FACTORS AFFECTING POTENTIAL BENEFITS OF WEBSITE REPORTING OF BANKS

[1] Dr. Lalita Kumari
[1] Assistant Professor
[1] Malwa College, Samrala (Ludhiana) Punjab

Abstract : **The subject matter of present paper is to study the Factors Affecting Potential Benefits of Website Reporting of Banks. Initially, an overview of Factors Affecting Potential Benefits of Website Reporting of Banks has been discussed followed by details of the varying behaviour of the stakeholders due to rapidly and swiftly growing need of information technology. Dimensions affecting Potential Benefits of Website Reporting of Banks have also been discussed in the present paper. Furthermore, scales have been developed to measure the Reliability and Validly of the scale.**

IndexTerms- websites, reporting, factors**.**

I. INTRODUCTION

Before existence of internet, traditional banking practices used to handle all the activities of banks. They used to provide information to the stakeholders for various transaction and reporting services. In the past, potential stakeholders (customers) seek information with the help of long print outs which provided extensive quantity of information to potential stakeholders (customers) related to their transactions. But, after the revolution in Information Communication Technology (ICT) has intense implications for social and economic (financial) development. It has made easy each and every sphere of human life whether it is entertainment, education, health, economics, government, medical, etc. The most imperative benefit connected to the new information technologies is the increase in the supply of quality and quantity information (Shanker, 2008). Besides it, nature of banks & their services and modern and well qualified information society made banking demanding from the information viewpoint. According to Shalleh et al. (2002); Pratt (2003) and Quagli and Riva (2005), " Increase management credibility, usefulness for companies to meet the challenges of business globalization, best way for private and foreign shareholders to exercise their voting rights, reduce share volatility, facilities ease and direct access to company's abundance of information and data base by users at low transaction cost, easier & fastest investment decision making process and non-financial information have motivated banking industries to provide online reporting services". Moreover, according to Palmer and McCole, 2000, "websites are becoming increasingly popular as anyone can browse these websites at the convenience of their workplace or homes compare offerings from multiple websites with the click of a mouse button".

The banking industry is one of the basic instruments of Economic Growth. The extent of disclosure adequacy in the banks may be a major determinant of the quality of investment decision making in particular, and economic resource allocation in general. Due to globalisation of banking industry banks now have started providing adequate web based reporting in order to meet the requirements of different stakeholders. Hence, the banks have shifted toward web based mode of reporting and disclosure than visiting banks i.e. web based reporting practices. It can be concluded that the "web based reporting enabling banks to providing best services and becoming their own agents". Therefore, a large number of Indian banks are practically adopting the new ways of reporting. Despite, a large number of Indian people are still using traditional and offline modes of banking services due to some limitations of website reporting of banks. The possible reason behind it may be "due to lack of 'human touch' because online channel cannot provide individual attention to the users. Other reasons for not using web based techniques are lack of experience of using information technology and security reasons etc. (Buhali and Licata, 2002). They prefer to get banking and reporting services through offline modes of banking.

1.2 OBJECTIVES

Thus, present paper is an attempt analyzed the important Factors which Affecting Potential Benefits of Website Reporting of Banks.

1.3 RESEARCH METHODOLOGY

Development, Refinement and Validity of the Scale

In order to study the Factors Affecting Potential Benefits of Website Reporting of Banks scale development procedure was used. The practice of scale development for Factors which Affecting Potential Benefits of Website Reporting of Banks was divided into three parts i.e. item generation, instrument development & refinement and validation. Consequently, an attempt has been made in the present paper to find important factors motivating the stakeholders to go for web based reporting. Firstly, researcher indentifed the dimensions in banking sector for web based reporting of banks. For this, a extensive review of empirical studies was carried out to recognize the scales which determine the concepts of web based reporting of banks. After review of literature, modified research scale was drafted through item generation on the basis of modified research schedule for web based reporting. Exploratory Factor Analysis (EFA) was used on the collected data in order to improve the scale. Following to it, Confirmatory Factor Analysis (CFA) was employed to confirm the strength of the scale. The methodology employed to develop measures recommendations of Churchill (1979) and Hair et al. (1990) was used.

- **Item Generation:** It includes recognizing the definite items which are to be utilized to measure each dimension. A wide literature review was carried out for generation of items. After reviewing the literature, modified scale web based reporting practices were formed. Prior to item generation with the help of extensive review of literature, meetings with bankers, academicians, experts and users also helped to make group of items more valuable. As suggested by Churchill, 1979, to avoid response set bias, items in each subscale were shuffled. Apart from it, a pilot survey was carried out to make a final group of items.

By reviewing the empirical studies and web based scales, a list of 36 statements was made for web based reporting practices in banking sector. The research schedule was refined by using two methods. Firstly content validity was assessed with the help of group of experts (Ko and Pastore, 2005). These experts were managers of various banks and two academicians from Indian Institute of Technology (Roper). Resultant 10 items were eliminated in this process, leaving a group of 26 items for further analysis. Additionally, it is desirable to recognize those items which have low or no relationship with the items of the scale.

II DATA ANALYSIS

Reliability Analysis

Cronbach's alpha was employed to test out the internal consistency of the items of the scale. The Cronbach's alpha scores moves from 0 to 1. A higher value is always desired as it represents that there is internal consistency among the items and scale is reliable. The reliability of each construct was also calculated separately as the web based reporting practices is multi-dimensional. It is recommended (Hair *et al*, 1998) that "for a scale to be reliable the alpha coefficient should be more than 0.7".

Therefore, an item to total correlations and Cronbach alpha (if deleted) analysis was performed to refine the scale. The rule of thumb says that delete the items with correlation value below 0.4 (Bearden, Hardesty and Rose, 2001). The results recommend that the correlation of one item is less than 0.40. The Cronbach's alpha increases by deleting this item, therefore this have been deleted from the scale. The final scale comprises of 25 items for further analysis.

The reliability of "Improvement in quality of information" subscale was found to be the highest (0.776) followed by "better decision making" (0.754), "increased usefulness of information" (0.678), "helps in evaluation" (0.646) and "enhanced competition" (0.630).

Therefore, initial value of Cronbach alpha was was 0.670. After the elimination of one item, Cronbach' alpha was increased from 0.670 to 0.793 shown in Table 1 (Sekaran, 2000). Further 25 items were used to carry factor analysis.

Table 1: Reliability Analysis

Cronbach's Alpha	No. of Items
0.793	24

Source: Calculated through SPSS

According to Hair et al. (1998), "It is necessary before conducting Exploratory Factor Analysis (EFA) to make sure that sufficient variance exists within the variables". The Bartlett test of sphericity and KMO test were employed to verify the correlation among variables and sample adequacy to run Factor Analysis. Kaiser (1974) recommended that "The value of KMO should be greater than 0.5 is acceptable". The findings of Bartlett test of sphericity and KMO have been represented in Table 2. The results of KMO and Bartlett's Test of Sphericity reveals that data is suitable to run Factor Analysis.

Table 2: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.767
Bartlett's Test of Sphericity	Approx. Chi-Square	1891.648
	df	253
	Sig.	0.000

Source: Calculate through SPSS

Principal Component Analysis

Further, Principal Component Analysis of Factor Analysis was used to trim down the 24 items into a fix number of factors and Varimax Rotation Method has also been employed to rotate the factors in the present study. Table 3 shows communalities of different items of the scale. If many or most communalities were less than 3 (< .30), a small sample size was more likely to distort results. Table 3 reveals communalities of different items (statements) of the scale. The extraction communalities were useful as these were obtained using the extracted factors. Hair et al. (1998) explained that "extraction communalities for a variable provide the total amount of variance in that variable, accounted by all the factors. The higher the value of communality for a particular variable after extraction, higher was its amount of variance explained by the extracted factors".

Table 3: Communalities

Items	Initial	Extraction
It provides inexpensive information to users	1.000	0.664
It helps in valuation of corporate securities by providing real time information	1.000	0.581
It makes investment decision making process easier and faster	1.000	0.471
It attracts potential customers	1.000	0.522
It increases the usefulness of financial and business information by way of link of investor relation section to other websites	1.000	0.579

It has the ability to communicate with previously unidentified users of information	1.000	0.737
It is the way for private and foreign shareholders to exercise their voting rights	1.000	0.657
It lowers the barriers for financial statement users	1.000	0.545
It is considered to be the best medium for foreign investors to collect all publically available information	1.000	0.651
It provides up to date information	1.000	0.618
It provides future oriented information	1.000	0.482
It is helpful for making comparison overtime	1.000	0.574
It increases management creditability	1.000	0.536
It improves the access to new capital	1.000	0.480
It reduces share volatility	1.000	0.636
It has the ability to present the information using international standards ,formats and currencies from other countries	1.000	0.560
It facilitates interaction and allows feedback	1.000	0.508
It will improve governance	1.000	0.727
It provides non financial information	1.000	0.645
It will be used by banks to meet the challenges of business globalization	1.000	0.526
It makes the information corrective	1.000	0.762
It allows users more easily to relate financial information to non financial information	1.000	0.700
It improves equality of information access	1.000	0.575
It will make the job of financial analyst easier	1.000	0.698
It increases quality of information	1.000	0.641

Source: Calculated through SPSS; Extraction method: Principal component method

Variance explained

Further, Malhotra (2006) recommended that "the minimum 50% of the variance should be accounted for explaining the variation of factors". In the present study, five factors were responsible for 50.906% variation in the factors (Table 4).

Table 4: Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.428	17.712	17.712	4.428	17.712	17.712	3.583	**14.330**	14.330
2	2.673	10.694	28.406	2.673	10.694	28.406	2.932	**11.728**	26.058
3	2.441	9.764	38.170	2.441	9.764	38.170	2.685	**10.740**	36.798
4	1.754	7.017	45.187	1.754	7.017	45.187	2.003	**8.013**	44.811
5	1.430	5.719	50.906	1.430	5.719	50.906	1.524	**6.095**	50.906

Extraction Method: Principal Component Analysis.Source: Calculated through SPSS

Rotated Component Matrix

While applying Factor Analysis, those items were not considered from the scale which have factor loading below 0.40 (Hair et al., 1998). After running of Factor Analysis, 24 items were reduced to 5 factors. The Varimax Rotated five factor satisfactory and solutions so obtained is represented in the Table 5. Table shows the factor loadings were used to measure the correlation between variables and the factors. Table 5 is showing the loadings of factors taken in the current study.

Table 5: Rotated Component Matrix

Rotated Component Matrix					
	Factors				
	1	2	3	4	5
X19	**.759**	-.066	-.076	-.065	.180
X14	**.659**	-.011	-.108	-.061	.065
X16	**.657**	-.216	-.026	-.020	.283
X4	**.644**	.211	.219	-.050	-.017
X15	**.619**	.256	.259	.259	-.042
X17	**.617**	.067	-.083	-.073	.095
X3	**.582**	-.121	.304	.157	-.023
X23	**.537**	.322	.363	.141	-.054
X24	.123	**.804**	.016	-.096	.049
X25	.013	**.783**	.098	-.010	-.012
X20	-.053	**.691**	-.039	.024	-.202

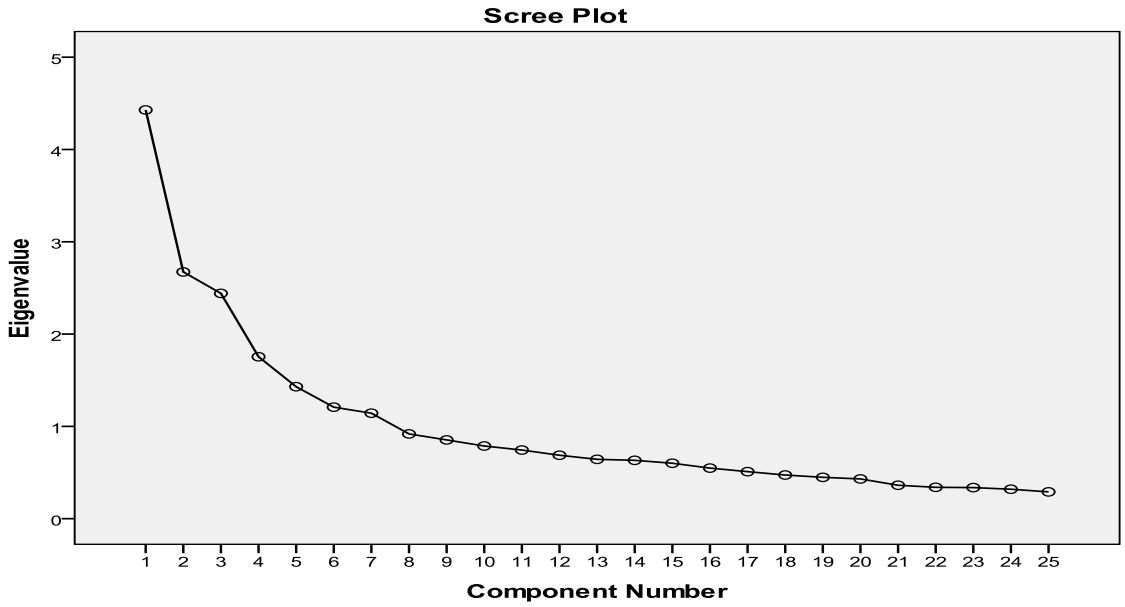
X18	.008	**.620**	-.215	.000	.208
X22	.182	**.602**	.237	.054	-.254
X10	-.006	.032	**.768**	-.009	-.038
X9	.257	.062	**.719**	-.089	.057
X8	.012	.100	**-.709**	.007	-.139
X2	.110	.048	**.628**	-.224	-.160
X21	-.133	-.023	.047	**.770**	.026
X6	-.110	-.176	-.098	**.632**	.127
X12	.248	-.084	-.245	**.477**	-.170
X1	.104	.099	-.088	**.475**	-.198
X11	.130	.172	.242	**.459**	.403
X5	.195	.227	-.199	.363	**.676**
X7	.183	-.123	.128	.063	**.653**
X13	.118	.041	.105	.119	**-.646**

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Source: Calculated through SPSS

Scree Plot: It is a diagrammatically presentation of numbers of factors. In this diagrammatically presentation, Eigen values are shown at y-axis and factors are shown on x-axis. The scree plot with five factors has been shown in Fig 1.

Fig 1: Scree Plot



Source: Calculated through SPSS

III NAMING OF FACTORS

There is no scientific and technical method for naming of extracted factors. It is usually based on the personal view of the researcher. All the factors have been given suitable names according to the variables loaded on to each factor. The summarized results of Factor Analysis have been shown in Table 6.

Factor I : Improvement in quality of information

Table 6 shows that the first dimension, 'Improvement in quality of information', is comprised of eight items relating to the Improvement in quality of information. It explained 14.330% variation in the data, with an Eigen value of 4.428. It contains eight items namely 'It provides inexpensive information to users (0.759)', 'It is considered to be the best medium for foreign investors to collect all publically available information' (0.659)', 'It provides up to date information (0.657)', 'It provides future oriented information (0.644)', 'It has the ability to present the information using international standards ,formats and currencies from other countries' (0.619)' and 'Customers have facility to return to previous pages conveniently (0.617)', It allows users more easily to relate financial information to non financial information (0.582) and It improves equality of information access (0.537). Thus, Improvement in quality of information is considered as the most important dimension in web based reporting. Therefore, quality of information should be continuously Improved and straightforward so that Improvement in quality of information should be easily navigated.. These findings are similar with the findings of Zeithaml *et al.*, (2002).

Factors II: Better decision making

The second dimension, 'Better decision making'explained 11.728% variation in the data, having eigen value of 2.673. It includes five items namely 'It makes investment decision making process easier and faster (0.804)', 'It has the ability to communicate with previously unidentified users of information (0.783)', 'It lowers the barriers for financial statement users' (0.691)', 'It increases management creditability (0.620)' and 'It provides non financial information' (0.602)'. Several scholars (Kim & Lee, 2004 and Lee and Lin, 2005) have identified "Better decision making" as one of the major criteria used by stakeholder in evaluating web based service quality". It shows that users find it easy to use wed based methods of reporting because it provides the latest and reliable contents. Therefore, banks websites are more reliable, accountable, adequate, faster and transparent in comparison to traditional means of reporting.

Factor III Increased usefulness of information

The third factor, 'Increased usefulness of information' was responsible for 10.740% of variation, having eigen value of 2.441. Four items have loaded on this factor such as 'It increases the usefulness of financial and business information by way of link of investor relation section to other websites (0.768)', 'It has the ability to communicate with previously unidentified users of information (0.719)', 'It improves the access to new capital (0.709)' and 'It makes the information corrective (0.628)'. According to Wolfinbarger and Gilly, 2003, "Increased usefulness of information' is a web-based customer support which requires special attention".

Factor IV Helps in evaluation

The fourth dimension 'Helps in evaluation' is a combination of five items. This dimension explains 8.013 of the total variance and 1.754 eigen value. The items were like 'It helps in valuation of corporate securities by providing real time information,(0.770)', 'It reduces share volatility (0.632)', 'It facilitates interaction and allows feedback (0.477)', 'It will improve governance (0.475)'and'It will make the job of financial analyst easier (0.459). This result is similar to the result of Tsang *et al.*, 2010. Sachs and Stair (1997) point out that, "Visitors turn to websites for two reasons: websites either perform a particular function or provide particular content".

Factor V: Enhanced competition

The fifth dimension, 'Enhanced competition', was responsible for 6.095% variation, with an eigen value of 1.430. It includes three items such as 'It attracts potential customers (0.676)', 'It increases management creditability (0.653)'and 'It will be used by banks to meet the challenges of business globalization (0.646)'.

Sr. No.	Factor Name (Variance Explained %)	Statements Included in the Factor	Loading	Percentage of Variance explained	Eigen Value	Cronbach Alpha
F_1	Improvement in quality of information	It provides inexpensive information to users	0.759	14.330	4.428	0.776
		It is considered to be the best medium for foreign investors to collect all publically available information	0.659			
		It provides up to date information	0.657			
		It provides future oriented information	0.644			
		It has the ability to present the information using international standards ,formats and currencies from other countries	0.619			
		Customers have facility to return to previous pages conveniently	0.617			
		It allows users more easily to relate financial information to non financial information	0.582			
		It improves equality of information access	0.537			
F_2	Better decision making	It makes investment decision making process easier and faster	0.804	11.728	2.673	0.754
		It has the ability to communicate with previously unidentified users of information	0.783			
		It lowers the barriers for financial statement users	0.691			
		It increases management creditability	0.620			
		It provides non financial information	0.602			
F3	Increased usefulness of information	It increases the usefulness of financial and business information by way of link of investor relation section to other websites	0.768	10.740	2.441	0.678
		It has the ability to communicate with previously unidentified users of information	0.719			
		It improves the access to new capital	0.709			
		It makes the information corrective	0.628			
F_4	Helps in evaluation	It helps in valuation of corporate securities by providing real time information	0.770	8.013	1.754	0.546
		It reduces share volatility	0.632			

Sr. No.	Factor Name (Variance Explained %)	Statements Included in the Factor	Loading	Percentage of Variance explained	Eigen Value	Cronbach Alpha
		It facilitates interaction and allows feedback	0.477			
		It will improve governance	0.475			
		It will make the job of financial analyst easier	0.459			
F_5	Enhanced competition	It attracts potential customers	0.676	6.095	1.430	0.680
		It increases management creditability	0.653			
		It will be used by banks to meet the challenges of business globalization	0.646			

Source: Compiled from the results of SPSS

IV CONCLUSION

Thus, in order to study the factors affecting web based reporting practices, EFA has been applied. Results of Exploratory Factor Analysis showed that in web based reporting practices "improvement in quality of information (IQI), better decision making (BDM), increased usefulness of information (IUI), helps in evaluation (HE) and enhanced competition (EC)" have been identified as important factors. Results showed that all the dimensions had adequate item reliability. From the above, it may conclude that stakeholders are using web based reporting practices now a day as it is more favorable and cost effective. Therefore, it is essential for all banking companies to offer web based reporting services to the stakeholders in order to survive in the competitive environment. Above discussion also shows that stakeholders are taking benefits of modern technology. It is essential for all banking service providers to propose web based services to the various stakeholders. Overall satisfaction of stakeholders is obligatory as it is the solitary measure that helps banks to survive and maintain its business.

REFERENCES

[1] Hair, Joseph F. Jr., Anderson, Rolph E., Tatham, Ronald L. and William, Black C. (1998), "Multivariate Data Analysis", New Delhi: Pearson Education.

[2] Sachs, D. and Stair, H. (1997), "The 7 Keys to Effective Web Sites" (Prentice Hall PTR).

[3] Tsang, N., Lai, M. and Law, R. (2010), "Measuring E-service Quality for Online Travel Agencies", *Journal of Travel and Tourism Marketing*, 27(3), pp. 306-323.

[4] Wolfinbarger, M. and Gilly, M. (2003), "E-tailQ: Dimensionalizing, Measuring and Predicting E-tail Quality", *Journal of Retailing*, 79(3), pp. 183-198.

[5] Kim, M. and Stoel, L. (2004), "Apparel Retailers: Web Site Quality Dimensions and Satisfaction", *Journal of Retailing and Consumer Services*", 11, pp. 109-117.

[6] Lee, G-G. and Lin, H-F. (2005), "Customer Perceptions Of E-Service Quality In Online Shopping", *International Journal of Retail & Distribution Management*, 33(2), pp. 161-176.

[7] Zeithaml, V.A. (2002), "Service Excellence in Electronic Channels", *Managing Service Quality*, 12(3), pp. 135-139.

[8] Malhotra, N. K. and Birks, D. F. (2006), "Marketing Research: An applied Approach", (3rd Ed.), Prentice Hall, Incorporated.

[9] Kaiser, H.F. (1974), "An index of factorial simplicity", *Psychometrica*, 39, pp. 31-36.

[10] Sekaran U. (2000), "Research Methods for Business: A Skill-Building Approach", 3rd Edition, John Wiley & Sons Inc., New York.

[11] Netemeyer, Richard G., Bearden, William O., and Sharma, S. (2003), "Scaling Procedures-Issues and Applications", New Delhi: Sage Publications.

[12] Ko, Y. J. and Pastore, D. L. (2004), "Current Issues and Conceptualizations of Service Quality in the Recreation Sport Industry", *Sport Marketing Quarterly*, 13, pp. 158-166.

[13] Churchill, G. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs", *Journal of Marketing Research*, 16(1), pp. 64-73.

[14] Buhalis, D. and Law, R. (2008), "Progress in Information Technology and Tourism Management: 20 Years on and 10 Years after the Internet-the State of e-Tourism Research", *Tourism Management*, 30(3), pp. 7-16.

[15] Palmer, A. and McCole, P. (2000), "The Role of Electronic Commerce in Creating Virtual Tourism Destination Marketing Organizations", *International Journal of Contemporary Hospitality Management*, 12(3), pp.198-204.

[16] Shanker, D. (2008), "ICT and Tourism: Challenges and Opportunities", Paper presented at Conference on Tourism in India-Challenges Ahead. 15-17 May IIMK. http://dspace.iimk.ac.in/bitstream/2259/536/1/50-58.pdf., Accessed on 20 August, 2009.

Appendices

Item-Total Statistics for benefits				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	74.3813	30.069	.687	.657
2	73.4883	30.848	.615	.666
3	73.4716	29.263	.522	.641
4	73.3378	28.459	.400	.629
5	73.3880	29.822	.456	.655
6	74.5920	31.719	-.605	.681
7	74.0769	31.011	.721	.665
8	74.3177	33.184	-.779	.701
9	73.1873	29.455	.643	.649
10	73.3378	30.191	.669	.660
11	74.0669	29.653	.739	.642
12	74.2742	30.414	.557	.661
13	73.1873	30.911	.565	.674
14	74.4381	29.254	.769	.646
15	73.4013	26.939	.651	.603
16	74.2910	29.952	.586	.657
17	74.4448	29.181	.408	.641
18	73.4816	30.391	.489	.657
19	74.1505	38.900	-.332	.793
20	73.5385	29.914	.517	.653
21	73.5151	30.667	.505	.668
22	73.9164	30.882	.493	.653
23	73.3244	26.891	.417	.606
24	73.5853	28.492	.466	.632
25	73.5953	28.967	.442	.637