

Key factors to the Industrialization in Himachal Pradesh

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ABSTRACT

Industrialisation is a comparatively recent phenomenon in Himachal Pradesh. It gained momentum during the last two decades. Monetary and fiscal benefits as incentives and subsidies to industry, provided by the state as well as the central government, and the availability of quality infrastructure with basic amenities, have played a key role in the industrial development of the state. Industries in Himachal Pradesh, are now producing from traditional to a wide spectrum of high –tech products like computer monitors, magnetic components, high quality precision components, tele-communication equipments, electronics, drugs and pharmaceuticals, processed food, textiles, and spinning products. The contribution of the industrial and manufacturing sector has increased significantly. In this backdrop, present paper, is an attempt to analyse the availability of infrastructural facilities apart from knowing the reason(s) for setting up industrial units in Himachal Pradesh. The paper is divided into two sections: section I deals with perception of the Industrial Promotional Agencies in the development of industries in Himachal Pradesh and section II deals with critical evaluation of the role of Industrial Promotional Agencies in promoting industrial industrialisation in Himachal Pradesh with the help of factor analysis. The Government has launched various policies and programmes for the promotion and development of industrial activities in the state. In order to execute these policies and programmes, various agencies such as: Directorate of Industries, District Industry Center, Small Industries Service Institute, Small Industries Development Bank Of India, State Finance Corporation etc. has been established. An attempt has been made in this paper to know the perceptions of respondents regarding the role of industrial promotional agencies in promoting industries in the state.

Research Methodology

In the present work, a sample of 131 industrial units has been selected from different industrial areas of the study state. In order to make the sample representative, proper weightage has been assigned to the units according to their size and product. Primary data is analysed with the help of factor analysis (Principal Component Analysis) with varimax rotation. Extraction criterion used is eigen value, should be greater than one.

Registration

Registration of industries with the DIC is necessary to enjoy the various incentives and concessions. The registration procedure in DIC has not been difficult for the new units as the State Government has notified a State Level Single Window Clearance and Monitoring Authority (SLSWC & MA) for providing umbrella support to the existing and new ventures and for ensuring expeditious clearances from the respective departments. The opinion of respondents regarding assistance provided by industrial promotional agencies for preparation of project report and registration of industrial units reveals that majority of respondents are satisfied with the assistance provided to them by these agencies. The mean score of overall responses is 2.41 with positive skewness of .566 and standard deviation of 1.36. More than half (55.7%) of the respondents are either satisfied or fully satisfied with the assistance provided by these agencies. Value of chi-square is also found to be highly significant at 1 and 5 percent level of significance. Thus, the analysis reveals that the entrepreneurs are largely satisfied with the assistance received from these agencies for registration of their units.

Acquiring Land

The perceptions of respondents about the role of industrial promotional agencies in acquiring land reveals that more than two-third (67.1 percent) of the respondents either agree or strongly agree with the statement. These agencies have satisfactorily assisted the industries in acquiring land is evident from the mean score of 2.35 having value of skewness of .782 and standard deviation of 1.31. Chi-square is highly significant at 1 and 5 percent levels of significance. Statistical analysis reveals that the opinion of respondents is concentrated towards the lower side of overall mean score. So, it is clear that industrial promotional agencies are satisfactorily assisting the industries in acquiring land.

Setting up Unit

The opinions of the respondents about the assistance provided by industrial promotional agencies in setting up the units is evenly distributed among satisfied and dissatisfied responses. Further, 29 percent of the respondents are found indifferent towards the statement. Mean score of 2.91 with negative skewness (-0.11) and standard deviation of (1.27) supports the fact that the responses are concentrated towards dissatisfactory scale. Chi-square is highly significant at 1 and 5 percent levels of significance. Thus, the role of industrial promotional agencies has not been found satisfactory in facilitation of the setting up of industrial units.

Paperwork

So far as the knowledge of various rules and regulations and assistance in its compliance is concerned, industrialists have to depend upon private professionals. The view of respondents regarding assistance from industrial promotional agencies in complying with rules and regulations reveals that three out of five respondents (62.6%) are either satisfied or very satisfied with the assistance received from industrial promotional agencies in dealing with paper work. The mean score of aggregate responses

is 2.36 skewness of (.711) and standard deviation of (1.54). Value of chi-square has also been found to be highly significant. Statistical analysis indicates that the of opinion of the respondents is skewed towards lower side of the mean, which shows that majority of the respondents are satisfied.

Elucidate Information

The Central and State Government announces various incentives from time to time for motivating the potential industrialists. Analysis reveals that four out of five respondents (80.9%) are quite satisfied with the information provided to them regarding the incentives and concessions by the industrial promotional agencies. The overall mean score of the responses is 1.87 which indicates that majority of the respondents are either satisfied or very satisfied with the industrial promotional agencies. The value of skewness (1.40) and standard deviation (1.320) is high and positive which shows that majority of the respondents are fully satisfied with the statement that industrial promotional agencies provide knowledge of various incentives available. Chi-square is also highly significant at 1 and 5 percent levels of significance.

No Objection Certificate from State Pollution Control Board

More than half (55.8%) of the respondents are dissatisfied or strongly dissatisfied with the statement that they obtained no objection certificate (NOC) from the State Pollution Control Board without any hassle. Government departments are still suffering from a disease of red tapeism. Bureaucracy seems to be the life blood of all the Government

Table 1: Perception of the Respondents Regarding Role of Industrial Promotional Agencies

Particulars	Strong-ly Agree	Agree	Neither Agree Nor Dis-agree	Dis-agree	Strong-ly Dis-agree	Mean	Std. Deviation	Skewness	Kurtosis	Chi-Square	Asymp. Sig.
Assist in Registration	47 (35.9%)	26 (19.8%)	38 (22.8%)	13 (9.9%)	15 (11.5%)	2.4122	1.36363	.566	-.863	28.504	.000
Assistance in Acquiring Land	40 (30.5%)	48 (36.6%)	13 (9.9%)	16 (12.2%)	14 (10.7%)	2.3588	1.31891	.782	-.577	41.710	.000
Facilitation in Setting up the Unit	26 (19.8%)	20 (15.3%)	38 (29.0%)	33 (25.2%)	14 (10.7%)	2.9160	1.27725	-.111	-1.030	14.229	.007
Assist Paper in Work Formalities	38 (44.3%)	24 (18.3%)	16 (12.2%)	9 (6.9%)	24 (18.3%)	2.3664	1.54026	.711	-1.033	34.229	.000
Provide Knowledge About Various Incentives	77 (58.8%)	29 (22.1%)	1 (0.8%)	13 (9.9%)	11 (8.4%)	1.8702	1.32082	1.402	.552	138.504	.000
NOC From State Pollution Control Board	13 (9.9%)	29 (22.1%)	16 (12.2%)	28 (21.4%)	45 (34.4%)	3.4809	1.41068	-.370	-1.292	24.534	.000
NOC's from Other Government Departments	6 (4.6%)	9 (6.9%)	27 (20.6%)	37 (28.2%)	52 (39.7%)	3.9160	1.13706	-.885	.042	56.748	.000
Arrangement of Loan	12 (9.2%)	9 (6.9%)	15 (11.5%)	50 (38.2%)	45 (34.4%)	3.8168	1.23912	-1.049	.170	38.883	.000
Acquiring Working Capital	7 (5.3%)	16 (12.2%)	21 (16.6%)	25 (19.1%)	62 (47.3%)	3.9084	1.26763	-.838	-.527	68.046	.000
Provide Valuable Information	28 (21.4%)	15 (11.5%)	20 (15.3%)	11 (8.4%)	37 (28.2%)	3.4122	1.62609	-.375	-1.490	51.405	.000
Provide Necessary Market Information	23 (17.6%)	16 (12.2%)	25 (19.1%)	28 (21.4%)	39 (29.8%)	3.3359	1.46030	-.362	-1.227	10.794	.029
Recruiting Staff	25 (19.1%)	24 (18.3%)	30 (22.8%)	27 (20.6%)	25 (19.1%)	3.0229	1.38933	-.041	-1.229	.870	.929
Imparted Training for Improving Technical Know-how	17 (13.0%)	29 (22.1%)	22 (16.8%)	27 (20.6%)	36 (27.5%)	3.2748	1.40906	-.183	-1.316	7.893	.096
Assistance for Marketing Product	34 (26.0%)	22 (16.8%)	35 (26.7%)	18 (13.7%)	22 (16.8%)	2.7863	1.40881	.186	-1.185	9.191	.057
Harassment by Government	39 (22.1%)	21 (16.0%)	32 (24.6%)	14 (10.7%)	15 (11.5%)	2.7328	1.24545	.182	-.726	37.206	.000

Officials											
Lack of Interest in Officials	58 (44.3%)	4 (3.1%)	65 (49.6%)	2 (1.5%)	2 (1.5%)	2.1298	1.06263	.127	-1.226	159.573	.000
Personal Relations/Connections with High-ups	81 (61.8%)	24 (18.3%)	10 (7.6%)	2 (1.5%)	14 (10.7%)	1.8092	1.30156	1.594	1.287	152.855	.000
Unnecessary Delaying Tactics	66 (50.4%)	25 (19.1%)	11 (8.4%)	12 (9.2%)	17 (13.0%)	2.1527	1.45429	.949	-.586	80.260	.000
Poor Work culture	16 (12.2%)	23 (17.6%)	13 (9.9%)	28 (21.4%)	51 (38.9%)	3.5725	1.45724	-.540	-1.185	34.611	.000
Seriousness of the officials to Promote Industrial Units	32 (24.4%)	30 (22.9%)	26 (19.8%)	15 (11.5%)	28 (21.4%)	2.8244	1.47012	.250	-1.304	6.748	.150

Source: Primary Probe

The mean score of responses which is 3.48 with negative skewness (-0.370) and standard deviation of 1.410 indicates that the responses are highly skewed towards dissatisfied responses. The findings are also supported by highly significant value of chi-square. Hence, it is inferred that respondents are dissatisfied in the process of obtaining NOC from State Pollution Control Board.

No Objection Certificate from other Government Departments

Paperwork of official procedures is a burdensome part of promotional activities. Before setting up the unit no objection certificates (NOC"s) from different Government departments is to be obtained. More than two third of the respondents (67.9%) are either dissatisfied or strongly dissatisfied with this statement. High mean score of 3.91 with negative skewness of -0.885 and standard deviation of 1.137 depicts that the responses fall between dissatisfied and very dissatisfied responses on five point scale. Thus, it can be concluded that government departments need to be revolutionized so that the industrialist do not feel harassed and disappointed while going through official procedures.

Arrangement of Loan

The perceptions of respondents regarding assistance provided by industrial promotional agencies for arrangement of loans has a mean score and skewness 3.81 and -1.04 respectively which shows that majority of the respondents are dissatisfied. More than two-third of the respondents (72.6 percent) are of the view that the Industrial Promotional Agencies did not assist them in arrange of loan. Chi-square test of goodness of fit is also highly significant at 1 and 5 percent levels of significance. Thus, it can be recapitulated that assistance to industrial units in arrangement of loans by these agencies has not been up to the mark and rather have failed.

Arrangement of Working Capital

The perceptions of the respondents regarding assistance provided by the industrial promotional agencies for acquiring working capital reveals that two-third of the respondents (66.4 percent) do not agree with this view. The mean score of the responses and value of skewness are found 3.90 and -.838 respectively which signifies that the

responses are highly skewed towards dissatisfied responses on five point scale. Chi-square test of goodness of fit is also highly significant at 1 and 5 percent levels of significance. Hence, it can be summed up that industrial promotional agencies have not assisted the industrial units in acquiring working capital.

Dissemination of Information

Views of the respondents regarding the information provided by Industrial Promotional Agencies for arranging factors of production shows a mixed response. More than half (51.9 percent) of the respondents either disagree or strongly disagree with this statement, whereas 32.9 percent of the respondents either agree or strongly agree. The mean score of aggregate responses is 3.41 with negative value of skewness (-0.375) and standard deviation of 1.62 which indicates that majority of respondents are either dissatisfied or strongly dissatisfied with the statement. Hence, it can be concluded that Industrial Promotional Agencies are not providing requisite information to the industrialists.

Market Information

The perceptions of the respondents about the assistance provided by promotional agencies regarding market information reveals more than half (51.2 percent) of the respondents either disagree or strongly disagree, whereas only 29.8 percent of the respondents either agree or strongly agree with the statement. Most of the respondents are indifferent for the statement, as the overall mean score is 3.33 with negative value of skewness (-0.362) and standard deviation of 1.460. This indicates that an overwhelming number of respondents are dissatisfied with the market related information provided by these agencies.

Assistance in Recruiting Staff

The opinion of the respondents in relation to assistance provided by Industrial Promotional Agencies in recruiting staff depicts that two-fifth of the respondents either disagree or strongly disagree with the statement, while 37.4 percent either agree or strongly agree with the statement. Overall mean score has been found 3.02 with low negative value of skewness (-0.041) and standard deviation of 1.38 which indicates that the opinion of respondents is slightly skewed towards dissatisfied responses. Further, 22.9 percent of the respondents are found indifferent. Value of chi-square has not been found significant. Hence, it can be concluded that a large number of responses are hesitant in commenting on the role played by Industrial Promotional Agencies in recruitment.

Imparting Technical Know-how

The Government has initiated various programmes and incentives to modernize and update the techniques of production in the industries. Industrial Promotional Agencies have been entrusted with the responsibility of encouraging and motivating the industrialists to modernize their methods of production. The opinion of respondents regarding role of industrial promotional agencies in imparting training for improving

technical know-how reveals that nearly half of the respondents (48.1percent) are either dissatisfied or very dissatisfied with the working of these agencies as far as imparting the training is concerned. Further, 16.8 percent of the respondents are found indifferent in their views. The mean score of overall responses and value of skewness are found 3.02 and -.041 respectively. Hence, it is concluded that Industrial Promotional Agencies have not assisted industries in imparting training to the workers.

Assistance in Marketing the Products

Role of the Industrial Promotional Agencies in providing assistance for marketing the product show that 26.7 percent of the respondents are indifferent towards the statement. The mean score and value of skewness have been found 2.78 and 0.186 respectively with standard deviation of 1.409. Statistical analysis reveals that the responses to the statement are slightly skewed towards dissatisfaction level. Therefore, it is concluded that majority of the respondents feel that the Industrial Promotional Agencies have not helped in marketing their product.

Harassment by Government Officials/Agencies

The perception of respondents regarding the statement that Government agencies rather harass them is reported by two-fifth of the total respondents where equal number of respondents are indifferent. The mean score of aggregate responses is 2.73 with low positive skewness of 0.182 and standard deviation of 1.245. Statistical analysis reveals that the responses are concentrated towards disagreement on five point scale. Chi-square test of goodness of fit has been found highly significant. Hence, it can be concluded that that Government officials/agencies are harass the industrialists.

Lack of Interest Shown by Officials/Agencies

Nearly half (47.4 percent) of the respondents are of the opinion that Government officials do not show any interest in solving their problems. The mean score of 2.73, value of skewness (0.182) and standard deviation of 1.062 reveals that the responses are concentrated towards agreement scale. Value of chi-square has also been found to be highly significant. Hence, it can be concluded that Government officials/agencies are hardly concerned with the problems faced by entrepreneurs.

Relations/Connections with High-Ups

The perceptions of respondents regarding the statement that personal connections with Government Officials are very important for getting work done shows a mean score of 1.80 which indicates that the respondents either agree or strongly agree with the statement. High and positive value of skewness (1.59) and standard deviation (1.301) also indicates that the responses falls between agree and strongly agree. Four out of five respondents (80.2 percent) either agree or strongly agreement scale with the statement that personal links with the officials are very important for getting the work done. This is also supported by value of chi-square which is highly significant at 1 and 5 percent levels of significance. Hence, it can be concluded that influential people get their things done easily and without consuming much time.

Unnecessarily Delaying Tactics

The response regarding the statement that promotional agencies which have been setup to assist entrepreneurs consume a lot of time show mean score of 2.15 with positive skewness of 0.949 and standard deviation of 1.454. Seven out of ten respondents (69.5 percent) either agree or strongly agree with the statement. Statistical analysis depicts that industrial promotional agencies unnecessarily consume a lot of time and resort delaying tactics.

No Work Culture

Responses of the respondents regarding the lack of work culture among the industrial promotional agencies reveals that three-fifth (60.3 percent) of the respondents either disagree or strongly disagree with the statement. The mean score of aggregate responses is 3.57 with negative value of skewness (-0.540) and standard deviation of 1.457 which indicates that a vast majority of the respondents either disagree or strongly disagree with the statement. The value of chi-square is also highly significant. Hence, it can be summed up that poor work culture of promotional agencies is not the reason for withdrawing industries from Himachal.

Seriousness of the Officials

The opinions of the respondents regarding involvement of Government officers to promote industries show a mean score of 2.82 with skewness of 0.250 of and standard deviation of 1.47. This indicates that the opinion of the respondents is concentrated towards the higher side of mean. Hence, a significant number of respondents either agree or disagree with the statement but are found slightly skewed towards disagreement responses.

Role of Industrial Promotional Agencies in Industrial Development: Factor Analysis

As indicated by Table 2, Kaiser-Meyer-Olkin Measure of Sampling Adequacy of the present study is significant. The part of study significantly satisfies both the tests.

Table 2: KMO and Bartlett's Test for Role of Industrial Promotional Agencies

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.692
Bartlett's Test of Sphericity	Approx. Chi-Square	946.975
	df	190
	Sig.	.000

Table 3: Total variance explained for Role of Industrial Promotional Agencies

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	3.608	18.039	18.039	3.608	18.039	18.039	3.103	15.513	15.513
2	3.332	16.659	34.698	3.332	16.659	34.698	2.242	11.212	26.725
3	2.083	10.416	45.114	2.083	10.416	45.114	2.051	10.257	36.982
4	1.626	8.132	53.246	1.626	8.132	53.246	1.946	9.731	46.713
5	1.355	6.775	60.021	1.355	6.775	60.021	1.796	8.982	55.695
6	1.151	5.755	65.777	1.151	5.755	65.777	1.640	8.202	63.897
7	1.018	5.089	70.866	1.018	5.089	70.866	1.394	6.969	70.866
8	.984	4.920	75.786						
9	.732	3.658	79.444						
10	.623	3.113	82.557						
11	.549	2.746	85.303						
12	.497	2.487	87.789						
13	.431	2.153	89.943						
14	.403	2.014	91.956						
15	.351	1.757	93.714						
16	.330	1.652	95.366						
17	.286	1.428	96.795						
18	.234	1.169	97.964						
19	.218	1.092	99.056						
20	.189	.944	100.000						

Extraction Method: Principal Component Analysis

Since it was difficult to visualize out twenty variables, Principal Component Analysis was used for the data reduction. The Kaiser rule is used to drop components which say that drop all values with eigenvalues under 1.0. For this data, seven out of twenty components have Eigen values greater than one and these will play the key role in the analysis. Together they account for 70.86 per cent of variance of the original variables. The first component explains 18.03 percent (Table 3) variance, second component explains 16.65 percent variance, third component explains 10.41 percent variance, fourth component explains 8.13 percent variance, the fifth, sixth and seventh components explains 6.77 percent, 5.75 percent and 5.08 percent variances respectively. The Kaiser criterion stopped at 7 components, but some researchers might use the scree plot criterion to stop at

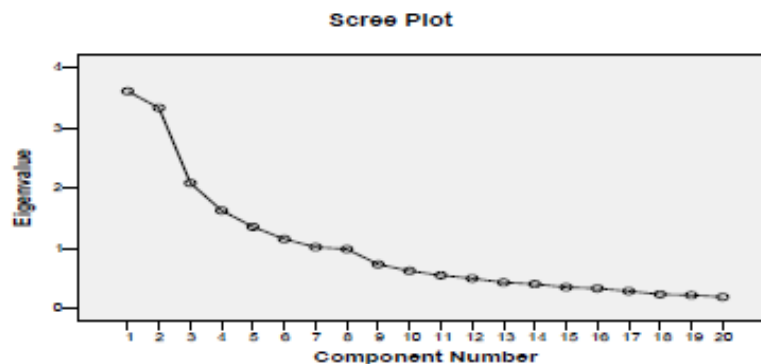


Figure 1: Scree Plot

Table 4 contains the rotated factor loadings which are correlations between the variable and the factors. The first factor extracted was the combination of – „assistance in acquiring land and paper work formalities“. The second factor extracted was the combination of – „facilitation in setting up the unit, assist in registration and NOC“s from other Government Departments“. The third factor signifies the combination of – „recruiting manpower, providing necessary market information and imparting training for improving technical know-how“. The fourth factor indicates the blend of – „assistance in marketing product, harassment by government officials, lack of interest shown by officials and poor work culture“. The fifth factor extracted was a combination of – “seriousness of the officials to promote industrial units and unnecessary delaying tactics“. The sixth factor extracted was a combination of – “sharing knowledge about various incentives/schemes of Government, NOC from state pollution control board, provide valuable information and arrangement of loan“. The seventh factor indicates the combination of – “personal relations/ connections with high-ups and acquiring working capital”.

Table 4 : Rotated Component Matrix

Particulars	Component						
	1	2	3	4	5	6	7
Assistance in Acquiring Land	-.864	.019	.030	.016	-.074	-.092	-.086
Paper Work Formalities	-.858	.003	.030	-.090	-.026	.129	-.016
Facilitation in Setting up the Unit	.852	.020	-.024	.052	.177	-.023	-.108
Assist in Registration	.672	.114	.286	-.100	.161	.301	.129
NOC's from Other Government Departments	.538	-.207	-.185	-.178	.107	-.259	.183
Recruiting Staff	.069	-.813	.303	-.119	-.012	-.019	.011
Provide Necessary Market Information	.029	.803	-.022	-.037	-.120	-.214	.206
Imparted Training for Improving Technical Know-how	.038	.711	-.482	.083	.137	-.013	.048
Assistance for Marketing Product	-.065	-.251	.840	-.033	.046	.059	-.006
Harassment by Government Officials	-.113	.433	-.674	-.069	.164	-.102	-.001
Lack of Interest in Officials	-.114	-.057	.593	-.051	.211	-.199	-.574
Poor Work culture	-.017	.123	.143	-.835	-.073	.065	-.033
Seriousness of the officials to Promote Industrial Environment	-.063	.061	.166	.755	-.060	.004	.001
Unnecessary Delaying Tactics	.041	.184	-.071	.738	.069	.237	-.016
Provide Knowledge About Various Incentives	.127	-.090	-.004	.005	.872	.054	.084
NOC From State Pollution Control Board	-.259	-.094	.016	-.081	-.801	.113	-.124
Provide Valuable Information	.062	-.103	.155	.065	.171	.788	-.010
Arrangement of Loan	-.081	-.114	-.134	.103	-.312	.756	-.126
Personal Relations/ Connections with High-ups	-.026	.163	.019	-.117	.266	.031	.797
Acquiring Working Capital	.120	.019	-.027	.126	.045	-.296	.524

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

The first factor may be interpreted as „assist in decree e.g. acquiring land“. The second factor may be termed as „assistance in setting up the unit e.g. registration“, the third as „assistance in putting together factors of production and disposing off goods“, the fourth as „biased attitude of officials“, the fifth as „uncompetitive approach of officials“, the sixth as „Industrial agencies assist in arrangement of factors of production and provide knowledge about incentives“ and the seventh as „biasness of Industrial Promotional Agencies and assistance in arranging working capital“. Thus, twenty factors regarding role of Industrial Promotional Agencies were classified into seven basic factors by applying the factor analysis technique of multivariate analysis.

Conclusion

The government has established various organizations to implement its policies of promotion and development of industrial activities. Registration of the unit with the DIC is not difficult and state industries department also assists the industrialists for acquiring land. Industrial promotional agencies have failed to disseminate proper information to the industrialists. As a result industrialists will have to depend upon consultants. As regards the procedure of government for issue of no objection certificates from state pollution control board and other government departments is concerned, high level of dissatisfaction among the entrepreneurs has been observed. Role of industrial promotional agencies is almost negligible as far as arrangement of finance is concerned and these agencies are not playing any role in arrangement of factors of production of industrial units and marketing of their products. Government officials of these agencies are found harassing people to some extent, though work culture cannot be the reason for withdrawing their industrial units from Himachal. Hence, the role of industrial promotional agencies in assisting the industries has been found below expectations.

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