

STATS: THE GYM CHAIN

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Introduction:

The researcher in this study discusses the loss experienced by the **GYM CHAIN** in Australia. The researcher focuses on the reasons behind loosing profits in running of the Gym Chain. The researcher also considers the descriptive research conducted. The researcher collects the data from the survey conducted and performs the univariate and bivariate analysis on the data. The researcher also suggests alternative recommendations for the improvement from the heavy losses incurred by the organisation.

Research Objectives and sources:

The main objectives and the source of the research are:

- To understand the causes of incurring heavy losses by the organization
- To evaluate the Gym chain's performance in customer retention strategy
- To analyze the preference of the customers
- To provide suggestions in improving the Gym Chain's profitability to retain its customer

Research Rationale:

The main issue faced by the Gym Chain is the heavy losses faced by the organisation. The organisation has been losing profits and it has become expensive for the organisation to run. Thus the researcher analyses the issue that is concerning the organisation to a large. This has been an issue to the organisation because the profits of the organisation have been falling significantly. This made the running of the Gym centres in Australia, New Zealand and Singapore very costly.

Literature Review:

The researcher in this section deals with the reasons for continuous fall in the profit of the organisation. The researcher deals with the strategies to be adopted in increase in the customer retention of the organisation. Craig, Rachel, & Vannatta (2007) stated that the customer turnover in the leisure industry determines the sales data and the profitability of the organisation. Taylor *et al.* (2008) stated that retention of the customer is the main aim of the leisure organisation.

Methodology:

The research philosophy used in this study is the post positivism. This is because it considers both the qualitative and the quantitative analysis (Wei *et al.* 2010). In this study, the post positivism philosophy will provide insights on the falling profit and the customer preferences. Day (2008) stated that the researcher considers the descriptive type of research which is based on the market surveys. The quantitative research is used in getting opinion of the customers, which in turn helps, in improving the organisation's efficiency.

The type of data used in the study is primary data which is purely based on the questionnaire prepared by the marker researcher. The survey method includes the population size of 120 and sample size of 90. That is the number of respondent is 90.

Data analysis and useful information:

The data analysis is based on the sample size and the survey. The two types of analyses used are univariate analysis and bivariate analysis. Zeithaml, Berry & Parasuraman (2007) said that the univariate analysis deals with only one data. That means this does not consider the Cause and effect relationship. The bivariate data use two sets of data as the variable determining the relationship between them.

Univariate Analysis:

It is the quantitative analysis based on the data collected in the survey. (*Refer Appendix 1*)

Question 1: Gender analysis

Mean	1.533333
Median	2
Mode	2
Variance	0.251685
Standard Deviation	0.501683

Question 2: Country analysis

Mean	1
Median	1
Mode	0
Variance	0.674157
Standard Deviation	0.821071

Question 3: Customer Age

Mean	33.222222
Median	31
Mode	28
Variance	90.6242197
Standard Deviation	9.5196754

Question 4: Height

Mean	168.533
Median	168
Mode	165
Variance	105.4797561
Standard Deviation	10.27033379

Question 5: Weight

Mean	64.08333
Median	62
Mode	58
Variance	150.8048
Standard Deviation	12.28026

Question 6: Reason of going to Gym

Mean	2.833333333
Median	3
Mode	3
Variance	1.488764045
Standard Deviation	1.22014919

Question 7: Use of Cardiovascular

Mean	1.211111111
Median	1
Mode	1
Variance	0.190886392
Standard Deviation	0.436905473

Question 8: Use of weight machines

Mean	1.3555556
Median	1
Mode	1
Variance	0.3440699
Standard Deviation	0.5865747

Question 9: Frequency of using the gym

Mean	3.1777778
Median	3
Mode	3
Variance	1.0242197
Standard Deviation	1.0120374

Question 10: Accompanied to gym

Mean	1.6444444
Median	1
Mode	1
Variance	0.5687890
Standard Deviation	0.7541810

Question 11: Source of regular exercise

Mean	1.4222222
Median	1
Mode	1
Variance	0.2466916
Standard Deviation	0.4966806

Question 12: Clarification of the source

Mean	1.422222222
Median	1
Mode	0
Variance	2.426466916
Standard Deviation	1.557712077

Question 13: Time of visiting and staying in the gym

Mean	26.46666667
Median	25
Mode	27
Variance	98.74606742
Standard Deviation	9.937105585

Question 14: Last visit time in the gym for weight machines

Mean	14.92222222
Median	14
Mode	14
Variance	63.24107366
Standard Deviation	7.952425646

Question 15: Last visit time in the gym for other activities

Mean	7.333333333
Median	7
Mode	7
Variance	15.64044944
Standard Deviation	3.954800809

Question 16: Age group

Mean	2.766666667
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Median	3
Mode	2
Variance	0.98988764
Standard Deviation	0.994930973

Question 17: Gym membership competitive priced

Mean	3.188888889
Median	3
Mode	2
Variance	2.98639201
Standard Deviation	1.728118054

Question 18: Gym high quality experience

Mean	6.63333
Median	7
Mode	7
Variance	4.45955
Standard Deviation	2.11176

Question 19: High variety of equipments

Mean	3.311111111
Median	4
Mode	1
Variance	6.756054931
Standard Deviation	2.599241222

Question 20: Gym has good atmosphere

Mean	3.133333333
Median	3

Mode	3
Variance	2.251685393
Standard Deviation	1.500561693

Question 21: Returning from the gym

Mean	5.24444444
Median	5
Mode	6
Variance	1.40024969
Standard Deviation	1.18332146

Question 22: Recommendations of gym to friends

Mean	4.24444444
Median	4
Mode	5
Variance	1.400249688
Standard Deviation	1.183321464

Question 23: Sociable feeling of the gym

Mean	2.46666667
Median	2
Mode	1
Variance	2.116853933
Standard Deviation	1.454941213

Question 24: Calm feeling in the gym

Mean	2.866667
Median	3
Mode	3

Variance	1.847191
Standard Deviation	1.359114

Question 25: Unpleasant experiences in gym

Mean	1.744444444
Median	1
Mode	1
Variance	1.203620474
Standard Deviation	1.097096383

Question 26: Rate the experience of Gym

Mean	3.266667
Median	3
Mode	3
Variance	0.489888
Standard Deviation	0.69992

Question 27: Overall appearance of the Gym

Mean	3.122222222
Median	3
Mode	3
Variance	0.49051186
Standard Deviation	0.700365519

Question 28: Overall appearance of the Gym co-workers

Mean	3.2
Median	3
Mode	3
Variance	0.498876404

Standard Deviation	0.706311832
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Bi-variate analysis: (Refer Appendix 2)

Question 1: Gender analysis

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	22.4	89	0.251685	65535	#NUM!	#NUM!
Columns	0	0	65535	65535	#NUM!	#NUM!
Error	0	0	65535			
Total	22.4	89				

Chi-Test	0
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Question 2: Country analysis

ANOVA

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	60	89	0.674157	65535	#NUM!	#NUM!
Within Groups	0	0	65535			
Total	60	89				

Chi-Test	0.9522640
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<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance</i>
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<i>F</i>					
Regression	1	71.49946	71.49946	0.787079	0.377403
Residual	88	7994.056	90.84155		
Total	89	8065.556			

		<i>Standard</i>			<i>Upper</i>	<i>Lower</i>	<i>Upper</i>		
		<i>Coefficients</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>95%</i>	<i>95.0%</i>	<i>95.0%</i>
Intercept	31.66117	2.026191	15.62596	4.08E-27	27.63455	35.6878	27.63455	35.6878	
X Variable									
1	0.034309	0.038672	0.887175	0.377403	-0.04254	0.111161	-0.04254	0.111161	

Question 3: Customer Age

Chi-Test	0
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Question 4: Height

ANOVA

					<i>Significance</i>
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>F</i>
Regression	1	40.06343	40.06343	0.377163	0.54071
Residual	88	9347.635	106.2231		
Total	89	9387.698			

		<i>Standard</i>			<i>Upper</i>	<i>Lower</i>	<i>Upper</i>		
		<i>Coefficients</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>95%</i>	<i>95.0%</i>	<i>95.0%</i>
Intercept	169.7015	2.191026	77.45299	9.44E-83	165.3473	174.0557	165.3473	174.0557	
X Variable									
1	-0.02568	0.041818	-0.61414	0.54071	-0.10879	0.057423	-0.10879	0.057423	

Chi-Test	0
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Question 5: Weight

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	980.4659	980.4659	6.935125	0.009984
Residual	88	12441.16	141.3768		
Total	89	13421.63			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	69.86404	2.527709	27.63927	3.72E-45	64.84075	74.88734	64.84075	74.88734
X Variable 1	-0.12705	0.048244	-2.63346	0.009984	-0.22292	-0.03117	-0.22292	-0.03117

Question 6: Reason of going to Gym

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.708832	0.708832	0.473304	0.493281
Residual	88	131.7912	1.497627		
Total	89	132.5			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	2.988764	0.26016	11.48819	3.38E-19	2.471752	3.505777	2.471752	3.505777
X Variable 1	-0.00342	0.004965	-0.68797	0.493281	-0.01328	0.006452	-0.01328	0.006452

Chi-Test

0.04326807

ANOVA

					<i>Significance</i>
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>F</i>
Regression	1	0.247047	0.247047	1.298551	0.25757
Residual	88	16.74184	0.190248		
Total	89	16.98889			

		<i>Standard</i>				<i>Upper</i>	<i>Lower</i>	<i>Upper</i>
	<i>Coefficients</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>95%</i>	<i>95.0%</i>	<i>95.0%</i>
Intercept	1.302871	0.092725	14.05087	3.33E-24	1.118599	1.487143	1.118599	1.487143
X Variable								
1	-0.00202	0.00177	-1.13954	0.25757	-0.00553	0.0015	-0.00553	0.0015

Question 7: Use of Cardiovascular

Chi-Test	0.999999
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Question 8: Use of weight machines

ANOVA

					<i>Significance</i>
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>F</i>
Regression	1	1.375001	1.375001	4.137148	0.044963
Residual	88	29.24722	0.332355		
Total	89	30.62222			

		<i>Standard</i>				<i>Upper</i>	<i>Lower</i>	<i>Upper</i>
	<i>Coefficients</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>95%</i>	<i>95.0%</i>	<i>95.0%</i>
Intercept	1.572035	0.122557	12.82694	7.49E-22	1.328478	1.815592	1.328478	1.815592
X Variable								
1	-0.00476	0.002339	-2.034	0.044963	-0.00941	-0.00011	-0.00941	-0.00011

Chi-Test	4.75
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Question 9: Frequency of using the gym

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance</i>			
					<i>F</i>			
Regression	1	0.678421	0.678421	0.659847	0.418806			
Residual	88	90.47713	1.028149					
Total	89	91.15556						

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	3.025718	0.215559	14.03661	3.54E-24	2.59734	3.454096	2.59734	3.454096
X Variable								
1	0.003342	0.004114	0.81231	0.418806	-0.00483	0.011518	-0.00483	0.011518

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance</i>			
					<i>F</i>			
Regression	1	0.000807	0.000807	0.001402	0.970213			
Residual	88	50.62142	0.575243					
Total	89	50.62222						

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.649688	0.161237	10.23147	1.21E-16	1.329264	1.970112	1.329264	1.970112
X Variable								
1	-0.00012	0.003077	-0.03745	0.970213	-0.00623	0.006	-0.00623	0.006

Chi-Test	0.3398331
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Question 10: Accompanied to gym

Chi-Test**0.999983399****Question 11: Source of regular exercise**

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.000263	0.000263	0.001056	0.974153
Residual	88	21.95529	0.249492		
Total	89	21.95556			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.425218	0.106186	13.42194	5.26E-23	1.214197	1.63624	1.214197	1.63624
X Variable 1	-6.6E-05	0.002027	-0.03249	0.974153	-0.00409	0.003962	-0.00409	0.003962

Chi-Test**4.77293****Question 12: Clarification of the source**

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	1.263185	1.263185	0.517765	0.473703
Residual	88	214.6924	2.439686		
Total	89	215.9556			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.629713	0.332051	4.908017	4.19E-06	0.969831	2.289595	0.969831	2.289595
X Variable 1	-0.00456	0.006338	-0.71956	0.473703	-0.01715	0.008034	-0.01715	0.008034

Chi-Test**0****Question 13: Time of visiting and staying in the gym**

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance</i>			
					<i>F</i>			
Regression	1	23.3916	23.3916	0.23485	0.629155			
Residual	88	8765.008	99.60237					
Total	89	8788.4						

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	25.57378	2.121646	12.05375	2.5E-20	21.35746	29.79011	21.35746	29.79011
X Variable								
1	0.019624	0.040494	0.484613	0.629155	-0.06085	0.100097	-0.06085	0.100097

Chi-Test**0****Question 14: Last visit time in the gym for weight machines**

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance</i>			
					<i>F</i>			
Regression	1	117.7586	117.7586	1.88048	0.173766			
Residual	88	5510.697	62.62156					
Total	89	5628.456						

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	16.92559	1.682286	10.06106	2.69E-16	13.5824	20.26878	13.5824	20.26878
X Variable								
1	-0.04403	0.032108	-1.37131	0.173766	-0.10784	0.019778	-0.10784	0.019778

Chi-Test**0****Question 15: Last visit time in the gym for other activities**

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance</i>			
					<i>F</i>			
Regression	1	180.3151	180.3151	73.26332	3.31E-13			
Residual	88	216.5849	2.461192					
Total	89	396.9						

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	9.11236	0.333511	27.32248	9.25E-45	8.449576	9.775143	8.449576	9.775143
X Variable								
1	-0.05448	0.006365	-8.5594	3.31E-13	-0.06713	-0.04183	-0.06713	-0.04183

Chi-Test**0****Question 16: Age group**

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance</i>			
					<i>F</i>			
Regression	1	367.3898	367.3898	138.2233	9.77E-20			
Residual	88	233.8991	2.657944					
Total	89	601.2889						

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	6.849688	0.346586	19.76332	4.08E-34	6.160921	7.538455	6.160921	7.538455

X Variable

1	-0.07777	0.006615	-11.7568	9.77E-20	-0.09092	-0.06463	-0.09092	-0.06463
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Chi-Test

1

Question 17: Gym membership competitive priced

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.395522	0.395522	0.174026	0.677574
Residual	88	200.0045	2.272778		
Total	89	200.4			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	3.249438	0.320492	10.13892	1.87E-16	2.612529	3.886348	2.612529	3.886348
X Variable								
1	-0.00255	0.006117	-0.41716	0.677574	-0.01471	0.009604	-0.01471	0.009604

Chi-Test

5.98124

Question 18: Gym high quality experience

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	367.3898	367.3898	138.2233	9.77E-20
Residual	88	233.8991	2.657944		
Total	89	601.2889			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
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		<i>Error</i>				<i>95%</i>	<i>95.0%</i>	<i>95.0%</i>
Intercept	6.849688	0.346586	19.76332	4.08E-34	6.160921	7.538455	6.160921	7.538455
X Variable								
1	-0.07777	0.006615	-11.7568	9.77E-20	-0.09092	-0.06463	-0.09092	-0.06463

Chi-Test

9.2312

Question 19: High variety of equipments

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.395522	0.395522	0.174026	0.677574
Residual	88	200.0045	2.272778		
Total	89	200.4			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	3.249438	0.320492	10.13892	1.87E-16	2.612529	3.886348	2.612529	3.886348
X Variable								
1	-0.00255	0.006117	-0.41716	0.677574	-0.01471	0.009604	-0.01471	0.009604

Chi-Test

0

Question 20: Gym has good atmosphere

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	15.42617	15.42617	12.43179	0.000673
Residual	88	109.1961	1.240864		
Total	89	124.6222			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	5.969538	0.23681	25.20813	5E-42	5.498928	6.440148	5.498928	6.440148
X Variable								
1	-0.01594	0.00452	-3.52587	0.000673	-0.02492	-0.00695	-0.02492	-0.00695

Chi-Test

0

Question 21: Returning from the gym

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	15.42617	15.42617	12.43179	0.000673
Residual	88	109.1961	1.240864		
Total	89	124.6222			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	4.969538	0.23681	20.98533	5.18E-36	4.498928	5.440148	4.498928	5.440148
X Variable								
1	-0.01594	0.00452	-3.52587	0.000673	-0.02492	-0.00695	-0.02492	-0.00695

Chi-Test

1

Question 22: Recommendations of gym to friends

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	7.171256	7.171256	3.482177	0.065364

Residual	88	181.2287	2.059418
Total	89	188.4	

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.972285	0.305078	6.464864	5.48E-09	1.366007	2.578562	1.366007	2.578562
X Variable								
1	0.010866	0.005823	1.866059	0.065364	-0.00071	0.022437	-0.00071	0.022437

Chi-Test	0.000202856
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Question 23: Sociable feeling of the gym

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	6.912853	6.912853	3.862735	0.052523
Residual	88	157.4871	1.789627		
Total	89	164.4			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	2.381273	0.284393	8.373172	7.98E-13	1.816102	2.946445	1.816102	2.946445
X Variable								
1	0.010668	0.005428	1.965384	0.052523	-0.00012	0.021455	-0.00012	0.021455

Chi-Test	0.803164645
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Question 24: Calm feeling in the gym

<i>Coefficients</i>	<i>Standard</i>			<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>				
2.381273	0.284393	8.373172	7.98E-13	1.816102	2.946445	1.816102	2.946445
0.010668	0.005428	1.965384	0.052523	-0.00012	0.021455	-0.00012	0.021455

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance</i>
					<i>F</i>
Regression	1	14.77971	14.77971	14.08467	0.000313
Residual	88	92.34252	1.049347		
Total	89	107.1222			

	<i>Coefficients</i>	<i>Standard</i>			<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
		<i>Error</i>	<i>t Stat</i>	<i>P-value</i>				
Intercept	2.454182	0.21777	11.26962	9.31E-19	2.021411	2.886954	2.021411	2.886954
X Variable								
1	-0.0156	0.004156	-3.75296	0.000313	-0.02386	-0.00734	-0.02386	-0.00734

Chi-Test	9.95684
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Question 25: Unpleasant experiences in gym

Chi-Test	1
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Question 26: Rate the experience of Gym

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance</i>
					<i>F</i>
Regression	1	3.363444	3.363444	7.356074	0.008038
Residual	88	40.23656	0.457234		
Total	89	43.6			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	2.92809	0.14375	20.36936	4.58E-35	2.642417	3.213762	2.642417	3.213762
X Variable								
1	0.007441	0.002744	2.712208	0.008038	0.001989	0.012894	0.001989	0.012894

Chi-Test	1
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Question 27: Overall appearance of the Gym

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	3.363444	3.363444	7.356074	0.008038
Residual	88	40.23656	0.457234		
Total	89	43.6			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	2.92809	0.14375	20.36936	4.58E-35	2.642417	3.213762	2.642417	3.213762
X Variable								
1	0.007441	0.002744	2.712208	0.008038	0.001989	0.012894	0.001989	0.012894

Chi-Test	1
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Question 28: Overall appearance of the Gym co-workers

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance</i>
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						<i>F</i>		
Regression	1	3.832675	3.832675	8.469387	0.004574			
Residual	88	39.82288	0.452533					
Total	89	43.65556						

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	2.760799	0.143009	19.30509	2.19E-33	2.476599	3.044999	2.476599	3.044999
X Variable								
1	0.007943	0.002729	2.910221	0.004574	0.002519	0.013368	0.002519	0.013368

Chi-Test	1
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Managerial advice and findings

The analysis and interpretations of statically tools, it has been analysed that there are different visitors of different age groups comes usually in the gym. There has been decreasing number of visitors in men and women. Thus, the management need to increase the facilities and more promotional strategies to be applied for increasing the performance of gym. It has also assessed that there has been lack of sources to increase awareness about the gym. Thus, management also need to include different social media websites and increase internet or online promotion activities to enhance source of information for the Gym.

The time scheduling for visiting the gym has also criticized, thus a reliable time schedule need to be implanted for increasing visits and satisfaction of the customers. As per the analysis, the gym has limited exercise equipments that is need to be increased so that more customers can visit and spend their valuable time. Increase in the good and positive atmosphere in the gym is also required, as most of the respondents have stated lack of reliable atmosphere in the Gym. The management of the Gym also need to increase the engagement of co-workers to enhance communication with the customers visited. It has interpreted that less customers are pleasant with the co-workers contribution in the gym.

Suggestions on Questioner

The questionnaire need to be more précised and structured to increase valuable analysis on the study, it evaluated that there has been many need of more questions related to competitive market environment introducing performance and customer satisfaction of other gym in the market place. The questioners must be focused to specific group or country to elaborate the actual behaviour customer's attention satisfaction and loyalty towards the gym. In the evaluations, some questionnaires also need to be included related to feedback, so that needs, demands and requirements of the customers could be analysed. It has help to interpret the loopholes of implementing reliable marketing approaches by management of the gym.

Conclusion:

The research has been based on critical analysis of the Gym chain and its performance level in the market. The case study evaluated declining popularity of the gym in market. With the engagement of responses of about 90 customers though online survey, the study highlighted some key factors that are effecting the gym. The research study has also engaged reliable literature, data methodologies and use of statistical tools to elaborate the data gathered from responses of customers of Gym chain.

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Appendices:

Appendix 1: Univariate Analysis

The univariate data analysis of the survey shows the following result:

The central tendency distribution for the gender respondent shows that the mode is 2 and the median is also 2. This implies that female members are more interested in the leisure activity than the male. The country analysis shows that all the three countries are facing the same problem of losing profit. The average age of the persons who visit the gym is nearly 33.22. The variance is 90.67 and the standard deviation is 9.51. This implies that variation in the age of the customers visiting the gym. The height of the customers of the gym is 168.53. Thus, the person having heights around 168.53 visit the gym. The healthy and fit person visits the gym because the median and the mode of the weight variable is 62. Losing weight is the main reason for visiting the gym.

The survey depicts that customer always use the cardiovascular equipment in the gym and the use of the weights machines are also done regularly. The customer turns almost 2-3times in a week in the gym. The customers prefer to visit the gym alone. The customers even have the equipments of their own. Thus, the data shows the preference pattern of the customers who visit the gym.

Appendix 2: Bivariate Analysis

1. In the gender analysis, the P-value represents the value lower than 0.5 it suggests that the many there is downfall in the frequency of gym goers. This analysis also suggests that Gym Chain is unable to attract customers at present.
2. The country analysis also suggests that the company's position in the market place is not favourable among the other and with other fitness centres.
3. The customer age analysis represents that with t-test more than 1.0, the number of gym goers may be more for particular age group but the gym goer members belong to all age group.
4. The height analysis suggests that the heights of most of the gym members are appropriate as per their age. However, in few cases the height of the gym member is not as per their ages.

5. The evaluation of weight of the gym members suggests that the weights of the gym goers are equivalent to their age and height excluding few members.
6. The analysis of reason of going to Gym suggests that many gym goers have genuine reason like they are concern for the body health and fitness. However, not all gym members feel alike.
7. Use of Cardiovascular analysis reveals that majority of gym goers prefer using cardiovascular during exercise. They think they are benefited by the using cardiovascular for in their exercise regime.
8. Analysis of the data regarding use of weight machines reveals that many people prefer weight machines in the gym for exercising.
9. Based on the analysis of the frequency of using the gym it can be stated that many people prefer going to gym. However, the gym usually shows few members turning to gym on regular basis.
10. This analysis suggested that most of the time the gym goers are not the member of the gym but usually comes to accompany their acquaintance(s).
11. Majority of the customer considers that gyms are the source of regular exercise. It enables them having a healthy and fit life. However, not all members think alike.
12. The analysis on clarification of the source suggests that many people do not understand the importance of gym as they are not aware of the reason of the gyms existence.
13. Majority of gym goers are punctual and timely visit the gym. They also exercise for appropriate time. Here, the exceptions are few members who are never punctual and never stayed for the appropriate time.
14. The analysis of the data collected about the last visitation in the gym for weight machines reveals that most of the members have visited gym for weight machines in the recent days.
15. According to the analysis, majority of the gym members visited recently for other activities besides using weight machines.
16. The analysis of age group suggests that majority of the gym members belong to age group appropriate for the gym.

17. The analysis of gym membership competitive period highlighted the fact that the gym has encountering excessive competition with other gym or other fitness centres.
18. This analysis states that the gym has high quality experiences for the members. Despite the fact, gym is unable to create satisfaction among the members.
19. As per the analysis, the gym is well-equipped with variety and high quality equipments but these equipments do not fulfil few parameters.
20. The analysis suggests that the gym has a good atmosphere and serve as a suitable environment to exercise. However, there are certain features which are needed to be concern making environment more acceptable to the gym members.
21. The analysis suggest that many gym user feels relaxing while returning from the gym as well as few gym goers do not feel the same on rerunning.
22. Not all gym goers agree on recommending the gym to friends. Majority of people remain neutral.
23. As per the analysis, the gym goers feels that gym is the place where they can socialize with others. However, not all feels social in the gym.
24. According to the analysis, people neither agree nor disagrees on the feel of calmness in the gym.
25. The analysis reveals that many gym goers experiences unpleasantness in the gym.
26. As per the analysis, the rate of experiences of the gym is increased. However, the increase in the rate is not assist in improving the effectiveness of the gym.
27. This analysis of the overall appearance of the gym suggested that the gym has appropriate overall appearance.
28. The gym co-workers appearances seem effective in the manner they assist and communicate with the members.