each type of material, quality, each source and each supplier ...

In addition to the design of detailed accounting systems to meet management accounting requirements, the steel manufacturing enterprises should also pay attention to well organized accounting records. Under ERP application conditions, enterprises need to guide the accounting staff to use software proficiently, pay attention to input data, check regularly to avoid errors to ensure reliability the accounting information provided to the business executives.

Completing information processing for planning

- Completing production cost normssystem

Cost norms are the basis for the implementation, analysis and evaluation of actual costs incurred, contributing to detect unreasonable costs incurred. Establishment of production cost norms plays an important role in planning and controlling costs of enterprises. Cost norms includes direct cost norms for raw materials; direct labor cost norms; common cost of production.

- Finalizing production cost

Estimation is an important step in the production process of steel manufacturing enterprises. Estimation is the basis for controlling costs and business activities of enterprises. Cost estimates are based on cost norms. Cost norms are the amount of costs required for a finished product unit. The cost estimating is an estimate of the amount of cost needed for a concrete product volume.

At present, the steel manufacturing enterprises have built some production plans such as production planning; mainly supplying plan. However, these plans can not be considered

as cost estimating. Therefore, businesses need to build cost estimation system standardly to meet the information needs for business governance including cost estimating of raw materials directly; direct labor cost estimating; cost estimating for generic production.

In parallel with the static estimation, the steel manufacturing enterprises need to make flexible estimates as a basis for assessing enterprises performance, contributing to improve the efficiency of business production. Flexible estimating is based on static estimates and built for multiple output levels. Flexible cost estimating is very appropriate and necessary for steel companies because of their production output, steel consumption and input material prices, labor costs fluctuate frequently.

Completing information implementation

Completing the processing of information bases on classifying information to meet the needs of enterprise management. In classifying information in general, cost classification is important in corporate governance. Classification of costs is a way of identifying costs, as a prerequisite for the accounting management organization. Due to the characteristics of the steel manufacturing enterprises, the cost of change depends on the level of inputs usages, human resources as well as technological equipment that enterprises apply, so the steel manufacturing enterprises should classify the cost by the level including certain fees, variable fees, and costs.

Completing processing information for controlling

Completing responsibility accounting

Responsibility accounting is a basic content of management accounting and increasingly important role in management at enterprises, it helps to maximize the resources of enterprises, thereby improving the competitiveness in the market. Therefore, researching and organizing the application of responsibility accounting system is a necessary requirement for enterprises in general and the steel industry in particular today.

Completing information processing for decision-making

- Completing cost-volume-profit analysis (CVP)

Analyzing the cost-volume-profit relationship is one of the important contents of management accounting. The steel manufacturing enterprises should pay attention to CVP relationship analysis to make business decisions. The choice of the main business option is still based on the results of comparison between revenue and costs. The CVP relationship analysis provides the tools for managers to exploit the potential of a business, as the basis for decision making to choose or adjust business such as price, output, cost ... to maximize profits of enterprises.

The information from the CVP analysis will help managers to make appropriate business decisions and choose the best option.

- Finalizing pricing of products transferred internally

The steel manufacturing enterprises should use the method of determining the price of internal transfer products at adjusted market prices instead of the price of internal transfer products at the actual cost incurred today.

3.3.4. Completing providing accounting information process

In order to provide the information of the AIS in steel manufacturing enterprises effectively, it is necessary to complete the accounting reporting system for decision making.

Regarding the current financial statements, steel manufacturing enterprises conducted a good application of the system of periodic financial statements according to the general regulations of the State. The management accounting report system has not been designed yet, but only the detailed financial reports. Therefore, in order to provide detailed information to the users, the authors propose solutions of steel domes need to build a management accounting report system including:

- The reporting system provides information for planning
- The reporting system provides information on implementation results
- The reporting system provides information for controlling
- The reporting system provides information for decision-making

3.3.5. Completing controlling accounting information process

The internal control of the AIS in the steel manufacturing enterprises is geared towards the management of risks within the enterprise, to ensure that operations within the unit are carried out in accordance with the initial operational objectives, detecting and preventing operational status with no quality assurance with targeted objectives. To design the process of accounting information control in the steel manufacturing enterprises in the ERP environment, the author aims to control the quality of accounting information - output of the information system to ensure the information provided by the AIS is most useful for objects used inside and outside the enterprises.

3.4. Conditions for solutions implementation

3.4.1. On the side of the State management agencies

Currently, enterprises are confused in the construction of the AIS, the State should have policies to support enterprises to create a AIS standardly. In order to achieve this, state management agencies should take the following methods:

- Improving the accounting legal environment applicable to enterprises in the current context, including the improvement of legal documents guiding the operation of the AIS in enterprises, creating conditions for businesses operate effectively.

- Finalizing the materials in the field of AIS and at the same time enhancing the training, teaching and updating of knowledge AIS to improve professional skills for accounting students and accountants in businesses.

- State management agencies need to study and issue mechanisms and policies to assist steel companies in investing in technology innovation and building a complete AIS to improve business efficiency and contribute to the state budget, promote the economy develop.

3.4.2. On the side of the authorities

The Vietnam Accounting Association, as a professional organization, should facilitate the support of enterprises in the implementation of the AIS by introducing a number of AIS models suitable for each type of enterprise, each business sector.

Vietnam Steel Association should promote its role in advising producers and consumers of steel, using high quality domestic steel. At the same time, creating a shared learning environment among steel enterprises. Assist steel companies in capital, technical machinery and technology.

Steel Association may also coordinate with relevant ministries and branches in managing production and business, stabilizing steel prices.

3.4.3. On the side of steel manufacturing enterprises

In order to complete the AIS in steel manufacturing enterprises of the Vietnam Steel Corporation, the enterprises themselves need to make changes in the management as well as change the awareness about the importance of the AIS in enterprises. That is:

- Vietnam Steel Corporation and the steel companies in the corporation should be aware of the important role of the AIS in managing the production and business activities of the company.

- Building and completing the management mechanism, ensuring the connection between the various sections in the managerial apparatus of the enterprise closely together, ensuring the provision of complete and timely information for collecting, processing and providing accounting information.

- Steel manufacturing enterprises need clear management decentralization for each division, department, clear division of responsibilities, authority and obligation to collect, process and provide specific information to departments.

- Enterprises need to pay attention to improve the qualifications for accounting staff to meet the requirements of improving the AIS in the business.

- Enterprises should pay attention to the application of information technology in accounting work. Enterprises need to prepare equipment infrastructure, financial resources to carry out ERP application model.

GENERAL CONCLUSION

According to the objectives set out, the thesis has studied the theory of AIS in the steel manufacturing enterprises. Basing on the research needs of accounting information of users and factors influencing the AIS in the business, the thesis has in-depth research on the content of the AIS in the accounting information process.

Through the methods of qualitative research, investigation, surveys and assessment of the reality of the AIS in the steel manufacturing enterprises, the author pointed out the advantages, the shortcomings and the main causes of the shortcomings in the AIS in these enterprises.

Basing on the theoretical and practical research in the field of AIS in the steel manufacturing enterprises, applying the knowledge and understanding of the AIS, the author has proposed some solutions to improve the AIS in the steel manufacturing enterprises of Vietnam Steel Corporation to provide useful, timely, sufficient and honest information for the users, especially the managers in making decisions.

The author hopes that the author's proposals in the thesis will be the suggestions for the research and development of steel manufacturing enterprises to improve the competitiveness of enterprises in the context of the associative and international competition.

LIST OF WORKS RELATING TO THE THESIS

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