Assessment of Studying Books as the Original Source of Knowledge Acquisition by the Top-Level Managers in Zinc Industry

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"Books feed the mind"
Prophet Muhammad(s)

Some books are to be tasted, others to be swallowed, and some few to be chewed and digested
Francis Bacon

ABSTRACT
Which are the main acquisition resources of formal and informal knowledge for Top-level industrial managers? How are these resources utilized and when are they get used? How are the quality and quantity of these knowledge acquisition resources assessed? This research tries to explore these three questions. In this research, target population members are top-level and middle-level managers of Iranian Zinc industry. The research is descriptive-explanatory regarding the objective, quantitative and qualitative regarding the variables, applied regarding the results, sectional regarding the time and survey type regarding the method. The results show that the amount and quality level of acquired knowledge by managers are low; its indicators are among the viewpoint and resource priorities of the organization which is based on the importance. It is recommended that the current situation be necessarily improved.

Keywords: Assessment of book study, original knowledge source, quantity of reading books, quality of reading books

SCIENTIFIC PRINCIPLES
Books are known as the original sources of knowledge. The word of knowledge is defined in Webster dictionary as: the fact or state of knowing some matters or skills which are obtained through the experience or association or a collection of models describing the properties or manners in a specific field and might be found in people's mind, the production procedures or existing documents.

Managers’ knowledge is categorized into several types; there are two types based on the level criteria: superficial and in-depth knowledge.

SUPERFICIAL KNOWLEDGE
Superficial knowledge has a low depth and is applied in plenty of situations. As an example, if your car ran out of fuel, it will not move. This knowledge is presented like: if your car lacks the
fuel, then the car is not going to move. Superficial knowledge basically represents the connection between the input and output within a system.

**In-depth knowledge**

Human problems solving is provided based on the in-depth knowledge of the situation. In-depth knowledge is an internal and causal structure and includes the interactions among system elements. The deeper knowledge could be applied for various situations and circumstances. This knowledge is based on a comprehensive solidarity and is a homogenous body of understanding and awareness comprising emotions, feelings, intuition, etc. Calculation of this knowledge type is difficult. According to another categorization, managers’ knowledge is in three levels: personal knowledge, inter-personal knowledge, and inter-organizational knowledge. As you are in the personal level, you acquire and apply the knowledge, manage the documents, share the lessons and obtain the others’ shared lessons, and in this way collaborate with the colleagues (Richardson, 2001).

As an important management feature in the personal knowledge level, people are just responsible for all they know; therefore, they prefer not to know (or learn). Inter-organizational knowledge comes in a more expansive level compared to the inter-personal knowledge. This management level includes generation, acquisition, and reuse of the knowledge in order to achieve the organizational objectives (Weggeman, 2000). The efforts are focused on the establishment of an open-mind culture and knowledge sharing in this level while face to face interactions are supported as well. In a network level, organizations and companies apply their information, skills, and experience as a tool to gain their common goals.

**The knowledge management formula**

The knowledge management is expressed by Weggeman as the following formula:

\[ K = I \times f(exs \times a) \]

\( I \) = Knowledge

\( exs \) = Information times a function of

\( e \) = experience,

\( s \) = skills and

\( a \) = attitude

According to this formula, information is defined as one of the knowledge elements and implied by people’s intelligence and attitude; and knowledge acquisition is considered as the access to the information, experience, skill learning and acceptance of attitudes.

**Knowledge acquisition sources**

The required knowledge could be obtained through various sources. These sources are divided into two main categories of internal and external wisdom and experience (Hospers, John, 1998). External sources of knowledge include books, magazines, newspapers, and media such as radio, TV, and educational seminars. Also, electronic or virtual sources like social networks and documents found in web as weblogs, websites, and e-books are other types of external sources. People’s experiences are the third class of external sources which are gained through five senses.

**Books: original sources of knowledge acquisition**

In Persian dictionary “Moein” two definitions are stated for the word “book”: a manuscript and a printed or hand-written collection of various subjects (Moein, 2015).

The most valid, scientific, and structured knowledge acquisition sources are “the books”. Most thinkers believe that knowledge consists of four elements as: science (empirical science, skill,
experience, and attitude). Therefore, science is one of the elements or the main element of knowledge. In addition, science is a collection of theories (feierabend). Theories are described completely, comprehensively, and precisely in the books. Therefore, books are the most reliable resources to achieve an accurate perception, even non-theoretical books, like novels. Hence, books are analyzed in this research as the most original knowledge acquisition sources.

A book is a set of written, printed, illustrated, or blank sheets, made of ink, paper, parchment, or other materials, fastened together to hinge at one side. A single sheet within a book is a leaf, and each side of a leaf is a page. A set of text-filled or illustrated pages produced in electronic format is known as an electronic book, or e-book.

Books may also refer to works of literature, or a main division of such a work. In library and information science, a book is called a monograph, to distinguish it from serial periodicals such as magazines, journals, or newspapers. The body of all written works including books is literature. In novels and sometimes other types of books (for example, biographies), a book may be divided into several large sections, also called books (Book 1, Book 2, Book 3, and so on). An avid reader of books is a bibliophile or colloquially, bookworm.

A good book is always regarded as the best friend of man. Usually a collection of handwritten, printed or empty sheets are called books. These may be made of paper, parchment, or any other material and bound together at sides. Each book has number of single sheets and these sheets are called pages. Now-a-days, electronic version of a book is available online and this is called an e-book. Books are a major source of knowledge and information. A book may be a work of literature, a novel, a periodical or a journal.

BACKGROUND

The first research
Seyed Hamzeh in a paper derived from his thesis titled “effect of being open-mind on the knowledge generation and acquisition” found out that the more open-mind the organizational personnel are, the higher quality the acquired knowledge is (Seyed Hamzeh, 2013).

The second research
A researcher named Jerry found that studying books is an appropriate knowledge and entertainment source (Jerry, 2016).

The third research
A researcher discovered that books could be both the best and the worst knowledge acquisition sources (Cura).

The forth research
The Canadian researcher “George Marino” showed that the most important knowledge acquisition sources are: life experience and books. He has wrote:

“Our society is highly dependent of knowledge. Most important source of knowledge is books and experience. Even when, both are interconnected some people gain knowledge from one of them and others group of people gain knowledge from both of them. For instance, Albert Einstein could not have defined the relativity theory without gain knowledge, mainly from books such as Newton’s laws, for example. Furthermore, Mozart never when to school and just from his own experience composed most famous classical music in the world. Books and experience are instruments that lead people to
gain knowledge throughout the life. In my opinion, none of them are more important than other; how important they are depends on each individual.

in summary, books and experience are abundant source of knowledge. However, if we put both of them in a balance to identify which one is better; it would be a difficult task. It is because everyone has different way to gain knowledge. While some people gain knowledge from books and experience other people, who never went to school, gain knowledge from experience.

RESEARCH METHODOLOGY

Research type
This research is descriptive-explanatory regarding the objective, since it explores an accurate description for the main knowledge acquisition sources by top-level managers of a significant industry. It is the applied research regarding the results; because the reason of execution is to present and apply proposals to increase the managers’ knowledge level through better literature review, more effective sourcing, optimal combination of knowledge sources and facilitating, accelerating and continuation of knowledge acquisition process by the managers. It is sectional regarding the time because it is carried out just once and in a specific period. Regarding the spread, it is not extensive, instead is relatively intensive because it investigates one of the main specialized sources, supporting the top-level and expert managers’ systematic knowledge and skill in a relatively long-time duration. It is twofold regarding the value types because there are both quantitative and qualitative values. It is a survey research based on the method, because each of the target population members was referred in order to collect the data and information.

The research target population
The target research population in this research consists of thirty five top and middle-level in zinc and lead industry, zinc quarry industry development group. Biography features of target population members are as following:

a) Age: average 37 years, minimum 29 years, maximum 57 years;

b) Religion: 100% Shiah;

c) Education: average ---, minimum bachelor (62.8%), maximum PhD (11.7%), master (26.5%);

d) Mother tongue: 91% Turkish, 9% Farsi;

e) Capability to read in English: --- (not asked in the questionnaire)

f) Field of study: engineering (64.4%), science (9%), management (17.6%), others (9%);

g) Experience in managing jobs: average 8.3 years, maximum 24 years, minimum 1 year;

15% of managers refused to mention their work experience duration; thus it is not considered in the item of management experience.

The research sample society
The research sample coincides with the research population; since most of the top-level managers of zinc production companies are concentrated in Zanjan province and were available for the survey, no necessities for sampling were needed.

Data collection tools
The main tool for the data collection was a questionnaire made by the researcher comprising 23 questions in three sections. The first part asks about the basic information and characteristics related to the target population members. Second part considers the knowledge acquisition source, especially non-academic books which are read by the managers as well as the relevant details. The third part explored the managers’ viewpoints, attitudes, beliefs,
comments, and analysis regarding the zinc industry. The procedure of creating questions and their review took about two weeks.

The questions involved in the questionnaire are as following:

- Question #1: which are the most beneficial non-academic books you have ever read?  
  Book title, author, subject, primary message of the book, and the age at the moment of reading the book.
- Question #2: What are the strength and weakness in Iranian zinc industry?
- Question #3: What are the major influential factors affecting success/failure of Iranian zinc industry?
- Question #4: How could one become an efficient and successful manager?
- Question #5: What are the most important decision and action you have taken?
- Question #6: What is your most important social and professional concern?

Data collection method
The questionnaires were distributed among target population members either directly or through the colleagues (personnel) and then were recollected after completion in the same manner. Surely the questionnaires were constantly under monitoring since it is quite hard to receive the answered questionnaires comprising detailed questions in our society; thus some motivations and encouraging mechanisms must be considered (e.g. friendships and workplace relationships). The distribution and completion procedure of questionnaires took 33 days.

Research domain
The research historical domain involves the last thirty years (from 1986 to 2016) and its geographical domain is Iran. The subject area is the management of knowledge acquisition procedure and human resource management.

Questionnaire validity
External validity of questionnaires was verified by the experts. Internal validity was obtained through designing questions in such numbers to cover all dimensions of the considered knowledge acquisition sources (i.e. books). There are freedom in style, form, details, and length of answers in open-ended questions; so there is a risk that the respondent writes too much such that different types of information are obtained from various people of the sample. In order to solve this problem, the answers domains were limited.

Questionnaire reliability
Reliability of questionnaire was confirmed more than 80% through test-retest method.

Variables and their parameters
The major variable is “the book” (as the knowledge acquisition source) and it refers to the books which are studied by the managers, in the printed or electronic format, and the knowledge has been acquired by. The parameters include the age when the book was read, book title, book subject, the main message of the book, nationality of the author (Iranian, non-Iranian).

FINDINGS AND RESULTS
The first result
The number of influential books studied by the managers varies from 2 to 11 volumes. The overall number of books, which are read by 34 managers, is 231 volumes; that means each manager have read 7 non-academic effective books. In other words, the managers have studied one book every 5.3 years.

URL: http://dx.doi.org/10.14738/assrj.46.2893.
The second results
The maximum and minimum intervals between the first effective studied books are 3 and 42 years. The number of managers who have studied the first effective book under the age 20 is 6 (17% of the target population).

The third results
The number of managers who studied the first effective book between ages 20-30 years is 30 people (37% of the target population) and the number of them who studied the first effective book between 31-50 years is 7. One fifth of the managers have studied the effective book after the age 30; in other words, for a significant number of managers, initiation of studying effective books and knowledge acquisition occurs quite late; because most of mental patterns have already formed at the age 30. Studying non-management books is 1.75 times more than management books. 67% of study refers to the operations managers; 20% relates to the middle-level managers; only 11.43% of the study belongs to the top-level managers; thus study share of top-level managers is lower than other ones. The books studied by top-level managers are both in the fields of management or others. In fact, 100% of top-level managers have studied at least one management book and only 8.5% of managers are involved simultaneously in both types of study. 23.5% of managers have perceived the author’s idea; 47% of them have just mentioned the general idea of the book and 29.4% of managers have not realized the message of the book.

The effectiveness of study among managers was 23.5% and the efficiency of study has been 70.5%; around 30% of readers have deprived to understand the book main idea for unknown reasons. The effectiveness of “perception of the idea and message of studied book” was about 30%.

The forth results
36.36% of managers study management books and 63.63% of them read non-management books that means two third of the managers population prefer to acquire non-management knowledge. 45.57% of the target population study both management and non-management books. 34.3% of the managers study the books relevant to their specialized field and 71.4% study non-specialized books; 85% of the managers study both types of specialized and non-specialized books.

The fifth results: the quality of managers’ knowledge acquisition through studying books.
Around one forth (i.e. 26.47%) of the managers had a “very little” perception of the main idea and message of the book. 17.6% of the readers had “little” perception, 26.5% (9 managers) had an “average” perception, 29.4% (10 managers) had a “high” perception of the book idea. None of the target population members (managers) had a “very high” perception of the main idea of the studied book. The important issue is that only 30% of the managers perceive the main message of the book at a high level (not even totally); this is a dissatisfying situation and must be essentially improved.

The sixth results: the managers’ level of concern
15 managers (44%) have personal concerns, 12 managers (35.3%) organizational concerns, 5 managers (15%) have concerns at the industry level, 16 members (47%) at the national level and 4 managers (13%) look at horizons beyond the national borders and have transnational concerns. 8 managers (25.5%) have not mentioned their concerns. Only 13% of managers have transnational concerns; thus top-level managers need to comprehend strategic viewpoints toward matters and industry through acquiring the required knowledge.
The seventh results: determination of the organization strengths
32 managers (94% of the population) have indicated non-human resources as the strength of zinc industry while human resources have been mentioned by 16 managers (47%). Also, 14 managers (41%) knew both sources (human and non-human) as the strong aspects of the industry. Therefore, according to the managers the industry strength is mostly in its non-human resources (94%). Human resources comprise 47% of strong aspects of the whole industry.

The seventh results: determination of the organization weakness
31 managers (91%) have stated that zinc industry weakness is a quantitative issue (equipment, technology, etc.) and 12 managers (35.3%) believe it is a qualitative problem (human resources).

The eighth results: determination of managers’ success factor
Human resources were conceived as the main success factor by 11 managers (about 32%) and 85% of the managers mentioned the non-human resources. Also, 17% of them mentioned both sources as the success factors.

The ninth results
The investment in adoption the technology and improving the non-human resources have been the success factor of this industry and could assist in decrease of product final price as well as increasing competitiveness in production market. Meanwhile the hardware technology gets improved it is of great importance to pay the sufficient attention to the efficient sources. Non-human resources are considered at the highest level (85%). The managers’ belief in importance and capabilities of human sources are lower.

CONCLUSION
The amount of knowledge acquisition through study by the managers is low; because the rate of study as well as its quality is less. No clear common strategy is observed among the industry managers in order to acquire the knowledge. Their prioritization for available resources do not coincide the criteria recommended by the management science; thus, it sounds that the managers are not that much familiar with the scientific themes and are not aware of the winners rules in the competitive world which is fulfilled by the constant and quick acquisition of knowledge.

References:
Knowledge management in development organisations: The learn@WELL experience F. Odhiambo, United Kingdom and J. Pels, The Netherlands, ODHIAMBO and PELS 2008).
Moein Mohammad, Persin lexicon, eletronic version.2015
Websites


www.webster.com


https://www.quora.com/Why-are-books-the-best-and-vastest-source-of-knowledge...