A Study of Association of Demographics with the Awareness About Innovation Management of Employees Working in Various It Companies: With Reference to Employees of It Companies Located in Pune Region of Maharashtra District

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Abstract

In IT companies, various techniques are used to create awareness about innovation management amongst the employees working at different levels. The main objectives of the study are to understand the demographic profile of the employees working in It companies located in Pune and to understand whether there is any association between the demographics and awareness about the innovation management. Chi square test revealed that there is no association between demographic profile of respondents and awareness about innovation management.

Introduction

Software Industry has observed paradigm shift in their working style for last two decades. With various tools and techniques to share the information, databases and maintain a centralized database at a low cost, it has facilitated various IT companies to take benefit of innovation management. This has kicked off IT industry in India way back.

Literature Review

Over the last decades, there has been growing interest to do research on innovation management as many authors been discussing an immediate effect on competitive edge of companies worldwide (Albach,1989;Wheelwrite and Clark, 1992; Cooper,2001).Innovation management depends on specific contextual fators that will guide the flexibility of strategic choices according to current demand patterns(Ortt & Van der Duin, 2008)Also, there is a need to bring break-through innovations to market before competitors do(Crawford, 1997; Lu thje,2007).

Research Objectives

1. To understand the demographic profile of employees working in IT companies located in Pune region of Maharashtra state.
2. To understand the association between demographics and awareness about innovation management.

Research Methodology

The study is based on the primary data collected through a structured questionnaire from employees of IT companies working in Pune region of Maharashtra state. Random sampling method was adopted for identifying 300 sample respondents from various parts of Pune region. Chi square test is used to for checking association of demographics with awareness about innovation management.

Hypothesis

H01: -There is no significant association between gender and awareness about innovation management

H02: -There is no significant association between age and awareness about innovation management

H03: -There is no significant association between monthly income and awareness about innovation management

H04: -There is no significant association between Experience and innovation management

Data Analysis, hypothesis testing and Interpretation

H01: -There is no significant relation between gender and awareness about innovation management

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * Awareness	300	100.0%	0	0.0%	300	100.0%

Gender * Awareness Crosstabulation

			Awareness		Total
			Yes	No	
Gender	Male	Count	82	85	167
		% within Gender	49.1%	50.9%	100.0%
		% within Awareness	61.2%	51.2%	55.7%
		% of Total	27.3%	28.3%	55.7%
	Female	Count	52	81	133
		% within Gender	39.1%	60.9%	100.0%
		% within Awareness	38.8%	48.8%	44.3%
		% of Total	17.3%	27.0%	44.3%
Total		Count	134	166	300
		% within Gender	44.7%	55.3%	100.0%
		% within Awareness	100.0%	100.0%	100.0%
		% of Total	44.7%	55.3%	100.0%

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.998[a]	1	.083		
Continuity Correction[b]	2.607	1	.106		
Likelihood Ratio	3.008	1	.083		
Fisher's Exact Test				.102	.053
Linear-by-Linear Association	2.988	1	.084		
N of Valid Cases	300				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 59.41.

b. Computed only for a 2x2 table

Pearson Chi square value of 2.998 and p>0.05 shows that there is no statistically significant association between gender and Innovation management

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.100	.083
	Cramer's V	.100	.083
N of Valid Cases		300	

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.

H 02:-There is no significant association between age and awareness about innovation management

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * Innovation_Awareness	300	100,0%	0	0,0%	300	100,0%

Age * Innovation_Awareness Crosstabulation

			Innovation_Awareness		Total
			Yes	No	
Age	Betwen 20 to 30	Count	57	38	95
		% within Age	60,0%	40,0%	100,0%
		% within Innovation_Awareness	28,4%	38,4%	31,7%
		% of Total	19,0%	12,7%	31,7%
	Between 31 to 40	Count	107	39	146
		% within Age	73,3%	26,7%	100,0%
		% within Innovation_Awareness	53,2%	39,4%	48,7%
		% of Total	35,7%	13,0%	48,7%
	Betwen 41 to 50	Count	27	20	47
		% within Age	57,4%	42,6%	100,0%
		% within Innovation_Awareness	13,4%	20,2%	15,7%
		% of Total	9,0%	6,7%	15,7%
	Above 51	Count	10	2	12
		% within Age	83,3%	16,7%	100,0%
		% within Innovation_Awareness	5,0%	2,0%	4,0%
		% of Total	3,3%	0,7%	4,0%
Total		Count	201	99	300
		% within Age	67,0%	33,0%	100,0%
		% within Innovation_Awareness	100,0%	100,0%	100,0%
		% of Total	67,0%	33,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8,104[a]	3	,044

Likelihood Ratio	8,242	3	,041
Linear-by-Linear Association	,886	1	,347
N of Valid Cases	300		

a. 1 cells (12,5%) have expected count less than 5. The minimum expected count is 3,96.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,164	,044
	Cramer's V	,164	,044
N of Valid Cases		300	

Pearson Chi square value of 8.104 and p>0.05 shows that there is no statistically significant association between age and awareness about Innovation management

H03:-There is no significant association between monthly income and awareness about innovation management

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Monthly_Income * Innovation_Awareness	300	100,0%	0	0,0%	300	100,0%

Monthly_Income * Innovation_Awareness Crosstabulation

			Innovation_Awareness		Total
			Yes	No	
Monthly_Income	Upto 30000	Count	23	26	49
		% within Monthly_Income	46,9%	53,1%	100,0%
		% within Innovation_Awareness	13,2%	20,6%	16,3%
		% of Total	7,7%	8,7%	16,3%
	Between 30000 to 50000	Count	78	53	131
		% within Monthly_Income	59,5%	40,5%	100,0%
		% within Innovation_Awareness	44,8%	42,1%	43,7%
		% of Total	26,0%	17,7%	43,7%
	Between 50000 to 70000	Count	64	34	98
		% within Monthly_Income	65,3%	34,7%	100,0%
		% within Innovation_Awareness	36,8%	27,0%	32,7%
		% of Total	21,3%	11,3%	32,7%
	Above 70000	Count	9	13	22
		% within Monthly_Income	40,9%	59,1%	100,0%
		% within Innovation_Awareness	5,2%	10,3%	7,3%
		% of Total	3,0%	4,3%	7,3%
Total		Count	174	126	300
		% within Monthly_Income	58,0%	42,0%	100,0%
		% within Innovation_Awareness	100,0%	100,0%	100,0%
		% of Total	58,0%	42,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7,374[a]	3	,061
Likelihood Ratio	7,335	3	,062
Linear-by-Linear Association	,508	1	,476
N of Valid Cases	300		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 9,24.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,157	,061
	Cramer's V	,157	,061
N of Valid Cases		300	

Pearson Chi square value of 7.374 and p>0.05 shows that there is no statistically significant association between Monthly income and awareness about Innovation management

H04:-There is no significant association between Experience and awareness about innovation management

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Experience * Innovation_Awareness	300	100,0%	0	0,0%	300	100,0%

Experience * Innovation_Awareness Crosstabulation

			Innovation_Awareness		Total
			Yes	No	
Experience	Basic	Count	28	35	63
		% within Experience	44,4%	55,6%	100,0%
		% within Innovation_Awareness	16,1%	27,8%	21,0%
		% of Total	9,3%	11,7%	21,0%
	Moderate	Count	80	57	137
		% within Experience	58,4%	41,6%	100,0%
		% within Innovation_Awareness	46,0%	45,2%	45,7%
		% of Total	26,7%	19,0%	45,7%
	Advanced	Count	66	34	100
		% within Experience	66,0%	34,0%	100,0%
		% within Innovation_Awareness	37,9%	27,0%	33,3%
		% of Total	22,0%	11,3%	33,3%
Total		Count	174	126	300
		% within Experience	58,0%	42,0%	100,0%

	% within Innovation_Awareness	100,0%	100,0%	100,0%
	% of Total	58,0%	42,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7,388[a]	2	,025
Likelihood Ratio	7,368	2	,025
Linear-by-Linear Association	7,065	1	,008
N of Valid Cases	300		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 26,46.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,157	,025
	Cramer's V	,157	,025
N of Valid Cases		300	

Pearson Chi square value of 7.388 and $p>0.05$ shows that there is no statistically significant association between experience and awareness about innovation management

Conclusion

Based on the survey results and analysis, it is found that there is no association between demographic profile of the employees working in IT companies located in Pune region of Maharashtra state and awareness about innovation management.

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