Influence of career commitment and employee competency on career management
Evidence from IT workers in Nepal

Abhishek Risal, Niranjan Devkota, Krishna Dhakal and Udaya Raj Paudel

ABSTRACT
The objective of the research on which this article is based was to comprehend the impact of career commitment and employee competency on the career management of information technology (IT) professionals in the Kathmandu Valley. The study employed an exploratory research design, drawing on social cognitive theory. Data were analysed using quantitative methods, specifically descriptive and inferential analysis, utilising a structured questionnaire. The study employed convenience sampling to collect data from 232 IT workers in Kathmandu Valley, utilising the KOBO Toolbox for data collection. Structural equation modelling (SEM) was employed for data analysis. The experience of stress and burnout, as well as feelings of inadequate confidence and insufficient training, are significant impediments to career management among IT professionals. The findings of the SEM analysis indicate that there exists a statistically significant relationship between career commitment and employee competency with respect to career management. The field of career management for IT professionals is currently in its nascent stage in Nepal. However, with increasing awareness among employers and individuals, its importance is steadily gaining momentum. Thus, it is imperative for HR managers to establish effective policies that facilitate the professional growth of employees.
KEY WORDS
career management, employee competency, career commitment, IT workers, career barriers

Introduction
Recent economic and societal shifts have resulted in significant modifications and fresh perspectives on career management (Hart & Baruch, 2022), which is important in the twenty-first century as every company considers it to be crucial to gain a competitive advantage (Callanan, Perri & Tomkowicz, 2017). The IT industry has been experiencing rapid growth and expansion in recent years (Devkota et al., 2022). With the increasing demand for digital services and the adoption of advanced technologies like artificial intelligence, cloud computing and blockchain, the industry is poised for even greater expansion in the coming years. As the speed of change in the IT industry accelerates, there is an associated need for smooth HR practices to manage careers and enhance the work and performance of employees. As Lameijer et al. (2021) note, it is anticipated that the worldwide IT sector will experience a 4% expansion in 2021, ultimately resulting in the industry’s value reaching $5.2 trillion. The expansion of the IT industry has resulted in a commensurate rise in the need for proficient IT experts. In this context, effective career management strategies can prove to be pivotal in the retention and growth of these professionals. Since the employees’ responsibilities are very tedious, time-consuming and require constantly updated knowledge to cope with new technological advancement, there are demands for extensive monitoring, training and strong willpower (Budhwar & Baruch, 2003; Paudel et al., 2018). There is therefore a need for managers in the IT industry to focus on developing their employees’ competences and enhancing their commitment towards work which has been conjectured only to be possible by managing their career ladders via best practices in career management (Hafizan, Halim & Meerah, 2012).

Employee well-being, goal-setting assistance, personal improvement and successful work engagement are all aspects that career management addresses, according to Jackson and Wilton (2016), who argue that assisting IT personnel in their career management benefits both the organisation and individuals. At an organisational level, it attracts and retains talent, increases employee engagement and productivity, and identifies future leaders. At an individual level, it provides a clear path for advancement, skill acquisition, and professional growth, resulting in higher job satisfaction and motivation. Investing in career management creates a win–win situation for both the organisation and employees. By assisting IT personnel in career management, a variety of benefits can be achieved at both an organisational and an individual level, which will have an impact on the organisation’s success as well as employee engagement (Canaj et al., 2021; Hernaus et al., 2019). Enhanced employee engagement, talent retention and productivity can be advantageous for organisations, whereas a sense of direction, skill development opportunities and personal fulfilment can be beneficial for IT personnel. The prioritisation of career development opportunities can serve as a means for organisations to both attract and retain high-quality talent. Every aspect of career enhancement is then possible by implementing career management practices in an
organisation where it improves employee motivation and engagement with the employer (Bagdadli & Gianecchini, 2019) by aiding in the identification of an employee's talents, interests, and career goals (Sullivan, 1999) and thus allowing employees to investigate new job opportunities that might help them to develop a customised career action plan (Canaj et al., 2021).

IT workers face several challenges when it comes to communicating their needs to colleagues and supervisors and discussing changes in their roles, responsibilities, and promotion matters. Adopting career management principles can help streamline these discussions.

Within the IT organisation, employees encounter obstacles such as heavy workloads, skill gaps caused by fast-paced technological advancements, insufficient support from leadership and difficulties adapting to digital transformation. Embracing new technology and innovation is crucial for staying ahead in the competitive landscape. Those who resist these changes risk falling behind and losing their competitive advantage. Recently, dramatic changes in work organisation have created new ‘career realities’ that are experienced at the individual level and require workers to take responsibility for their own career development (Budhwar & Baruch, 2003). Organisations increasingly incorporate employee commitment and workers’ competency into their career management interventions (De Vos, Dewettinck & Buyens, 2009). Briscoe, Hall and Frautschy DeMuth (2006) concluded that the traditional career management practices, which were defined by organisational management, hierarchical promotion and extended tenure, are gradually eroding. This situation, they argue, was based on an implicit psychological contract between the employee and the employer, where the individual was promised job security in exchange for his or her devotion and ongoing organisational relationship (Eby, Lockwood & Butts, 2006). In the past, many IT organisations around the world have been paternalistic, with managers taking on much of the responsibility for managing their employees’ careers. As a result, employees have been heavily reliant on possibilities supplied by their employers, and have had to believe that their boss would consider their career goals when making decisions. Employee training has frequently been geared toward creating firm-specific capabilities that are not easily transferable (Donohue & Tham, 2019).

Companies manage career management challenges in different ways, but have a common focus on things like individual evaluation, training courses, mentoring, work rotation and other necessary requirements (Sultana, 2012) which then improves employee proficiency and dedication towards their jobs. Career management is more effective when there are competent employees with strong commitment (Noor, Suherli & Sutisna, 2020). Globally, career management was regarded as an unnecessary business at first, with managers focusing on productivity increases, with little concern about the contribution of human resources to success (Hoppock, 1976). However, career management has recently begun to receive attention in Nepali firms, including the IT industry, as the country’s HR environment has evolved tremendously (Soares & Mosquera, 2021) and the scenario has changed radically over time since 2000. Before 1990, a significant proportion of businesses in Nepal exhibited inadequacies in managing their human resources. Following the reinstatement of multiparty democracy...
in Nepal in 1993, there was an increase in the scope of human resource management, with a focus on the significance of employee performance and the necessity for training and development, as highlighted by Kaliannan et al. (2022).

The implementation of human resources (HR) policies by the Nepal government has a long-standing history. The Public Service Commission was established in the early 1950s, with the primary objective of conducting independent recruitment of public servants. In 1990, multinational corporations (MNCs) and aid organisations that possessed integrated HR systems were introduced in Nepal (Malik et al., 2022). Before the adoption of economic liberalisation policies in the nation, enterprises utilised a unidirectional management approach that marginalised the perspectives of their workforce. Before 1990, a significant number of organisations had regarded the expenses associated with HR departments as an unnecessary cost, a mentality which was widespread during this period. Despite the limited availability of data on human resource practices in Nepal, the existing information indicates that the nation is currently in the early stages of implementing efficient human resource management strategies (Rajbhandari et al., 2022) which are distinct from those of India and China, which are geographically proximate (Gautam & Davis, 2007).

In recent years, the HR landscape of Nepal has undergone noteworthy transformations. Before the turn of the millennium, the information technology sector in Nepal lacked dedicated HR departments in IT companies to manage human resources. According to Gautam (2012), IT departments have undergone historical mergers with other departments, such as accounting and general administration. The situation has experienced significant transformation over the years, and there has been a notable surge of interest in the domain of human resource management within the IT firms of Nepal (Gautam, 2015). It has been observed that the presence of HR departments within companies enables the implementation of organised personnel management practices.

The field of human resource management has experienced notable advancements due to the recognition of its significance by the public, business and government sectors. The management of careers for IT workers has gained significant attention in the field of HR in recent times. Callanan, Perri and Tomkowicz (2017) have determined that the career decision-making of IT professionals has conventionally been perceived as a structured procedure that encompasses various stages, including self-evaluation, environmental analysis, and career objective establishment. The present circumstances pose several challenges that impede the selection of a career, thereby contradicting this approach.

Nepal's HR practice is at best in the early stages of implementing effective career management approaches (Gautam & Davis, 2007; Rajbhandari et al., 2022). Career management has considerable potential to play a major role in shaping the IT industry for better performance in the days to come. There are various areas for the study which are yet to be explored and which can be addressed via further research. One important priority is to conduct a quantitative study to statistically test the characteristics of HRM practices in Nepal (Maharjan, 2013) where research could usefully delve deeper into individual groups' job decision-making experiences, notably by generation and gender (Callanan, Perri & Tomkowicz, 2017). Future integrative research on career adaptation and management could also be done to examine the correlation of professional enhancement in IT workers with their career development (Chong & Leong, 2017). Even more, further research is required to
broaden the understanding and generalisability of IT workers' career aspirations and skill expectations (McKenzie, Coldwell-Neilson & Palmer, 2017). Considering all the aspects of career management, how should organisations identify the diverse demands of individuals in different stages of their careers and design plans for improvement?

The study presented in this article addressed four key questions: First, what are the perspectives of the workers regarding career management in Nepalese IT organisations? Second, what are the factors that influence career commitment and employee competency in career management in Nepalese IT organisations? Third, what are the barriers that make it difficult to implement career management policies in Nepalese IT organisations? Fourth, what might be the managerial solutions for career management in Nepalese IT organisations? More specifically, the study aimed to examine the impact of employee competency and career commitment on IT workers' career management in Kathmandu Valley and provide insights into the overall state of career management in Nepalese IT organisations. Through a comprehensive analysis of these factors, the study aimed to provide recommendations for improving career management practices in the IT sector of Nepal.

The remainder of this article is organised in three parts. After a discussion of the research methods, the research results are presented and discussed. This is followed by a section that draws general conclusions and explores some of their implications.

Research methods

Theoretical framework and conceptual framework

There is a considerable body of literature about the significance of career management in the organisation. The research can broadly be broken down into four different theoretical approaches which are most commonly used in the field of career management: first, career typology theory (Hoppock, 1976); second, self-concept theory (Epstein, 1973); third, social cognitive theory (Jena & Nayak, 2020); and fourth, MBTI (Myers-Briggs Type Indicator Personality Theory) (Donnellan & Robins, 2010). The career typology theory claims that occupations are shaped by a combination of personalities and the environment we live in and thus, people want to collaborate with people who are similar to them. They look for opportunities to put their skills and abilities to use, as well as convey their attitudes and values, while tackling topics and roles that they find enjoyable (Jena & Nayak, 2020). Similarly, self-concept theory focuses on how a career develops over the course of a person's life, indicating that biological, psychological, sociological and cultural factors all have an impact on career choices. The self-concept idea is based on the concept of a life rainbow, in which one's level of awareness fluctuates over time (Leung, 2008). Social cognitive theory deals with the concept of self-efficacy, defined as the conviction in one's ability to plan and carry out the actions necessary to achieve specific goals, based on personal performance, expression, verbal persuasion, and physiological elements (Leung, 2008).

Personality typology theory does not clearly and absolutely correlate to categorical distinctions between people; however, it does provide an empirically supported technique to account for within-person personality configuration which includes a taxonomy and classification system for classifying and organising people at a high level of abstraction. People learn more when using classification systems because they focus attention on groups with similar qualities, outcomes and developmental correlates.
Personality types could be useful moderator elements in determining why people react to the same situations in different ways (Donnellan & Robins, 2010). Thus, our research supports the assertion that no single theory is sufficient to demonstrate a person’s career progression; rather, each theory promotes a certain idea while ignoring the other aspects of individual career choice (Osipow, 1990).

Our research reviewed several studies which used Bandura’s social cognitive theory to develop their theoretical models. Seema (2014) used the self-efficacy theoretical model, Schoenfeld et al. (2016) adopted the integrative model, Brown, Lent, Telander and Tramayne (2011) used the work performance model, and Noor, Suherli and Sutisna (2020) used the c-structure model in their studies, all based on Bandura’s social cognitive theory. These models refer to a range of factors which support career management practices within the organisation. The measures and models have been developed by various scholars to analyse the need for career management in the organisation. Likewise, the self-efficacy model explains the relationship between career satisfaction and personality traits and environmental support with the help of career management behaviours (Seema, 2014). Similarly, the integrative model is a goal-oriented instructional style which notifies employees how to improve their ability to learn independently by utilising a variety of cognitive talents (Schoenfeld et al., 2016) and thus contributes to an understanding of the effects of employee ability and skill on performance attainment. The model we tested included the central cognitive predictors of performance (ability, self-efficacy, performance goals), with the exception of outcome expectations, and focused particularly on the work performance model (Brown, Lent, Telander & Tramayne 2011). Likewise, the Career Structure Model states that firms are more likely to have effective career management as employee skill improves (Noor, Suherli & Sutisna, 2020). Competency has an impact on how a person’s career is managed. Employee competency has a positive impact on career commitment through career management (Bagdadli & Gianecchini, 2019). The four components of the Career Management Fit Model, which guides career management practices, are: individual career ideas, individual career development plans, organisational socialisation, and OCM strategy (Soares & Mosquera, 2021).

Following the approaches developed in these models, we developed our own model in order to conduct the study on Nepalese IT industries regarding the career management of IT workers. Figure 1 shows the conceptual framework used in our research, indicating the interrelationships between the various variables that might affect the career management process. It was constructed on the basis of the review of the literature related to career management summarised above. In this model, career commitment (CC) and employee competence (EC) are independent variables and career management (CM) is a dependent variable for the purposes of this study.

**Research design**

This study employed an explanatory research design, which is a suitable approach for investigating associations among variables and comprehending the rationales behind observed patterns in social science research. By testing hypotheses and establishing causal relationships between variables, this study provides valuable insights into the factors that influence career management practices in the IT sector in Nepal.
Employee competency and career management

The effective management of careers within the IT industry in Nepal necessitates a high level of expertise among employees. As the IT industry undergoes transformation, companies must ensure that their workforce possesses the necessary competencies and knowledge to succeed. The enhancement of skills and professional growth is facilitated through employee training and development. Career development programmes and career counselling services can assist employees in assessing their competencies and limitations, as well as establishing career goals. Investing in competencies could potentially improve career management, employee satisfaction and overall company success for IT firms in Nepal. Employee competency has a substantial impact on IT workers’ career management since competency entails polishing knowledge, skills, talents, and personal traits that enable employees to work better and contribute to company success (Jackson & Wilton, 2016). Employers can aid workers in their career advancement by creating a career development plan, career counselling, training and development (Hirschi, 2012). The closer an employee reaches to the top of the professional ladder, the more competent he or she will be. Previous research has also demonstrated that employee competency has a positive impact on career management (Sumaryati, Novitasari & Machmuddah, 2020).

H1: Employee competency has a positive influence on career management of Nepalese IT workers.

Career commitment and career management

The manifestation of enthusiasm and proactive behaviour in the workplace can result in improved interpersonal connections and enhanced productivity (Sidani & Al Hakim, 2012). Additionally, exhibiting a strong commitment to achieving success can engender the confidence and admiration of superiors, thereby facilitating opportunities for career
development (Bagdadli & Gianecchini, 2019). Proficient management of one’s career can potentially foster trust in the organisation, stimulate creativity and innovation, and influence one’s perception of career assistance and development initiatives in a positive manner (Li et al., 2015; Thomas, Lillian, Kelly & Daniel, 2005). Consequently, this may result in an increased level of dedication to one’s profession, which has been demonstrated to yield favourable outcomes in terms of career administration. These principles can be implemented by IT organisations in Nepal to enhance their human resource management strategies and cultivate an environment that promotes professional advancement and progression for their staff. However, Park (2020) depicts that career commitment has a positive impact on career management.

**H2**: *Career commitment has a positive influence on the career management of Nepalese IT workers.*

**Variables and their definitions**

In this part, the variables used in the study are discussed. The variable under SEM is described in detail as follows:

**Table 1: Observed variable and description**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Observed variables</th>
<th>Variable notation</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Commitment</td>
<td>Career Investment</td>
<td>CC_3</td>
<td>Invested a lot in professional career</td>
</tr>
<tr>
<td></td>
<td>Job Tenure</td>
<td>CC_4</td>
<td>Invested job tenure in professional career</td>
</tr>
<tr>
<td></td>
<td>Length of Service</td>
<td>CC_5</td>
<td>Invested length of service in professional career</td>
</tr>
<tr>
<td>Employee Competency</td>
<td>Feedback</td>
<td>EC_1</td>
<td>Regular feedback on the performance</td>
</tr>
<tr>
<td></td>
<td>Training</td>
<td>EC_2</td>
<td>New and creative training opportunities</td>
</tr>
<tr>
<td></td>
<td>Required Competent</td>
<td>EC_5</td>
<td>Developing competency that is required for career</td>
</tr>
<tr>
<td>Career Management</td>
<td>Career Conversation</td>
<td>CM_2</td>
<td>Informal talks about career issues</td>
</tr>
<tr>
<td></td>
<td>Work Enrichment</td>
<td>CM_4</td>
<td>Effort to enrich work with relevant activity</td>
</tr>
<tr>
<td></td>
<td>Career Planning</td>
<td>CM_5</td>
<td>Help in planning the career</td>
</tr>
</tbody>
</table>

Notes: The items including CC_1 and CC_2 from construct 1, EC_3 and EC_4 from construct 2 and CM_1 and CM_3 from construct 3 were dropped after performing Confirmatory and Exploratory Factor Analysis and these items’ value remains below 0.5.

**Study area and study population**

The study region selected was the Kathmandu Valley, as illustrated in Figure 2. The Kathmandu Valley, situated in the central region of the country, functions as the capital of the nation. It comprises three districts, namely Kathmandu, Bhaktapur and Lalitpur, and possesses a bowl-like shape. The Kathmandu Valley is located at the
geographic coordinates of 28.3949° N and 84.1240° E. Given that Kathmandu serves as a prominent commercial centre with a multitude of enterprises situated in and in proximity to the valley, it sustains a substantial workforce, thereby requiring the implementation of career management strategies. Conducting research on career management of IT workers in the Kathmandu Valley, owing to its high population density and status as a commercial hub, is likely to yield more precise and valuable outcomes.

**Sampling techniques and sample size determination**

This study adopted a non-probability sampling technique because the researchers could not get exact numbers of IT workers in the Nepalese context. Data were collected from a pool of respondents via convenience sampling. To calculate the sample size, this study adopted a statistical formula used by Singh and Masuku (2014), that is, \( n = \frac{z^2pq}{l^2} \). Where the standard tabulated value for a 5% level of significance \( (z) \) is 1.96, \( p \) is the prevalence or proportion of an event 50% (Kharel, Rai & Bhandari, 2019) and allowable error that can be tolerated \( (e) \) is 6%. The total population for the study was 266.78. Thus, the sample size taken for the study was 280. Because most IT organisations had Work-From-Home policies in operation at the time of the research as a result of the numerous COVID-19 variants, it was not always possible to reach the appropriate individual. Considering the scenario caused by the global epidemic, it was not surprising that only 232 people responded to the survey.

![Study area](source: GIS ArcMap)
Research instruments, data collection and data analysis techniques

To explore the career management opportunities for IT employees, a standardised questionnaire was developed. The survey instrument comprised five distinct sections, covering: socio-demographic characteristics, general comprehension of career development, factors that impact career development, and challenges relating to the corresponding managerial solutions. A 5-Point Likert Scale was used to gather data from IT professionals located in Nepal. The data collection method employed was a questionnaire survey. To accomplish the diverse objectives of the study, the researchers devised an integrated survey.

The KOBO Toolbox incorporates a structured questionnaire for the purpose of data collection. A preliminary study was conducted on a sample size of 15 using a set of questions from the KOBO toolkit to validate the reliability and validity of the research instrument. Through the submission of an official letter to multiple IT entities, authorisation was obtained to access the data. Upon acquisition of data from the field, an analysis was conducted using both descriptive and inferential methods to examine the collected data. This study utilised tables and figures for descriptive analysis, while SPSS and AMOS were employed for inferential analysis. Structural equation modelling was also utilised in the inferential analysis.

Results and discussion

Socio-demographic characteristics

This section includes the socio-demographic variables which were used for the research. Data were collected around Kathmandu Valley from 232 respondents of IT organisations. Age, gender, education, working experience and work position were visualised and validated using Geographical Information System (GIS) software.

The results revealed that the majority (63%) of respondents were male, most commonly in the 21–30 age group, qualified up to Bachelor’s degree level. The fact that they typically switched to a new organisation after 1–5 years of working experience suggested that some mechanism of career management would be advantageous for employee retention. Moreover, most of the employees in IT organisations were intermediate workers with 1–2 years of experience, followed by freshers e) who had joined the organisation within the past year, making up 32% and 27%, respectively, as shown in Table 2. The results also indicated that men were more likely than women to be involved in IT-related work, that the majority were young (with only 12% aged over 30) and highly educated (with 94% holding a Bachelor’s degree or higher qualification).

IT workers’ perspectives on career management

Management practices

This section outlines the organisation’s general grasp of career management procedures. Various individuals may have different perspectives and understandings of career management in terms of strategy, implementation, and benefits. As a result, we focused
on the common concept of career management techniques in Nepalese IT firms. The awareness of the respondents was measured regarding career management practices.

Our survey results showed that the majority of the IT organisation’s employees have professional development plans in place aimed at upgrading and updating the skills of their employees. Likewise, 50% of the employees said that they had received individual development plans from the employing organisation, whereas 37% had received career advice and 31.9% had been trained by means of practical experiences. However, they had also been provided with workshops and seminars, courses and elective credentials from their employers (in 29%, 14% and 10% of cases, respectively). Similarly, 78% of respondents said that they had been the recipients of training and development programmes twice, but only 9% of respondents had received training and development programmes more than three times from their employers in the last six months. This suggests that Nepalese IT organisations lack ongoing programmes related to career development. However, almost all (95% of respondents – 221 employees) agreed that the training provided would ultimately contribute to better performance. Thus, we can conclude that there remains a need for ongoing training and development programmes for IT workers in Nepal to ensure continuing career growth.

### Table 2: Socio-demographic characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>146</td>
<td>62.93</td>
</tr>
<tr>
<td>Female</td>
<td>86</td>
<td>37.07</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 20</td>
<td>7</td>
<td>3.01</td>
</tr>
<tr>
<td>21–30</td>
<td>197</td>
<td>84.92</td>
</tr>
<tr>
<td>31–40</td>
<td>28</td>
<td>12.07</td>
</tr>
<tr>
<td><strong>Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Secondary</td>
<td>15</td>
<td>6.47</td>
</tr>
<tr>
<td>Bachelor’s Level</td>
<td>158</td>
<td>68.1</td>
</tr>
<tr>
<td>Master’s and above</td>
<td>59</td>
<td>25.43</td>
</tr>
<tr>
<td><strong>Working Position</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>75</td>
<td>32.33</td>
</tr>
<tr>
<td>Fresher</td>
<td>63</td>
<td>27.16</td>
</tr>
<tr>
<td>Team Lead</td>
<td>52</td>
<td>22.41</td>
</tr>
<tr>
<td>Project Manager</td>
<td>24</td>
<td>10.34</td>
</tr>
<tr>
<td>Others</td>
<td>18</td>
<td>7.76</td>
</tr>
<tr>
<td><strong>Working Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 1 year</td>
<td>70</td>
<td>30.17</td>
</tr>
<tr>
<td>1–5 Years</td>
<td>133</td>
<td>57.32</td>
</tr>
<tr>
<td>5–10 Years</td>
<td>27</td>
<td>11.65</td>
</tr>
<tr>
<td>Above 10 Years</td>
<td>2</td>
<td>0.86</td>
</tr>
</tbody>
</table>
Career management opportunities for workers in Nepalese IT organisations

This section discusses the succession planning options available in Nepalese IT companies. This was one of the study’s key research variables, focusing on how employees were assisted in furthering their career and organisational progress. ‘Employee competency’, ‘career commitment’, and ‘career management’ were chosen as study variables. Opportunities for career advancement were examined separately based on these variables. Each construct was displayed in its own table, and under each construct, a set of questions was asked, with respondents responding on a five-point Likert Scale to each proposition (strongly disagree, disagree, neutral, agree, strongly agree).

‘Employee competency’ includes explanatory variables such as ‘required competence of IT workers’, ‘learning’ and ‘training that they have received’. The result revealed that the majority of respondents agreed that providing training would make IT employees more competent in their careers, and that learning was the factor which would most help employees to be more competent. The employees working in the IT industry inside Kathmandu Valley in our sample further agreed that their boss tried to make them competent regarding the work. The average response from the respondents (on the Likert Scale) of these explanatory variables was above 3.7 for ‘training’, ‘learning’ and ‘required competence’ which reflects a moderate, but nevertheless positive, level of response by the respondents regarding employee competency in organisations. It can therefore be concluded that IT managers provide employees with constructive feedback on their performance, which can help them make professional decisions and advance their careers.

Likewise, ‘career commitment’ encompasses factors such as ‘dedication to professional growth’, ‘length of employment in the IT field’, and ‘duration of service within the organisation’. This study revealed that 45% of respondents (103 out of 232) expressed a preference for prioritising their length of service to the organisation over regular timing. Additionally, 40% of respondents indicated that they valued longer job tenure without significant breaks in their professional careers. Similarly, it is worth noting that 39.6% of respondents expressed their strong dedication and commitment to their careers. The average response from the respondents, as measured on the Likert Scale, indicated a level above 3.7 for career investment, job tenure and length of service. This suggests a moderate level of response from the participants. This finding suggests that there is a moderate influence of career commitment of employees on career management, as shown in Figure 3.

Similarly, ‘career conversation’, ‘work enrichment’ and ‘career planning’ were explanatory variables under ‘career management’ in the context where individuals currently understand that organisations can no longer guarantee everlasting employment and that individuals must manage their own careers, either within the same business or across many businesses (Soares & Mosquera, 2021). The result indicates that the majority of employees in our study (111 respondents, i.e. 47%) agreed that they have the opportunity to formally discuss career-related issues with the leader, and also agreed that the leader makes efforts to enrich their work with activities relevant to their career. The average response from the respondents (on the Likert Scale) ranges from 3.3 to 3.8.
for career conversation, work enrichment and career planning which reflects that there is a moderate level of response by the respondents regarding the career commitment in IT organisation.

All of the values of the above indicators, which are above 3.5, indicate that respondents selected for the research (232 IT workers), agreed that career commitment and employee competency are required for the overall development of the individual career.

**Barriers and managerial solutions of career management**

This section contains information about perceptions of the obstacles to career management techniques in IT organisations. The average response to the question of whether they see any difficulties in implementing career management; indicates that some two-thirds of employees (67%) believe there are barriers toward practicing career management. In order to gain a comprehensive understanding of the challenges in career management, we grouped them into two categories. The first focuses on personal factors, while the second explores external factors. Our results shed light on a range of personal factors that were seen as barriers: stress and burnout (78%); lack of academic background (31%), lack of confidence and inability to communicate (30% each), careless attitudes (27%) and lack of parental support (22%). In relation to external factors that may pose barriers to career management, it is worth noting that the personality of employees accounted for 53% of the challenges that were cited, followed by education, training, and courses at 38%.

Similarly, respondents were asked whether barriers to career management could be managed in IT organisations. The results revealed that over three-quarters (77%) of respondents thought that the barriers to career management could be mitigated in IT organisations, with 23% disagreeing.
Respondents were also asked what would be the managerial solution for the betterment of career management in the IT sector. The insights shared in Figure 4 reveal the respondents’ perspectives on the various managerial strategies employed to overcome obstacles in career management. These results suggest several key factors that may be relevant here. Firstly, it is important to establish strong HR policies within the organisation. These policies serve as a foundation for managing and nurturing the workforce effectively. Additionally, providing regular training and development opportunities appears to be vital, to enable employees to enhance their skills and knowledge, ultimately contributing to their professional growth and the overall success of the organisation. Implementing effective career counselling services is another important aspect. By being offered guidance and support, employees can gain clarity and direction in their career paths, leading to increased job satisfaction and motivation. Encouraging self-awareness regarding career aspirations is also important. When individuals have a clear understanding of their goals and ambitions, they can align their efforts towards achieving them, resulting in a more engaged and fulfilled workforce. Furthermore, a commitment to continuous improvement is essential. By continuously evaluating and enhancing HR practices, organisations can adapt to changing needs and remain competitive in the ever-evolving business landscape. Lastly, promoting effective communication and teamwork is a key element in fostering a positive work environment. When employees can openly communicate and collaborate with one another, it leads to increased productivity, innovation, and overall organisational success. By considering these key factors, organisations can create a conducive environment that supports the growth and development of their employees while driving the achievement of business objectives.
Pickman (1996) who concludes that the three most important solutions to addressing the special challenges in career management are transparency, control and velocity. In relation to those respondents who thought that barriers could not be mitigated, some possible explanations are that this might be experiences of bad governance, carelessness of the employee, management refusal, and practices of favouritism within the organisation, all of which could create barriers which are very difficult to mitigate. The largest group of respondents (41%) pointed solely to HR managers as the responsible authority to mitigate the barriers to career management in IT organisations.

Discussion

The reliability test and multiple linear correlation were used in this work to establish and test the relationship between variables (described in Appendix A). From this analysis, we can conclude that employee competency and career commitment have a significant impact on career management. Hypotheses 1 and 2, that career commitment and employee competency affect the overall career management process, were therefore both supported.

With regards to the first hypothesis (H1), which stated that employee competency positively affects career management of IT workers in the Kathmandu Valley, the findings revealed that employee competency has a significant relationship with career management. As a result, it can be said that employees with the required competencies, and suitable training and who seek regular feedback on performance are likely to have effective career management. Employee competence has a favourable impact on career management (Frick, 1996). Employee competence also has an impact on career development activities and goals (Koch, Forgues, & Monties, 2017). It can therefore be concluded from our results that as employee competence grows, firms are more likely to have effective career management. This finding demonstrates that employee competence has an impact on career management. Thus, it is imperative for the IT industry in Nepal to allocate resources towards the training and development of their personnel, to augment their proficiency levels and advance their prospects for career development. To enhance their career growth opportunities, IT professionals ought to concentrate on enhancing their competencies and soliciting periodic feedback on their performance.

The second hypothesis (H2) stated that career commitment positively and significantly influences the career management of IT workers in Kathmandu Valley. The findings also revealed that there is a significant direct relationship between career commitment and career management. As a result, it can be said that employees who have invested a lot in their jobs and have high tenure and length of service are likely to achieve effective career management. Career management has a favourable impact on employee competence. Employee competence has an impact on career development activities and goals (Bagdadli & Gianecchini, 2019). These results confirm the findings of Thomas, Lillian, Kelly and Daniel (2005) that as employee competence grows, firms are more likely to have effective career management. This finding backs up those who claim that career management has an impact on employee competence. The study’s findings indicate that career commitment plays a crucial role in determining the efficacy of career management among IT professionals in the Kathmandu Valley region. This suggests that companies operating within the
IT sector in Nepal should prioritise the cultivation of a culture centred on career commitment, while simultaneously investing in the professional growth and development of their workforce. Furthermore, employees need to develop a robust dedication to their professional pursuits to augment their prospects for effective career management and elevate their proficiency levels.

Despite this, the research project had certain flaws. The investigators made a concerted effort to include a bigger sample and probe these variables with greater precision. Because the study had to be accomplished in a short time frame in order to achieve a degree requirement, it was limited to a single topic. More research on this topic is essential in other areas of the nation to acquire a more general notion of how workers feel. This study simply used a survey questions approach, but to supplement these surveys, a few in-depth discussions or participant observations could have enabled a deeper understanding of the motivation behind the career management perspective. Additionally, further studies might be focused on directly measuring the ongoing biological, and socio-economic impacts of their work on people in order to better understand the effect of career commitment and employee competency over career management. COVID-19 seems to have had a serious effect on every sector of the country between 2020 to 2022. In the post-COVID-19 era, it is crucial to analyse how IT employees are behaving with regard to career management, career commitment, and competency.

Conclusions and recommendations

This study has furnished significant insights into the necessity of career management for information technology (IT) professionals to facilitate career progression and enhance their work environment. Career commitment and employee competency exert a significant influence on career management, as evidenced by the results of the SEM analysis. This suggests that the level of commitment exhibited by IT professionals in their workplace and their personal proficiency play a crucial role in the management of their careers.

The study’s results have the potential to inform the development of diverse strategies, specifically for IT companies operating in Nepal’s varied regions. The management of one’s career is beneficial in achieving favourable results, including the formulation of a career plan and the identification of potential successors. Additionally, it involves defining the career progression path for IT personnel and creating a foundation for addressing their career-related requirements. The management of IT workers’ careers is a nascent field in Nepal; however, the growing recognition of its importance among both organisations and employees has rendered it increasingly significant. Likewise, the necessity for instruction and enhancement, coupled with the positive reactions of staff to the instruction given, suggests a significant demand for career management administration. There is a need for human resource managers to establish robust policies that offer direct benefits to employees with regard to career progression. Additionally, there is a need for transparency about promotion procedures to ensure that employees are well informed about the steps they need to take. However, additional modifications such as improvements to work-life balance, career counselling, training and development are also necessary to ensure that individuals and entities undertake the essential measures to guarantee career management practices within IT organisations.
The study's findings suggest that a range of social actors, including training providers, governmental agencies and worker representation groups, can play a crucial role in enabling effective career management strategies within IT firms in Nepal. Training providers can create programmes to teach IT professionals the necessary skills for career planning and personal development, while governmental entities can implement policies and initiatives to encourage career advancement opportunities for IT professionals. Worker representation groups can advocate for improved career management practices and collaborate with employers to facilitate career advancement opportunities. By promoting enhanced career management practices, these entities can enhance the occupational satisfaction of information technology professionals in Nepal and contribute to the growth and advancement of the IT sector.

(c) Abhishek Risal, Niranjan Devkota, Krishna Dhakal and Udaya Raj Paudel, 2023

REFERENCES


Technical Annex (Appendix A)
Inferential analysis

Summary statistics
Mean, standard deviation, skewness, and kurtosis were used to summarise the data. Mean and standard deviation lay in the range from 3.7457 to 3.8966 and 0.88035 to 1.07113, respectively indicating that the responses had low dispersion. Skewness was defined as a measure of distribution symmetry, while kurtosis was defined as a measure of a distribution’s peak or flatness (Newell & Hancock, 1984). In this study, the value of skewness of data lies from –0.627 to –1.120, that is, (–2 to +2) representing the negative skewness of the data which exactly agrees with the study conducted by Sharma and Ojha (2020). Similarly, all the measure of kurtosis lies between –1 to +1 which reveals that data is free from normality problem which is similar to the study conducted by (Sonnier, Lassar & Lassar, 2015).

Exploratory Factor Analysis (EFA), common method bias and communalities
The applicability of the data should be checked using KMO and Bartlett’s test. The result reveals that the KMO value in this study is 0.901, which meets the minimum requirement of 0.60 (Taherdoost, Sahibuddin, & Jalaliyoon, 2014) which indicates that factor analysis is useful with our data and the data doesn’t have any issues of reliability and validity. Moreover, the Bartlett’s Test value is 0.000, which is less than 0.05, suggesting that the data is significant. Similarly, the Hermann single-factor test is performed to identify whether the study contains issues of common method bias or not. The study revealed single factor explains 35.35% < 50% which indicates that there is no issue of CMB in data. Additionally, three latent variables were generated using communalities on a scale of 0.5 to balance the variance-covariance matrix of the indicator variables. The overall variable’s extraction value is greater than 0.5, showing that the entire variable satisfies the integrative collective requirement. As a result, whether or not to include a variable in a factor analysis is controlled by the value of commonality.

Confirmatory factor analysis (CFA)
Confirmatory factor analysis (CFA) was utilised to verify and corroborate the numerous variables and scales revealed during EFA. CFA is employed to test the goodness of fit, and metrics such as CMN/DF, RMR, RMSEA, GFI, IFT, TLI and CFI were utilised to investigate the goodness of fit in the study. Structure model results (Noor, Suherli & Sutisna, 2020) from the sample with CMIN/DF (1.173 < 5); RMSEA (0.017 ≤ 0.08); CFI (0.921 ≥ 0.90), NFI (0.956 ≥ 0.90), GFI (0.912 > 0.90) also satisfied with the result obtained for the research which indicates that the model is fit.

Measurement model
Convergence validity and discriminant validity were used to confirm the data’s reliability and validity, as indicated in the table. The data must meet the conditions of CR > 0.70 and AVE > 0.50 in order to verify convergence validity. Similarly, the data
must meet the conditions of $\text{AVE} > \text{MSE}$ and square root of $\text{AVE} > \text{correlation}$ to indicate discriminant validity. Because it meets the mentioned requirements, the result of this investigation exhibits both convergence and discriminant validity. Table 3 shows the reliability and validity test and its results that there is no issue of reliability and validity in the researcher’s data. Likewise, Table 4 shows the latent construct correlation which shows that variables taken are correlated with each other.

Table 3: Reliability and validity

<table>
<thead>
<tr>
<th>Construct</th>
<th>Indicators</th>
<th>Factor Loading</th>
<th>Cronbach’s Alpha</th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Competency</td>
<td>CC3</td>
<td>0.833</td>
<td>0.861</td>
<td>0.899</td>
<td>0.747</td>
<td>0.638</td>
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<tr>
<td></td>
<td>CC4</td>
<td>0.853</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CC5</td>
<td>0.776</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Competency</td>
<td>EC1</td>
<td>0.804</td>
<td>0.894</td>
<td>0.871</td>
<td>0.693</td>
<td>0.513</td>
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<tr>
<td></td>
<td>EC2</td>
<td>0.793</td>
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<td></td>
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<tr>
<td></td>
<td>EC5</td>
<td>0.780</td>
<td></td>
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<td></td>
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<tr>
<td>Career Management</td>
<td>CM2</td>
<td>0.850</td>
<td>0.900</td>
<td>0.905</td>
<td>0.761</td>
<td>0.638</td>
</tr>
<tr>
<td></td>
<td>CM4</td>
<td>0.840</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CM5</td>
<td>0.798</td>
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</table>

Table 4: Latent construct correlation

<table>
<thead>
<tr>
<th></th>
<th>EC</th>
<th>CC</th>
<th>CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td>0.864</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC</td>
<td>0.716</td>
<td>0.833</td>
<td></td>
</tr>
<tr>
<td>CM</td>
<td>0.799</td>
<td>0.643</td>
<td>0.873</td>
</tr>
</tbody>
</table>

Hypothesis testing

This section looks at the hypotheses statements to evaluate if the study’s findings are statistically significant. The outcomes of this procedure will also determine whether the hypotheses on which this research is based should be accepted or rejected. After constructing an identified path model, the researcher was able to examine the hypothesised relationship between the elements as indicated in the suggested study model.

In Table 5, H1 and H2 are accepted which implies there is a significant relationship between career commitment and employee competency in career management. In Hypothesis 1, the effect of employee competency on career management is in the hypothesised direction and it was statistically significant (Standardised beta = 0.584; $p < 0.10$). Similarly, in Hypothesis 2, the effect of career competency on career management is in the hypothesised direction and it was statistically significant (Standardised beta = 0.117; $p < 0.10$). As a result, each hypothesis was supported.
SEM is used to evaluate regression analysis, variable analysis, and the normalisation pattern during the inferential phase of the research. Figure 6 shows the path analysis between observed variables and latent construct with the error terms. On the basis of latent variables vs observable variables, the various components were assessed. The value of CMIN/df is 1.173. The p-value is less than 0.10 indicates that there is a substantial relationship between latent variables and observed variables. A statistical hypothesis test’s main goal is to determine if a data sample is typical or atypical in comparison to a population, provided a population hypothesis is correct (Emmert-Streib & Dehmer, 2019). This section looks at the hypothesis statements to evaluate if the study’s findings are statistically significant. The outcome of this procedure will also determine whether the null hypothesis (Frick, 1996) on which this research is based should be accepted or rejected. We examined two hypotheses where a significant relationship between variables was measured with the help of SPSS and AMOS software. The following is the end result of the hypothesis.

Table 5: Path estimates for the structural model

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Employee Competency ---&gt; Career Management</td>
<td>0.584</td>
<td>0.076</td>
<td>7.709</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>H2: Career Commitment ---&gt; Career Management</td>
<td>0.117</td>
<td>0.067</td>
<td>1.757</td>
<td>0.079</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Figure 5: Structural model