

Do Managers Recognise Their Human Resources?

Ásmundur R. Richardsson

Department of Business Administration
University of Iceland

Eðvald Möller

Department of Business Administration
University of Iceland

Introduction

With increased education and specialisation, a reliable flow of information within and outside companies is more important than ever before to a company's operational performance and the ability of management to react in a timely fashion to the new demands of customers and the community (Bokowitz & Williams, 2000).

For more than a century, progress in the area of administration— development, processes and techniques – has been applied to enhance the efficacy of human activities. Processes designed to improve workflow, planning, project management and numerous other indispensable management tools have been in existence since the early 19th century. As a matter of fact, the foundations of “modern” management were laid by men such as Daniel McCallum, Frederick Taylor and Henry Ford who were all born before the close of the American Civil War in 1865. In those times, the main problems related to economy and volume, and the solution was bureaucracy, with its multi-layered organisation, itemised objectives, precise job descriptions and complex regulations and processes (Hamel, 2009). The question may be asked why the past 25 years have only seen insignificant developments in the application of information available to management within companies, despite progress in every field of human endeavour (Mintzberg, Ahlstrand, & Lampel, 1998). Managerial as well as public access to data has multiplied to the extent that many people have problems extracting the information they need from the voluminous mountains of data existing within a company (Mintzberg, Ahlstrand and Lampel, 1998). Could the reason be that managers in general do not know which information they require in order to enable them to better respond to ever-changing market conditions? In this context, change is needed in the relationship between management and staff (Hamel, 2009).

A public company workplace was investigated with regard to knowledge management and the provision of information. This workplace had the function of supporting other company departments and generally providing guidance regarding working methods and general work procedures within the company, which has a staff of approximately 3,000. The department under investigation has approximately 60 employees and is highly specialised both with regard to education and expert training for specific tasks/jobs. Consequently, there is a strong requirement, at all times, that company strategy should be fully integrated with this expert knowledge as well as other competencies found among its staff, to ensure that objectives are fulfilled and the company's future vision implemented. This is a situation which demands strong cooperation between sections/departments as well effective communication of information due to circumstances which specifically differentiate a public institution from a private company.

The research was initiated by asking the question whether managers are utilising staff knowledge to improve performance and whether they are creating circumstances conducive to information exchange among staff. A qualitative method was used since this methodology yields descriptive data gathered from interviewees' own words and conduct (Bogdan and Taylor, 1998). The research was in part conducted by means of mixed focus groups and a combination of qualitative and quantitative methods. The duration of the project was just over one year.

Knowledge is an Organisational Resource

All business operations are launched for the purpose of selling something, whether it be goods or services. As a result of increased education and professional specialisation it has become important, and in fact essential, for those in charge of businesses to be at home with the knowledge harboured by their employees. Thus, managers must shoulder the responsibility of providing the right technology to ensure the active communication of information within companies, and, no less importantly, to create an atmosphere which encourages such active communication (Claire, 2002).

The behaviour patterns or aspects of culture practised by top level management constitute the most significant part of corporate culture and their failure to understand this aspect is the most common barrier to change. Corporate culture exists, whether it is recognised or not, and is inherent in all company operations. It consists of a feeling about the company's role and the values employed to attain this role, together with infrastructure and the traditions which have developed through time or been designed for controlling the firm. Without this kind of framework, cooperation would be difficult, if not impossible; the fundamental regulations, however, help to direct people, at least in part, towards a shared objective (Irons, 1994).

Values expressed through policies, processes and corporate culture are the methods a company offers individual stakeholders for participating in its growth and success. Policies and work procedures are espoused norms within the company. Generally only few people know what they are or where to look for them. People are subconsciously aware of the operating norms and regard them as the determinants of behaviour or responsibility. The operating processes answer a basic question regarding points of contact within the company: what are the company's responsibilities towards its stakeholders? What are the responsibilities of company staff? When operating processes and espoused norms walk hand in hand the result is an environment which inspires confidence. In such an environment people feel assured that what has been said can be trusted. (Bokowitz & Williams, 2000)

It has often been demonstrated that in many companies inconsistencies occur between, on the one hand, written values and work rules presented to staff and, on the other, daily operations and the implementation of those same values. Such contradictions are a cause for serious concern, indicating, as they do, significant irregularities in the management structures of the companies in question. A company's espoused norms and implementation processes serve as a guidance to individuals on their journey towards shared objectives. Those are the threads supporting the web of added value solutions for the benefit of all stakeholders¹.(Bokowitz & Williams, 2000)

In connection with staff progress and promotions within companies there are at least two options, more or less independent of each other, which may be applied in the assessment of employees and their work:

- You can evaluate other people on the basis of how well and efficiently they work and how they contribute to the company through their actions; or
- You can evaluate other people on the basis of how intelligent they seem.

In many instances the latter option— how intelligent they seem — is the only available piece of information (Pfeffer & Sutton, 2000).

It has been shown above that conflicts may be expected within a company, accompanied by low productivity and even rising staff turnover, in the event that employees feel that their working environment and/or the management practices of their superiors are restrictive and indicate inadequate understanding of their needs and competencies. This can, for example appear in the form of inconsistent provision of information compared to published aims and strategies; or that the company' intranet is poorly maintained and crammed with obsolete information (Drucker, 1999)

Within the learning organisation, intellectual capital is regarded as an intangible resource which may lead to a competitive advantage for the company concerned. The discourse suggests that intellectual capital comprises both business and human resources, as well as organisational capital (Jashaphara, 2004). In this context, business intelligence is often high on the agenda; belonging as it does to the last of the three categories, since it forms part of the information system of the organisational unit.

¹Stakeholders are customers, owners, suppliers, staff and all other parties involved in the company or its business relationships.

Business intelligence is a combination of information technology, the competencies and proficiency of human resources and organisational processes. Analytical skills enabling the successful evaluation and classification of evidence and information play an increasingly significant role, with their current focus on maximum operational benefit. (Laurson and Thorlund, 2010).

People's efficiency in a creative environment depends on the group they relate to and have contact with; the tools and systems accessible to them; the type of management and implementation processes they belong to; the staff education and improvement systems they have participated in; information, theories, world vision, values, morality and codes of conduct they adhere to. It is only through action that individuals have a value-adding influence — note, however, that sitting in contemplation on a garden bench may be the forerunner of action! (Normann & Ramirez, 1998).

Action does not necessarily originate from being well-informed, educated, experienced or properly motivated. When these and other resources are conjointly summoned to action we can talk about the generation of "competence". Knowledge as such may slumber within a firm and in that state it does not have to be seen as competence. Competence is assessed in the terms of action and implementation; thus it represents a company's assets and consequently must be nourished and further developed. Competence also depends on the amount of knowledge employees can access in order to enhance their own value.

All staff harbour two types of knowledge; explicit knowledge and tacit knowledge. Some things are easily expressed in words and stored on the intranet or in a manual — explicit knowledge, others are intangible and hard to express or explain verbally, for knowledge can also be a perception which has developed through experience and training; for example smell or taste — tacit knowledge. In relationships, tone of voice, gesture or facial expression may be of importance and changes in those areas when communicating with a customer or colleague may call for different reactions or responses. How can this kind of knowledge be transferred? (Ribeiro, 2013) (Alexopoulos & Buckley, 2013) (Claire, 2002)

It is relatively easy to argue that explicit knowledge should be added to the intranet; therefore it should not come as a surprise that knowledge managers today mainly emphasise its transfer and storage. However, a large proportion of knowledge within firms — and many people maintain this is of higher value or greater significance for objectives and strategy — is tacit by nature. The best way to transfer tacit knowledge from one individual or group to another is not via a database, but by the support of human relationships. Mushy knowledge needs to be softly conveyed through the company (Bokowitz & Williams, 2000) (Madalina, 2012) (Claire, 2002).

As a result of improved education and added professional expertise it has become vitally important for operations managers to recognise the knowledge resources harboured by their staff. They must be aware of the composition of education and expertise available today in the context of the company's operational requirements, the community and the objectives to be attained. They must keep a constant eye on the combined education and expertise which is at hand at any particular time and ensure that this is relevant to the company's future needs, enabling them to work in accordance with formulated strategy. In this way management can achieve improved control of company operation, attain goals and respond better to the needs of owners and customers (Madalina, 2012).

People cannot be Managed

Managers must master the technology required to ensure the constant provision of information within companies and, even more urgently, they must create an atmosphere which supports the active mediation of information (Claire, 2002).

In their book *Information Orientation* Marchand, Kettinger and Rollins (2001) propose a theory outlining how it is possible to achieve outstanding results in the management of information technology, business data and human resources in direct positive connection with general performance. For this they use the term information-oriented company and suggest examining three different topics: that is, information technology in action; the management of information-related issues and, finally, customs and traditions in the handling of information.

During the past few years, the role of managers has changed significantly, concurrently with alterations relating to staff and the social environment in which companies operate. Nevertheless, many firms still cling to old and firmly-rooted management practices (Claire, 2002; Hamel, 2009).

Knowledge management is a relatively new subject within management studies. It deals with those factors which must be present to ensure that the knowledge possessed by each person is distributed among individuals who cooperate to different degrees. Knowledge management has its roots in a number of disciplines which all join forces in mediating and communicating knowledge. Among those disciplines are, for example: anthropology, information technology, economics, psychology, sociology, computer science, philosophy, and human resource management. Knowledge is communicated with respect to different subject areas as, for example corporate culture, human resources, change management etc., as well as looking at systems used in each company and the strategy on which the operation is based (Claire, 2002) (Jashapara, 2004).

In this context the phrase information and knowledge management is used as an umbrella term for attempts to better define and assume control of the information and knowledge which exists within an organisational unit and the effort to make more effective use of the knowledge and strength possessed by the human resources of that same unit. The focus of information and knowledge management aims to create an environment which stimulates the transfer of information for the purpose of engendering new knowledge (Madalina, 2012).

The management and handling of information and knowledge may be regarded as one of the preconditions for the development and progress of companies and organisations. It has even been stated that in some cases knowledge management is the key to a lasting competitive advantage in company operations. Information and knowledge management must be linked to the strategy of a company or organisation in a wider context. As applies in the case of other management techniques, companies and organisations must, on the basis of their role and strategy, develop a clear future vision and objectives with regard to aspects of particular relevance to information and knowledge management (Stjórnunaraðferðir Stjórnarráðs Íslands, 2013) (Administrative Methods of Icelandic Government Offices, 2013).

The Knowledge Management Fieldbook by Wendi R. Bukowitz and Ruth L. Williams describes knowledge management as;

“the process by which the organization generates wealth from its knowledge or intellectual capital. Intellectual Capital or Knowledge: Anything valued by the organization that is embedded in people or derived from processes, systems, and the organizational culture – individual knowledge and skills, norms and values, databases, methodologies, software, know-how, licenses, brands, and trade secrets”.

Out of a company's entire staff, an ever smaller number are nowadays classified as subordinates, but rather as knowledge workers. When the training stage has been completed, knowledge workers will probably know more about their work than their superiors do (Drucker, 1999). Employees are movable production tools and when they quit their jobs they take their knowledge and skills with them (Drucker, 1999; Madalina, 2012). Consequently, there is an increasing pressure on managers to find ways to satisfy the needs of their highly educated staff and, at the same time, successfully run their companies, thus protecting shareholders' interest by a profitable operation. Often this is done by providing employees with opportunities to utilise all their knowledge and experience and regard their staff as a strength, not a weakness or item of expense (Bokowitz and Williams, 2000; Claire, 2002; Madalina, 2012).

“For the knowledge worker in general, and especially for executives, information is their key resource” (Drucker, 1999).

Thus, we need to see changes in the relationship between management and staff and in responses to everyday tasks and issues. In this context, managers must first of all admit that they have reached the end of the road in the practice of administrative techniques based on the concept of industrialisation, standards, specialisation, organisational charts and shareholders' priorities. Administrators must face the fact that tomorrow's tasks lie outside the sphere of today's management methods (Hamel, 2009). As a result of changed modes of communication between management and their staff and customers in recent years, new perspectives are called for in human resource management and the general operation of businesses, where focus on shared responsibility for running a company is more visible than has hitherto been the case.

All those who are involved in the operation of a company must know, understand and be able to adopt its current policies and be ready to attain the aims sought. People cannot be managed. The task at hand is to guide people and the aim is to impact staff environment in such a way that employees of their own account wish to share and mediate their information (Drucker, 1999; Madalina, 2012).

The main objective of the new mode of management is to transform each company into a knowledge business where each and every employee is able to find expression for his/her abilities and creativity (Hamel, 2009).

Managers have tended to lean towards those who produce data and statistics— technical experts in the industry of information technology and bookkeepers/accountants – for deciding on their behalf which types of data needs to be examined. Knowledge workers must be able to independently identify and analyse their own needs for data and consequently be aware where to look for them.

“The *producers* of data cannot possibly know what data the *users* need so that they become information. Only individual knowledge workers, and especially individual executives, can decide how to organize their information so that it becomes their key to effective action.”(Drucker, 1999).

It is obviously of great benefit to organise information systems and company data in such a way that they can be used to produce solutions in the context of business intelligence.

It is clear that companies must find some way of measuring the results of their operations; this, in turn, creates the need for business intelligence systems which facilitate decision making (Davenport, Harris, & Morison, 2010). The quality and reliability of data is the foundation on which companies must build in order to benefit from the opportunities inherent in analysing information and utilising available databases. The article by Eðvald Möller and Kristín Guðmundsdóttir (2012) states that the design and introduction of business intelligence is a cooperative venture where managers and knowledge workers who make business decisions must be a leading force. Experience has shown that it seldom leads to a desired result to entrust this task exclusively to knowledge workers in the information technology section. Laursen and Thorlund (2010) propose a business analytics model for the purpose of providing an overview of the competencies required to maximise the return from business intelligence and/or the analysis of business transactions.

The operation of companies/organisations depends on the interplay of numerous factors in addition to the financial element. Among those are aspects of services, human resources, technology etc.; each of which is an indispensable component in the operation of a company/organisation. A strategy oriented performance assessment includes all of those factors(often known as dimensions) since each and every one is vital to the implementation of the strategy of a company/organisation (Kaplan & Norton, The Balanced Scorecard, 1996). A strategy oriented performance assessment, or Balanced Scorecard as it is originally named, is a methodology designed by Robert S. Kaplan and David P. Norton around 1990 to assist companies in adapting daily operations to espoused strategy.

The business analysis is to a large extent based on performance assessment in order to be able to provide information which can serve as an operational learning model where knowledge workers play a key role in the process (Laursen & Thorlund, 2010).

The book *Balanced Scorecard, Step by Step* by Nivens cites Margaret Blair from Brookings Institute where she states on the radio programme *Morning Edition*:

„If you just look at the physical assets of companies, the things that you can measure with ordinary accounting techniques, these things account for less than one-fourth of the value of the corporate sector. Another way of putting this is that something like 75% of the sources of value inside corporations is not being measured or reported in their books.“(Niven, 2006).

This is supported by research under the auspices of The American Productivity & Quality Center. (Madalina, 2012)

An Integrated World of Experience

Research by Nonaka and Takeuchi shows, however, that the exclusive use of explicit and tacit knowledge is insufficient. Managers must also apply the third type of knowledge which often tends to be forgotten and is known as practical wisdom, or perhaps more commonly in popular usage “common sense”. Practical knowledge is a tacit form of knowledge or awareness, drawn from experience, which enables people to make well-considered decisions and take calculated action. Such action would, therefore, be based on real circumstances and also guided by values and ethics. This is making use of personal insight. In order to make appropriate decisions management must understand the purpose of the company, its reason for existence. Sometimes firms act as if they were prepared to do anything to survive, even at the cost of destroying the world in which they exist and operate. A far better choice would be to focus on the public good — not because this is considered proper and fashionable, but to ensure their own continued operation.

No business will survive in the long term if it cannot offer its customers added value, create a future which its competitors cannot match and protect the public good. Decisions must be guided by the individual's values and ethics. Without a foundation in values, managers are unable to determine what is good or bad. And the values need to be your own; they cannot be borrowed (Nonaka & Takeuchi, 2011).

In their book, *Living leadership*, Binney, Wilke and Williams describe how they repeatedly discovered that leaders know more as a result of their experience than they themselves realised. They tended to place the leadership role in a box marked "management" and then proceed to work as if external experience did not matter. Those who had a background in diverse experiences, however, possessed the wisdom needed to lead others. The parental role, for example, appears to be an incredibly precious fountain of insight (Binney, Wilke, & Williams, 2005).

A company's financial performance is the result of a favourable relationship with customers, a sought-after product, services which satisfy customer demand and constructive internal relationships within the company which generate a positive morale and atmosphere. This in turn, is reflected in the company's products and services. (Rothschild, 1990)(Niven, 2006) (Nonaka & Takeuchi, 2011).

No longer are companies based on the power of management over staff. They are to an ever greater extent built on trust. Trust does not have to mean that people like one another. It means that people can trust one another in professional matters. This presupposes a mutual understanding. It is a condition *sine qua non* that individuals assume responsibility for their relationships. This is an absolute obligation. Whether one is a company employee, an external advisor, supplier or distributor, one owes the commitment of a responsible relationship to all colleagues, to all those on whom one's own work depends, and, conversely, to all those who depend on one's work.(Drucker, 1999) (Alexopoulos & Buckley, 2013)

One way of creating this trust is to grant employees open access to information regarding the company and give them the freedom to use this in their work. Communication channels must be developed within the company; information and transmission systems, which provide employees with access to one another and to the information they need to be able to succeed in their work. Such systems must be regularly maintained and those involved must be able to assume as a matter of course that the data they contain are correct, up to date and relevant to their work. To achieve this, the company must appoint a systems director who assumes responsibility for the points outlined above and undertakes the task of keeping the system updated with the latest information which staff and management can use in their work, as well as providing them with mutual access. (Pratt, Hauser, & Sugimoto, 2012) (Madalina, 2012)

It is clear, therefore, that this new environment within which companies operate, both with regard to staff education levels and rapid market developments, together with better informed customers, calls for altered emphasis in the collection and communication of information. Managers and knowledge workers must themselves identify their need for information so as to have the potential to respond appropriately to market developments. They also have to be familiar with employees' information requirements and they must ensure that this is at hand when needed. Although firms today are generally aware of those developments, there are quite a number of exceptions where management styles have lagged behind changed circumstances and old values stubbornly survive as for example the notion that a superior is a superior and a subordinate is a subordinate, as ordained by the almighty organisational chart.

In his article *Moon Shots for Management* Gary Hamel (2009) together with 34 other academic specialists in management studies and currently working managers drew up a summary which, in their opinion, will turn out to play a decisive role in shaping the success of future firms in the light of altered circumstances with regard to the technological, operational and social environment. The main points are as follows:

- Ensure that managers' work serves the intended purpose.
- Maintain community and civil duties within the administrative system of the organisation.
- Abandon the general routines of a formal system of administration.
- Reduce fear and enhance trust.
- Reinvent methods of management.
- Increase diversity and make use of it.
- Create an information democracy.

A company's staff constitute a highly valuable and badly needed resource in the current corporate environment of ever tougher competition and unstable work situations. It is, therefore, of vital importance for the managements of 21st century business organisations to find their bearings in those altered circumstances and discover ways to harness this concealed wealth to which they often have access, but either use improperly or not at all (Madalina, 2012).

The aim of the analysis was to map espoused norms and work procedures with regard to the mediation of information and knowledge management from the participants' perspective.

Conclusions

The conclusions of the research reveal employees' urgent need for better and more open relationships with their colleagues and a more open and enhanced flow of information among staff. It was found, furthermore, that managements appear not to be making use of their employees' knowledge. There were indications that the methodology of knowledge management was inadequately applied for the purpose of creating circumstances favourable to the communication of information, and the internal culture appeared rather to discourage than encourage such communication. In other words, there are barriers to the introduction of knowledge management, but at the same time challenges which suggest it must be done, with the knowledge worker playing a leading role. It is not specifically suggested what must be changed; however, it is of vital importance from the very beginning how well key partners, managers and knowledge workers know and understand the tools to be used. It is clear that the more basic structures there are, the harder it becomes to design and create solutions for managers and this is where the knowledge worker enters into the picture.

Furthermore, the research showed that superiors were not always aware of the human resources at their disposal; they appeared tied to, and restricted by, the organisational chart. Simultaneously staff and management access to data has multiplied to such an extent that many find it difficult to extract the information they require in such a way as to obtain meaningful evidence. Managers must, therefore, urgently support staff training and develop the role of the knowledge worker and his/her network of links.

Remedial proposals for companies and organisations in a similar position might conceivably involve the introduction of business intelligence comprising a combination of knowledge and information, where the task at hand is investigated on the basis of knowledge management and theories of the learning organisation. Such organisations emphasise continuous education, sound communication of information, a company culture characterised by open relationships and staff cooperation, as well as the distribution of knowledge through the improved training of other employees. An article by Eðvald Möller and Kristín Guðmundsdóttir (2012) indicates that neither is it realistic to expect knowledge workers to distribute information "spontaneously" for they often work under time constraints and thus it is not at the top of their list of priorities to train other employees who in any case may have limited interest and patience when confronted with such solutions. As referred to above, companies are increasingly adopting a technology with a deliberate focus on the gathering and communication of information, although many still tend to place the technology itself above its usefulness and impact on company operation (Claire, 2002). Unfortunately employees are not born with those technical skills; they must be taught to master them. For this purpose employees must be given enough spare time from their normal duties to learn this technology and use it, thus benefiting both themselves and the company.

All companies and organisations have amassed large volumes of information within their systems. It may be said that information systems have mainly been used as storage facilities for data. When the methods of knowledge management have been adopted, however, a change in emphasis has been noted in such a way that organisational units increasingly make an effort to utilise available data, with the knowledge worker in a leading role, for the purpose of extracting targeted and useful information.

Recent research initiated by Festa – Icelandic Center for Corporate Social Responsibility – has examined the attitudes of managers and the general public towards the social responsibilities of Icelandic companies and organisations. The results indicate that a significant segment of the general public feels that companies are not shouldering their responsibilities, whereas a larger proportion of managers, compared to the public, feel that companies are doing well in this respect. (Corporate Social Responsibility, 2014). Results from the Festa research correspond to the analysis conducted here, in so far as a divergence is revealed between the attitudes of managers and others involved. Why attitudes diverge to this extent is not known, which indicates an urgent need for further research in the field of knowledge management and the provision of information.

The era characterised by methods in the operation of management of companies which belong to the class “Management 1.0” has now passed and a time for new methods has seen the light of day, with altered work procedures and new perspectives which belong to “Management 2.0” (Hamel, 2009).

Were the methodology of knowledge management and its approaches to be introduced, the results of this research indicate that management and related processes would become significantly more transparent than now is the case. Thus, the results suggest that attitudes need to be altered and working methods improved in order to harness the resources inherent in business employees.

References

- Alexopoulos, A. N., & Buckley, F. (June 2013). What Trust Matters When: The Temporal Value of Professional and Personal Trust for Effective Knowledge Transfer. *Group & Organization Management*, 38(3), 361-391. doi:10.1177/1059601113488939
- Binney, G., Wilke, G., & Williams, C. (2005). *Living leadership*. Harlow: Pearson Education Limited.
- Bogdan, R. C., & Taylor, S. J. (1998). *Introduction to qualitative research methods: A guidebook and resource* (3rd edition). New York: John Wiley & Sons.
- Bokowitz, W. R., & Williams, R. L. (2000). *The Knowledge Management Field book*. London: Pearson Education Limited.
- Claire, M. (October 2002). Knowledge Management and the Dynamic Nature of Knowledge. *Journal of the American Society for Information Science and Technology*, 12(53), 1009-1018. doi:10.1002/asi.10109
- Davenport, T. H., Harris, J. G., & Morrison, R. (2010). *Analytics at work*. Boston: Harvard Business School Publishing Corporation.
- Drucker, P. F. (1999). *Management Challenges for the 21st Century*. New York: HarperCollins Publishers Inc.
- Hamel, G. (May 2009). Moon Shots for Management. *Harvard Business Review*, 91-98.
- Irons, K. (1994). *Managing Service Companies*. Wokingham: Addison-Wesley Publishing Company.
- Jashapara, A. (2004). *Knowledge Management*. Harlow: Pearson Education Limited.
- Kaplan, R. S., & Norton, D. P. (1996). *The Balanced Scorecard*. Boston: Harvard Business School Press.
- Kaplan, R. S., & Norton, D. P. (2004). *Strategy Maps*. Boston: Harvard Business School Press.
- Laursen, G. N., & Thorlund, J. (2010). *Business analytics for managers: Taking business intelligence beyond reporting*. Hoboken, NJ: John Wiley & Sons.
- Madalina, C. T. (December 2012). Knowledge Based Strategies for Knowledge Based Organizations. *Journal of Knowledge Management, Economics & Information*, 2(6), 74-83. Retrieved 11 July 2013 from www.scientificpapers.org
- Marchand, D. A., Kettinger, W. J., & Rollins, J. D. (2001). *Information orientation: The link to business performance*. Oxford: Oxford University Press.
- Mintzberg, H., Ahlstrand, B., & Lampel, J. (1998). *Strategy Safari*. New York: The Free Press.
- Möller, E., & Guðmundsdóttir, K. Viðskiptagreind [Business Intelligence]. Retrieved January 9, 2014, from <http://hdlhandle.net/1946/13363>
- Niven, P. R. (2006). *Balanced Scorecard, Step by Step*. Hoboken: John Wiley & Sons, Inc.
- Nonaka, I., & Takeuchi, H. (May 2011). The Wise Leader. *Harvard Business Review*, 59-67.
- Normann, R., & Ramirez, R. (1998). *Designing Interactive Strategy*. Chichester: John Wiley & Sons.
- Pfeffer, J., & Sutton, R. I. (2000). *The Knowing-Doing Gap*. Boston: Harvard Business School Press.
- Pratt, J. A., Hauser, K., & Sugimoto, C. R. (2012). Cross-Disciplinary Communities or Knowledge Islands. *Journal of Computer Information Systems*, 53(2), 9-21. Retrieved July 11, 2013, from <http://www.highbeam.com/doc/1P3-2900589331.html>
- Ribeiro, R. (June 2013). Tacit Knowledge Management. *Phenomenology and the Cognitive Sciences*, 12(2), 337-366. doi:10.1007/s11097-011-9251-x
- Rothschild, M. (1990). *Bionomics Economy as Ecosystem*. New York: Henry Holt and Company Inc.
- Stjórnunaraðferðir Stjórnarráðs Íslands. [Administrative Methods in Icelandic Government Offices]. Retrieved April 27, 2013, from the Government Offices of Iceland]: <http://www.stjornendavefur.is/stjornun/stjornunaraðferdir>
- Samfélagsleg ábyrgð í yrtækja [Corporate Responsibility]. Retrieved September 15, 2014 from www.festasamfelagsabyrgd.is: <http://festasamfelagsabyrgd.is/node/82>