



FACTORS INFLUENCING CAREER CONTINUUM OF IT EMPLOYEES

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Abstract

This article focuses on identifying the various forces that influences the software employees' career decisions in the career continuum. The questionnaire designed by the researcher consists of 42 items under the variable Career Continuum and found out 8 factors. Among all factors, Career Awareness and Networking(25%) is playing major role in assessing Career Continuum, Technical Advancement (10%) is second major factor and career Development(9%) is third major factor. Education, Compensation, Stress are factors with less influence on Career Continuum.

Introduction:

The software employees prefer to choose IT career because of the attraction of the reputation that comes with working for a well recognized company, higher salaries which help in quick financial settlement and career advancement opportunities. However the scope for career advancements narrows down once they reach the mid career stage. Understanding the career issues of IT professionals is important for several reasons as they have a much shorter cycle before their skills become obsolete.

Further the review of literature has shown that there are no studies on the career continuum of software employees in the Indian context. The present work has been taken up to identify the different variables influencing the software employees in their career continuum. According to the Socio-Economic Outlook-2018 of the State government, growth rate in employment generation from the IT sector has been high at 16% from 2014-15 to 2016-17. Telangana's share in the country's IT export is over 10% and Hyderabad ranks second in terms of total revenues from the IT sector in the country. In 2016-17, the total value of software and IT product exports accounted for `85,470 crore.

Career:

A career is the pattern of work –related (Ex. Job positions, job duties, decisions and subjective interpretations about work –related events) and activities over the span of person's **work** life. Protein career theory by Hall 1996: Protein careers are driven by the individual, not the organization, created from individuals' work and non-work goals, and driven by



psychological success rather than attaining objective success through pay, promotion, or power. Boundary-less career theory Arthur and Rousseau 1996: Boundary-less career is a sequence of job opportunities that go beyond the boundaries of a single employment setting. Kaleidoscope career theory by Mainiero and Sullivan 2005: A Kaleidoscope Career is a career created on your own terms, defined not by a corporation but by your own values, life choices, and parameters.

Need for the Study:

A career is an on-going, vital component of our satisfaction and happiness in life however, our professional roles evolve. Career can develop over time to form a continuum of satisfying experiences that will increase your personal sense of accomplishment and well being and enable to realize potential. Understanding the career issues of IT professionals is important for several reasons as they have a much shorter cycle before their skills become obsolete. Globalization, new technologies, industrial restructuring, downsizing, demographic shifts and the emergence of new occupations are all reshaping the careers of individuals. The likelihood of additional upward promotion for software employees is usually quite low which results in career plateau leading to changed career patterns in career continuum. The study focuses in finding the various factors implicit in the career continuum of software employees.

Research Gap:

The IT employees prefer to choose this career because of the attraction of status, the reputation that comes with working for a well-recognized company, financial security and career advancement opportunities. Although the other factors are true there is a little scope for career advancements after they reached to mid-career. The literature review shows very few studies on career success but no studies in the arena of career continuum. The study focuses in identifying the different variables influencing the software employees in performing jobs in their career continuum.

Research problem:

Careers do not just happen in isolation from environmental and personal factors. Every person's career goes through a series of stages. Each of these stages may be influenced by attitudes, motivation, the nature of task, economic conditions and so forth. Every employee must be sensitive to the career cycle and the role that influences can at different stages. Employees must have a clear picture of the opportunities available now and anticipated in the future. The study focuses on identifying the various forces that influences the software employees career decisions in the career continuum.

Review of Literature

Suutar, 2003, the paper concentrated on the cadre of global managers in international positions of various companies the literature of international careers dealt with the



assignments known as once in a lifetime experience as a continuum from the right candidates to repatriating back to home country e of the employee. The authors identified that there was less interest and attention on so called global managers committed to international careers over a long period of time. The study concentrated on career tracks, career orientation, lifestyle implications and career commitment of global managers the results of the study indicated that it managers were originally interested in international career typically studying between home country and position abroad working for one or the other international assignments. The study resulted in the positive implications compared to negative implications with career for both managers and their families.

Sandra Slaughter, 2001, Prior research on the Information Technology (IT) profession reflects two conflicting schools of thought. Some consider IT an occupational labor market (OLM) where careers comprise sequences of jobs within IT, while others view IT as a boundary less profession where careers include job moves into and out of IT. However, there has been relatively little empirical support for either view of IT. The authors analyzed the structure of career in IT and tested to know whether IT is boundary less profession or occupational labor market (OLM). The study covered Career histories from 1979-1998 for 412 IT professionals from 1979 in National Longitudinal Survey of Youth (NLSY) dataset. The article examined the study using Optimal Matching Techniques in Crustal for job moves in individuals. The study reveals that occupational orientation of professionals in IT sector is different from individuals in their career in IT. The findings of the study reveal that 75% primarily take sequence of IT jobs, whereas 80% of them move in and out of the IT area. Further the study indicated that IT is characterized as both boundary less profession and OLMs. Finally concluded that professional in non IT are like boundary less profession and professionals who start career in core IT are OLMs suggesting a future research for IT professionals between these different structures of IT career.

Nigel Nicholson, 1996, The paper highlighted the model for career that is changing according to traditional aspects were both the models have different elements and set for present and past realities. The study identified the factors influencing change in organizational trends on psychological aspects resulting in dislocation of opportunities, mechanisms and people to connect them. Therefore career development will occur in every form of organization being models at same place. The authors highlighted various forms of decision-making and information exchange to assist the people at organizations with cross boundaries of organizational occupations and communities.

Rose Mary Wentling, Steve Thomas 2007, The authors have thrown light on women career development at executive levels in IT using qualitative research design. With the help of semi-structured telephone interviews with 25 women groups in US the study was conducted. The role and perception of women executives in the technical areas of IT was identified. The study analyzed career paths and their educational aspects that made women

reach such executive level also highlights about the entry of women in field of IT and their experiences in such field. Further the study also listed the barriers that assisted in achieving such executive level positions of women as well as a detailed view of opportunities and challenges of women in such educational programs and walked ahead towards the ladder of career for position in such executive level.

Joia, L. A., and Mangia, U., 2017, The study highlights that as organizations are investing in IT the concern for personnel management has been high including retaining, hiring and training of such professionals dealing with investment. The paper has pointed two aspects about IT professionals first being 'turnover' i.e, change of job but being in the same area and second one 'turnaway' i.e professionals leaving IT area assuming a place other area in same company or other company for having a better managerial position. The authors have also stated about turn away of IT professionals in Brazil reinforced by the deficiency of trained IT professionals to be part of such sector in India. Using structural equation modeling research hypotheses related to IT professional turn away phenomenon was tested. Finally the paper concluded that professional growth and conscious managerial capacity; experience to be attracted in the job market; job dissatisfaction for career transition are the antecedents of IT professionals and other functional areas.

Objectives of the study:

The primary objective of the study is to extract the variables impacting the career continuum of the employees of software industry.

Research methodology:

The target population will be confined to IT employees who are working in various levels in select IT Organization located and operating in the Hyderabad and Bangalore. These IT companies are selected based on the NASSCOM survey for the year 2015-16. The organizations which have completed at least 10 years of operations will be chosen as a criteria , as only such organizations would have defined and standardized the Career Path for their employees. A Convenience sampling technique is used for selection of employees for the study among the IT Companies which are located in Hyderabad and Bangalore. The research will be employing survey method to get responses in a 5-point Likert attitude scale. The data is collected using questionnaires and interviews of the selected sample of Software Industry employees. The secondary data includes extracts from literature, various case studies, libraries from different IT Organizations, libraries associated with various universities, articles published in related Journals and Internet Sources.

The study is proposed to collect the data from a sample of about 200 employees working in **select** Software Companies. The sample covers both the genders and all age groups which fulfill the criteria identified. The period of the study for **primary information** will be collected during **2018-19**. A structured questionnaire given to the employees of the

selected IT companies for primary data collection. The questionnaire is developed by the researcher and been tested for the reliability and validity is confirmed with the professionals.

The questionnaire used in the survey consisted of two sections. The first section was the demographic information of respondents namely Gender, Age, Educational qualification, Marital status, Spouse profession, Total years of experience, Years of experience with present employer, Approximate no of promotions attained in entire career, Approximate number of technologies/ platforms worked and Reasons for choosing shift in technologies . The second section, including 42 statements, was designed to measure the impact on career continuum. This data is analyzed with the help of Factor Analysis and the major factors influencing Career Continuum are identified.

Data Analysis and Interpretation:

The data is tested with KMO and Barlett Sphericity to test the data is reliable for factor analysis test. The value of KMO and Barlett is 0.920, signifies that the data can be used for factor analysis.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.920
Bartlett's Test of Sphericity	Approx. Chi-Square	4812.203
	Degree of Freedom	861
	Significance	0.000

The table of Communalities shows the initial and extracted Eigen values.

Communalities	Initial	Extraction
1. My graduation /post graduation is the base for choosing employment in Software Industry	1.000	0.644
2. After completion of study, I learnt new courses to enter Software Industry	1.000	0.682
3. I have good knowledge of job market	1.000	0.669
4. I have lot of knowledge about the current workforce availability	1.000	0.701
5. I have many skills that I could use in a range of different occupations	1.000	0.838
6. Besides pure expert knowledge, I possess many skills and competencies that are important in different jobs	1.000	0.745
7. I have a good employment opportunity in my domain	1.000	0.781
8. If I leave the job here, I can get the job immediately without learning any new course	1.000	0.713



9. My organization offers interesting career advancement opportunities for me	1.000	0.834
10. My organization holds many interesting positions for my future career	1.000	0.813
11. I always try to be well connected in my professional field	1.000	0.768
12. I frequently build contacts with other people who are important for my career development	1.000	0.762
13. My organization actively supports my career development	1.000	0.803
14. I feel fully supported in my career development by my current employer	1.000	0.779
15. My work allows me to fully utilize my professional skills	1.000	0.752
16. My work helps me to increase my skills	1.000	0.827
17. My work is a central part of my identity	1.000	0.768
18. I feel strongly attached to my work	1.000	0.800
19. I am getting fair compensation and it reflects my performance.	1.000	0.791
20. I have satisfied growth in my earnings.	1.000	0.817
21. I have a clear understanding of what I want to achieve in my career	1.000	0.750
22. I have clear career goals that reflect my personal interests and values	1.000	0.819
23. I am capable of managing my career	1.000	0.830
24. When I set goals for my career, I am confident that I can achieve them and face the challenges	1.000	0.834
25. Others see me as an expert in my occupation	1.000	0.749
26. I possess profound knowledge in my occupation	1.000	0.757
27. I constantly stay up-to-date about employment opportunities in the job market	1.000	0.588
28. I use every opportunity to expand my professional knowledge	1.000	0.748
29. I continuously develop my work-related abilities	1.000	0.803
30. I make sure that my work-related abilities and knowledge are up-to-date	1.000	0.803
31. Rapid technological advancements affect my job avenues	1.000	0.782
32. I must learn new advancements continuously to exist in this career	1.000	0.761
33. My co-workers support me in my career development	1.000	0.704
34. My work schedules are very convenient to me	1.000	0.747
35. I often feel excessive levels of stress at work	1.000	0.719
36. I suspect that I will lose my job in the near future	1.000	0.735
37. I am satisfied with my life	1.000	0.704
38. I sleep for 6 hrs in a day continuously	1.000	0.655
39. I can spend sufficient time to take care of my children and parents	1.000	0.676

40. I come home from work too tired to do the chores which need to be done	1.000	0.717
41. I know near and dear who support me in my career development	1.000	0.725
42. I receive a high level of career support from my social environment	1.000	0.725
<i>Extraction Method: Principal Component Analysis.</i>		

The total variance table identifies eight factors that explain about 75% of career Continuum. Further these variables are rotated to see the convergence.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	21.132	50.315	50.315	21.132	50.315	50.315	10.714	25.509	25.509
2	2.581	6.146	56.461	2.581	6.146	56.461	4.571	10.883	36.392
3	1.929	4.592	61.053	1.929	4.592	61.053	4.115	9.798	46.190
4	1.411	3.358	64.411	1.411	3.358	64.411	3.085	7.346	53.536
5	1.257	2.994	67.405	1.257	2.994	67.405	2.850	6.786	60.323
6	1.204	2.867	70.272	1.204	2.867	70.272	2.503	5.960	66.282
7	1.084	2.582	72.854	1.084	2.582	72.854	1.988	4.733	71.016
8	1.018	2.423	75.277	1.018	2.423	75.277	1.790	4.262	75.277
9	0.934	2.223	77.500						
10	0.750	1.785	79.285						
11	0.688	1.637	80.922						
12	0.659	1.568	82.491						
13	0.609	1.451	83.941						
14	0.519	1.236	85.177						
15	0.506	1.204	86.382						
16	0.474	1.129	87.510						
17	0.456	1.086	88.596						
18	0.392	0.933	89.529						
19	0.363	0.864	90.393						
20	0.345	0.823	91.216						
21	0.325	0.774	91.990						
22	0.311	0.740	92.730						
23	0.303	0.722	93.452						

24	0.282	0.671	94.123						
25	0.277	0.660	94.783						
26	0.235	0.559	95.342						
27	0.224	0.534	95.875						
28	0.209	0.498	96.373						
29	0.189	0.450	96.823						
30	0.179	0.425	97.249						
31	0.167	0.397	97.646						
32	0.161	0.382	98.028						
33	0.143	0.340	98.368						
34	0.121	0.288	98.656						
35	0.109	0.260	98.916						
36	0.096	0.229	99.145						
37	0.084	0.199	99.344						
38	0.076	0.181	99.525						
39	0.067	0.160	99.685						
40	0.049	0.117	99.802						
41	0.046	0.110	99.912						
42	0.037	0.088	100.000						

Extraction Method: Principal Component Analysis.

The Component Matrix shows which item (question) is falling under which Component (Factor).

Component Matrix ^a	Component							
	1	2	3	4	5	6	7	8
1. My graduation /post graduation is the base for choosing employment in Software Industry	0.555							
2. After completion of study, I learnt new courses to enter Software Industry				0.523	0.512			
3. I have good knowledge of job market	0.703							
4. I have lot of knowledge about the current workforce availability	0.719							
5. I have many skills that I could use in a range of different occupations	0.626							
6. Besides pure expert knowledge, I possess many skills and competencies that are important in different jobs	0.668							
7. I have a good employment opportunity in my domain	0.861							



8. If I leave the job here, I can get the job immediately without learning any new course	0.742							
9. My organization offers interesting career advancement opportunities for me	0.640	0.517						
10. My organization holds many interesting positions for my future career	0.665	0.532						
11. I always try to be well connected in my professional field	0.815							
12. I frequently build contacts with other people who are important for my career development	0.809							
13. My organization actively supports my career development	0.777							
14. I feel fully supported in my career development by my current employer	0.784							
15. My work allows me to fully utilize my professional skills	0.804							
16. My work helps me to increase my skills	0.825							
17. My work is a central part of my identity	0.806							
18. I feel strongly attached to my work	0.795							
19. I am getting fair compensation and it reflects my performance.	0.639							
20. I have satisfied growth in my earnings.	0.653							
21. I have a clear understanding of what I want to achieve in my career	0.798							
22. I have clear career goals that reflect my personal interests and values	0.827							
23. I am capable of managing my career	0.845							
24. When I set goals for my career, I am confident that I can achieve them and face the challenges	0.859							
25. Others see me as an expert in my occupation	0.798							
26. I possess profound knowledge in my occupation	0.835							
27. I constantly stay up-to-date about employment opportunities in the job market	0.688							
28. I use every opportunity to expand my professional knowledge	0.776							
29. I continuously develop my work-related abilities	0.804							
30. I make sure that my work-related abilities and knowledge are up-to-date	0.778							
31. Rapid technological advancements affect my job avenues	0.572	0.530						



32. I must learn new advancements continuously to exist in this career	0.676								
33. My co-workers support me in my career development	0.672								
34. My work schedules are very convenient to me	0.701								
35. I often feel excessive levels of stress at work		0.589							
36. I suspect that I will lose my job in the near future		0.757							
37. I am satisfied with my life	0.753								
38. I sleep for 6 hrs in a day continuously	0.611								
39. I can spend sufficient time to take care of my children and parents	0.572								
40. I come home from work too tired to do the chores which need to be done		0.643							
41. I know near and dear who support me in my career development	0.724								
42. I receive a high level of career support from my social environment	0.705								
Extraction Method: Principal Component Analysis.									
a. 8 components extracted.									

Rotated Component Matrix^a									
	Component								
	1	2	3	4	5	6	7	8	
3. I have good knowledge of job market	0.513								
7. I have a good employment opportunity in my domain	0.581								
8. If I leave the job here, I can get the job immediately without learning any new course	0.666								
11. I always try to be well connected in my professional field	0.738								
12. I frequently build contacts with other people who are important for my career development	0.725								
15. My work allows me to fully utilize my professional skills	0.668								
16. My work helps me to increase my skills	0.724								
17. My work is a central part of my identity	0.721								



18. I feel strongly attached to my work	0.797						
21. I have a clear understanding of what I want to achieve in my career	0.741						
22. I have clear career goals that reflect my personal interests and values	0.752						
23. I am capable of managing my career	0.793						
24. When I set goals for my career, I am confident that I can achieve them and face the challenges	0.740						
25. Others see me as an expert in my occupation	0.552						
26. I possess profound knowledge in my occupation	0.583						
37. I am satisfied with my life	0.526						
41. I know near and dear who support me in my career development	0.586						
42. I receive a high level of career support from my social environment	0.535						
28. I use every opportunity to expand my professional knowledge		0.553					
29. I continuously develop my work-related abilities		0.656					
30. I make sure that my work-related abilities and knowledge are up-to-date		0.692					
31. Rapid technological advancements affect my job avenues		0.777					
32. I must learn new advancements continuously to exist in this career		0.644					
33. My co-workers support me in my career development		0.575					
9. My organization offers interesting career advancement opportunities for me			0.832				
10. My organization holds many interesting positions for my future career			0.765				
13. My organization actively supports my career development			0.663				
14. I feel fully supported in my career development by my current employer			0.622				
4. I have lot of knowledge about the current workforce availability				0.571			

5. I have many skills that I could use in a range of different occupations				0.809				
6. Besides pure expert knowledge, I possess many skills and competencies that are important in different jobs				0.685				
34. My work schedules are very convenient to me				0.566				
38. I sleep for 6 hrs in a day continuously				0.660				
39. I can spend sufficient time to take care of my children and parents				0.681				
35. I often feel excessive levels of stress at work					0.691			
36. I suspect that I will lose my job in the near future					0.764			
40. I come home from work too tired to do the chores which need to be done					0.728			
19. I am getting fair compensation and it reflects my performance.						0.693		
20. I have satisfied growth in my earnings.						0.714		
1. My graduation /post graduation is the base for choosing employment in Software Industry								0.600
2. After completion of study, I learnt new courses to enter Software Industry								0.796
Extraction Method: Principal Component Analysis.								
Rotation Method: Varimax with Kaiser Normalization.								
a. Rotation converged in 8 iterations.								

The rotated Component matrix clearly shows the item (question) is falling under which Component (Factor). The variables are named after reviewing the items in the questionnaire. Based on the above table the factors identified are as follows. Among these variables Career Awareness and Networking (25%) is playing major role in assessing Career Continuum, Technical Advancement (10%) is second major factor and career Development (9%) is third major factor. Education, Compensation, Stress are factors with less influence on Career Continuum.

1. Career Awareness and Networking
2. Technical Advancement
3. Career Development
4. Multi skilled work force

5. Work schedules
6. Stress
7. Compensation
8. Education/Skill

Conclusion:

A career is an on-going, vital component of our satisfaction and happiness in life however, our professional roles evolve. Career can develop over time to form a continuum of satisfying experiences that will increase your personal sense of accomplishment and well being and enable to realize potential. Understanding the career issues of IT professionals is important for several reasons as they have a much shorter cycle before their skills become obsolete. The paper attempted to study the perceptions of IT employees towards Career Continuum.

The questionnaire designed by the researcher consists of 42 items under the variable Career Continuum and found out that there are 8 factors which influence the variable Career Continuum. Among these variables Career Awareness and Networking(25%) is playing major role in assessing Career Continuum, Technical Advancement (10%) is second major factor and career Development(9%) is third major factor. Education, Compensation, Stress are factors with less influence on Career Continuum.

Limitations of Study:

The study is based on the sample of 200 respondents chosen from Hyderabad and Bangalore. Hence this study will have limitation of generalization to the whole population. The error of in-articulation of feelings expressed by respondents may affect the analysis. Further the researches should study the relationship of Career Continuum with all the factors identified.

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