THE ROLE OF ORGANIZATION-LEVEL FACTORS ON INFORMAL LEARNING PROCESS

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1   INTRODUCTION

1.1   Significance of informal learning

Informal learning is being considered as one of the increasingly important issues in present global business environment due to its spontaneous appearance in everyday activities. Though workplace learning takes place both in formal interventions as well as in informal setting, researchers have found informal learning more dominating than the learning from formal arrangements in business organizations (Ellinger 2005, 389; Ellinger & Cseh 2007, 448; Marsick 2009, 265; Mattox 2012, 50). Marsick (2006, 52) mentions that about 80 percent of what individuals learn at work, they learn informally by their informal interactions, which is subsequently revealed even up to 90 percent in the empirical studies by Eraut (2011, 12). The contribution of informal learning can be observed significantly in the workplace in form of increased employee retention, improved individual performance quality, and enhanced organizational performance (Eraut 2007, 420-421). The informal nature of this learning is more powerful and influencing in any organization to optimize overall occupational expertise (Van der Heijden, Boon, Van der Klink & Meijs 2009, 27-29). Therefore, the recognition of informal learning can unlock significant reserves of dormant or underutilized human capital in business organizations.

Individuals in the workplace usually learn from their work, and from the people who they work with (Strimel, Reed, Dooley, Bolling, Phillips & Cantu 2014, 49). As a human being, individuals learn in different contexts, including their own experience, continuous interactions with others, and so forth (García-Peñalvo & Conde 2014, 686-687). When people work with their colleagues, they can learn by asking questions and receiving immediate feedbacks on their shared activities and events (Lohman 2005, 512-513; Eraut 2011, 9). Such learning is largely tacit, and difficult to explain (Eraut 2011, 9). In fact, it is also difficult to distinguish informal learning from usual work life since it is embedded with individuals´ day-to-day work activities (Merriam, Caffarella & Baumgartner 2007, 35; Marsick 2009, 271). The transfer of knowledge is also not easy through this learning across the organization when the nature of such knowledge is tacit (Nonaka 1994, 16; Nonaka & Takeuchi 1995, 8, 59-60, 72, 85; Nonaka & Toyama 2003, 4-6). The process of informal learning, therefore, proceeds through a variety of

activities and events, which comprises an important arena of our tacit knowledge. This learning is usually unplanned, unstructured, and may not pursue traditional approaches of formal learning.

Learning in the workplace has long been traditionally focused on its off-the-job methods, including different training courses, seminars, coaching, and other educational programmes (Marsick, Watkins, Callahan & Volpe 2006, 794; Strimel et al. 2014, 48). The formalized approaches of such learning may not always lead to a good match between the learning purpose and the learners´ needs. It is evident that formal learning approaches often lack the ability of transferring new learning to be applied on the job (Bryans & Smith 2000; Chen 2001; Garvin, Edmondson & Gino 2008, 109, 116). On the other hand, informal learning can be considered as an attractive alternative to formal learning because of its efficient use of time and money (Halliday-Wynes & Beddie 2009, 3), and frequent new knowledge accumulation (Berg & Chyung 2008, 239; Lucas & Moreira 2009, 333-334). Smith, Oczkowski, and Smith (2008, 27-35) find in their investigations that informal learning provides the opportunity to the individuals at work to learn and develop more from the work culture than any formal arrangements. Similarly, informal learning has been found more competent in the workplace compared with formal learning programmes (Billett 2002, 39-41; Berings, Poell & Simons 2008, 420; Van der Heijden et al. 2009, 29, 31-32; Cross 2011, 5, 16-19). The trend, therefore, has shifted from formal learning to informal work-based learning (Boud & Garrick 1999, 5-6; Tjepkema, Stewart, Sambrook, Mulder, ter Hoerst & Scheerens, 2002, 13-15).

The recognition of informal learning in the workplace contributes to satisfy mutual interest both from the individual and organizational perspectives (Kim & McLean 2014, 45-51). As the individuals in an organization initiate and drive their informal learning while they are working, it saves money (Enos, Kehrhahn & Bell 2003, 385; Hoffman 2005, 16; Merriam et al. 2007, 36; Cross 2011, 18-19), capitalizes right use of time, and satisfies learners-specific needs (Hoffman 2005, 2; Neal & Hainlen 2012, 2) compared with formal learning. In addition, when employees develop their capabilities and expertise from their informal learning experience at work, they can increase their employability and able to tackle any work-related internal and external challenges (Joo & Ready 2012, 289-280). The interest for informal learning has also been increasing in order to manage organizational knowledge efficiently by mobilizing employees´ intellectual assets, and to prove that this learning is one of the most cost effective way to develop

their competencies (Attwell 2007, 44-45). In addition, the workplace learning has been increasingly shifting from formal to informal due to its significant contribution to spontaneous transfer of knowledge across the organization (Wofford, Ellinger & Watkins 2013, 80; Kim & McLean 2014, 47-48, 51).

1.2   Identifying research gaps

The process of how individuals learn informally by their interactions with others in the workplace is a significant issue since it shows the ways to obtain and develop required competencies for work (Eraut 2004; 247-248; Za, Spagnoletti, & North-Samardzic 2014, 1026). Despite a growing number of literatures have been concentrating on informal learning and it process, there are literatures which still insist on developing a comprehensive concept of this learning due to its important contribution to solving work problems in a flexible way (Wofford et al. 2013, 80). In other words, the nature and scope of informal learning can be interpreted by investigating how it proceeds through the complex interactions among a variety of factors in the organizations.

A good number of research works have been taking place to investigate on the factors that can affect individuals´ learning in different organizations. In fact, empirical studies have long been attempted to find out influencing factors that affect both formal and informal learning together through quantitative and qualitative research approaches. For example, Kwakman (2003) has done an intensive quantitative research on the influential factors that affect learning activities in the workplace. Similarly, Clardy (2000), Brockman and Dirkx (2006), and Koopmans, Doornbos and Eekelen (2006) have used critical incident technique, Sambrook (2005), Brockman and Dirkx (2006), Koopmans et al. (2006), Eraut (2007), Ellstrom, Ekholm and Ellstrom (2008), and Crouse, Doyle and Young (2011) have conducted semi-structured interviews as qualitative research approach almost for the same purpose. More specific studies on the factors affecting informal learning have been investigated also both in quantitative approach (Skule 2004; Lohman 2005; Berg & Chyung 2008; Alonderiene 2010; Eraut 2011; Froehlich, Segers & Bossche 2014), and qualitative approaches (Ellinger 2005; Alonderiene 2010). In most of the studies, the factors that affect informal learning are broadly divided into two categories: personal characteristics, and work characteristics or environment. The organization-level factors that affect informal learning have been identified within work

characteristics or environment in those studies. However, to understand the nature and extent of their role on informal learning process, considerable gaps exist in analyzing how informal learning process is affected by these factors individually and interactively.

First, majority of the research works have emphasized to investigate the role of factors on informal learning activities in general, rather than on its process. The research by Kwakman (2003), Skule (2004), Lohman (2005), Sambrook (2005), Berg and Chyung (2008), and Eraut (2011) can be mentioned as for examples in this regard. However, in order to investigate what and how the factors affect individuals´ informal learning activities, scholars have considered certain common activities, which are: emailing (Berg & Chyung 2008), reflection (Kwakman 2003; Lohman 2005; Berg & Chyung 2008), talking (Lohman 2005; Berg & Chyung 2008), trial and error (Lohman 2005), internet or web search (Lohman 2005; Berg & Chyung 2008; Noe, Tews & McConnell Dachner 2010), reading (Kwakman 2003; Berg & Chyung 2008), observation (Kwakman 2003; Lohman 2005; Berg & Chyung 2008; Siebert, Mills & Tuff 2009), and collaboration (Kwakman 2003; Lohman 2005). Although two of the studies by Ellinger (2005), and Ellinger and Cseh (2009) have explored the role of contextual factors on informal learning process, the researchers have collected data from the same single case company which does not reflect the findings of any particular industry. Apart from this, the literature reviews on these research works have been more concentrated on informal learning activities instead of its process.

Second, most of the researchers have studied combined individual and organization-level factors, their interactions, and influential role on informal learning. For example, the investigation by Kwakman (2003, 162-166) reveals that individuals´ engagement in informal learning process is significantly affected by personal factors rather than work-specific or environment factors. Similarly, Van Woerkom, Nijhof and Nieuwenhuis (2002, 377-379), Doornbos, Bolhuis and Simons (2004, 264-265), Skule (2004, 14-15), Lohman (2005, 508-509), Berg and Chyung (2008, 231), and Kim and McLean (2014, 42-43) use a combination of individual and organizational factors to examine how those factors affect workplace learning. The purposes of these combinations are aimed at comparing the extent to which both of the factors affect informal learning. As a result, the role of organization-level factors, constituting the context in the workplace, on informal learning has not been explored adequately.

Third, there is a lack of comprehensive framework to include all prominent organization-level factors which usually affect informal workplace learning. For example,

Berg and Chyung (2008, 237) identify work environment as a distinctive organization-level factor from physical structure, and monetary rewards. Lohman (2000, 88) emphasizes nonmonetary rewards along with monetary increments, and Van der Sluis (2004, 11-12) distinguishes work structure from work design and work context. Doornbos et al. (2004, 265) suggest a model in which they identify managerial and collegial support that foster interactive learning at work. Similarly, Kwakman (2003, 163-165) and Eraut (2011, 9-10) find collegial support, and Van der Sluis (2004, 11) and Kyndt, Dochy and Nijs (2009, 381) recognize teamwork as the key organization-level factors that affect learning in the workplace. Lohman (2005, 512-522) and Alonderiene (2010, 266, 269-270) signify the role of human resource development, where Alonderiene (2010, 267, 269), Warhurst (2013, 50-51), and Froehlich et al. (2014, 30, 33-51) analyze the managerial role in their leadership styles on informal workplace learning. However, the most common organization-level factor has been recognized as ``work culture´´ by Van Woerkom et al. (2002, 379, 381), Marsick and Watkins (2003, 139), and Van der Sluis (2004, 12). Though Gnyawali and Stewart (2003, 66) design a framework to explore link between environmental factors with learning processes and types, the model is neither based on empirical data, nor includes all affecting organization-level factors found by earlier researchers.

Fourth, the interactions among the affecting factors have not been reflected adequately in the aforementioned existing literatures on the factors affecting informal learning. It has been found that the organization-level factors affect each other in a varying degree of their interventions into informal learning process. For example, it is evident that HRD can affect organizational structure (Ter Horst, Mulder, Sambrook, Scheerens, Stewart & Tjepkema, 2003, 14) and work culture (Sambrook 2005, 114) in a way that foster learning across the organization. In contrast, Chen and Huang (2007, 113) finds that organizational structure can dictate work culture and managers´ performance to facilitate a favorable knowledge management within the organization. It has been found that managers can foster learning in the organization by influencing the flexibility in structure and work culture (Vera & Crossan 2004, 231-232), as well as HRD activities (Jung, Chow & Wu 2003 539-541; Beattie 2006, 111, 115-116). Collegial support can also shape the work culture (Lohman 2005, 523; Ragins & Kram 2007, 681-682), whereas team learning, and work culture provide HRD with additional information on how to facilitate learning in the organization (Egan, Yang & Bartlett 2004, 292, 296). Montes, Moreno and Morales (2005, 1168, 1169-1170) take a different stand

by suggesting that teamwork among the individuals is immensely stimulated by managerial support in the workplace. However, neither of research has been attempted to analyze how these factors interact with each other when specifically affecting informal learning process, nor propose any framework to include all possible factors to explore their relationship in this regard.

The prevailing gaps in understanding the role of organization-level factors on informal learning process remind the complexities associated with the tacit nature of such learning. However, motivation for empirical investigation on the phenomenon can be sparked due to the growing interest on driving such frequent, non-routine, unstructured, and unplanned learning toward the achievement of organizational learning goal.

1.3   Research purpose and questions

The purpose of this study is to understand the role of organization-level factors on informal learning process inside the organization. Since learning has been found as the key indicator to improve strategic competitiveness in business organizations (Za et al. 2014, 1024), it also seems logical that informal learning has a critical role in this respect in addition to formal learning. The process of informal learning is likely more interesting due to its ad hoc, less structured and unconscious nature affected by a variety of factors in the organization. This study highlights that informal learning is a continuous, spontaneous, and essential process in the day-to-day business which is shaped by certain key organization-level factors.

Instead of examining the causal influence of organization-level factors on informal learning process, this study aims at investigating how informal learning process is affected by the organization-level factors. Therefore, in order to address the role of organization-level factors on informal learning process inside the organization, following research sub-questions need to be answered:

(i)   How does informal learning process take place in business organizations?

(ii)   What organization-level factors do affect informal learning process?

(iii)   How is informal learning process affected by organization-level factors?

1.4 Scope of the study

The scope of this study revolves around bridging the theories related to informal learning and organization-level factors, and striving for practical implication of how these factors affect informal learning process in freight forwarding business in Bangladesh. This study assumes that organization-level factors have a significant role on informal learning process—which lacks inadequate research. With the exploration of the role of organization-level factors on informal learning process, such learning process is likely to be improved in order to achieve individuals´ learning goals in business organizations.

Informal learning has become a key concern for the business organizations in order to understand and improve the knowledge base of their workforces. To understand informal learning in the workplace, it becomes necessary to know about its process—how individuals learn at work in an informal way. Since this learning takes place differently from traditional formal learning process, it can be assumed that informal learning does not necessarily affected by the same influential factors of formal learning. In addition, informal learning activities do not always depict how the learning process takes place in different organizational context. The popular researched model of informal learning process by Mersick et al. (2006, 795) has been used exclusively in this study to understand the process itself, in addition to investigate how this process is affected by different organization-level factors in business organizations.

The process of informal learning is affected by both individual and organization-level factors in business organizations. Though individual-level factors affect informal learning process to a large extent, organization-level factors remain as a key concern for business organizations. Organizations seem to have more control on shaping the informal learning process if it is known how the organization-level factors affect the process. Therefore, this study attempts to examine organization-level factors and their role on informal learning process. As this study wishes to investigate how informal learning process is affected by organization-level factors, the theoretical implication is attempted to apply on the context of freight forwarding business in Bangladesh. Thus the chosen example context in this study is freight forwarding business.

A freight forwarding company is the business organization which takes care of the carriage of goods and the related formalities on behalf of a shipper (Shang & Lu 2012, 64). Freight forwarding companies are engaged in international business by providing customized logistic support services to the local and foreign customers in different

countries across the world. The growth of freight forwarding industry is increasingly influenced by the growth of global GDP and export due to their close connections with global business market. Global GDP and trade are expected to grow at 6-7% over year with more expansion of international business (Berger, 2012). As a common phenomenon, informal learning is taking place almost in every organization irrespective of its nature. Since informal learning is consistently defined in contrast to formal learning in many ways, the frequency and variety of such learning are also more widely visible in different business organizations compared with formal learning. Therefore, selection of the context in this study has been influenced by the significance of phenomenon on the industry.

The importance of learning in freight forwarding business has been recognized by many researchers especially in terms of its knowledge management process. Freight forwarding business can be immensely benefited by efficient knowledge management, where the benefits includes: competitive advantages and innovation (Wu 2008, 248; Lee & Song 2010, 580) improved customer relationship management (Hertz & Alfredsson 2003, 146; Shang & Lu 2012, 70-71), innovative organizational culture (Flint, Larsson, Gammelgaard & Mentzer 2005, 127-128), and improved service quality and business performance (Panayides 2007, 146). However, the literatures have highlighted the importance of learning, as a part of knowledge management, more on formal setting rather than informal learning in freight forwarding industry. With the increasing contribution of tacit knowledge to work, this research attempts to focus on informal learning process in freight forwarding business by exploring how it is affected by organization-level factors.

Informal learning is taking place almost in every organization irrespective of manufacturing or service in nature. Since informal learning has been defined in contrast to the formal learning in many ways, the frequency and variety of such learning is also more widely visible in different business organizations compared with formal learning. The freight forwarding business, as part of the broader supply chain management industry, seems one of the ideal territories of informal learning because of the workforce diversity and exposure to learning opportunities. The day-to-day interactions with carriers, buyers, customers, shippers, logistics providers, and so on make the freight forwarding business truly multi-dimensional which can build the knowledge base for the learning opportunity within organization. The acquisition and transfer of interactive learning in supply chain business organizations are also consistent with resource-based

view (Hult, Ketchen & Nichols 2002, 583-584), and knowledge-based view (Hult, Ketchen & Slater 2004, 250-251) of the firm. In addition, Chow, Choy and Lee (2007, 883) assert that the spontaneous and multi-directional knowledge flows in freight forwarding companies make their business networks highly decentralized and informal in nature As a result, interactions of the workforce within freight forwarding organizations are considered as their individual informal learning process which is likely to be immensely affected by different organization-level factors.

In freight forwarding context, an example nation is required to examine role of organization-level factors on informal learning process. Bangladesh is chosen as the nation in this respect. As a promising export-oriented country, Bangladesh is the home of a good number of freight forwarding organizations where informal learning process is characterized by its distinctive work culture. In case of Bangladesh, during 2012-2013, the country´s total import was 32476.79 million US Dollar, and export was amounted to 27027.36 million US Dollar (CCI&E 2015). Due to its increased involvements in international business, multinational freight forwarding companies are expanding their operations for both import and export trading in this country. Therefore, as a promising developing country, Bangladesh has now become a home ground for all major multinational freight forwarding companies.

An empirical study to explore the process of a phenomenon and the factors affecting that process demands close involvement and familiarity of the context by the researcher. Creswell (2013, 8-9) points out that the researchers usually interpret the process of human interactions in a specific context by developing different meanings from its social and cultural setting. In fact, the researchers have to be closely attached with the participants and the context if the study tends to be a subjectivist epistemology (Lincoln, Lynham & Guba 2011, 13, 119). Similarly, Frosh & Young (2008, 112) acknowledge that it is impossible to do a research by being apart from the context. The choice of conducting this empirical study in freight forwarding industry in Bangladesh is relevant and appropriate in a sense that the familiarity with the culture of specific business in a certain geographical location make the research easy to conduct. In addition, personal experience in research relevant phenomenon saves time and cost; makes easy access to the information, and increase trustworthiness of the research.

2 INFORMAL LEARNING AS A PROCESS

2.1 Conception and definition of informal learning

The concept of informal learning in the workplace has been developed over a long period of time. The presence of informal learning come into to focus by Lindeman (1926), Lewin (1935), Dewey (1938), and Knowles (1950) (Ellinger 2005, 391; Marsick et al. 2006, 794-795; García-Peñalvo & Conde 2014, 686[1]). Subsequently, other scholars like Coombs (1985, 24-26) and Marsick and Watkins (1990, 6-8) also recognize the existence of informal learning in the holistic learning process in any context. In twenty-first century, the significance of informal learning has been highlighted more extensively by terming it as one of the inextricable parts of lifelong learning (The European Higher Education Area 2012). However, Livingstone (2001, 4-5) acknowledges that informal learning and its activities are not duly emphasized by many scholars because of its co-existence with other social activities, and difficulties in assessments. In this respect, Livingstone (2001, 5) declares that:

``*it is clear that both adults' informal education/training and their self-directed informal learning have been relatively little explored to date and warrant much fuller attention from those interested in comprehending the nature and extent of adult learning.´´*

Though importance of informal learning have been gaining more attention with the phase of globalization, the concept of informal learning ``is being absorbed into different pedagogical contexts and is becoming more and more unclear´´(Ebner, Lienhardt, Rohs & Meyer 2010, 93). Informal learning, therefore, has been conceptualized as tacit, unstructured, and even sometimes unplanned nature of learning by scholars.

Informal learning has been defined by different scholars from different perspectives. The synthesis of its definition is outlined in Table 1.

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[1] Original source:

    (1) Lindeman, E. (1926) To discover the meaning of experience. *Survey*, Vol. 55, 545–546.

    (2) Lewin, K. (1935) *A dynamic theory of personality*. McGraw-Hill, New York, USA.

    (3) Dewey, J. (1938) *Experience and education*. Touchstone, New York, USA.

    (4) Knowles, M. S. (1950) *Informal adult education*. Association Press, New York, USA.

Table 1   Synthesis of definition of informal learning

Perspective	*Source*	*Concept*
Experiential learning, and in contrast to formal learning	Marsick and Volpe (1999, 3-7); Livingstone (1999, 4-7, 11); Livingstone (2001, 5, 14); Eraut (2004, 247-248, 250, 254-255); Merriam et al. (2007, 36-37); Sloep (2012); Cunningham and Hillier (2013, 38-39, 40, 44); Za et al. (2014, 1025); Armstrong and Taylor (2014, 305)	Learning through action and experience; outside institutional curricula, courses or workshops, and without explicit learning objectives, time, and support
In collaboration with formal learning	Colley, Hodkinson and Malcolm (2002); Billett (2004, 313-314); Sefton-Green (2004, 5-9, 30); Rowold and Kauffeld (2008, 96-98); Bednall, Sanders and Runhaar (2014, 57); Strimel et al. (2014, 50-51); Armstrong and Taylor (2014, 305); Song and Lee (2014, 512-513)	Individuals learn informal pattern of social relationship in formal setting, whereas formal learning covers virtual informal learning with new technologies
Learner-initiated	Livingstone (1999, 17, 23, 31); Marsick and Watkins (2001, 25-26); Colardyn and Bjornavold (2004, 71, 74); Merriam et al. (2007, 38); Cook, Pachler & Bradley (2008, 4, 16); Lucas and Moreira (2009, 334); Cunningham and Hillier (2013, 39, 43); Armstrong and Taylor (2014, 305)	Learning is self-directed, self-motivated, incidental, intentional, unintentional or social, and without controlled by teacher or supervisor
Learning plan	Foley (2001, 72); Marsick and Watkins (2001, 25-26, 31-32; 2005, 310); Colley et al (2002); Hrimech (2005, 310)	Learning is unplanned, unanticipated, unorganized, and even sometimes unacknowledged by the learner
Interpersonal relationship	Rowold and Kauffeld (2008, 92, 97); Lucas and Moreira (2009, 334); Siebert et al. (2009, 449); Shulz and Robnagel (2010, 396-397); Bednall et al. (2014, 54)	Learning through continuous on-the-job interactions, with the support and feedback from the colleagues or supervisors
Generalization	Lohman (2000, 85); Livingstone (2001, 6); Bell, Lewenstein, Shouse and Feder (2009, 42-44)	Expending physical, cognitive or emotional effort to acquire knowledge, skill and understanding

Informal learning has been defined by a majority of scholars in terms of experiential learning process, which is not restricted to any formal arrangements or institutions (Eraut 2004, 247-248; Merriam et al. 2007, 24; Cunningham & Hillier 2013, 38-39, 43). According to Livingstone (1999, 5): ``informal learning is any activity involving the pursuit of understanding, knowledge or skill which occurs outside the curricula of educational institutions, or the courses or workshops offered by educational or social agencies.´´ Marsick and Volpe (1999, 3, 6-8) mention that informal learning is a process where people tend to learn informally at work in order to satisfy their individual needs without having any explicit objective unlike their formal learning initiatives. More specifically, Sloep (2012) defines informal learning as ``all intentional learning that is not formal´´, which is clearly contradictory to the concept of formal learning where ``all learning involves a social contract between the learner and institute or organization´´ (Song & Lee 2014, 512). Eraut (2004, 247-248, 254) also attempts to define informal learning by stating that informal learning is more flexible, allows the learners more freedom to learn socially from others compared to formal learning. Similarly, Cunningham and Hillier (2013, 38) defines informal learning as all sorts of learning activities taking place outside formal or institutional contexts for the purpose of acquiring required knowledge or skills. However, informal learning cannot be formalized completely (Wenger & Snyder 2000, 143-145) though an informal learning environment can be created out of formal setting (Ebner et al. 2010, 93).

Though definition of informal learning is articulated in contrast to formal learning by many scholars, a learner can be involved with formal, informal, or both at the same time, depending on the nature of the learning in different contexts. Colley et al. (2002) and Billett (2004, 313-314) assert that formal and informal learning can take place together in any context, and informal learning can be better understood by examining their relationships instead of the differences. Billett (2004, 313-314) acknowledges that informal learning is being formalized to some extent by social and economic elements, which is reflected in structuring people's learning in the workplace. In contrast, a formal learning environment is very often characterized by the learners´ informal social relations in the workplace (Jubas, 2011, 229). Therefore, it is evident that formal and informal learning can go hand in hand to build knowledge base of individuals at work.

Strimel et al. (2014, 48, 50-51) asserts that individuals learn formally by attending a professional development session, or informally by acquiring new skills through real-world work experiences. However, formal learning instruments can facilitate informal

learning in the workplace (Bednall et al. 2014, 57). In fact, advanced technology is offering more specific and active media or tools by which people are learning more informally in their day-to-day activities (Dieterle, Dede & Schrier 2007, 35-38). On the other hand, formal learning also includes off-the-job or online courses (Rowold & Kauffeld 2008, 92). Therefore, individuals´ informal learning process cannot be separated from their general learning process at work (Sefton-Green 2004, 5-9, 30).

The co-existence of formal and informal learning and interactive relationship has been conceptualized by Poikela (2004, 267-270) through a transformation process. Information as a source of any potential knowledge builds both theoretical and practical knowledge which are required to be processed to understand the objects and organisms through observations or experiments. As a result, experiential and tacit knowledge are evolved by which learners gain their *knowing* in terms of competence and expertise. (Poikela 2004, 268-269.) Figure 1 depicts the distinction between formal and informal learning divided into two different sides along with their relationships.

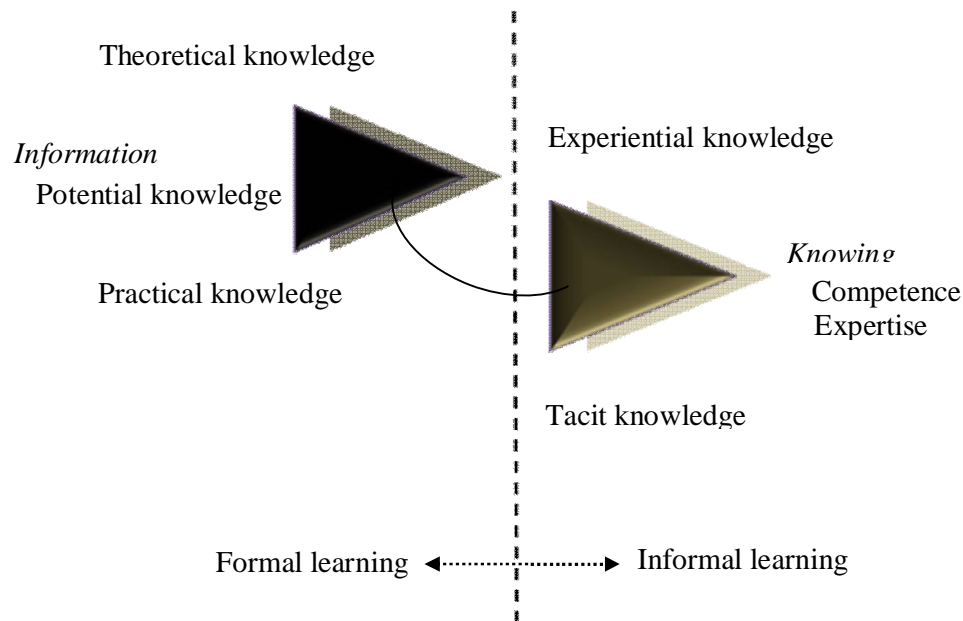Figure 1   The interaction of formal and informal learning (Poikela 2004, 268)

Informal learning has been defined by scholars outlining its structure from learner-initiated perspectives. For example, it has been defined as self-directed, incidental, unstructured, unintentional or social, and essential part of daily life of all individuals (Colardyn & Bjornavold 2004, 71; Lucas & Moreira 2009, 326; Armstrong &

Taylor 2014, 305). Similarly, Cook et al. (2008, 4) acknowledge that informal learning is a self-motivated natural activity in which the learners satisfy their learning needs intentionally or unintentionally. However, there are disagreements about these points of views. For example, scholars like Marsick and Watkins (2001, 25-26), Merriam et al. (2007, 38), and Cunningham and Hillier (2013, 39, 43) argue that informal learning is usually self-initiated, which is not controlled by the instructor or institution. On the contrary, a learner can also learn informally by self-direction in different formal learning contexts (Song and Lee 2014, 512).

In consistent with the learner-initiated perspectives, Livingstone (1999, 5) defines informal as the explicit learning that takes place when people decide by themselves whether to work alone or with others in group. In explicit informal learning there is ``the retrospective recognition of both a new significant form of knowledge, understanding of the skills acquired on one´s own initiative and also the recognition of the process of acquisition´´ (Livingstone 1999, 5). This *explicit* dimension of informal learning makes it different from other common informal experiences in daily life like enjoying radio or television. Therefore, informal learning is learner-initiated where the learners proceed through informal learning process in the workplace at their own pace, and take the critical decisions about required time, resources, and energy for this learning. (Cunningham & Hillier 2013, 38-39.)

From the learning plan perspective, informal learning is unplanned, mundane, and can be underestimated ignored by the individuals in the workplace (Marsick & Watkins 2001, 25-26, 31-32; Colley et al 2002). Similarly, Hrimech (2005, 310) states that informal learning is such kind of learning ``which people do on their own and which has not been planned or organized in formal settings´´. Marsick and Watkins (2001, 25-26) define informal learning as the common phenomenon in the workplace, which is unconscious, unsystematic, incidental and even sometimes unacknowledged by the learner. In fact, informal learning is tacit and individuals practice it without any plan, commonly in their daily life and at work (cf. Foley 2001, 72). Thus informal learning can be defined as a spontaneous learning process that takes place without any learning plan by the individuals in the organizations.

Informal learning has also been defined by scholars in terms of interpersonal relationship. Rowold and Kauffeld (2008, 92, 98) state that informal learning is the outcome of continuous interactions by the individuals at work, in which they share any relevant work issues with their colleagues and supervisors. Siebert et al. (2009, 449)

have discovered the dominance of learners´ exposure to different perspectives, social interactions and interpersonal relationships in their workplace informal learning. In this respect, trusted peers are a good source of informal learning as they provide required support to identify problem areas of individual performance and interpersonal relationship, and suggest how to overcome (Eddy, Tannenbaum, Lorenzet & Smith-Jentsch, 2005, 392-393). Nevertheless, Shulz and Robnagel (2010, 393-397) assert that individuals´ learning from others depends to large extent on their ability of how they plan, set their goals, assess their existing knowledge level, and stimulate their learning initiatives.

In general, whatever the form learning takes—either formal, informal or both—the purpose of the learning remains the same: to learn, or enhance one´s understanding, knowledge, skills, and abilities (Strimel et al. 2014, 48). In pursuit of learning in the workplace, individuals tend to invest their time, efforts and resources to varying extent. In this respect, Lohman (2000, 85) and Bell et al. (2009, 42-44) define informal workplace learning as the activities in which employees provide their physical, cognitive or emotional efforts for the purpose of their knowledge and skill development. Thus the generalized definitions of informal learning highlight that it is a purposeful learning effort by the individuals to learn and develop themselves in their workplace. More specifically, Livingstone (2001, 5) defines informal learning as any kind of activities that individuals undertake in the workplace for the purpose acquiring knowledge, skill and understanding without any externally imposed curricular criteria.

Though scholars have characterized informal learning from different perspectives, it is difficult to completely segregate such learning from individuals´ integral part of day-to-day activities and their interactions with others in the workplace. For example, unintentional informal learning frequently occurs during regular activities at work (Malcolm, Hodkinson & Colley 2003, 314), and it is not easy to split between work and learning as the individuals continuously learn from their mistakes or the trial-and-error (Marsick & Watkins 2001, 25-26; Tikkanen 2002, 91-95). In addition, Eraut (2004, 266-267) finds that informal learning takes place to a large extent through daily social interactions with others in the workplace while working with colleagues or performing in group assignments, dealing with clients, and tackling challenging tasks. Armstrong and Taylor (2014, 305-306) argue that though informal nature of learning can be supplemented by formal interventions, such approaches are directed to enhance informal learning at work. The success of informal learning highly depends on how

efficiently the individuals maintain the quality of their interactions with others in their workplace (Eraut 2004, 268, 270-271; Lucas & Moreira 2009, 334).

To have an understanding of the role of organization-level factors on informal learning processes, informal learning has been defined in this study as the learner-initiated experiential learning process which is not planned or organized in formal settings, and learned through interpersonal relationships in the workplace. This definition incorporates the basic features of informal learning that are reflected in informal learning process in the workplace. Though informal learning process at work is self-initiated and takes place without any direct control by any institutional or formal setting, learners´ decisions and actions are immensely guided by organization-level factors (Ellinger 2005). Therefore, the features of informal learning constitute the overall conception of its process, and how it is affected by the organization-level factors inside the organization.

2.2   The process of informal learning

The process of informal learning entangles with the key question: how do individuals learn informally in the workplace? The individuals´ learning process has been explored over a period of time through different organizational learning models (Crossan, Maurer & White 2011, 448). The informal learning process model was originally developed by Marsick and Watkins in 1990 to depict how the individuals get involved with informal learning in the workplace (Conlon 2004, 286-287; Marsick et al. 2006, 794-795; Marsick 2009, 266; Le Clus 2011, 359, 361-362; Wofford 2011, 35). This learning model specifically describes how individuals acquire and process information, skills, and feelings in a non-classroom-based learning framework (Marsick & Watkins, 1997, 308). However, the initial model has been revised to incorporate the interactions of environment and context with the phases of learning process.

Marsick and Watkins (1997, 295-297) develop the problem-solving model which incorporates the idea of how individuals interact with others within their work environment. More specifically, the problem-solving model points out that informal learning process in the workplace begins with a trigger—a situation, or an event—in form of a work-related problem. Subsequently, the trigger makes the individual learner to look for an appropriate solution in problem-solving approach. However, Cseh´s (1998) study

finds that the context of the learning is not explicit in this problem-solving model which has to be incorporated because of its pervasive effect on informal learning process (Ellinger 2005, 392). Cseh, Watkins and Marsick (1999, 87) also acknowledge the common interference of context in every phase of informal learning process. Therefore, the model has been re-conceptualized to incorporate the importance of context (Ellinger 2005, 395). With the re-conceptualization, Marsick et al. (2006, 795) model has become a complete informal learning process model, and started to popularly used in various literatures (Wofford et al. 2013, 81). In order to understand the role of organization-level factors on the detailed informal learning process in the workplace, Marsick et al. (2006, 795) model has been used as the guiding theoritical framework for this study which is depicted in Figure 2.
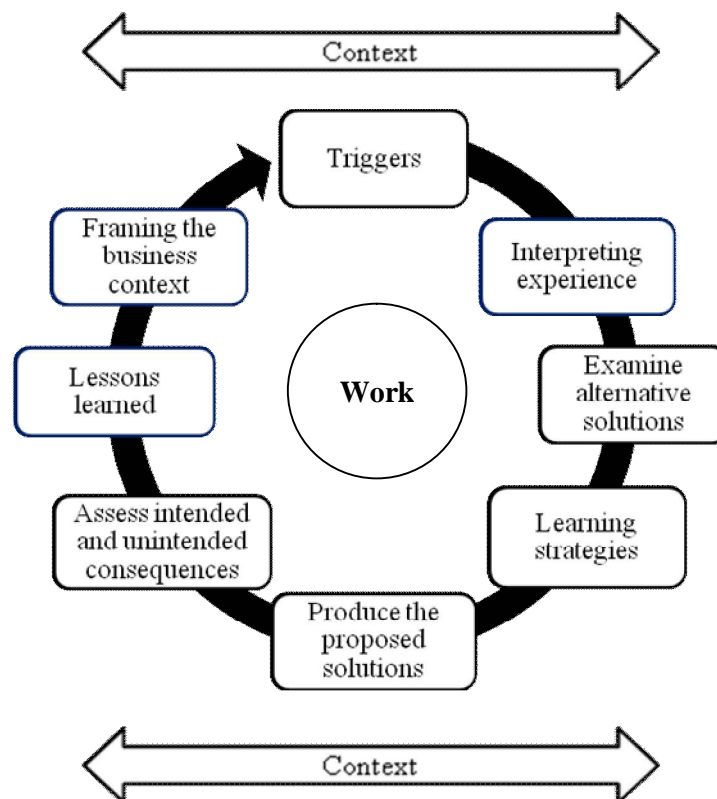

Figure 2   Reconceptualized model of Informal learning process
              (Marsick et al. 2006, 795)

Starting with the a trigger (or a problem) in place, the informal learning process proceed through subsequent seven phases: interpreting experience (describing the trigger/problem), examine alternative solutions, learning strategies (developing appro-

priate learning strategies), produce the proposed solutions (implementing a chosen strategy), assess intended and unintended consequences, lessons learned (whether the consequences are positive to solve the problem), and framing the business context (transforming the learning within organizational context). The completion of one phase leads to the next which make their relationship linear and sequential.

A *trigger* emerges from a situation or an event that provides a disjuncture for the individual involved in this process (Jarvis 2012, 30). As an informal learning opportunity, a trigger instigates the learning process when it confronts with a routine response to a situation or expected solution (Williams 2003, 209-212; Jarvis 2012, 173-174). Ellinger (2003, 11-12) has also termed triggers as informal learning opportunities in the workplace, and categorized those into perceived gaps, political issues, and developmental opportunities. Similarly, Triggers that provide informal learning opportunities have been identified as environmental instability, challenges, opportunities, discontinuities, and disjunctures (Boud & Solomon 2003, 330-331; Ellinger 2003, 11-12; Marsick 2009, 273; Jarvis 2012, 173-174). On the other hand, Reardon (2004, 394) asserts that organizational restructuring that improves quality of individual work assignment act as a trigger for informal learning. In addition, the individuals solicited by others to facilitate learning, or the individuals being faced with a challenging assignment has been found as a trigger for informal learning (Reardon 2004, 388-392; Ellinger & Cseh 2007, 448-449; McNally, Blake & Reid 2009, 324-329).

When the informal learning process has been initiated by a trigger, the learning process proceeds to *interpret the experience* acted as a trigger. During this phase, individuals´ interpretation is affected by their relevant previous experience, expectations, and contextual perception (Gola 2009, 341-343; Hoekstra, Korthagen, Brekelmans, Beijaard & Imants 2009, 289-292; Jarvis 2012, 190-193). The interpretation of triggers in light of prior experience and expectations are the most common aspect in informal learning, especially when individuals encounter any situations that are to be resolved by themselves in the workplace (Boud & Solomon 2003, 330-331; Williams 2003, 212-216; Ruth-Sahd & Tisdell 2007, 125-127; Hoekstra et al. 2009, 285-288).

The subsequent phase of informal learning process is to *examine the alternative solutions* for the problem encountered. Individuals in the workplace have been found to develop various possible solutions by their informal interactions with peers, which results in development of tentative strategies to solve their problems (Lohman, 2005, 91-92). In examining alternative solutions, individuals´ past learning outside the present

functional areas contributes to their valuable intuitive responses to the assessments. Such intuitive responses produce distinctive informal learning experience which sometimes leads to bypassing the next phase of *learning strategies* in which individuals are supposed to develop appropriate strategies for the solutions. In this case, individuals move directly to *produce proposed solution* by implementing a strategy using a tacit or preconceived learning framework which has been learnt from an unrelated arena. (Ruth-Sahd & Tisdell 2007, 134-137.)

During the phase of *learning strategies*, an individual processes and considers the strategies that are necessary to produce a solution to the problem. Wofford (2011, 40) acknowledges that individuals develop strategies to learn how to make adjustments with a problem, or to understand the situation for the purpose of developing further subsequent strategies. In order to overcome practical experience deficiencies, the individuals in the workplace have been found to choose collaboration as a strategy to acquire skills and knowledge (Starr & Conley 2006, 91-92). Similarly, Lohman (2005, 91-92), Hoekstra et al. (2009, 287-289), and McNally et al. (2009, 324-329) find that the individuals develop their learning strategies by sharing materials, collaborating with one another through talking, and using on-line resources to address learning needs in the workplace.

When a strategy has been selected and required competencies have been achieved in this field, an individual attempts to *produce proposed solution*s, or implement the chosen strategy. In this phase, individuals in the workplace go through some form of action, cognitive adjustment, or both, to address the trigger (Jarvis 2012, 152; Wofford 2013, 88-89). Such implementations go through the full exposure to the problem with acquired competencies, and collaboration with others in the workplace (Starr & Conley, 2006, 88-90). In fact, the phase of strategy implementations in informal learning process in the workplace ranges from reinforcement, to trial and error (Wofford et al. 2013, 89). However, Reardon (2004, 393-394) acknowledges that the attempts of strategy implementation in regular learning process are carried out both individually and through informal networks.

Once the strategy has been implemented, the following step in the informal learning process is to *assess intended or unintended consequences, or* evaluate the consequences of outcomes. The outcomes include what the individuals had anticipated and what they encountered unexpectedly (Marsick et al. 2006, 796-798). When individuals evaluate their actions, they often presume a cause and effect relationship based on their assump-

tions and beliefs (Wofford 2011, 41). In some cases, these assumptions and expectations may be proven as wrong (Jarvis 2006, 62; Wofford 2013, 91). In such cases, the assessment of the consequences may lead to further learning by modifying their future learning expectations (Gola 2009, 344; Marsick 2009, 273). Therefore, this evaluation leads to the lessons that one has learned about the suitability of a tentative solution.

The evaluation of consequence provides individuals the lessons of their prior decisions and actions in informal learning process. These *lessons learned* lead to the change of individuals´ behaviors or their prospective actions for future encounters (Wofford 2011, 42). In addition, individuals gain new insights about themselves which have been affected by changes in organizational context (Ellinger 2005, 400-401, 404-406). Starr and Conley (2006, 91-92) find that individuals become more confident when they realize a match between their expectations and actual results after an informal learning experience. However, it is quite challenging to link informal learning with its outcome due to its tacit nature, which may produce less value as well as individual development if those are applied through a reflective process (Marsick et al. 2006, 799; Marsick 2009, 273; McNally et al. 2009, 330-331). Thus the evaluation phase leads to designing a positive image of solution from the whole process that is supposed to be embedded with the context.

The final phase of informal learning process, *framing the business context,* creates the basis for further learning, and stimulates individual expectations toward future informal learning (Jarvis 2012, 20). Framing the context involves reflective transformation of informal learning experience to the organizational context (Marsick et al. 2006, 797; Ellinger & Cseh 2007, 444-445; Marsick 2009, 273). In this transformational phase, individuals try innovations, reframe identification, and restructure social interactions (Lohman 2005, 91-92). The entire informal learning process is based on the context, or the complex environment in which informal learning takes place. Though the context has been observed as implicit in earlier model, this re-conceptualized framework of Marsick et al. (2006, 795) constantly illustrates the extensive interaction of context with the entire informal learning process.

3 ORGANIZATION-LEVEL FACTORS AFFECTING INFORMAL LEARNING PROCESS

3.1 Organizational structure

Organizational structure can be viewed as the process of how power and responsibility are divided, and work procedures are materialized among the workforce in any organization (Nahm, Vonderembse & Koufteros 2003, 282-283). It affects organizational capacity to identify, acquire and integrate required information and knowledge, and guides how to distribute those across the organization (Martínez-León & Martinez-Garcia 2011, 543). Organizational structure can be defined as a multi-dimensional construct that dictates the characteristics hierarchical levels, and the extent of delegation of authority in the organizations (Hao & Muehlbacher 2012, 38). Chen and Huang (2007, 113) and Martínez-León and Martinez-Garcia (2011, 557-559) find that the organization-level structure promotes social interactions and knowledge sharing among employees if it is less centralized, less formalized, and more integrated. However, as Martínez-León and Martinez-Garcia (2011, 543) point out, the structure is not a uniform condition to facilitate learning since different parts of an organization undertake different environmental pressures, which develop distinct practices, policies and structures as a result. Thus the flexibility of organizational structure makes the informal learning process more dynamic in nature.

Ripley (2003, 93-94) finds in his empirical research that organization and design of work affect workplace learning to a greater extent. It has become evident that organizational structure can increase the learning opportunities, and foster the learning process in the organizations (Vera & Crossan 2004, 232-233). This statement has also been supported by Lohman (2005, 522) who finds that individuals´ scope of informal learning becomes limited because of their distant work areas from those of their colleagues. Similarly, Berg and Chyung (2008, 238) assert that informal learning of new or junior employees can be visibly promoted by ensuring their proximity to their colleagues working in the similar functional areas.

The way how the work is organized, the schedule is determined, and the work pressure is imposed can inhibit informal learning in the business organizations if proper care is not given on each aspect appropriately (Sambrook 2005, 114). The organiza-

tional structure is the key to encourage learning in any workplace when it ensures the variation in work itself, including temporary assignments (Cunningham & Hillier 2013, 43-44; Hughes & Campbell 2009), cross-functional teams (Quinn, Bright, Faerman, Thompson & McGrath 2014, 120-122), and job rotations (Rowold & Kauffeld 2008, 98). More specifically, when an organizational structure is less formalized, less horizontally specialized, and more autonomous, it is evident that it enhances learning in the organizations (Martínez-León & Martinez-Garcia 2011, 557-559). The incorporation of necessary changes or shifting in organizational structure can be ensured significantly by its human resource development (Torraco 2005, 103-104).

3.2   Human resource development

Human resource development (HRD) plays a key role in enhancing learning in the organization both in formal and informal way. Werner and DeSimone (2012, 4) define HRD as ``a set of systematic and planned activities designed by an organization to provide its members with the opportunities to learn necessary skills to meet current and future job demands.´´ HRD professionals take the lead to transfer individuals´ informal learning to their job performance by designing appropriate HRD activities (Keep 2015, 111-115; Lim & Morris 2006, 106). HRD activities include designing, implementing, and evaluating individual development plan, employee orientation/socialization programmes, online learning courses, and acting as a coach and mentor to promote individual learning in the business organization (Armstrong & Taylor 2014, 306-309). The employees´ learning purpose and how they will pursue this learning in the organization are affected by the nature and extent of HRD (Bierema & Eraut 2004, 57-58). Russ-eft (2002, 58) states that HRD can manipulate or affect each learning elements in the workplace except individual personality or motivational factors. In an effort to establish a positive learning culture throughout the organization, HRD significantly facilitates informal learning in addition to traditional formal learning techniques (Ter Horst et al. 2003, 16).

Sthapit (2012) points out that learning can be geared at the initial stage for new employees by HRD intervention in form of induction and socialization programmes. Though induction programs are usually more structured and formal in nature, HRD usually tends pursue informal socialization to enhance employees´ learning on their new

organization. In addition to the extensive area of managing learning and development programs for individuals in the organizations, HRD can design compensation and benefits programs that include the monetary rewards for spontaneous learning within the organizational environment (Lohman 2000, 98-99; Berg & Chyung 2008, 239). Moreover, the effective role of HRD in mentoring and coaching activities is likely to resolve the barriers in learning, and build networks within the organization, which result in facilitating the transfer of learning (Garavan & McCarthy 2008, 464). In perusing a learning organization, the role of HRD practitioners has changed from specialists to internal consultants, advisers, and facilitators of learning, rather than merely trainers (Sambrook 2005, 115).

Harrison and Kessels (2004, 270, 297) suggest that the extent to which HRD affects learning in the organizations is guided by a consistent vision valuing the learning in the workplace, and promoting trust among employees to pursue the learning objectives throughout their career. In addition, HRD can implant employee learning in the organizational structure, strategy, routines, and practices by creating required infrastructures, systems, and networks (Garavan & McCarthy 2008, 464). Beattie (2006, 112, 115-116) proves that HRD strategies has a significant impact on managers´ supervisory role that encourages employees´ learning and development in the workplace. Lohman (2005, 523-525) and Alonderiene (2010, 266, 269-270) argue that HRD interacts with both the learners´ and the organizational learning objectives which subsequently determine HRD intervention approach. However, Stead (2004, 52-54) signifies that the availability of HRD resources shapes the strength of HRD intervention in organizational learning. Similarly, Sambrook (2005, 115) finds that the ability of HRD professionals to evaluate the quality of learning resources can lead to make the resources user-friendly. Therefore, Froehlich et al. (2014, 50-51) suggest that in order to increase organizational adaptability and competitiveness, HRD practices are more and more concentrating on informal learning and its process, However, the success of HRD to excel organizational learning across all levels largely depends on its managerial support (Tseng & McLean 2008, 425).

3.3   Managerial support

As a key driver of expediting informal learning process throughout the organization, managers facilitate and promote continuous learning among their employees. Nonaka, Toyama and Konno (2000, 22-25) suggest that the most significant role of managers in any organization is to ensure the learning preconditions are in place, and support the employees in their learning initiatives. Crouse et al. (2011, 50) also recognize the managerial support as the strongest learning facilitating factor in the organization. In fact, the managers´ roles are more effective in informal learning across the organization when they simply allow their employees to solve work-related problems reflectively, instead of approving the practice of coping with (Eraut 2011, 10). The benefit of managers´ support is illustrated by Thomson, Mabey, Storey, Gray & Iles (2001), where it has been found that managers´ active involvements with employee development activities make the impact double (Beattie 2006, 104[2]). In respect of informal learning, recent literatures are more focused on the role of managers on learning outcomes (Warhurst 2013, 46-51; Froehlich et al. 2014, 43-44, 46-47) and learning process (Wofford et al. 2013, 85-89; Bjørk et al. 2013, 430-434).

The managers are the lead role players in facilitating, monitoring, and shaping different informal learning processes among the workforce within the organization. As Bratton and Gold (2012, 302) point out: ``at the heart of learning climate or learning environment lies the line manager-employee relationship.´´ Similarly, Beattie (2006, 109-116) finds that managers significantly contribute to developing a healthy learning environment within the organizations by inspiring their employees´ creative thinking of work-related issues. This notion has been supported by research literatures which have found that managers are acting as an essential facilitator for workplace learning through effective labour processing, and building strong social relationship (Eraut 2011, 10-11; Fuller & Unwin 2011, 51-52). Thus managers are now regarded as the central driver for creating favorable features of learning in the workplace (Warhurst 2013, 51-53).

Managers are the key players in informal learning process due to their positions, influences and interactions with their employees. In fact, the managers are primarily responsible for designing work, shift and balancing workload of their employees in a way that

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[2] Original source: Thomson, A. - Mabey, C. - Storey, J. - Gray, C. - Iles, P. (2001) *Changing Patterns of Management Development*. Blackwell, Oxford, UK.

creates opportunity for learning (Sambrook 2005, 115). The active role of managers and their effective leadership style create a positive learning environment, and motivate the employees to be involved with organizational learning process (Van der Sluis 2004, 11; Vera & Crossan 2004, 235; Alonderiene 2010, 271-272). When the learning is less structured and more informal in nature, the managers´ support and their leadership style become more crucial to enhance employee learning. For example, action oriented leadership has been found to play more positive role on the followers´ learning initiatives than laissez faire leadership. In addition, it is evident that transformational leadership style motivates the employees to search for and practice in-depth learning initiatives. (Froehlich et al. 2014, 46-51.) However, it has also been found that collegial support sometimes becomes more prominent than the managerial support in respect of continuous learning in an organization (Eddy et al. 2005, 392-393).

3.4   Collegial support

Individuals´ learning in business organizations has been found to be significantly affected by their frequent interactions with colleagues. Kwakman (2003, 166), Doornbos et al. (2004, 264), and Lucas and Moreira (2009, 332-334) identify that collegial support enhances learning in different ways since most of the learning comes from individual or group contacts. Similarly, as the individuals face the challenges time to time from their assigned job, the required confidence to overcome such challenges are dependent on how they feel get supported by their colleagues (Eraut 2007, 417). Tikkanen (2002, 93) asserts collegial support as a key organization-level factor to stimulate individual learning by discovering that ``there was always somebody at the workplace who could help in problems, and if not, a solution was worked out together´´. Similarly, Lohman (2005, 522-524) suggests that an employee´s learning, to a greater extent, depends on collegial availability and support, and it tends to limited by lack of proximity to others working around.

Collegial availability, their interactions and time to time feedbacks improve individual performance throughout the organization (Gielen, Peeters, Dochy, Onghena & Struyven 2010, 311-313). However, Broad (2006, 324-328), Rowold amd Kauffeld (2008, 92, 97), and Eddy et al. (2005, 392-393) argue that colleagues or peers act as the learning facilitators, and can shape the outcome of learning activities on the basis of the

extent of their relationships. The people working around as colleagues or peers can identify the complex and uncertain situations in the workplace (Parker, Hall & Kram 2008, 489), which can be transferred to the learner as a valuable input for taking learning initiatives (Lim & Morris 2006, 106-107). The way individuals learn in the workplace, with their collegial support and interactions, is spontaneous which usually broadens the knowledge base of the business organizations (Billett 2001; 2004, 315-319; Järvinen & Poikela 2001, 283, 285-289; Collin 2002, 147-148).

Russ-Eft (2002, 49) argues that collegial support can transfer an organizational learning climate to individual learning domain in which learners get the opportunity to develop themselves and achieve their individual learning goals. Similarly, Hawley and Barnard (2005, 73-75) state that collegial support can range from setting individual learning goal to providing valuable feedbacks on the progress on the learning. While peer support affects mainly skill transfer (Chiaburu & Marinova 2005, 115, 119-120), it also provides emotional and psychological support to enhance individual learning and career success (Parker et al. 2008, 490). Collegial support has become a key predictor of inspiring motivation and transferring learning within the organization (Hatala & Fleming 2007, 23-24), especially when individuals recognize the need of learning, and assist each other accordingly (Bates, Holton, Seyler & Carvalho 2000, 32, 36-37). In addition, Seibert, Kraimer and Liden (2001, 232-233) and Parker et al. (2008, 499) find that peer mentoring results in the improvement of both involved individuals´ personal and work-related skills. In fact, collegial or peer support is not limited to technical and psychosocial assistance (Ensher, Thomas & Murphy 2001, 433-434); it can also ensure development and transfer of knowledge across the organization in order to achieve competitive advantage (Bryant 2005, 320, 331-332). Individuals´ learning at work through collegial support can be promoted in the spirit of teamwork (Jones, Charlton & Whittern 2002, 234).

3.5   Teamwork

Teamwork is basically a combination of connected attitudes, knowledge, and skills that are necessary to maintain a team as a single unit (Baker, Day & Salas 2006, 1578-1579). It reflects the level of collective learning where individuals hold their personal value, trust, task interdependence, but trade-off self interest for team performance (Fong

& Lung 2007, 166-167). Van der Sluis (2004, 11) suggests that the activities in team-work and the surrounding interactions among team members expand individual learning in business organizations. In fact, working in teams and getting peers´ feedback are essential sources of informal learning in any workplace by which employees tend to upgrade their knowledge level (Kyndt et al. 2009, 381) Similarly, Lohman (2005, 520) points out that the individuals usually learn in teamwork by talking and sharing materials with others. Such learning in teams improves organizational performance and innovation which results in achieving sustainable competitive advantages (Montes et al. 2005, 1169-1170). However, Williams, Duray and Reddy (2006, 607) argue that the learning from teamwork in the organizations varies with the level of trust and coopera-tion among group members.

Hoegl, Parboteeah and Munson (2003, 758-759) prove that informal pattern of learning flows across the team and overall organization when team members are signifi-cantly motivated and cooperative to each other. However, such motivation and cooperation can be promoted by combining individual disposition and team learning toward creativity (Hirst, Van Knippenberg & Zhou 2009, 291). Bingham and Conner (2015, 105) suggest that teamwork becomes lifeline of organization when team mem-bers share responsibility to educate each other, and create the opportunity for others to ask for cooperation. In fact, teamwork and its role on learning are immensely guided by the extent of supportive leadership and conducive learning environment (Montes et al. 2005, 1169; Hirst et al 2009, 283-284, 291). Kontoghiorghes (2004, 959) suggests that a teamwork climate contributes to development of a work culture that foster transfer of learning across the organization.

3.6   Work culture

Work culture can shape learning environment in an organization by combining work practices, working relationship, structure, attitude of employees, and so on. Green (2005, 630) defines work culture as ``a human process that is both separate from and intimately related to broader organizational structures and requirements.´´ On the other hand, to find out the role of work culture on learning across the organization, Doornbos et al. (2004, 265) include autonomy, work pressure, task variety as core elements of work culture. It has been found that work culture stimulate learning in the workplace

when it is open (Vera & Crossan 2004, 233), and promote informal socialization and trusting (Green 2005, 645). A conducive work culture facilitates both formal and informal learning (Van Woerkom et al. 2002, 380; Marsick & Watkins 2003, 134; Vam der Sluis 2004, 12; Egan et. al. 2004, 295) while unsupportive culture inhibits learning opportunities in the organizations (Lohman 2005, 516). Therefore, development of organizational learning culture is one of preconditions of fostering informal learning among the individuals working in the business organizations.

An organizational learning culture can be developed by providing motivation, clarifying responsibilities, and reorganizing the works of employees in any business organization (Sambrook 2005, 115-116). Marsick and Watkins (2003, 139) attempt to define organizational learning culture as a combination of available learning opportunities, empowerment, leadership, communication, collaborative learning, systems thinking, and knowledge management system. The relationship between informal workplace learning and the work culture is strongly linked since the learning follows unstructured way to be evolved within cultural context (Armstrong-Stassen & Schlosser 2008, 433-434; Kirby, Knapper, Evans, Carty & Gadula 2003, 48-49; Froehlich et al. 2014, 49-50). However, the how informal learning is affected by workplace learning culture varies with different cultures in different informal learning activities (Froehlich et al. 2014, 49-50).

3.7   Preliminary framework for the role of organization-level factors

The studies on discovering the relationship between organization-level factors and learning have focused on identifying the factors and justifying to what extent those affect learning in business organizations. However, the findings are required to be synthesized into a framework in to examine how those factors affect informal learning process. The framework, as depicted in Figure 3, provides a systematic way of looking at various organization-level factors, their interactions with each other, and how they affect informal learning process in business organizations. The framework has been considered as a basis of analyzing how and to what extent informal learning process is affected by organization-level factors from theoretical perspectives. Thus this framework represents the synthesis of the organization-level factors and the informal learning process in the workplace.

Organization-level factors
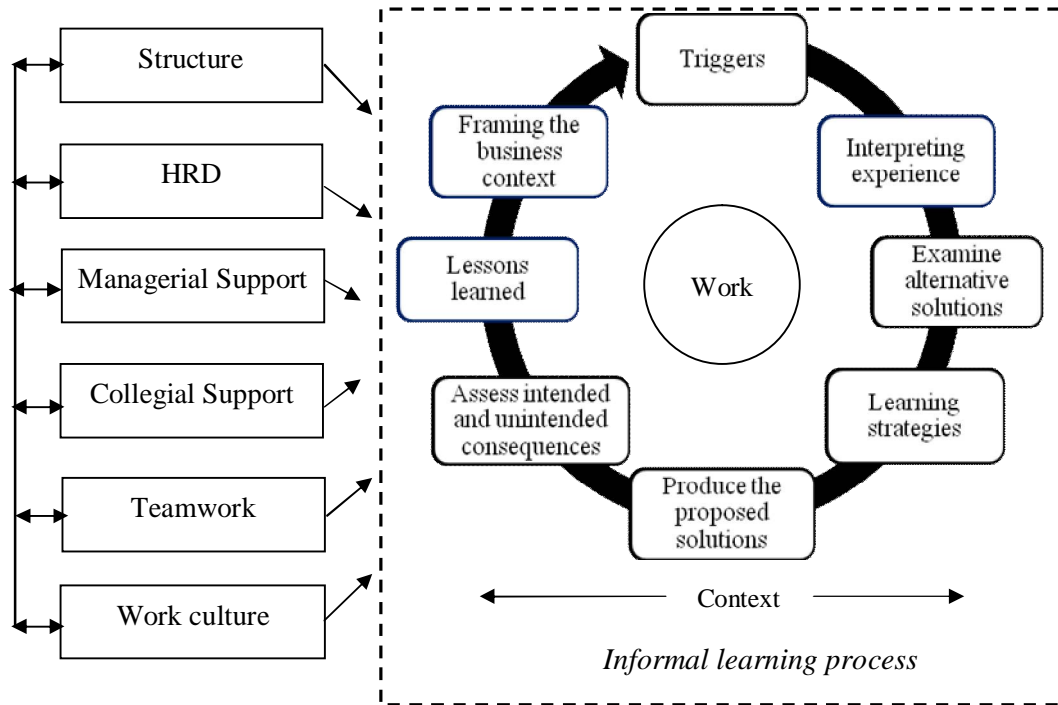
Figure 3   Preliminary framework (modified from Marsick et al 2006, 795)

Through this framework, the organization-level factors affecting informal learning pro-
cess are not compared with each other in order to determine which one is more im-
portant than another. Instead, the focus has been put on how different phases of infor-
mal learning process are affected by those factors individually or interactively. There-
fore, although the factors are different from each other, and can affect informal learning
process individually, their interactive relationships can also be found in the workplace
which is presented with the *arrows*.

To examine how informal learning process is affected by organization-level factors,
the framework depicts the phases of informal learning process which are cyclical and
move around the work. Informal learning process is sparked by the triggers, which
proceed through considering alternative solutions, identifying and implementing appro-
priate learning strategies, assessing anticipated and unanticipated consequences of the
solution, lesson learned, and framing the context. It is possible that each of these phases
of informal learning process can be affected by a particular organization-level factor or
a combination of factors individually or interactively. Such role of factors can also vary
with the frequency and to the extent.

4 RESEARCH DESIGN

4.1 Research approach

In this study, qualitative case study approach is chosen to explore the role of organization-level factors on the informal learning process. The choice of such approach is based on the findings and recommendations from different literatures analyzing the nature of respective phenomenon as well as context of the study.

A qualitative research is usually aimed at understanding and describing an action by providing possible theoretical analysis with a solution, but not to produce any statistical generalization (Yin 2013, 21). Mack, Woodsong, MacQeen, Guest and Namey (2005, 1-2) suggest that a qualitative research scientifically follows some predefined course actions to search for the research questions by collecting evidences and developing findings around the scope of the study. In this study, qualitative research approach has demonstrated an in-depth understanding of the phenomenon by examining the actions of participants from real life situation in which the analysis of actions or behaviours form the construct of the study (Woods 2006). In addition, Merriam (2002, 3-5) declares that qualitative research can elaborately interpret how individuals´ experiences interact with their contexts. Moreover, the basis of choosing a particular research approach is how well it can address the research questions to conduct the study.

The first research question about how informal learning process take place in the organizations match with Suddaby's (2006, 634) conditions for choosing qualitative case study approach as ``most suited to understand the process by which actors construct meaning out of inter-subjective experience.´´ Similarly, Merriam (1998, 33-34, 36), Ghauri and Gronhaug (2005, 115-116), Ellinger, Watkins and Marsick (2005, 330), and Corbin and Strauss (2014, 177-185, 293-294) assert that qualitative case studies are more appropriate for analyzing any process or having a good understanding of a phenomenon. Qualitative case study approach has been considered as the most functional in this research, because they address ``how´´ or ``why´´ questions in which there is a little or no control of the researcher over a contemporary set of events. Case study is the most appropriate research strategy for examining any process when it becomes the purpose of a study. (Yin 2013, 2, 11, 29, 191-194, 223.)

The second and third research questions about identifying organization-level factors, and how informal learning process is affected by those factors also seem appropriately addressed by qualitative case study method. Merriam (1998, 29, 31, 39) asserts that qualitative case study produces an intensive description and analysis of phenomenon affected by contextual factors in the organizations. In addition, ``case studies help us to understand the processes of events, projects, and programs to discover context characteristics that will shed light on an issue or object´´ (Merriam 1998, 33[3]). In fact, a qualitative case study approach strives to describe the individual experiences and understandings of a phenomenon within the contexts of research participants. Therefore it can be stated that qualitative research works are commonly answering to ``what´´, ``how´´ and ``why´´ questions. (Silverman 2010, 11).

To have a good understanding of the role of organization-level factors on informal learning process by addressing all three research questions in this study, a qualitative instrumental case study has been found as the most suitable approach. Stake (1995, 49-51), Cooper (2008, 40, 42-43), Langston (2012, 89-90), and Bjørk, Tøien and Sørensen (2013, 428-429) suggest that a qualitative instrumental case study method is best suited for understanding the learning process in work setting. More specifically, Wofford et al. (2013, 83) strongly recommend qualitative instrumental case study method for such research which is aimed at exploring informal learning process in the workplace. Researchers like Ellinger (2005, 396) and Ellinger et al. (2005, 329-330) also support this method to be used in describing informal learning process and its influential factors. In addition, Stake (1995, 62-63) suggests that the choice of case study method may bring about the associated complexity which provides the researchers a deeper understanding of the phenomenon of their study. Therefore, instrumental case study method has been chosen for this study to explore the role of organization-level factors on informal learning process inside the organization.

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[3] Original source: Sanders, J.R. (1981) *Case study methodology: a critique case study methodology in education evaluation.* Proceedings of the Minnesota Evaluation Conference, Minnesota Research and Evaluation Centre, Minneapolis.

4.2   Selection of the units of analysis

To identify appropriate companies as the units of analysis for conducting this research, three selection criteria have been developed. First, the companies must be representative of contemporary freight forwarding business. Second, the companies must have the commitment and practice of their employee learning and development. Third, the companies must be geographically located in the capital of Bangladesh to permit accessibility for data collection.

Freight forwarding MNCs are among the first international service organizations who extended international business by facilitating foreign market penetration (Hertz & Alfredsson 2003, 140; Khanna, Palepu & Sinha 2005, 15-17). The emphasis on more coordinated forward and backward linkage has made the international firms to choose freight forwarding MNCs as their logistics partner. In order to cope with the ongoing changing nature of international business, MNCs have to make necessary adjustments with their supply chain relationships (Casson 2013, 12; Lorentz, Kittipanyangam & Srai 2013, 225-226). Thus the worldwide increasing demand for integrated logistics services and the popularity of global sourcing have made the freight forwarding MNCs to emerge as the best representative of contemporary freight forwarding business.

A company´s determination to establish and maintain a learning environment can be articulated by reviewing its vision and mission statement, as well as core values (Ellinger 2005, 396). Similarly, the articles, blogs, writings, and the news on employee learning and development can also be a good source of information about company´s philosophy toward developing a learning environment. To have an understanding of the learning environment of potential companies, the researcher accessed to all available online and printed information on each company´ learning and development initiatives. Moreover, previous experience and networks, along with good contacts with human resource department, helped the researcher to better conceptualize the learning environment of freight forwarding companies as the units of analysis for this study.

A good access to required data for any research is characterized by familiarity, and physical proximity of location (Fowler Jr. 2013, 76, 125). In respect to location criterion, the researcher searched online and used previous networks. As a result, head offices of all the freight forwarding MNCs in Bangladesh has been found in the capital city of Dhaka. Therefore, it became easy for the researcher to proceed for initial communication and subsequent interviews with the selected freight forwarding companies.

For the purpose of selecting the most fitted units of analysis for this study, the researcher communicated employees working in different positions in six different freight forwarding companies, including their HRD officials. In addition, the researcher consulted with officials of DCCI (Dhaka Chamber of Commerce & Industries) to make sure that the selection of such companies satisfies all preset criterion. Finally, the four suitable freight forwarding MNCs in Bangladesh were found to have their commitment and practice of employee learning and development, along with the visible presence of informal learning process in all hierarchical levels. The companies which were chosen as the units of analysis for this study are shown in Table 2.

Table 2   Units of analysis and interview participants

Organization	Size (number of employees)	Main products (Type of Business)	No. of participants	Participants´ position and Date of interview
DAMCO	210	Sea and air freight (B2B)	4	● Deputy General Manager (DGM), Operations 03.06.2015 ● Manager, HR 23.06.2015 ● Assistant Manager (AM), Operations 27.08.2015 ● Officer, Operations 07.07.2015
DB Schenker	43	Sea freight (B2B)	3	● General Manager (GM), Operations and Sales 17.06.2015 ● Manager, sales 28.07.2015 ● Executive, Operations 11.08.2015
DHL	65	Sea and air freight (B2B, B2C,C2C)	3	● General Manager (GM), Operations 09.06.2015 ● Deputy Manager (DM), Commercial 01.07.2015 ● Officer, HR 23.07.2015
Expolanka	161	Sea and air freight (B2B)	3	● Assistant General Manager (AGM), Operations 11.06.2015 ● Assistant Manager (AM), Administration 14.07.2015 ● Executive, Sales 05.08.2015

The companies selected as the units of analysis are perfectly matched with the context of this research as they all are operating in freight forwarding businesses in Bangladesh. In addition, the choice of companies was based on their industrial importance. The researcher was able to discuss about informal learning practices in more detail with the participants of this study because of its frequent occurrence in freight forwarding business.

4.3   Data collection

Data collection during the execution of this study was guided by the preliminary framework developed earlier to examine the role of organization-level factors on informal learning process. Case study approach has been adopted to collect and analyze data which builds the foundation for the findings of this report. The freight forwarding industry in Bangladesh has been considered as the ``case´´ for this study in which the selected companies contributed to the units of analysis. With the progression of the research, interview questions have been adjusted with the findings from each previous response by the participants. This approach was useful for the researcher in order to adapt, refine, and ensure the focus of interview question on the research questions (Lupton & Beamish 2014, 714). In addition, company documents and websites were reviewed to conceptualize the extent of the context and terminology discussed in the interviews.

The interviews were conducted between June and August 2015 in Dhaka, Bangladesh. In total, 13 interviews were executed with the employees working at different hierarchical level in four different freight forwarding MNCs in Bangladesh. Each interview took from 30 to 70 minutes with each participant. All interviews were taken in the closed-door office environment of the participants. The top-level managers were interviewed in their personal office rooms, and other participants were interviewed in the meeting rooms of their office premises with prior appointments. As a result, the interview environments were friendly, quiet and uninterrupted.

During almost all initial interviews, the concept of informal learning and organization-level factors were discussed. Examples that were used in the discussions to understand the phenomenon were seemed to be common in general business organizations as well as within the industry. The primary data for this research have been collected from

the face-to-face interviews with the employees working at different hierarchical level in different departments of each company. The interviews were semi-structured, and designed to gain insight into the participants´ personal workplace experience regarding the role of organization-level factors on their informal learning process in form of personal history. Participants working in different positions from four organizations were interviewed in order to compare their perspectives and inferences. Interview questions were articulated and directed toward addressing the informal learning process in freight forwarding business, and how it is affected by organization-level factors.

The interview was conducted in a way to permit participants to describe the phenomenon based on their own understanding. This permit of self-explanation, instead of providing definitions in advance, increases the credibility of the research outcome (Liu 2011, 121-122[4]). Therefore, each interview began with asking each participant to recognize any particular events at work when they had any difficulty or problem with their colleagues or managers that resulted in their informal learning. As the interview progressed, the respondents were asked how their informal learning process took place, what organization-level factors affected their learning process and how. Though the participants were encouraged to tell their learning story spontaneously in detail, the entire interview sessions were guided by the operationalization of the research.

The operationalization of the research has been designed on the basis of the preliminary framework. The operationlization consisted of three basic phases. First, the research purpose was divided into three sub-research questions. Second, each research question was splited into their relevant operational equivalents. Third, the final interview questions were designed on the main theme of the interview, which were derived from the operational equivalents. Table 3 depicts the operationalization overview.

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[4] Original source: Lincoln, Y. S. - Guba, E. G. (1985) *Naturalistic inquiry.* SAGE Publications, Thousand Oaks, CA.

Table 3   Operationalization of research

The research purpose	*The sub-research questions*	*The operational equivalents*	*The interview questions*
To understand the role of organization-level factors on informal learning process inside the organization	How does informal learning process take place in business organizations?	What are the phases of informal learning process?	Why do individuals involve with informal learning?
			How do they categorize their experience into different steps?
		How do individuals experience informal learning as a process?	How do the individuals proceed through different steps in entire process?
			What is the nature of relationship in different steps?
	What organization-level factors do affect informal learning process?	What are the positive organization-level factors?	What are the positive factors that affect informal learning?
			Why have the factors been considered as positive contributor?
		What are the negative organization-level factors?	What are the negative factors that affect informal learning?
			Why have the factors been considered as negative contributor?
	How is informal learning process affected by organization-level factors?	How is the learning process affected by positive factors?	How is the learning process affected by individual positive factor?
			What are the interactive positive factors? How do they interact with each other to affect the learning process?
		How is the learning process affected by negative factors?	How is the learning process affected by individual negative factor?
			What are the interactive negative factors? How do they interact with each other to affect the learning process?

4.4   Data analysis

All interviews conducted for this study were recorded with a voice recorder, and then transcribed to interpret the responses from the participants. The transcripts had been considered as the primary proof of information since data were collected primarily through the articulation of stories and associate narratives during the interviews with each participant. Data analysis of this study was processed by using constant comparative analysis until reaching a level of saturation when no relevant categories or themes were traced from the available data out of all participants (Creswell 2002, 450; Moghaddam 2006; Baxter & Jack 2008, 556). In a constant comparative analysis, the data are constantly compared, which then lead to produce tentative categories to be also compared with each other. This data collection and analysis process is depicted in Figure 4.
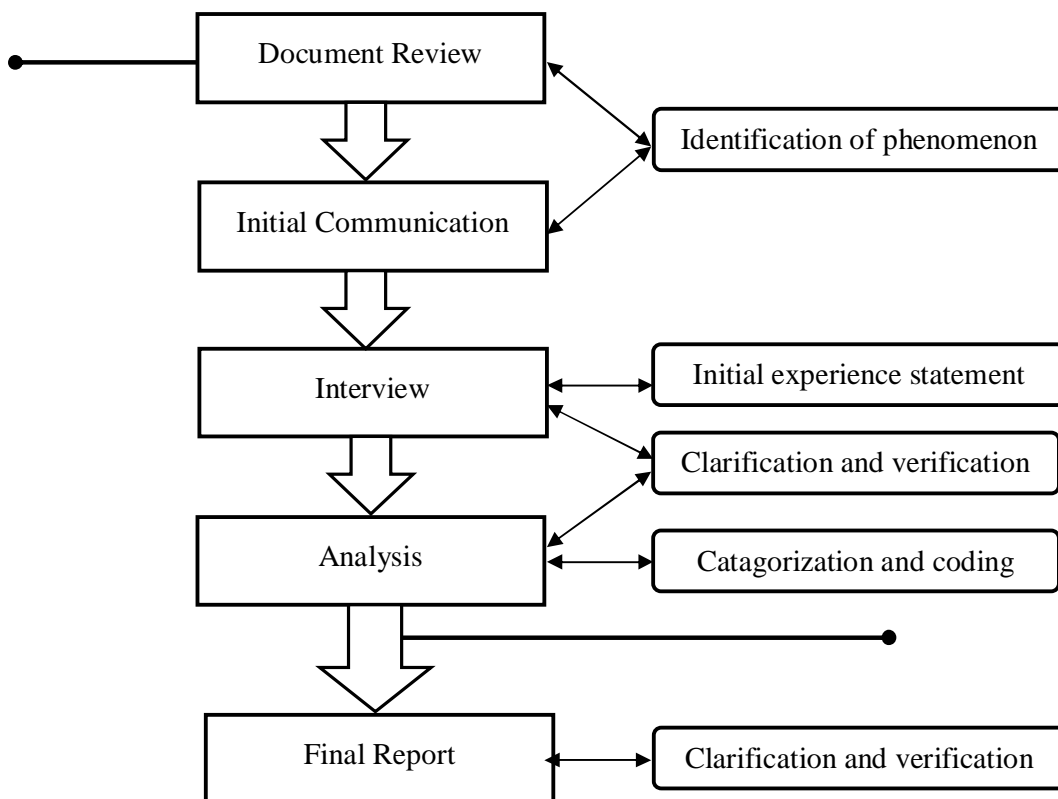
Figure 4   Data collection and analysis process

The transcripts review process was progressed by a careful listening to the participants´ individual responses from interview records which were then edited carefully to take out any confidential information related to the company or the participants. Following the editing process, an initial thematic analysis of the transcripts was initiated to identify primary patterns and themes of the data similar to each of the participants (Clandinin, Murphy, Huber & Orr 2009, 88-89; Saldaña 2012, 175-177; Vaismoradi, Turunen & Bondas 2013, 401-402). Specific themes were identified from each participant's narratives that were aligned with predetermined categories drawn from the literature. Thus, themes had been categorized and coded with the reflection form literature review, which is depicted in Table 4.

Table 4   Predefined category and code for data analysis

Phases of Informal learning process (Marsick et al. 2006)		*Organization-level factors*	
Category	*Code*	*Category*	*Code*
Trigger	T	Organizational structure	OS
Interpreting trigger	IT	Human Resource Development	HRD
Examine alternative solution	EAS	Managerial support	MS
Learning strategies	LS	Collegial support	CS
Produce proposed strategy	PPS	Teamwork	TW
Assessing consequences	ASS	Work culture	WC
Lessons learned	LL		
Framing the context	FC		

The long narratives of each participant were analyzed by splitting those into sub-parts of transcript through thematic and structural analysis which facilitates further analysis

(Flick 2009, 347-348, 374-375; Wofford 2011, 73[5]). The sub-parts of the narratives were then reviewed by interpretive analysis in which each sub-part of each participant was considered to be used as a meaning framework (Clandinin et al. 2009, 82, 88-89; Tesch 2013, 84-85). In fact, the review process included checking all sentences in each sub-part to find if those are matched with the framework categories on the basis of category meaning and definitions from the literatures (Table 4).

The 14 categories acted as an organizing framework for data sorting. All transcribed sentences matching with the framework categories were then identified, and category names were marked around each participant´s narrative portrait. Subsequently, the narratives were cross-referenced with other categories of each participant and across the categories of the other participants as well. In respect of organization-level factors, each factor category was cross-checked whether they had any connection with any phases of informal learning process category from each participant´s narrative. Each relationship was marked then to check further if they have any link with other factor category. When individual transcripts were fully coded, then those were combined to draw an overall scenario of organization-level factors and their role on informal learning process. This process of constant comparative analysis ensured theoretical and conceptual saturation of categories in data analysis.

4.5   Evaluation

The researcher had been passionate to select the phenomenon of this study, which also remained throughout the study. Due to his work experience in HRD as well as in freight forwarding industry, he had the opportunity to have a close insight at the informal learning process in freight forwarding business organization. However, the researcher was careful to avoid the impact of any presuppositions on the research process. Different views and arguments of scholars regarding the phenomenon and context were reflected from literatures while sincere care was given not to exclude any contradictory information arise out of data collection and analysis. This study has focused on its objectivity throughout the progression to ensure more reliability and validity.

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[5] Original source: Riessman, C. K. (1993) Narrative Analysis. SAGE Publications, Newbury Park, CA.

Reliability of a research is generally conceptualized as the ability to replicate research findings when the work is repeated using the same methodology, with the same participants in the same context (Shenton 2004, 74). There are some principles regarding the design and conduct of a research that determine its reliability, which are (Lewis et al. 2014, 355, 359):

- Unbiased sample design/selection that are representative of the target population and comprehensive of all known constituencies
- Minimum of non-response or attrition within the sample
- Equal opportunity and maximum coverage of interviewees´ participation
- Sufficient opportunities for the participants to portray their experiences
- Systematic and comprehensive analysis of data
- Interpretation of data with well supported evidences

This study satisfies almost all the requirements above to ensure its reliability. First, the interview participants were selected from four leading freight forwarding MNCs in Bangladesh, which represent the major portion of international business in that industry. In addition, to represent the holistic scenario of each organization, the participants were chosen from top, middle, and entry level positions. Second, there was no non-response or attribution within the sample, because all the participants spoke up freely to tell their story about the phenomenon from their contexts. Third, all participants were given full opportunity to tell their experience of informal learning irrespective of position and organizations. However, only in few occasions, the participants´ were interrupted with the request to tell phenomenon more in detail, and concentrate more on research questions. All selected participants were interviewed, and all research questions were covered during the interview sessions. Fourth, the initial discussions and subsequent interviews were planned with the participants´ prior approval, allowing them adequate time and convenient environment to feel free. While research purpose and questions were concentrated to ensure consistency, the researcher also encouraged the participants to add any relevant issues that can fully cover their informal learning experiences. Fifth, data analysis of this study followed constant comparison method to make it more systematic and comprehensive, which is justified in chapter 4.4. Sixth, document search, initial communications and interviews were initiated for primary data collection, which were interpreted through the careful analysis to include all the literature reviews and exceptions, if any.

Validity is concerned with the ``meaningfulness´´ (Drost 2011, 114), ``correctness´´ or ``precision´´ of a research reading (Lewis, Ritchie, Ormston & Morrell 2014, 356). It accurately reflects the phenomena as perceived by the study population. The principles that can determine the validity of a research are (Lewis et al. 2014, 356, 362):

- Selection of sample frame based on the importance of the study
- Effective environment and quality questioning to include participants´ full expression/exploration of views
- Identification and categorization of phenomenon to reflect the meanings by participants
- Sufficient internal evidences for effective interpretation
- Presentation of findings based on analytic constructions

The criteria for validity of a research were mostly satisfied in this study by complying with all required aspects. First, the selection of the companies, as the units of analysis for this study, was based on their leading role in the industry due to the dominance of freight forwarding MNCs in Bangladesh context. Biasness toward the selection of participants was minimized by targeting the sample participants from all hierarchical level of each selected company. Second, all interviews were conducted with the prior arrangements in the participants´ work premises in a friendly environment. On the other hand, the research questions were minimized to focus on the research purpose while allowing participants to feel at ease, and fully express their views. Third, the phenomenon was identified, defined, and categorized from the literatures in a way that could better comprehended by the participants. Since informal learning is a common phenomenon in the workplace, it was easily reflected by the participants´ views in their interviews. Fourth, in order to maximize internal evidence and their validity, the researcher used document review along with primary data collection from the participants working in different departments in different positions. In addition, participants´ feedbacks on their transcripts were solicited after their interviews to ensure the inclusion of all internal evidences. Moreover, a three-month data collection and review time period helped the researcher to validate the collected evidences for effective interpretation. Fifth, based on systematic analysis, the researcher has tried to present the findings of this study by explaining the facts with the use of most suitable tables and figures.

The researcher has tried in this study to focus on the relevant research methodologies suggested by the scholars from different literatures along with interpreting the actual method of data collection and analysis. Such focus was intended to make the used

methodologies justifiable, and provide the logic of the interpreting research findings in light of its reliability and validity. With an effort to clarifying the relationships and use of logics, this study attempts to increase its credibility and acceptance of findings and conclusion.

For the purpose of exploring the role of organization-level factors on informal learning process in the workplace, this study defined informal learning, its process, organization-level factors and their roles from literature perspectives. In empirical part, this study attempted to justify the literatures, or unearth any contradiction or possibilities of new insights on the phenomenon. However, in this effort, this study had to embrace certain limitations. First, it is not possible to generalize the findings of this research work to large population or universe as a qualitative case study (Yin, 2013). Therefore, the intention of this study is not to provide broad statements or findings to be generalized beyond this specific study. Instead, this study attempts for ``particularization´´ (Stake 1995, 8) in the context of freight forwarding industry in Bangladesh. More specifically, the distinct nature of business and use of only relevant and customized technology in the units of analysis restricted this study to a specific context which further limits its ability to generalize the acquired findings and conclusions. Moreover, the small size of sample and purposeful sampling approach made this study difficult to generalize. Second, the use of self-report interview for data collection limits this study within the participant´s own focused areas instead of broader perspectives. The recollection of informal learning incidents and organization-level factors that affect their learning from the participants´ memory creates the possibility of excluding certain aspects because of non-record or documentation of events and actions in real time. Finally, the numbers of informal learning incidents that are critical to participants are relatively small. Therefore, the organization-level factors that affect informal learning process are also restricted to specific events, though sufficient for an exploratory study.

5   FINDINGS

5.1   The phases of informal learning process

The phases of informal learning process can be traced by carefully considering the process of why and how each participant responded to the problems they encountered in their workplace. The reason why individuals in freight forwarding MNCs engaged with informal learning was identified by recognizing the triggers that initiated their learning process. Their involvement in the subsequent phases of informal learning process went through the themes of learning strategies and learning outcome. The key phases of the participants´ informal learning process are presented in Table 5.

Table 5   Key emergent phases of informal learning process

Themes of the phases	Detail phases	Findings
Trigger Identification	■ Triggers ■ Interpreting experience or triggers	Triggers are of two kinds: ● Technical skill problem ● Attitude problem
Learning Strategies	■ Examining alternative solutions ■ Learning strategy (strategy development) ■ Produce the proposed solutions (Strategy implementation) ■ Assess intended and unintended consequences	Four kinds of strategies were developed: ● Intuitive response based on past experience ● Inquiry of others ● Collaboration ● Trial and error
Learning outcome	■ Lessons learned	● Creativity and flexibility are required to solve a problem ● If an outcome does not solve the problem in anyway, trigger is to be interpreted again along with the subsequent phases until reaching a solution.
	■ Framing the business context	● Outcome cannot always be embedded with the context

Triggers are the reasons that make individuals in the workplace to involve with informal learning process. Triggers that initiated the informal learning process in freight forwarding MNCs can be divided into two broad categories: one is technical skill problem and another is attitude problem. Technical skill problem has been considered as the absence or lack of required technical proficiency to do a particular work, whereas attitude problem has been regarded as the lack of behavioral maturity. The participants with technical skill problem had the difficulties with their operational tasks, or in understanding their job requirements. Such problems were located in dealing with the organizations´ complex global software systems, reconciling local systems with those of global, changing standard operating procedures (SOPs), and providing knowledge-based customer service. On the other hand, the participants with attitude problem had their own interest, values, goals, and motivation conflicting with those of organizations. Such problems reflected in employees´ lack of commitment to work, inattentiveness, and conflict with others at work.

Though three themes of phases emerged from the narratives of respondents´ informal learning experience, all the phases of informal learning process model (Marsick et al. 2006, 795) can be traced in this study. In fact, the three different themes emerged out of eight detail phases of the informal learning process model based on their relevant features of functionalities. For example, encountering a problem usually proceeded through the interpreting the experience or trigger before designing new strategies to resolve the problem. Similarly, the strategy development phase was followed by the evaluation of the outcomes of the strategy implementation. When a successful resolution had not been reached, the process went *back to interpreting the experience* again from lesson learned, and moved again through subsequent phases and until a solution was achieved. On the other hand, when the applied strategy produces positive result, the context is then framed to build on the solution. The detail phases of participants´ informal learning process and how they proceeded through those phases are depicted in Figure 5.

5.2   The process of informal learning

The process of informal learning is drawn in this study by understanding how participants learned informally in their workplace. The phases of this learning process and how they are connected and directed to achieving a desired learning outcome is depicted in Figure 5.

```
┌──────────────┐     ┌──────────────┐     ┌──────────────┐
│ Framing the  │ ──▶ │   Triggers   │ ──▶ │ Interpreting │
│  Business    │     │              │     │  experience  │
│   context    │     │              │     │              │
└──────────────┘     └──────────────┘     └──────────────┘
       ▲                                          │
       │              ╭──────────╮                ▼
┌──────────────┐     │          │        ┌──────────────┐
│   Lessons    │     │   Work   │        │   Examine    │
│   learned    │     │          │        │ alternative  │
│              │     ╰──────────╯        │  solutions   │
└──────────────┘                         └──────────────┘
       ▲                                          │
       │                                          ▼
┌──────────────┐     ┌──────────────┐     ┌──────────────┐
│Assess intended│ ◀─ │   Produce    │ ◀─ │   Learning   │
│and unintended │    │ the proposed │    │  strategies  │
│ consequences │     │  solutions   │     │              │
└──────────────┘     └──────────────┘     └──────────────┘

        ◀──────────────  Context  ──────────────▶
```
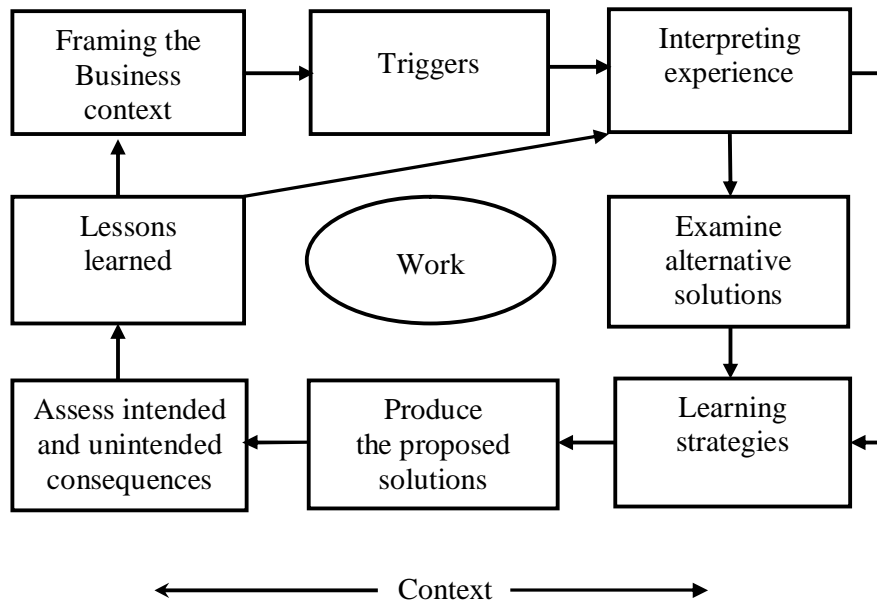
Figure 5   The process of informal learning of freight forwarding employees

All participants´ involvements with informal learning process started with encountering a problem either in form of technical skill problem or attitude problem. Being MNCs, all participated companies had to use global integrated system which tended to change its features frequently in respond to local requirements. As a result, most of the technical skill or knowledge problems evolved due to the difficulty with or lack of knowledge about data management systems. The DGM of DAMCO mentioned an incident where he responded to such problem by initial informative briefing in which he demonstrated the appropriate procedure to manage the system. However, he found his employee continuing the mistakes in updating the system in spite of his continuous coaching for improvements. That challenging situation led the DGM to realize that his approach of coaching was inappropriate; then he decided to go for *trial and error* to try alternative solutions. In order to identify the area of improvement, he asked his

employee to work with him on reconciliation of the regional key performance indicators (KPIs) with operational performance data against standard operating procedures (SOPs). The employee was allowed first to analyze customer service performance, second to update the system, and finally to make the reconciliation. As the DGM was observing him, when the reconciliation showed discrepancies, he realized that the employee was mixing certain sales KPIs with customer service performance results. Instead of advising his employee what to do, the DGM did the analysis process by himself followed by reconciliation and system-update. On the other hand, by observing his supervisor, the employee found not only the mistakes of mixing sales KPIs, but also choosing the right category for system-update. Regarding this strategy, the DGM said: ``*… my intention was to let him do, and let me show to remedy the problem. I found one of his mistakes when I was observing him, and he found another of his mistake when he was observing my demonstration…´´* The DGM admitted that he learnt how to be creative, flexible to search for a better solution for his employee´s problem. However, when he tried to transform this learning by embedding it with the context, he found that it could not be generalized fully because of the unique individual capability and perception toward a common solution. As a result, it involved further informal learning process to justify fitness of the solution.

Like the DGM of DAMCO, the Manager of DB Schenker told the story of his informal learning when one of his sales officers repeatedly failed to adjust local price offers to customers, and accurate price reporting to headquarter every month. In spite of online training along with several presentations, the officer was unable to improve his performance. When the Manager learnt the lesson that a particular strategy was not working, he moved to interpret his experience or trigger again. Then the Manager decided to try alternative solutions by instructing the officer not to do pricing and monthly report until he makes those fully accurate. The officer was then asked to prepare single product price offer and weekly price reporting with smaller amount of data. In addition, the officer was advised to come to the manager and ask as many questions as possible, even for each step of his actions. With the surprising improvement of the employee´s performance within a month, what the Manager learned informally is to solve a problem by interpreting again its reason, and searching for alternative strategies. In case of all other top and mid-level managers including GM, AGM, Manager, DM of freight forwarding companies, the technical or knowledge skill problems are same as DGM of DAMCO and Manager of DB Schenker.

The bottom-level employees had almost similar kinds of learning experience like their superiors. However, most of their informal learning came in contact with their colleagues in addition to their supervisors. Executive of Expolonka stated that after her joining to the company, she got standard orientation on how to update and report global sales management system. However, having faced some error reports at the earlier stages, she adopted the strategy of going through the operations manual, and trying to resolve by herself. Though she was confident to apply basic data input procedures, she was stuck at multiple cross-departmental categories. As soon as she learnt the lesson that her strategy went wrong, she decided to interpret her experience or trigger again, bypass standard procedures, and try alternative strategies by trial and error. She stated: ``… I felt embarrassment to ask my manager´s assistance several times a day, and decided to ask my colleagues if they knew any easy or short-cut way that they applied in their own works.´´ Sometimes she went to her colleagues´ desks, while in few occasions, her colleagues came to her desk to show different ways of solving the problem. Because of such assistance from the colleagues, she came to know multiple ways of system-update from which she chose later the best convenient one suited for her. The learning she learnt was not structured or formal; rather, it was informal in nature.

In respect of attitude problem, almost all participants found that such problem arises due to lack of interest or motivation of the person they were dealing with. The GM of DHL mentioned a situation when he found that one of his employees KPI score was going down consistently. Initially he thought that issue as a technical skill problem. Therefore, he tried multiple alternative solutions ranging from providing formal training to relaxing job completion deadlines. However, nothing produced any impressive result. Then the GM realized that the employee was not sincere about his work. With an effort to find out the reason, the GM inquired two of the employee´s colleagues. Subsequently, he came to know that his employee was not interested in his job, and trying to leave the company. With a direct approach in a detail counseling session, the GM came to know that the employee was interested to work in banking industry instead of that freight forwarding company. As the GM mentioned: ``…*very often attitude problem are associated with technical skill problem, and is not easily find out. Though I succeed to trace it finally, I didn´t have the right solution to change my employee´s attitude.´´* Like the GM of DHL, other top-level employees´ learning were similar about attitude problems. The AGM of Expolanka told that when strategies to resolve technical skill problem did not work out, he decided to go back to interpret his experience again, and discovered

that one of his managers was bored with his job. He then proceeded to develop few alternative solutions including job rotation, relocation, and transfer. To try the first approach of job rotation, the manager´s performance was found improving. However, when attempted to frame that learning with the business context, he had to reorganize his team which led to dissatisfaction among few employees who were in comfort zone. To deal with that new emerged trigger, he had to involve another informal learning process.

For the mid-level employees, attitude problem as a trigger for their informal learning experience are not much different from those of top-level employees. The Manager of DAMCO mentioned an event when one of his HR officers was not performing well. With the strategy of frequent enquiries, the Manager came to know that the officer´s poor performance was not because of his technical skill problem; instead, it was due to his conflict with another officer in Finance department. In spite of individual counseling and meeting with both of the officers in conflict, no positive result came up. As a result, the Manager had to go back to interpret his experience again, and searched for further alternative solutions. Finally, he got a positive result when he redesigned the officer´s job description so that the officer did not have to send or clarify any payroll information to the Finance Officer.

The bottom-level employees´ informal learning process also reflected the same picture of those of top-and-mid-level employees. The Officer of DAMCO shared the experience of his informal learning triggered by a attitude problem. However, the attitude problem was underlying a technical skill problem. When he was given a new client to take care of, he had difficulties to comply with their specific requirements and database management. He regarded the difficulties as technical problem which he tried to resolve by developing SOP and undergoing one-day database management training. However, his initiatives made him expert technically, but the client complains were still taking place. Then when he went back to interpret the experience again, he realized that the client did not like his attitude of being so direct and strict on the SOP. To overcome this problem, he planned to develop a good relationship with his clients by visiting their office, making more contacts over phone instead of emails, being more polite to explain the reason if something went against the SOP, and so on. As a result of his persistent efforts, his relationship with the clients improved a lot. The Executive of DB Schenker shared similar experience when he had to change himself to get a better social interaction with others. He said: ``… It´s always difficult to change the attitude; but

with change of some particular behavior, the conflict can be reduced, and relationship can be improved with others.´´

In general, the employees of freight forwarding MNCs stepped into informal learning process by interpreting their triggers. Often it has been found that the employees tended to bypass the phase of ``examine alternative solutions´´ at their initial stages of informal learning process. Instead, after interpreting the trigger, they moved directly to ``learning strategies´´ in order to develop a strategy which was to be implemented for solving the problem. When they assessed the consequences of implementation and learnt that the strategy was not effective, then they went back to interpret the trigger again. Then they followed the same sequence until found the positive results from assessing the consequence. When they found that positive result, they proceeded to frame it with their business context. There was a possibility that the framing might not always fit with the context, which could create another problem to be solved. However, the participants´ informal learning process was found slightly differing between technical skill and attitude problem.

Regarding the technical skill problem, the informal learning process of freight forwarding employees was found similar regardless of their hierarchical positions. When the lesson was learnt that a particular strategy could not solve the problem, the employees went back to interpret their triggers again along with the subsequent phases until they solved the problem. In fact, it was very common for the employees to consider alternative solutions in addressing technical skill problems. On the other hand, to deal with the attitude problem, the employees were found to be forced to interpret their triggers again, consider and implement alternative strategies to find out a workable solution.

5.3   Positive organization-level factors

It has been found in this study that when the participants had a problem to be resolved, they became involved with informal learning process by interpreting their triggers and proceeding to subsequent steps in the process. In each phase of that learning process a variety of organization-level factors affected their decisions as well as subsequent courses of action. The organization-level factors that directly or indirectly facilitated informal learning process inside the organization had been viewed as positive factors by

the participants in this study. It has been found that very often the implementation of a particular strategy could not result in resolving the problem. As a result, the participants had to go back to interpreting their experience again, developing alternative solutions and subsequent phases of the process. However, the organization-level factors that affected any phase of participants´ informal learning process to proceed for a workable solution to the problem have been considered as positive organization-level factors. Table 6 shows the four organization-level factors that were found positively affect informal learning process in this study

Table 6   Emergent positive organization-level factors

Positive organization-level Factors	Sub factors
Learning committed HRD	• HRD learning and development policy that promotes learning across the organization (policy includes individual learning rights, areas, and resources). • HRD performance appraisal system that reward learning initiatives (learning KPI, measurement tools, link with increment and promotion)
Learning supportive managers	• Managers who consistently develop their employees (provide opportunities, resources, and feedback) • Managers who support and promote knowledge sharing (encourage risk-taking, support problem-solving) • Managers who give positive feedback and recognition (provide continuous feedback, appreciation, rewards) • Managers who create the foundation for further learning within the context (set examples, encourage continuous learning, framing the context for further learning)
Learning supportive colleagues	• Colleagues who support for problem-solving (provide assistance, guidance on technical issues) • Colleagues who provide mentoring (expert opinion on technical and behavioral issues)
Learning promoting culture	• Opportunities for learning (presence of the environment to have more exposure to triggers, and solving problems) • Empowerment for learning (having the environment to take risks and pursue self-development)

The positive organization-level factors that affect informal learning of freight forwarding MNCs have been found as learning committed HRD, learning supportive managers, learning supportive colleagues, and learning promoting culture. These four factors are reflected from the learning experience of all participants irrespective of their positions. Learning committed HRD has been regarded as having HRD learning and development policy in place that promotes learning across the organization, along with performance appraisal system that reward learning initiatives. Similarly, learning supportive managers have been found those who consistently developed their employees, supported and promoted knowledge sharing. In addition, they gave positive feedback and recognition, and built the foundation for further learning across the organization. Learning supportive colleagues have been identified as those who supported and provided mentoring for problem solving. Finally, learning promoting culture includes the available opportunities and empowerment for learning across the organization. Detailed role of these factors is discussed in chapter 5.5.

5.4   Negative organization-level factors

Having a problem to be solved informally, it has been found in this study that the participants went through different phases of their informal learning process. Since the learning took place in their organizational context, a variety of organization-level factors affected their decision and actions from time to time. The organization-level factors that directly or indirectly inhibited informal learning process inside the organization have been viewed as negative factors by the participants of this study. Negative organization-level factors made the learning process difficult to deal with, and the participants very often had to try alternative solutions to overcome the obstacles. Table 7 represents the four organization-level factors that inhibit informal learning of the participants in this study.

Table 7   Emergent negative organization-level factors

Negative Organization-level Factors	*Sub factors*
Lack of managers´ support and commitment	• Managers who do not support learning initiatives (emphasize routine work, meeting deadlines, etc.) • Managers who prefer micromanagement (authoritative; tells what to do, and how to do)
Non-cooperative colleagues	• Colleagues having superiority complex, cynicism (underestimate and non-cooperative to juniors • Colleagues with self-interest, and worrying for job insecurity (concerned for self-development, afraid of losing job if alternative experts grow up)
Learning inhibiting culture	• Emphasize on compartmentation and formality (preference for specialization, blocking cross-functional learning)
Learning disrupting structure	• Physical architecture boundaries (isolated sitting arrangements) • Hierarchical barriers (power distance, bureaucracy in knowledge sharing)

The negative organization-level factors that affected informal learning process adversely in this study include lack of managers´ support and commitment, non-cooperative colleagues, learning inhibiting culture, and learning disrupting structure. All of these four negative factors have been found in all participants´ learning experience irrespective of their positions. The lack of managers´ support and commitment to learning indicate the role of managers who did not support their employees learning initiatives, and always preferred to instruct what to do in a routine way. Non-cooperative colleagues in learning process have been found to have superiority complex, cynicism, self-interest; were not willing to help others to learn, and worrying for their job insecurity. Learning inhibiting culture reflects extreme compartmentation and formality that blocked learning across the organizations. Finally, learning disrupting structure includes physical architecture boundaries, and hierarchical barriers to learning in the organizations. Detail role of these factors is discussed in chapter 5.6.

5.5 The process of learning affected by positive factors

The process of informal learning is affected by a number of positive organization-level factors on it different phases in different ways. Since the employees in the workplace perceive a problem in light of their reflective role on the performance, they try to figure out all the relevant factors that can facilitate their initiatives to reach a workable solution. In an effort to get the best support from the positive factors, the employees tend to solicit those factors in different stages of solving the problem. However, it is also evident that the interactions between two positive factors become complementary while affecting informal learning process. Figure 6 depicts how positive organization-level factors affect informal learning process.

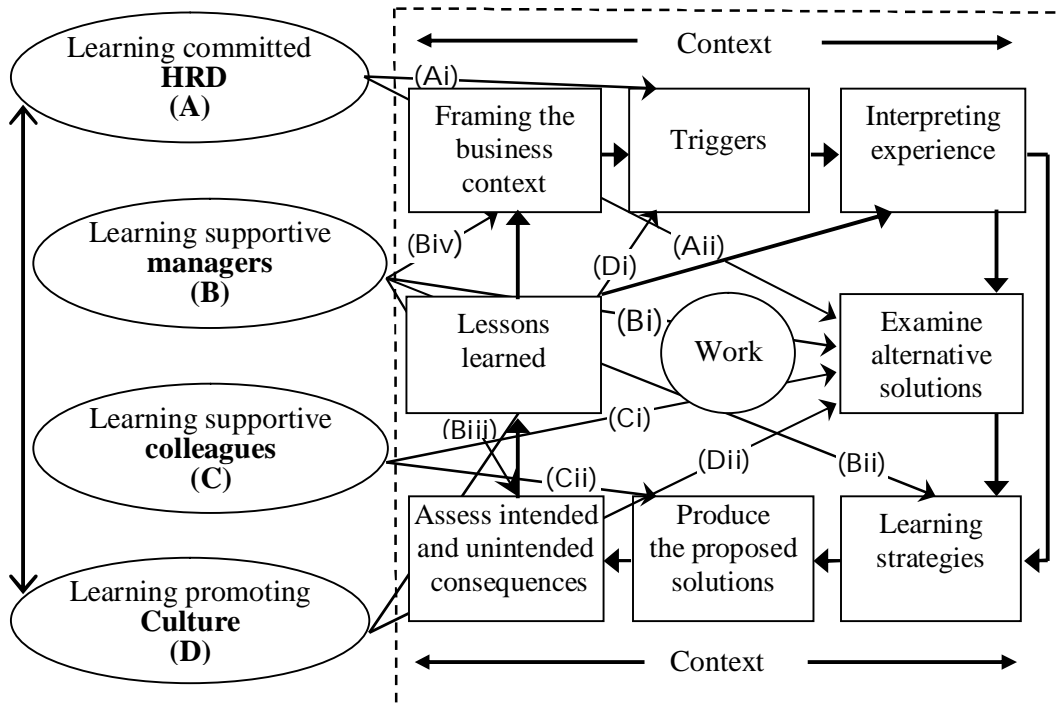Figure 6   The map of how informal learning process is affected by positive organization-level factors

Learning committed HRD has been found to have its positive role on two phases of informal learning process. Arrow Ai shows how it affects ``triggers´´, where arrow Aii demonstrates how it affects ``examine alternative solutions´´ of informal learning process. Manager of DB Schenker, DM of DHL and Executive of Expolanka acknowl-

edged the positive role of HRD policies which motivated them to be more exposed to the learning situations to get learning triggers or opportunities (Ai). In addition, inclusion of informal learning events into performance appraisal system by HRD gave them the impetus to search for learning opportunities or facing a trigger. In respect of HRD learning and development policy, the DGM of DAMCO termed it as an important element to encourage learning among the employees. As he faced an experience where he was not able to solve the mistakes by one his employees, he was guided by company HRD policy to examine alternative solutions persistently (Aii). As he mentioned: ``At some point, I saw no hope. Then I reviewed our company HRD policy, and found the empathy to give persistent efforts on trying alternatives to solve my problem.´´

Learning supportive managers play a key to foster informal learning process in the workplace. Arrow Bi depicts how they affect ``examine alternative solutions´´, and arrow Bii demonstrates how they affect ``learning strategies´´ of informal learning process. In addition, arrow Biii and Biv show how they affect ``assess intended and unintended consequences´´ and ``framing the business context´´ of the learning process respectively. In general, a learning supportive manager facilitates his employees´ learning by providing effective coaching and mentoring. The Officer of DHL said: ``Whenever I go to my manager, and ask for any explanation, he always try to explain in detail with examples from his experience.´´ The AM of Expolanka mentioned that his manager was very patient to listen to him, allowed him to try alternative solutions instead of instructing what to do (Bi). The manager of DAMCO said that his manager used to appreciate his efforts to take the risks associated with developing critical learning strategies (Bii), which encouraged framing the learning with the context for further learning (Biv). Similarly, the DGM of DAMCO and the Manager of DB Schenker acknowledged the support of their managers in developing strategies for a solutions (Bii), and subsequent discussions on the consequence of their implementations (Biii).

Learning supportive colleagues improve individuals´ learning and development experience in the workplace by affecting certain phases of their informal learning process. Arrow Ci depicts how it affects ``examine alternative solutions´´, and arrow Cii demonstrates how it affects ``produce the proposed solutions´´ of informal learning process. As the Executive of Expolanka told her story of an informal learning experience, she mentioned that she got her colleagues´ support time to time in order to experiment alternative solutions to solve a trigger (Ci). Similarly, the Manager of DB

Schenker mentioned that he found more alternative solutions when he discussed with his colleagues regarding a technical skill problem of one his employees. The DGM of DAMCO said: ``Whenever I had to implement a critical strategy for a solution, I used to consider my colleagues´ point of views; especially from senior colleagues, who are the best resource persons in any functional area (Cii).´´ In addition, the officer of DAMCO mentioned that the colleagues´ expert mentoring on a particular strategy implantation made him confident to get the best result.

Learning promoting culture has been found to provide learning opportunities and learning empowerment across the organization. Arrow Di and Dii show how it affects ``trigger´´ and ``examine alternative solutions´´ of participants´ informal learning process respectively. The GM of DHL mentioned that the shared values of helping each other, and the culture of learning together encouraged him to get more exposure to the trigger for solving his problem (Di). The Executive of Expolanka said: ``Though I bypassed my manager, and got much of my support from my colleagues, I had the autonomy to take the risk for examining alternative solution by myself (Dii).´´ Similarly, the DM of DHL also acknowledged that the environment of allowing self-development provided him the opportunities to explore more alternative solutions.

The interactive role of positive organization-level factors on informal learning process has been found between learning committed HRD and learning promoting culture. As the Manager of DAMCO mentioned: ``The organizational HRD policy motivated me to have more autonomy in identifying the problem, and assess alternative solution to solve it.´´ The Manager of DB Schenker, DM of DHL and Executive of Expolanka also expressed similar opinions by telling that the HRD policy and activities on employee learning and development had an positive role on the culture of learning informally within the organization. In contrast, learning promoting culture has been found to affect HRD in different ways. The Manager of DAMCO stated that the employees´ demand for learning and development opportunities creates a pressure on HRD to change its policy and practice time to time. The Officer of DHL mentioned that the employees usually discussed with HRD professionals on their learning opportunities, and also asked for HRD support especially when to assess alternative solutions. As the AGM of Expolanka mentioned: ``When I was trying to develop alternative solutions to deal with one of my managers problem, certain alternatives came to my mind including job rotation, relocation, and transfer. I then discussed the issue with HRD, and persuaded them to ease the process of implementation.´´ Therefore, it is evident that there

is a visible interactive role of HRD and work culture on informal learning process of participated companies as the units of analysis in this study.

5.6 The process of learning affected by negative factors

When an employee passes through an informal learning process, certain organization-level factors can affect adversely his/her decisions or courses of action at different phases. The extent and degree of such negative role usually vary with the individuals, and the kind of problems they are trying to solve. In fact, it is evident that the same factor affects both positively and negatively within the same organizational context. Figure 7 represents how negative organization-level factors affect informal learning process.
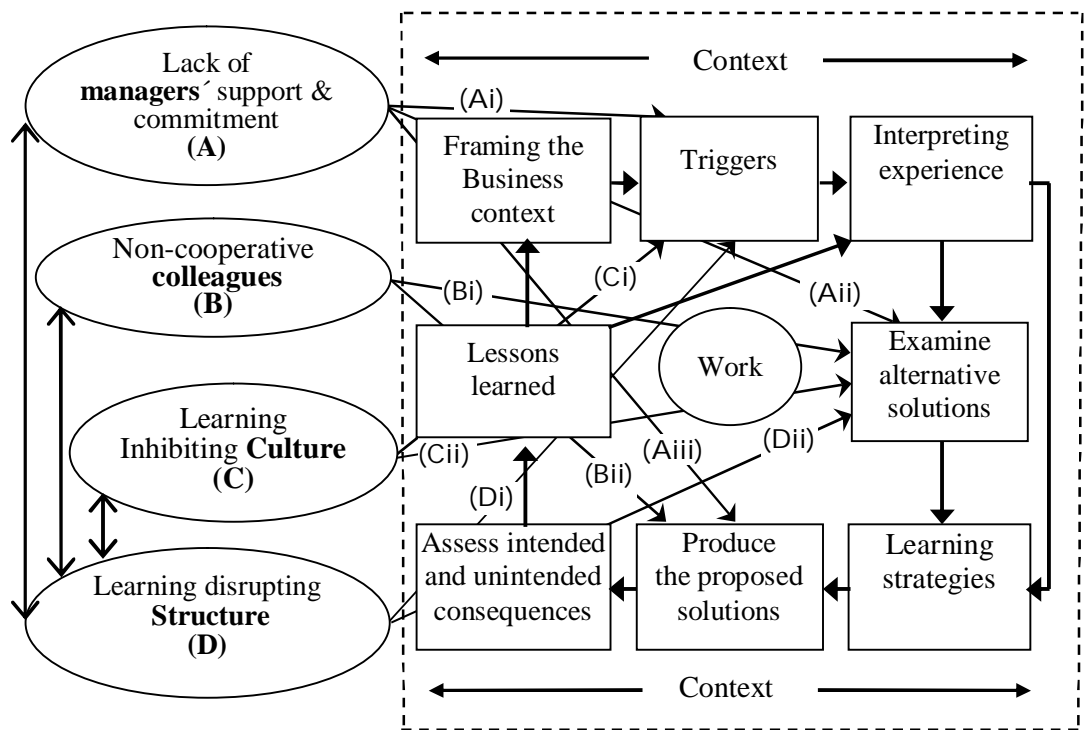

Figure 7   The map of how informal learning process is affected by negative organization-level factors

Lack of managers´ support and commitments to learning can hamper the employees´ informal learning in the workplace. Managers´ inadequate or absence of support is found when they do not cooperate with their employees´ learning efforts, or prefer micromanagement by always telling the employees what to do. Arrow Ai, Aii, and Aiii demonstrates how managers´ lack of support and commitment affect ``triggers´´, ``examine alternative solutions´´, and ``produce the proposed strategy´´ of participants´ informal learning process. As the Manager of DB Schenker mentioned: `` My manager was only concerned with my routine works and meeting deadlines, which allowed me less access to learning opportunities or trigger (Ai).´´ Executive of Expolanka stated that her manager was not generous to support her in examining alternative solutions while she was dealing with a problem (Aii). Though she managed to develop a strategy from alternative solutions with the help of her colleagues, she was not confident to get the adequate support from her manager to implement it (Aiii). Similarly, the Officer of DAMCO said that his manager used to tell him every single specific procedure to solve the problem which was not producing any positive outcome for him. As he said: `` I did not get inspiration from my manager to think on my own to assess any alternative solution, or implement it.´´

The informal learning process at work is also impeded by non-cooperative colleagues in different aspects. The non-cooperative colleagues contribute to discourage an individual´s informal learning initiatives when they suffer from superiority complex, cynicism, or when they are more concerned about self-interest and own job security. Arrow Bi depicts how they affect ``examine alternative solutions´´, and arrow Bii shows how they affect ``produce the proposed solutions´´ in informal learning process respectively. As the AGM of Expolanka mentioned, he got angry feedbacks from his colleagues when he was examining alternative solutions for one his managers' problem (Bi). He said: ``As I was discussing about job rotation and transfer issues, few employees came up with negative feedback. After few days, I realized that the protesters felt a threat to their job security as a result of reshuffling their job assignments.´´ In addition, he got no cooperation from those colleagues when he went for implementing job rotation strategy (Bii). Similarly, the Executive of DB Schenker informed that he got non-cooperation especially from senior colleagues, when he asked their support to assess some alternative solutions as well as to implement the chosen strategy.

A learning inhibiting culture attempts to restrict informal learning initiatives in the workplace. The employees do not get adequate learning opportunity or triggers when

they do not have the access to other departments or functional areas because of more emphasis on compartmentation and formality. Arrow Ci demonstrates how it affects ``triggers´´, and arrow Cii shows how it affects ``examine alternative solutions´´ in the informal learning process. The AM of DAMCO said that he hardly had any informal interactions with Finance and HR Department due to their functional restrictions. As a result, he got the feeling that he missed valuable learning opportunities or triggers from them (Ci). Similarly, the Manager of DB Schenkar explained that when he found a problem with one of his officers who was unable to fix a pricing issue, he initially wanted to try alternative solutions with Marketing and Finance Department. However, he had been told that it was an intra-department issue which he had to solve it by himself (Cii). As he mentioned in addition: ``As a Sales Department, we have to work closely with Marketing and Finance Department. But when they keep a distance from us for the sake of compartmentation, it blocks our access to many learning sources that we might get from them.´´

Learning disrupting structure can also lead to lack of access to informal learning opportunities in the workplace when the physical architecture boundaries and hierarchical barriers restrict employees to interact with each other. Arrow Di and Dii depict how it affects ``triggers´´ and ``examine alternative solutions´´ of participants´ informal learning process. The Officer of DAMCO mentioned that holding the most junior position in the department, he experienced the distant relationship with his manager that allowed him less learning opportunities or triggers (Di). The Manager of DB Schenkar also expressed the similar feelings by pointing: ``the sitting arrangements of frequent interacting departments like Finance, Marketing, and Sales should be close to each other in order to have more informal learning opportunities at work.´´ The Executive of Expolanka explained that the physical distance between her and her manager were one of the key disrupting factors in her informal learning. Specifically, the distance made her uncomfortable to go to her manager´s desk frequently, and discuss the option of experimenting any alternative solutions to a problem (Dii). She acknowledged that though she felt free to go to her colleagues´ desks for their assistances, she was not comfortable to do the same with her manager due to the hierarchical gap.

The interactive role of negative organization-level factors on informal learning process in freight forwarding organizations has been found to revolve with the organizational structure. In this study, it has been found that learning disrupting structure interacts

with all identified negative organization-level factors—lack of managers´ support and commitment, non-cooperative colleagues, and learning inhibiting culture. The managers and colleagues were less supportive when they were having distant interactions, compartmentation or preference for the formality due to the presence of learning disruptive structure. The Officer of DAMCO and the Executive of Expolanka mentioned that they did not get required support from their managers to solve their problem because of the structural restrictions. Similarly, the Executive of DB Schenker did not get the expected cooperation from his senior colleagues because of hierarchical barriers. The AM of DAMCO and the Manager of DB Schenkar also explained the cultural barriers they faced in their informal learning process which was affected by structural arrangements. On the other hand, they also indicated that their lack of managerial, collegial, and cultural support to their informal learning process led the emergence of structural barriers within the organization. As the Manager of DB Schenkar mentioned: ``When managers are non-cooperative and the culture become unsupportive, the organizational structure also turns into learning-impeding especially for informal learning in an organization.´´ Therefore, it is evident that the learning disrupting structure actively interacts with lack of managers´ support and commitment, non-cooperative colleagues, and learning inhibiting culture.

6   DISCUSSION

This study examines the role of organization-level factors on informal learning process by exploring how informal learning process is affected by different organization-level factors in business organizations. As the findings suggest, all the phases in an informal learning process are not always necessarily linear and sequential in relation to each other. On the other hand, the findings depict that all organization-level factors do not have either positive or negative role necessarily on all the phases of informal learning process. In addition, it is also evident that all the organization-level factors do not interact with each other while affecting informal learning process.

The informal learning process of freight forwarding employees went through three core themes, which are: trigger identification, learning strategies, and learning outcome. The triggers were identified in form of technical skill problem and attitude problem. Technical skill problem includes the gap or deficiency of skills, challenging assignments, new roles and responsibilities, compliance with policies and procedures, and difficulty in the adjustment to changes (Lohman, 2000, 89-94; Skule, 2004, 13-14; Wofford et al. 2013, 86). On the other hand, attitude problem is involved with individual interest and preference toward learning (Wofford et al. 2013, 86-88). In contrast to these literatures, to some extent, this study suggests that *technical shortcomings or difficulties, and emotional attachment of self or others contribute to the evolution of technical skill and attitude problem.*

In respect of learning strategies, the participants of this study were found to go through the phases of assessing alternative solutions, developing a suitable strategy, and implementing the developed strategy. In these phases, the respondents were guided by their previous experience along with the idea they got from their consultation with others. That phases resemble the findings of existing literatures to some extent in which individuals experiment alternative solutions through trial and error (Lohman 2005, 508), or solicit their managers or colleagues informally (Beattie 2006, 107-114) to solve the problem. However, this study demonstrates that *the individuals not always necessarily tend to develop a suitable strategy by examining alternative solutions. Instead, sometimes they bypass the phase of examining alternative solutions, and tend to develop a strategy on their perception or previous experience.*
It has been found in this study that the employees in business organizations learn the lesson about the effectiveness of a particular strategy by assessing the consequences of

their strategy implementation. They learn the importance of being creative and flexible throughout the informal learning process to get the best result from the strategy implementation. When the outcomes produce desired solution to the problem, then they try to frame the result with the context for future reference. Such transformative feature of outcome has been acknowledged by Marsick (2009, 271-272). However, as an exception to that existing literature, this study discovers that *the individuals tend to interpret their triggers again when they learn that a particular strategy cannot produce a positive solution, and proceed through another informal learning until they find the positive outcome for their problem.*

In respect of positive organization-level factors, this study proves that HRD can profoundly promote employees´ informal learning process in the business organizations. The role of HRD reflects through its learning and development policy and performance appraisal system. With the prime responsibility to develop human resources in the organization, HRD promotes individual informal learning by creating more learning opportunities across the organization. In addition, HRD professionals help the individual to assess alternative solutions to a problem while acting as mentors at the same time. The studies conducted by Russ-eft (2002, 58), Bierema and Eraut (2004, 57-58), Harrison and Kessels (2004, 270, 297), Lohman (2005, 523-525), Beattie (2006, 112, 115-116), Garavan and McCarthy (2008, 464), and Berg and Chyung (2008, 239) recognize the role of HRD on organizational learning in general. However, how HRD affects informal learning process has not been explored by these literatures. This study demonstrates *what attributes contribute to develop a HRD support, and how it can be reflected on the phases of employees´ informal learning process in business organizations.*

The importance of managerial support on informal learning has emerged in this study in form of their consistent development efforts, knowledge sharing, positive feedback, and creating foundation for further learning. The role of such managerial support is consistent with the findings of Van der Sluis (2004, 11), Vera and Crossan (2004, 235), Sambrook (2005, 115), Beattie (2006, 104, 109-116), Alonderiene (2010, 271-272), Wofford et al. (2013, 85-89), Warhurst (2013, 51-53), Bjørk et al. (2013, 430-434), and Froehlich et al. (2014, 43-44, 46-47). However, this study describes *more specifically how learning supportive managers help their employees in examining alternative solutions to a problem, developing appropriate learning strategy, assessing the consequence of strategy implementation, and framing the lessons with the context.* The

managerial support has been found as the most important positive organization-level factor that affect the maximum phases of an informal learning process compared with other positive factors.

The significance of collegial support has been emerged in this study in form of helping an individual learner in problem-solving as well as in mentoring by his/her colleagues. In problem solving approach, the colleagues tend to work with the learner to solve a problem; whereas in mentoring approach, the colleagues provide expert opinion or advice to find a solution. The literatures including Ensher, Thomas and Murphy (2001, 433-434), Tikkanen (2002, 93), Russ-Eft (2002, 49), Eddy et al. (2005, 392-393), Bryant (2005, 320, 331-332), Hawley and Barnard (2005, 73-75), Chiaburu and Marinova (2005, 115, 119-120), Broad (2006, 324-328), Parker et al. (2008, 489-490), and Rowold and Kauffeld (2008, 92, 97) recognize the significance of collegial support in individuals´ workplace learning and development. However, in contrast to these literatures, this research suggests that *the positive role of collegial support do not necessarily contribute to informal learning process as a whole.* Rather, positive collegial support affects only when employees tend to examine alternative solutions and produce the proposed solution.

The prominence of positive work culture has emerged in this study in forms of having informal learning opportunity and the empowerment pursue such learning in the organizations. Literatures like Van Woerkom et al. (2002, 380), Marsick and Watkins (2003, 134), Vera and Crossan (2004, 233), Vam der Sluis (2004, 12), Egan et al. (2004, 295), Green (2005, 645), Lohman (2005, 516), and Froehlich et al. (2014, 49-50) highlight the positive work culture and its role on organizational learning or informal learning in general. However, they do not investigate *what attributes make work culture a positive factor, and how those attributes affect the phases of an informal learning process.* In addition to discover such gaps, this study also describes *how the work culture interacts with HRD, and how such interactions affect informal learning process in business organizations.*

Though it is recognized by the scholars including Hoegl et al. (2003, 758-759), Van der Sluis (2004, 11), Lohman (2005, 520), Fong and Lung (2007, 166-167), Kyndt et al. (2009, 381), and Bingham and Conner (2015, 105) that the teamwork affects organizational learning process, this study has *not found any role of teamwork which can affect individuals´ informal learning process.* However, from the story and narratives of participants´ informal learning experience, the role of team leaders and teammates have

been reflected to some extent in the role of managerial and collegial support that promote their informal learning process.

In terms of the interactions among positive organization-level factors, this study identifies the interactive factors, and describes how they interact with each other while affecting informal learning process. The scholars like Jung et al. (2003, 539-541), Vera and Crossan (2004, 231-232), Egan et al. (2004, 292, 296), Sambrook (2005, 114) Lohman (2005, 523), Beattie (2006, 111, 115-116), and Ragins and Kram (2007, 681-682) find the interactions among HRD, managerial support, collegial support and culture that affect organizational learning in general. However, this study discovers *only the interaction between HRD and work culture which affects the informal learning process* in freight forwarding organizations. HRD, through its policies and practices, promote a learning supportive culture within the organization. On the other hand, a learning supportive culture affects HRD to thrive for more learning promoting policies and practices across the organization. Though HRD and work culture are two dominant organization-level factors to affect informal learning process, no interactions between managerial and collegial support have found in this study. The reason why managerial and collegial support do not interact with each other, HRD, and work culture, has not been explored further in this study due to inadequate data. However, it can be assumed that due to the prevailing positive role of HRD and work culture, managers and colleagues tend to support informal learning process individually, rather than interactively by affecting each other, HRD and work culture.

In respect of negative organization-level factors, it has been found that lack of managers´ support and commitments inhibit informal learning process in freight forwarding organizations. Vera and Crossan (2004, 222), and Ellinger and Cseh (2007, 447) acknowledge that when managers do not support or abstain from any initiatives that promote individual learning, it is difficult for the employees to learn from the organization. This study also finds the negative role of managers on the employees´ informal learning process in all the participant companies acting as the units of analysis. Similarly, this study support the findings of literatures asserting that non-cooperative colleagues (Lohman, 2005, 522-524; Collings, Conner, McPherson, Midson & Wilson 2010, 12) and learning inhibiting culture (Lohman 2005, 516) negatively affect individual learning within the organization. However, this study depicts *what activities constitute lack of managerial support, collegial support, what attributes form learning inhibiting culture, and how they affect informal learning process in business organiza-*

tions. Moreover, this study recognizes structural boundaries as the most dominating learning inhibiting factor in which physical distances emerge from ineffective architectural workplace design, and hierarchical gaps. Though similar findings can be traced from the literatures by Lohman (2005, 522), Sambrook (2005, 114), Chen and Huang (2007, 113), Berg and Chyung (2008, 238), Martínez-León and Martinez-Garcia (2011, 557-559), and Hao and Muehlbacher (2012, 38), this study supplements the evidences by illustrating *how organizational structure negatively affects informal learning process* in freight forwarding organizations.

In terms of the interactions among negative organization-level factors, this study describes how lack of managerial support, collegial support, and learning inhibiting culture interact with structural barriers. In addition to the findings of existing literatures (Sambrook 2005, 114; Martínez-León and Martinez-Garcia 2011, 557-559) on the negative role of structural barriers on manager and other employees in general, this study discovers the opposite impact. In this study it has been found that *those managers or colleagues, who are non-cooperative, tend to establish structural barriers between them and the learners.* Therefore, their lack of support leads to create a learning disrupting structure in the workplace. Similarly, it has also been found that while a learning disrupting structure creates a learning inhibiting culture, *a learning inhibiting culture can also encourage the evolution of a learning disrupting structure in the organizations*.

7   CONCLUSION

The recognition of workplace informal learning has been widely established due to its spontaneous occurrence among the employees at work. In order to develop informal learning across the organization, it is necessary to explore the role of organization-level factors on this learning process so that influence of positive factors can be maximized and impact of negative factors can be minimized. This study examines how informal learning process is affected by organization-level factors in freight forwarding organizations in Bangladesh. As the findings suggest from this study, informal workplace learning is dynamic sequential process affected by both positive and negative organization-level factors in business organizations.

7.1   Theoretical contributions

The presence of informal learning in business organizations has been recognized for long for its significant contribution to the individual and organizational development. Therefore, the interest of researchers also continues to grow in different dimensions of the phenomenon. The more literatures are focusing on informal learning, the more experiments are producing similar, supplementary, or even contradictory results. Theoretical contributions of this study include the findings of this study that represent new insights into existing literatures on informal learning, its process, and the factors affecting informal learning or its process.

This study presents the dynamic process of informal learning in the workplace which unfolds its complex, spontaneous, and ongoing nature (Marsick et al. 2006, 795-796). The informal learning process at work begins with having a trigger or a problem which is resolved by the individuals in the organizations through different phases of this learning process. This study identifies that the triggers at work evolve from individuals´ technical shortcomings or difficulties, and emotional attachment of self or others which constitute their technical skill problem and attitude problem. Though the model of Marsick et al. (2006, 795) depicts the linear and sequential behavior of informal learning process, this study finds this behavior not always necessarily true; rather, it depends on individual perspectives. When an individual proceeds through all the detail phases of the informal learning process model, others may bypass one or more phases to solve

their unique problems. In an effort to solve these problem, this study shows that individuals sometimes skip the phase of examining alternative solutions, and tend to develop a strategy on their own perceptions or previous experiences. In addition, when individuals in the learning process learn the lesson that a particular strategy cannot solve their problems, they tend to interpret their triggers again and proceed through another informal learning process. In respect of the role of organization-level factors, it is evident that their roles also vary with different phases of informal learning process.

This study identifies that HRD learning and development policy and HRD performance appraisal system contribute to develop HRD support on informal learning in the business organizations. In addition, this study depicts how HRD provides or facilitates informal learning opportunities, and helps the learners to examine alternative solutions to a problem. Regarding the role of managers, this study describes more specifically how they help an individual learner to examine alternative solutions, develop appropriate learning strategy, assess consequence of strategy implementation, and framing the lessons with the context. Similarly, this study suggests that collegial support do not necessarily play positive role on every phases of informal learning process. Instead, it affects only the phases of examining alternative solutions and implementing the strategy to solve a problem. In respect of work culture, this study identifies that empowerment and opportunities for learning build a positive learning work culture in the organization. In addition, this study proves how these attributes affect informal learning process in form of work culture in the organization. With regard to the interactive role of positive organization-level factors, this study discovers that HRD and work culture interact with each other to affect informal learning process.

This study identifies specific activities that make up lack of managerial support, collegial support, and learning inhibiting culture. In addition, this study illustrates how these attributes affect informal learning process within organization. This study extends the understanding of how physical distance and hierarchical gaps constitute structural boundaries, and become inhibitors to the informal learning process in freight forwarding organizations. Moreover, this study asserts that non-cooperative managers or colleagues inhibit informal learning initiatives inside the organization by establishing structural barriers between them and the learners. In respect of the interactive role of negative organization-level factor, this study proves that if a learning disrupting structure can create a learning inhibiting culture, a learning inhibiting culture can also help the evolution of a learning disrupting structure in the organizations.

7.2 Managerial implications

It is evident that every informal learning process begins with interpreting triggers that individuals have to resolve. In other terms, triggers are the learning opportunities that initiate informal learning at work. However, the misinterpretation of triggers may result in choosing and implementing a wrong learning strategy for solving the problem. Effective and timely trainings on interpreting triggers can reduce such misinterpretation, and increase individuals´ skills to solve their problems. Managers can also include informal learning opportunities as an essential part in the employees´ learning need assessments (LNAs) so that they can be more exposure to the triggers. In addition, HRD can take the necessary initiatives to provide training, coaching, and mentoring to individual employee on understanding unusual situations and events, developing and applying appropriate strategies, and framing learning with the contexts. Moreover, a consistent evaluation can be practiced for each phase of informal learning process along with examining how organization-level factors affect each phase, for the purpose facilitating individuals´ learning in all phases.

This study identifies the positive role of HRD, managerial support, collegial support, and work culture on individuals´ informal learning process. Several sub-factors have emerged out of these main factors which indicate how the factors affect this learning process. Those sub-factors can be served as a guideline for the HRD professionals to plan and implement their learning and development initiatives across the organization. In addition, the managers and team leaders across all functional units or departments in the organization can assess the degree and the extent to which the positive and negative factors do affect their employees´ informal learning process. The diligent assessments will help them to formulate necessary action plan in order to maximize the impact of positive factors and minimize that of negative factors.

It has been found in this study that HRD learning and development policy as well as performance appraisal system promote informal learning in the organization. To ensure the fullest support of HRD to every learner in an organization, HRD professionals can review their policy and appraisal system in order to articulate all necessary provisions including individuals´ rights, their learning objectives, required support and resources, and the criterion for learning assessments. The role of managers has been found as the most prominent on employees´ informal learning process. In or to ensure spontaneous informal learning within the organization, all managers should carefully provide right,

adequate, and timely learning opportunities, resources, feedbacks, and rewards to the right individual learner. The team leaders, along with first-level and mid-level managers, can provide specific technical support to individual learner, and top-level managers can work with HRD to design and implement all necessary learning and development initiatives. Collegial support has also been found to facilitate the informal learning process of individuals in the workplace. HRD professionals and all respective managers can consistently brief on and promote a friendly, supportive working relationship among all employees in the organization. Thus employees will get their colleagues as a supporter or mentor in their difficulties while pursuing their informal learning process. Similarly, HRD professionals, along with the managers, can promote a learning oriented work culture by providing more learning opportunities and empowerment in all level of employees in the organization.

In respect of negative organization-level factor, this study finds that lack of managers´ support and commitment, non-cooperative colleagues, learning inhibiting culture, and learning disrupting structure impede informal learning process in the workplace. HRD can arrange proper training and development programmes for the managers to get rid of their micromanagement, and to be more creative and flexible in supporting and promoting their subordinates´ individual informal learning. Similarly, HRD, along with all respective managers, can minimize collegial superiority complex, cynicism, self-interest, and worrying for job insecurity by conducting periodical briefing, coaching, mentoring, and including their learning supportive efforts into performance appraisal system. Learning inhibiting culture can be reduced to a great extent by removing compartmentation and formality within and across the departments in the organization. HRD can organize effective training and development programmes for the top-level and middle-level managers, while the top-level and middle-level managers can coach or guide first-level managers and team leaders to ensure such free movement of learning within the organization. HRD can eliminate learning disrupting structure by removing physical architecture and hierarchical barriers that block informal learning flow across the organization. By analyzing individual job descriptions, functional areas and networks, HRD can design effective sitting arrangements so that employees can get easy access to learning opportunity and required support from others. In addition, HRD can minimize power distance and bureaucracy in knowledge sharing by offering proper training and counseling for the managers as well.

The interactive impact of negative organization-level factors on informal learning process can be reduced by minimizing the negative impact of each individual factor. When the negative features of a single factor will be removed or eliminated, the negative impact of other interactive factors will also be minimized as a result. In this study, learning disrupting structure has been identified as the most dominant negative organization-level factor. This study shows that learning disrupting structure interacts with lack of managers´ support and commitment, non-cooperative colleagues, and learning inhibiting culture. Therefore, the role of negative organization-level factor can be minimized to a large extent when the learning disrupting structure can be converted into a learning promoting structure in the workplace.

For international business in general, the headquarters and their HRDs should keep it in mind that informal learning is a spontaneous process surrounded by local cultures. Therefore, the design of strategic HRD and its implementation can be varied with the MNCs´ local offices. The most effective informal learning process can be expected in an MNC by allowing its local HRDs more authority and freedom to design, implement, and evaluate their local employees´ informal learning process. With the assistance from team leaders and managers from all levels, local HRDs can build a learning culture within the organizations to promote effective informal learning process. However, it is very important to keep in mind that informal learning should not be formalized for the sake of its better control. To get the maximum benefit of this learning, employees should be encouraged to learn in their own informal way. Finally, all necessary assistance should be extended to the individual learners in the organizations to learn more informally, especially by ensuring more positive role of organization-level factors on their informal learning process.

7.3   Suggestions for future research

This study provides a platform to continue the exploration of the factors that promote or inhibit informal learning process in business organization. More specifically, it would be worthwhile to explore informal learning process more in different organizational and cultural contexts to understand how and to what extent they affect this learning process. Freight forwarding MNCs in Bangladesh are more process-focused, and therefore, findings of this study need to be further examined before those are applied to other or-

ganizations. The future research on exploring informal learning process and how it is affected by organization-level factors in different organizational contexts will motivate the researchers and practitioners to consider each unit of analysis identical to others. In addition, the interactive role of all positive organization-level factors can be researched further to discover why few factors affect each other but others do not, while playing their role on informal learning process in different organizations. Thus the researchers and practitioners will be able to build up more sophisticated tools for assessing the role of both positive and negative organization-level factors on informal learning process in the business organizations.

8   SUMMARY

This study illustrates the role of organization-level factors on informal learning process inside the organization. As the most common phenomenon in the organizations, informal learning process takes place through certain specified phases. Identification of organization-level factors and exploration of how informal learning process is affected by those factors are the key concern of this study.

For the purpose of having a good understanding of the role of organization-level factors on informal learning process inside the organization, this study proceeds by addressing three research sub-questions. The sub-questions attempts to answer how informal learning process takes place in business organization, what organization-level factors affects informal learning process, and how informal learning process is affected by organization-level factors. In addition, this study starts with literature reviews on which a preliminary framework has been developed to proceed further. The preliminary framework emphasizes the role of structure, HRD, managerial support, collegial support, work culture, and team work on the individuals´ informal learning process in business organization. In addition, the framework also indicates that these organization-level factors interact with each other while affecting informal learning process.

Based on preliminary framework, an empirical investigation has been conducted with the face-to-face interviews in this study. Four suitable freight forwarding MNCs in Bangladesh were chosen as the units of analysis in which thirteen interviews were conducted with the employees working at different hierarchical levels. During the interviews, the data were collected by the articulation of stories from each participant, which were then transcribed as the primary proof of information. The data analysis was processed by using constant comparative analysis until reaching a level of saturation. The empirical research has found that all the phases in an informal learning process are not linear and sequential, and the role of organization-level factors on each phase varies with the degree and nature of each factor. The results of this study also reveal that informal learning process is immensely affected by certain organization-level factors, but all of the factors do not necessarily interact with each other while playing their role on informal learning process.

This study acknowledges many findings on the similar concepts from other scholars by linking those with the existing gaps and purpose of this study. Although this study is based on a specific context with an example nation and industry, and thus cannot be

generalized, extensive future research on the same phenomenon in different organizational contexts can produce more universal results. However, this study considerably extend our understanding of the important role of HRD, manager, colleague, culture, and work structure on informal learning process in business organization.

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APPENDIX

Identifying codes for data analysis

``I think culture is one of the most important factors to encourage informal learning in any organization. If the culture of work is not good, I mean, when culture of an organization does not encourage the learning from each other, people do not get the opportunity to learn informally. In absence of proper culture, the learning in different hierarchical levels can be hampered in many ways. In this case, today's more emphasis on the compartmentation of work is doing a lot of harm to free transfer of learning among the employees in a company.''

``I can share an experience in this regard. Last month one of my officers was having difficulty in fixing the pricing of a new product. First of all, he tried by himself, but failed. Then he came to me for a solution. When I found the gravity of the problem, I took over the responsibility to solve it, and assigned the officer another task to work on. When I reviewed the problem, I thought I can get help from Marketing or Finance Department in this regard. I, therefore, went to our Marketing and Finance Department to discuss the problem and come up with any alternative solutions, if possible. However, I was disappointed by both of the Departments' lack of generosity when I had been told that it was an intra-department issue, and I had to solve it by myself.''

``As a Sales Department, we have to work closely with Marketing and Finance Department. But when they keep a distance from us for the sake of compartmentation, it blocks our access to many learning sources that we might get from them.''