



Research Article

KNOWLEDGE TRANSFER MODEL CATEGORIZATION IN KPO INDUSTRY IN MIDDLE LEVEL CITIES

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ABSTRACT

KPO is the method of outsourcing with the knowledge and information related work is carried out by workers in different company or subsidiary of the same organization. This subsidiary may be in the same country or an offshore location to save costs with other resources. Categories resort to knowledge process outsourcing when they have a shortage of skilled professional and have opportunity to hire the skilled workers earning lower wages in another location for lower overall cost. KPO has been divided into three categories like Low, Medium, High. In this paper we are going to discuss how the knowledge transfer is going to happen in the knowledge Process outsourcing.

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INTRODUCTION

Background

Organizations indulge nowadays in alliances, collaborations and partnerships. All this require transfer of knowledge, especially, knowledge related to strategies, technologies and best practices to improve the network cooperation. Research studies attempt to obtain inferences from these transfer processes so as to understand more about the characteristics of knowledge transfer.

Although the influence of knowledge characteristics has been widely acknowledged, relevant empirical research is quite absent. Because it is rather difficult to quantify the variable of knowledge characteristics and knowledge transfer efficiency, also relevant data collection can't do without making an effort. On considering the above situation, this paper aims to make deep analyze on knowledge characteristics' effect on knowledge transfer efficiency empirically.

LITERATURE REVIEW

A. Relevant research on knowledge characteristics Simonin (1999) pointed out that knowledge ambiguity would remarkably affect knowledge transfer process, and knowledge ambiguity mainly derives from knowledge tacit, specific and complex.

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Tacitness

Polanyi(1967) named tacit to be "can't speak out what you know," Reed & DeFillippi (1990) argued that Knowledge tacit expressed as difficult to acknowledge and specific, which would be connected with specific context, such as the accumulation of skills need to be learn by doing, and the close communication is necessary. Simonin (1999) drew the conclusion that there exist positive correlation between the degree of knowledge tacit and knowledge ambiguity.

Complexity

Reed & Defillippi (1990) argued that the degree of Knowledge complexity can be expressed by the number of tools and routines used in the process of knowledge transfer,. Arogote & Ingram (2000) maintained that knowledge mainly transferred with the aid of specific carriers, complex carriers used to transfer more complex knowledge. Cummings (2001) also pointed that the efficiency of knowledge transfer depended on the choice of adept knowledge carrier tools, including network and routines.

Specificity

If the value of capital would decrease when it is used for Other purpose, we can say it has a certain degree of Specificity. As to knowledge transfer, the characteristics of specificity would exert influence on knowledge transfer Efficiency. For instance, local knowledge is tightly connected with local experiences and culture, which would difficult to transplant to other environment, thus would serves as barriers to transfer.

Purpose of the study

The structural model can be divided into structural equation and measurement equation, in which structural equation reflects the relationship among latent variables, measurement equation reflects the relationship between latent variable and indexes. The proposed structural equation model is presented in the following figure. The model establishes the causal-effect relationship between latent variables and tourist loyalty.

Releated Work

In this paper we discuss about the semantics of the intrinsic fuzzy cubic representation

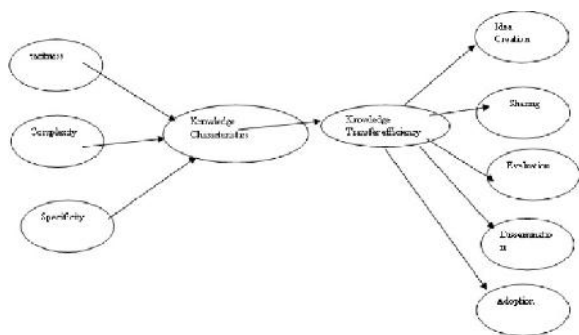


Fig 1

Consider this example we have designed the table with the relationship and this relationship which will give the knowledge transfer efficiency modeling In this model the knowledge transfer can be divided into the five categories like idea creation, sharing, evulation, dissemination, adoption

Table 1 Hypothesis for Knowledge characteristics

Serial Number	Hypothesis
H1	Knowledge characteristics exert distinct effect on Knowledge transfer efficiency.
H2	Tacitness was a distinct characteristics in the knowledge transfer process
H3	Complexity was a distinct characteristics in the knowledge transfer process
H4	Specificity was a distinct characteristics in the process of knowledge transfer process

According to the above structural relationship and relevant analysis, we bring forward the following research hypotheses

Experimental Design

In this table 1-2 shows the dataset will give the six knowledge category matrix KC1,KC2,KC3,KC4,KC5,KC6 three base relationships like complexity,specificity,tactiness accordingly

METHODOLOGY

Linear Forward selection

In this approach the linear selection of the data will be given in the table the average complexity and tacitness will give the 30% yielding with the average validation.

Table 2 Dataset for the Knowledge Characteristics

Knowledgecharectris	Tacitness	AveTacitness	Complexity	Ave Complexi	Specificity	Ave Specificity	Quality
KC1	1201	19.06349206	10	0.158730159	361	5.73015873	medium
KC2	1053	16.71428571	11	0.174603175	338	5.365079365	bad
KC3	1133	17.98412698	19	0.301587302	393	6.238095238	medium
KC4	970	15.3968254	4	0.063492063	467	7.412698413	bad
KC5	1258	19.96825397	36	0.571428571	294	4.666666667	good
KC6	1386	22	35	0.555555556	225	3.571428571	good
KC6	966	15.33333333	13	0.206349206	417	6.619047619	bad
KC6	1189	18.87301587	12	0.19047619	488	7.746031746	bad
KC3	1103	17.50793651	14	0.222222222	677	10.74603175	bad
KC4	1310	20.79365079	29	0.46031746	427	6.777777778	medium
KC5	1362	21.61904762	25	0.396825397	326	5.174603175	good
KC3	1171	18.58730159	28	0.444444444	326	5.174603175	bad
KC4	1102	17.49206349	9	0.142857143	349	5.53968254	bad
KC5	1424	22.6031746	21	0.333333333	382	6.063492063	good
KC1	1230	19.52380952	16	0.253968254	275	4.365079365	medium
KC2	1285	20.3968254	9	0.142857143	303	4.80952381	medium
KC3	1329	21.0952381	11	0.174603175	339	5.380952381	medium
KC4	1210	19.20634921	15	0.238095238	536	8.507936508	bad
KC5	1331	21.12698413	21	0.333333333	414	6.571428571	medium
KC5	1366	21.68253968	24	0.380952381	282	4.476190476	good
KC6	1289	20.46031746	17	0.26984127	302	4.793650794	medium
KC6	1444	22.92063492	25	0.396825397	253	4.015873016	good
KC6	1175	18.65079365	12	0.19047619	261	4.142857143	medium
KC3	1317	20.9047619	42	0.666666667	259	4.111111111	good
KC5	1248	19.80952381	11	0.174603175	315	5	medium
KC6	1508	23.93650794	43	0.682539683	286	4.53968254	good
KC6	1361	21.6031746	26	0.412698413	346	5.492063492	medium
KC6	1186	18.82539683	14	0.222222222	443	7.031746032	bad
KC3	1399	22.20634921	24	0.380952381	306	4.857142857	good
KC3	1259	19.98412698	20	0.317460317	367	5.825396825	good
KC4	1164	18.47619048	6	0.095238095	311	4.936507937	bad
KC3	1277	20.26984127	19	0.301587302	375	5.952380952	good
KC4	1195	18.96825397	5	0.079365079	441	7	bad
KC3	1208	19.17460317	14	0.222222222	371	5.888888889	bad
KC6	1399	22.20634921	26	0.412698413	346	5.492063492	good
KC3	1259	19.98412698	14	0.222222222	443	7.031746032	bad
KC3	1164	18.47619048	24	0.380952381	306	4.857142857	bad
KC6	1277	20.26984127	20	0.317460317	367	5.825396825	bad
KC6	1195	18.96825397	6	0.095238095	311	4.936507937	medium
KC4	1399	22.20634921	26	0.412698413	427	6.777777778	good
KC3	1259	19.98412698	14	0.222222222	326	5.174603175	medium
KC6	1164	18.47619048	24	0.380952381	326	5.174603175	good
KC3	1277	20.26984127	20	0.317460317	349	5.53968254	medium
KC3	1195	18.96825397	6	0.095238095	382	6.063492063	bad
KC4	1053	16.71428571	36	0.571428571	275	4.365079365	medium
KC3	1133	17.98412698	35	0.555555556	303	4.80952381	good
KC4	970	15.3968254	13	0.206349206	339	5.380952381	medium
KC3	1258	19.96825397	12	0.19047619	536	8.507936508	good
KC6	1386	22	35	0.555555556	261	4.142857143	medium
KC3	1053	16.71428571	29	0.46031746	282	4.476190476	bad
KC3	1133	17.98412698	25	0.396825397	302	4.793650794	medium
KC4	970	15.3968254	36	0.571428571	253	4.015873016	good
KC3	1258	19.96825397	35	0.555555556	261	4.142857143	medium
KC4	1386	22	13	0.206349206	259	4.111111111	good
KC3	1053	16.71428571	12	0.19047619	326	5.174603175	medium
KC6	1133	17.98412698	14	0.222222222	349	5.53968254	bad
KC3	970	15.3968254	29	0.46031746	382	6.063492063	medium
KC3	1258	19.96825397	25	0.396825397	275	4.365079365	good
KC4	1386	22	36	0.571428571	303	4.80952381	medium
KC3	1053	16.71428571	35	0.555555556	339	5.380952381	good
KC4	1133	17.98412698	13	0.206349206	536	8.507936508	medium
KC3	970	15.3968254	12	0.19047619	414	6.571428571	good

Table 3

= Attribute selection 10 fold cross-validation (stratified), seed: 1 ===
 number of folds (%) attribute
 8(80 %) 1 Knowledgecharectrisics
 5(50 %) 2 Tacitness
 3(30 %) 3 AveTacitness
 4(40 %) 4 Complexity
 3(30 %) 5 Ave Complexity
 0(0 %) 6 Specificity
 0(0 %) 7 Ave Specificity

Gredy Stepwise

In this approach the linear selection of the data will be given in the table the average complexity and tacitness will give the 40%, 50% yielding with the average validation respectively

Table 4

Attribute selection 10 fold cross-validation (stratified), seed: 1 ===
 number of folds (%) attribute
 6(60 %) 1 Knowledgecharacteristics
 5(50 %) 2 Tacitness
 0(0 %) 3 AveTacitness
 4(40 %) 4 Complexity
 0(0 %) 5 Ave Complexity
 0(0 %) 6 Specificity
 0(0 %) 7 Ave Specificity

In this model we are considering six categorical visualization graph given below

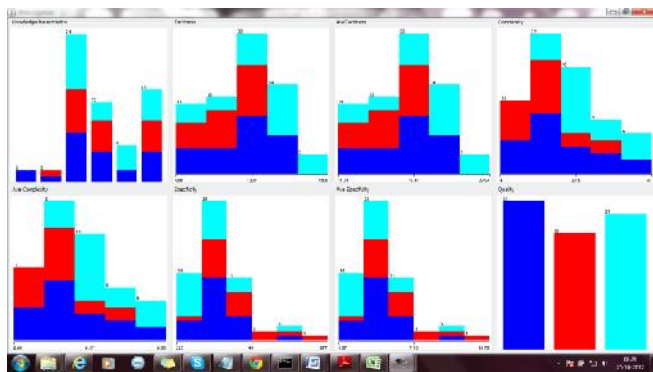


Fig 2

Correctly Classified Instances 5 23.8095 %
 Incorrectly Classified Instances 16 76.1905 %
 Kappa statistic 0
 Mean absolute error 0.4531
 Root mean squared error 0.4856
 Relative absolute error 100 %
 Root relative squared error 100 %
 Total Number of Instances 21
 Ignored Class Unknown Instances 1

TP Rate	FP Rate	Precision	Recall	F-Measure	ROC Area	Class
1	1	0.238	1	0.385	0.5	medium
0	0	0	0	0	0.5	bad
0	0	0	0	0	0.5	good

Weighted Avg.:
 0.238 0.238 0.057 0.238 0.092 0.5

=== Confusion Matrix ===

a b c <-- classified as
 5 0 0 | a = medium
 7 0 0 | b = bad
 9 0 0 | c = good

Analysis and Results

In the classification analysis test result show the three major category is shown the weighted average of the each complexity, specifity, tacitness as well as average for the major role FP Rate and TP Rate and the precision rate is and the F- test can be considered as the first set is the medium classes and the next is bad and the good respectively.

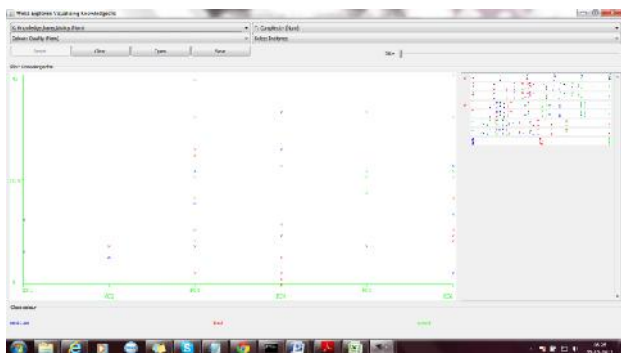


Fig 3 Knowledge Characteristics Plot Matrix

Correct classified responses (23.8%) are low comparatively incorrect responses (76%) is high because the negative responses have in to the picture. The mean squared error and absolute error is closely to the very few instances 0.45 and 0.48 respectively.

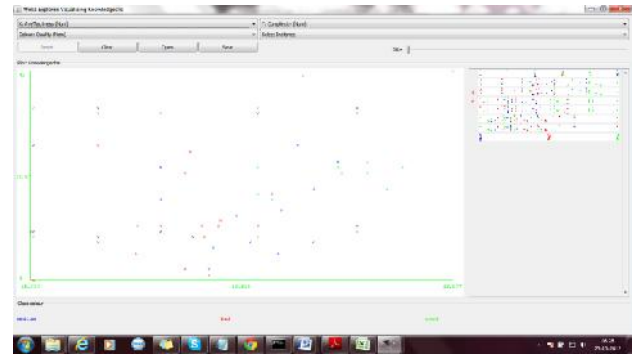


Fig 4 Ave Tacitness Plot Matrix

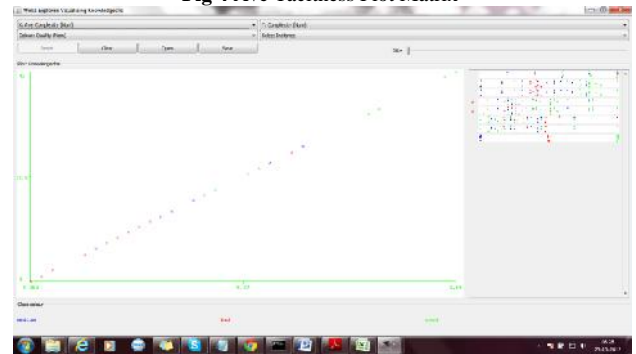


Fig 5 Ave Complexity Plot Matrix

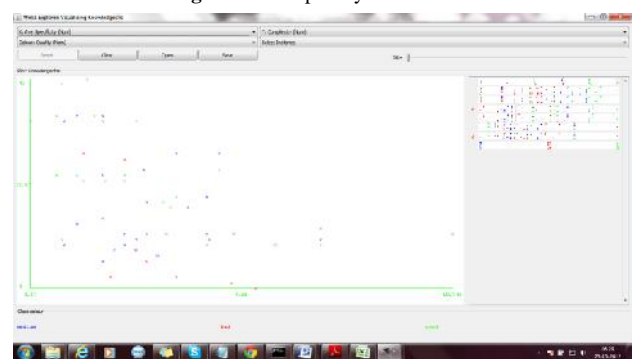


Fig 6 Ave Specificity Plot Matrix

CONCLUSIONS

In this study, we have taken 63 samples taken for the questionnaire survey test data. The data set was loaded into to the Weka 3.6 and the preprocessed data will be transformed into the visualization graph and the three categorical format.

The above presented method has the capability to investigate the knowledge transfer process with the help of the three basic criteria and the idea sharing and the evaluation and the adoption and creation played the major role and the calculation result shows the three major good, bad and medium responses have come in the questionnaire. This result will help to improve how the knowledge transfer and the information will reach to the respondents in the effective way in future.

Future Work

In future the data will be considered for the huge databases like the data warehouse and OLAP in the categorical history or mystery in the database repositories. In these repositories how

the data can be tracked and how data can be transformed and how the results will be published these idea and tactics will be implemented in future.

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