

ภาคผนวก ข

ผลการวิเคราะห์จำแนกปัจจัยด้วยวิธี Principal Component Analysis จาก SPSS

ผลการวิเคราะห์เพื่อจำแนกกิจกรรมของ TQM

กิจกรรมภาวะผู้นำ (Leadership)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.774
Bartlett's Test of Sphericity	Approx. Chi-Square	272.859
	df	6
	Sig.	.000

Communalities

	Initial	Extraction
Beliefs about the future direction	1.000	.564
Encourage change	1.000	.706
Opportunity	1.000	.677
Eliminating barriers	1.000	.533

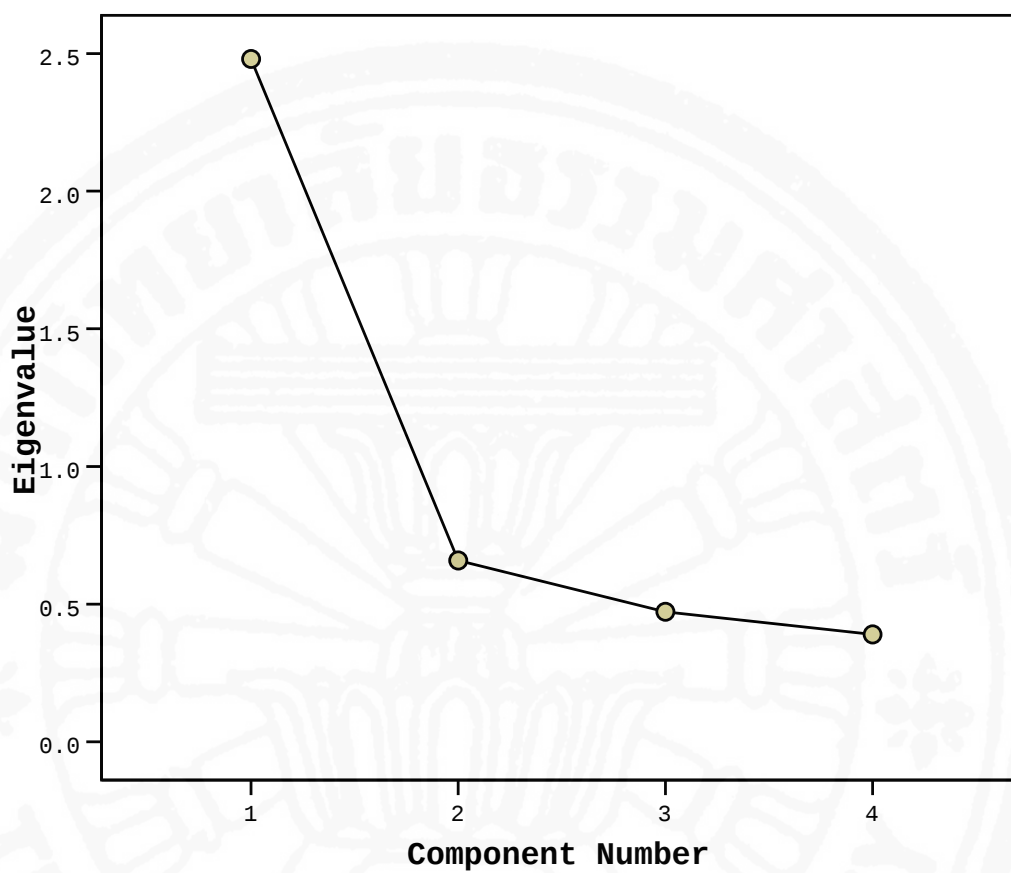
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.480	61.998	61.998	2.480	61.998	61.998
2	.658	16.458	78.456			
3	.472	11.803	90.259			
4	.390	9.741	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix(a)

	Component
	1
Encourage change	.840
Opportunity	.823
Beliefs about the future direction	.751
Eliminating barriers	.730

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

กิจกรรมยุทธศาสตร์และกระบวนการวางแผน (Strategic planning)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.790
Bartlett's Test of Sphericity	Approx. Chi-Square	306.612
	df	6
	Sig.	.000

Communalities

	Initial	Extraction
Mission statement	1.000	.595
Planning process	1.000	.700
Developing plans, policies and objectives	1.000	.631
Written statement of strategy	1.000	.671

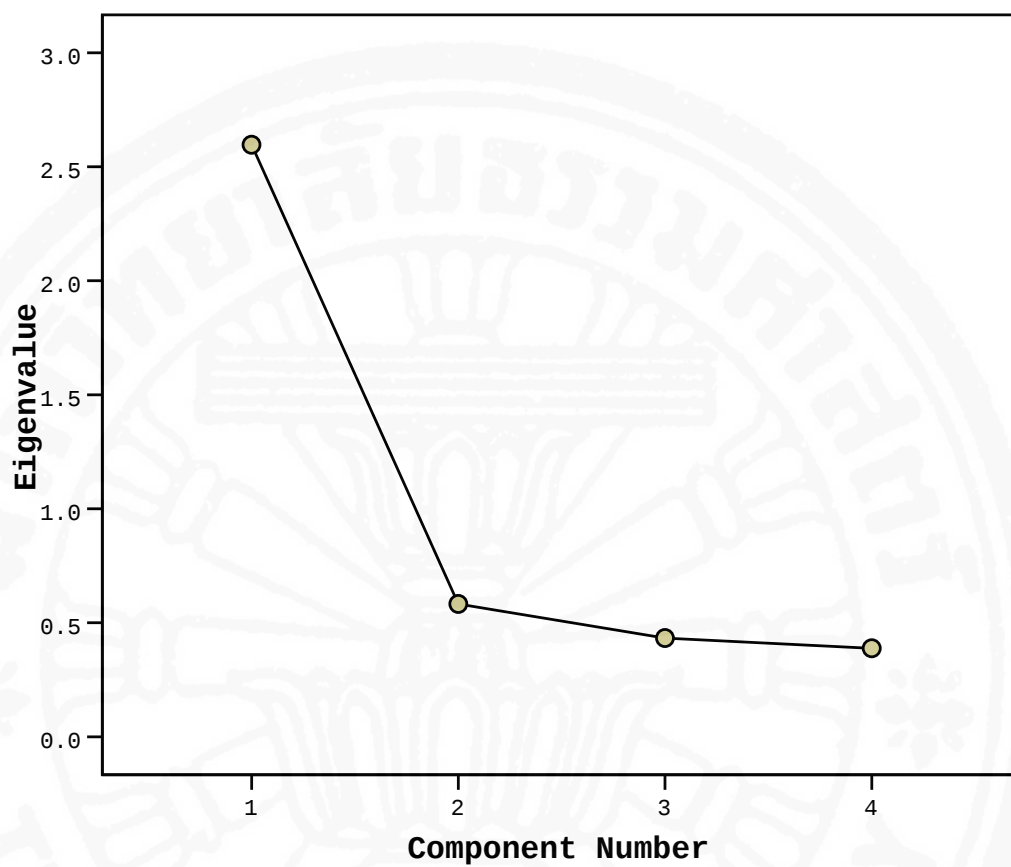
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.596	64.910	64.910	2.596	64.910	64.910
2	.583	14.564	79.475			
3	.433	10.819	90.293			
4	.388	9.707	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix(a)

	Component
	1
Planning process	.836
Written statement of strategy	.819
Developing plans, policies and objectives	.794
Mission statement	.771

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

กิจกรรมการมุ่งเน้นลูกค้า (Customer focus)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.808
Bartlett's Test of Sphericity	Approx. Chi-Square	444.204
	df	15
	Sig.	.000

Communalities

	Initial	Extraction
Customer needs and expectations	1.000	.595
Workforce	1.000	.533
Product design processes	1.000	.388
Customers relationship	1.000	.532
Customers' complaints	1.000	.541
Customer satisfaction	1.000	.601

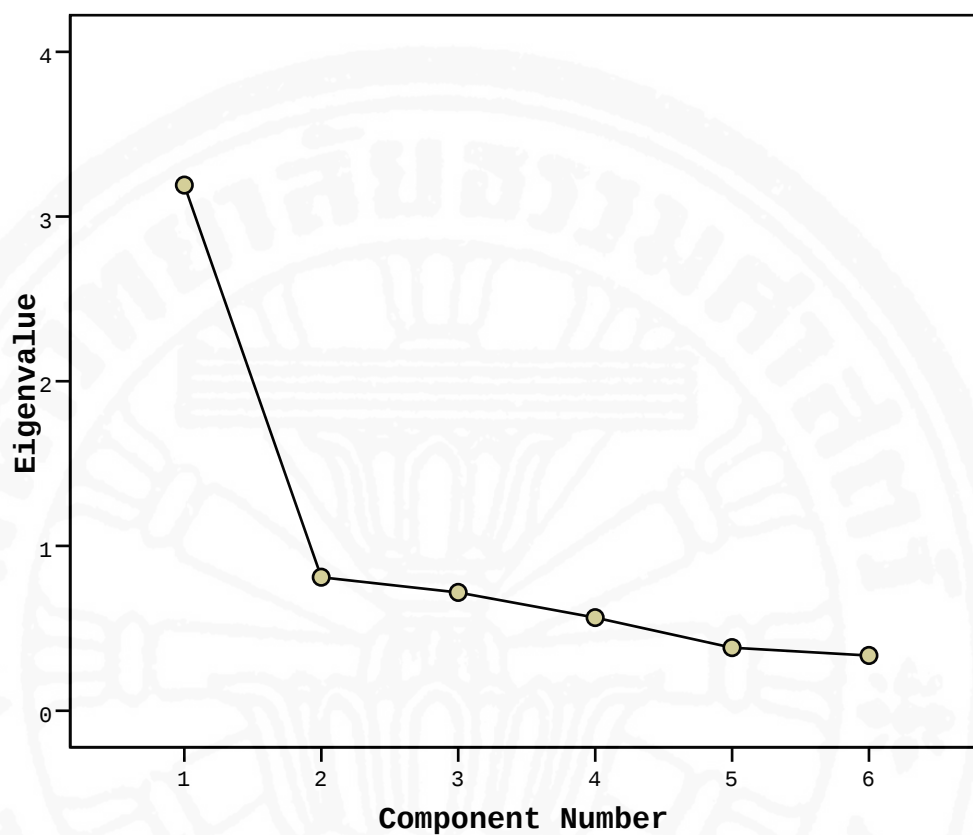
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.190	53.173	53.173	3.190	53.173	53.173
2	.810	13.498	66.671			
3	.718	11.959	78.630			
4	.564	9.405	88.036			
5	.383	6.379	94.415			
6	.335	5.585	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix(a)

	Component
	1
Customer satisfaction	.775
Customer needs and expectations	.772
Customers' complaints	.736
Workforce	.730
Customers relationship	.730
Product design processes	.623

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

กิจกรรมการวิเคราะห์ข้อมูล (Information analysis)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.777
Bartlett's Test of Sphericity	Approx. Chi-Square	410.807
	df	6
	Sig.	.000

Communalities

	Initial	Extraction
Performance measurement system	1.000	.754
Up-to-date data	1.000	.760
Company's performance	1.000	.730
Benchmarking program	1.000	.496

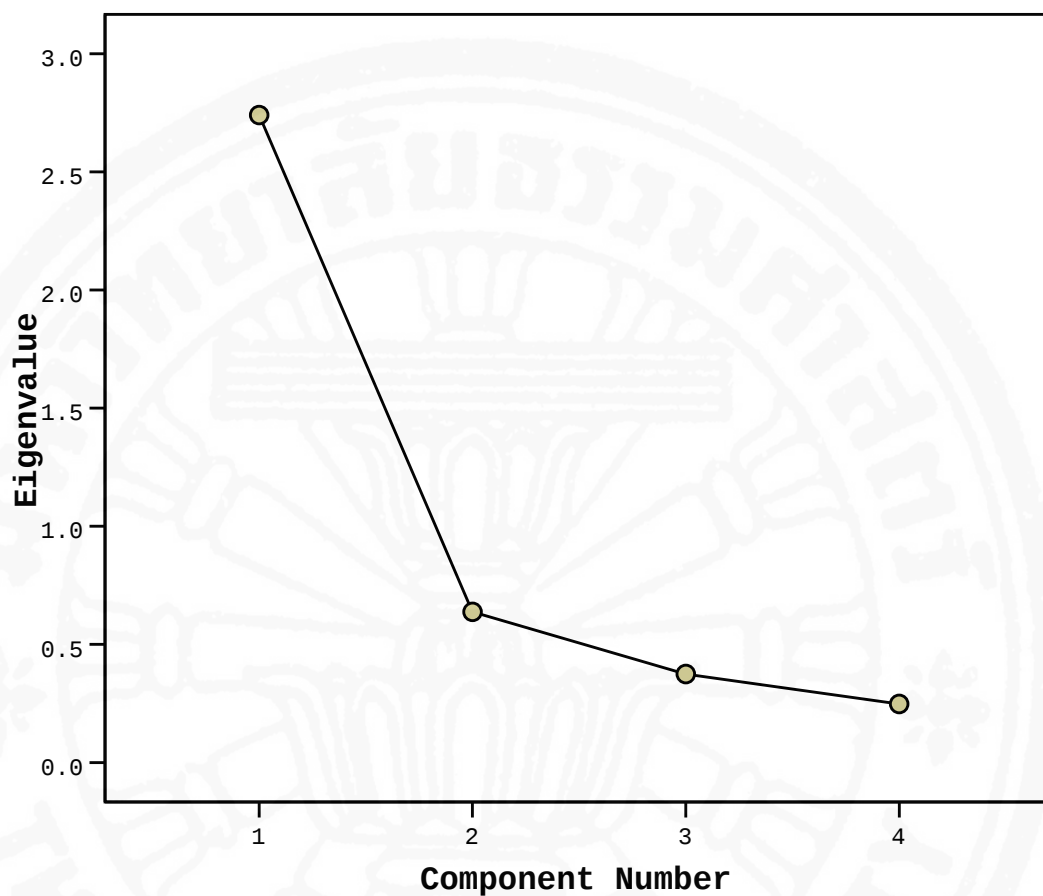
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.740	68.503	68.503	2.740	68.503	68.503
2	.637	15.935	84.438			
3	.375	9.364	93.803			
4	.248	6.197	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix(a)

	Component
	1
Up-to-date data	.872
Performance measurement system	.869
Company's performance	.854
Benchmarking program	.704

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

กิจกรรมการจัดการบุคลากร (People management)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.840
Bartlett's Test of Sphericity	Approx. Chi-Square	431.898
	df	10
	Sig.	.000

Communalities

	Initial	Extraction
Training and development process	1.000	.717
Communication processes	1.000	.680
Employee satisfaction	1.000	.559
Employee flexibility	1.000	.622
Work environment	1.000	.488

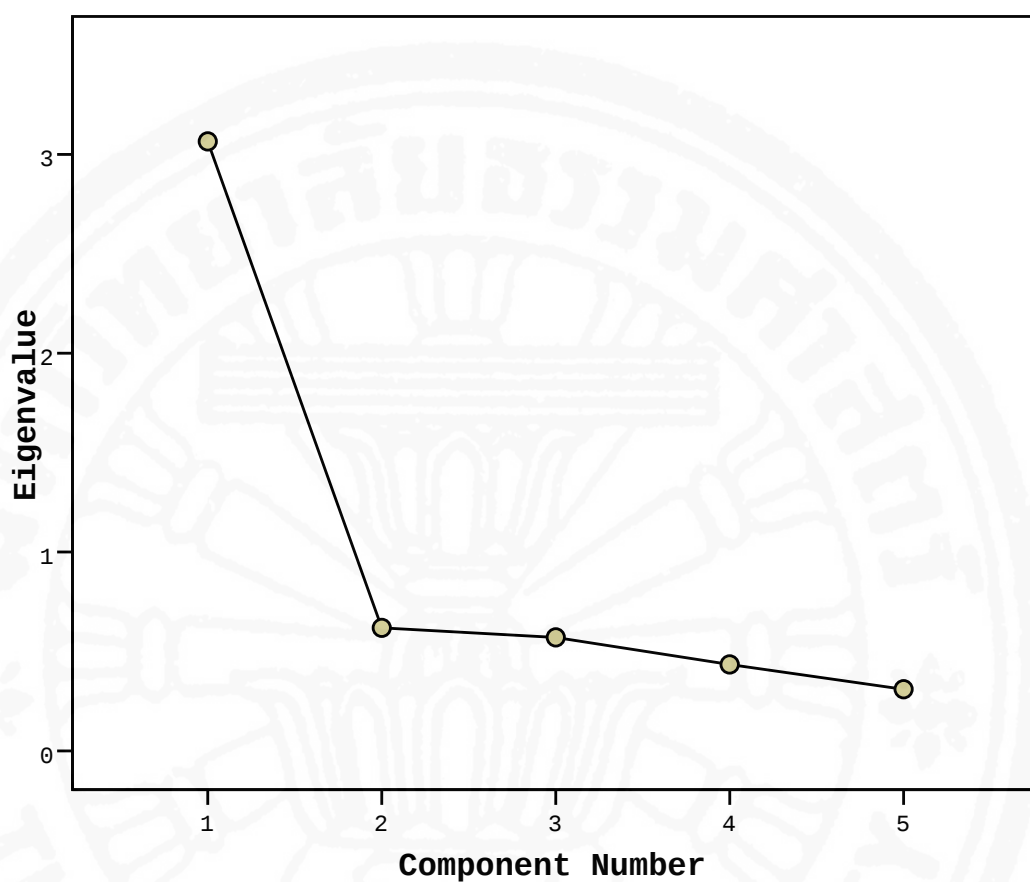
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.065	61.307	61.307	3.065	61.307	61.307
2	.619	12.377	73.684			
3	.571	11.415	85.098			
4	.435	8.698	93.796			
5	.310	6.204	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix(a)

	Component
	1
Training and development process	.847
Communication processes	.825
Employee flexibility	.788
Employee satisfaction	.748
Work environment	.698

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

กิจกรรมการจัดการกระบวนการ (Process management)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.807
Bartlett's Test of Sphericity	Approx. Chi-Square	301.756
	df	6
	Sig.	.000

Communalities

	Initial	Extraction
Internal customer	1.000	.594
Process design	1.000	.661
Process instructions	1.000	.675
Statistical techniques	1.000	.672

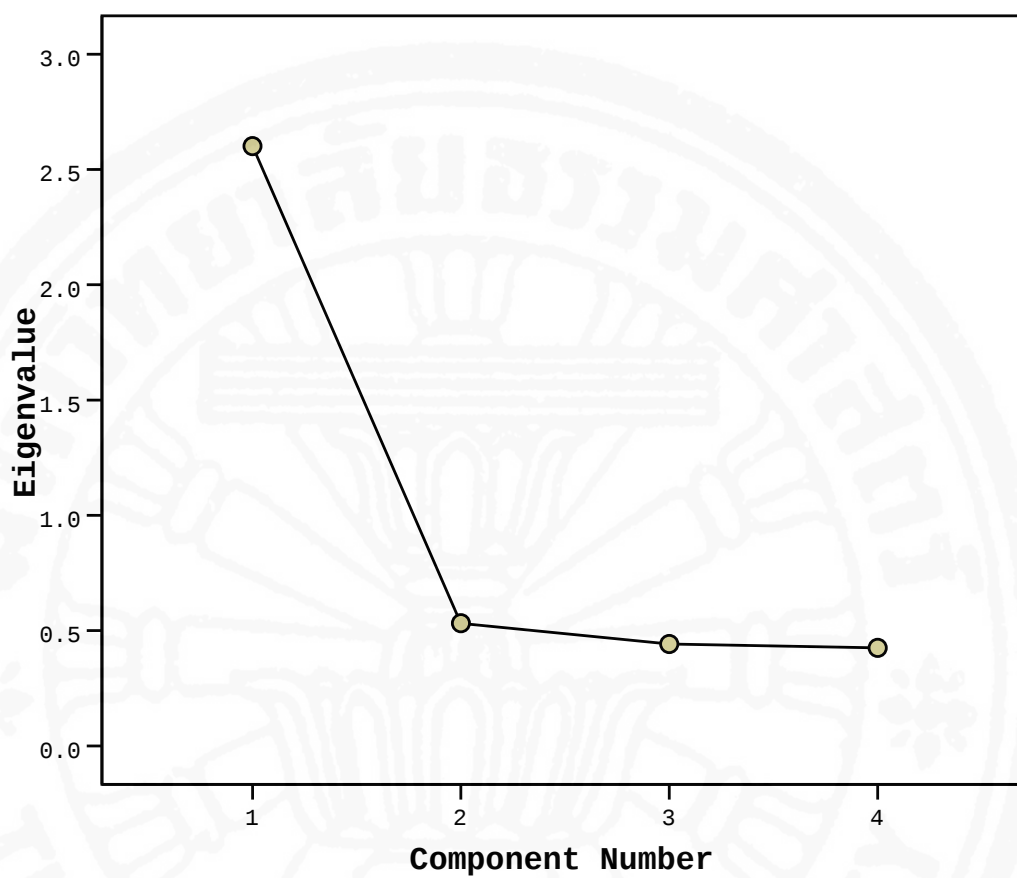
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.601	65.036	65.036	2.601	65.036	65.036
2	.532	13.297	78.333			
3	.442	11.048	89.381			
4	.425	10.619	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix(a)

	Component
	1
Process instructions	.821
Statistical techniques	.820
Process design	.813
Internal customer	.771

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

กิจกรรมการบริหารผู้ส่งมอบ (Supplier management)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.744
Bartlett's Test of Sphericity	Approx. Chi-Square	201.764
	df	6
	Sig.	.000

Communalities

	Initial	Extraction
Relationships with suppliers	1.000	.655
Supplier rating system	1.000	.514
Reasonably small number of highly dependable suppliers	1.000	.610
Product development process	1.000	.496

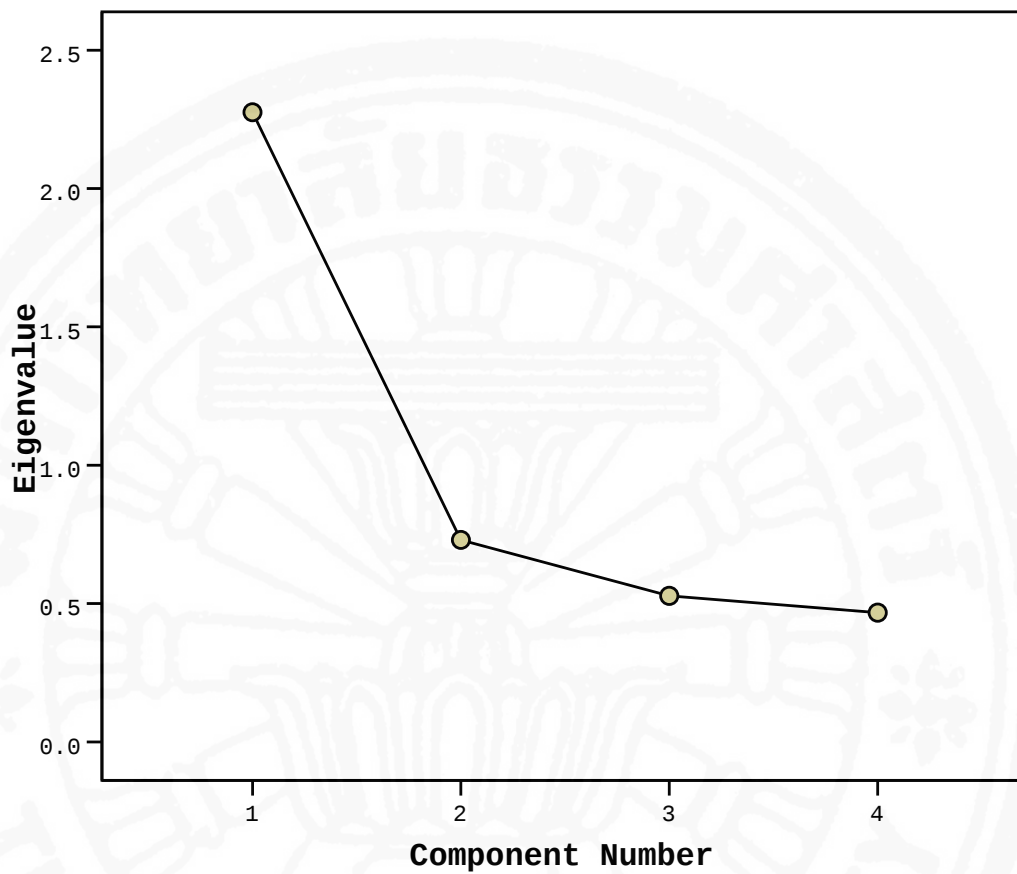
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.275	56.887	56.887	2.275	56.887	56.887
2	.730	18.243	75.130			
3	.528	13.197	88.328			
4	.467	11.672	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix(a)

	Component
	1
Relationships with suppliers	.809
Reasonably small number of highly dependable suppliers	.781
Supplier rating system	.717
Product development process	.704

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

ผลการวิเคราะห์เพื่อจำแนกลักษณะของวัฒนธรรมองค์กร
วัฒนธรรมแบบเกื้อหนุน (Group culture)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.761
Bartlett's Test of Sphericity	Approx. Chi-Square	252.986
	df	6
	Sig.	.000

Communalities

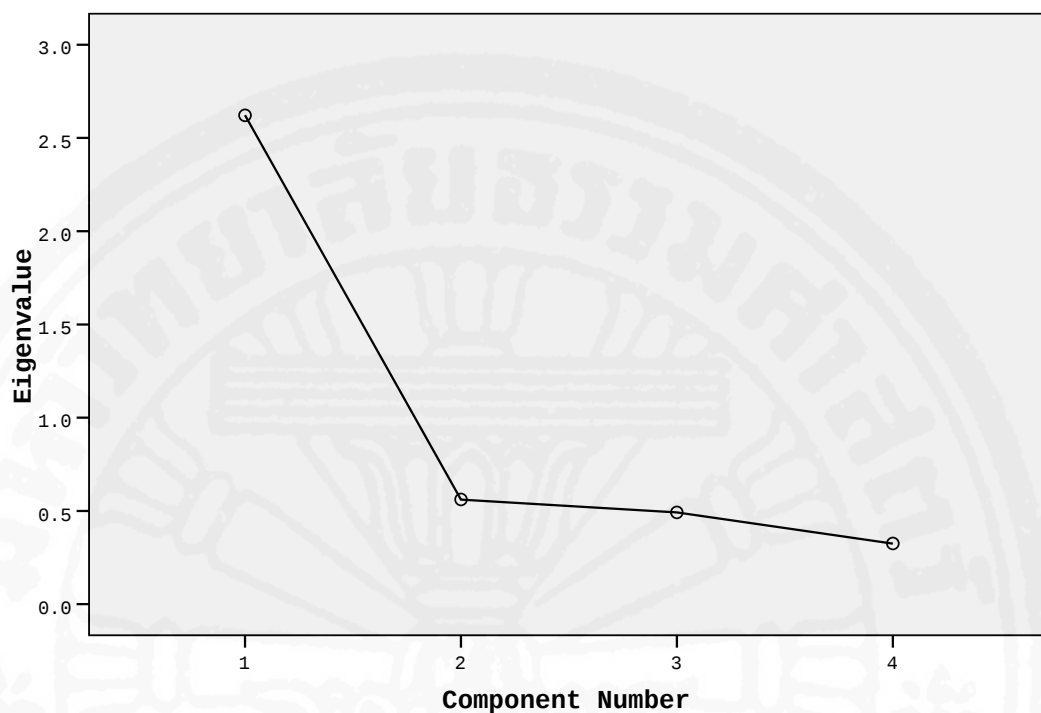
	Initial	Extraction
Participation, open discussion	1.000	.652
Empowerment of employees to act	1.000	.681
Assessing employee concerns and ideas	1.000	.630
Human relations, teamwork, cohesion	1.000	.659

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.622	65.543	65.543	2.622	65.543	65.543
2	.561	14.030	79.574			
3	.492	12.303	91.877			
4	.325	8.123	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot**Component Matrix(a)**

	Component
	1
Empowerment of employees to act	.825
Human relations, teamwork, cohesion	.812
Participation, open discussion	.807
Assessing employee concerns and ideas	.794

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

วัฒนธรรมแบบปรับตัว (Development culture)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.788
Bartlett's Test of Sphericity	Approx. Chi-Square	228.754
	df	6
	Sig.	.000

Communalities

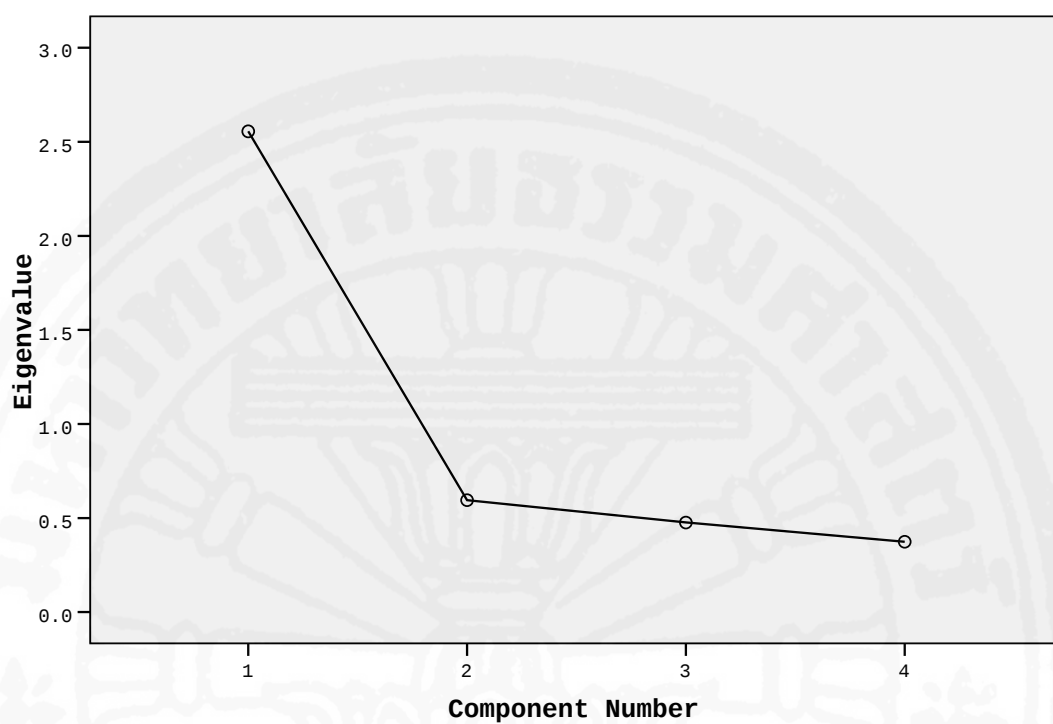
	Initial	Extraction
Flexibility, decentralization	1.000	.583
Expansion, growth, and development	1.000	.592
Innovation and change	1.000	.726
Creative problem solving processes	1.000	.655

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.556	63.895	63.895	2.556	63.895	63.895
2	.595	14.865	78.761			
3	.476	11.898	90.659			
4	.374	9.341	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot**Component Matrix(a)**

	Component
	1
Innovation and change	.852
Creative problem solving processes	.809
Expansion, growth, and development	.769
Flexibility, decentralization	.764

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

วัฒนธรรมแบบลำดับชั้น (Hierarchical culture)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.570
Bartlett's Test of Sphericity	Approx. Chi-Square	101.339
	df	6
	Sig.	.000

Communalities

	Initial	Extraction
Control, centralization	1.000	.774
Reutilization, formalization and structure	1.000	.645
Stability, continuity, order	1.000	.759
Predictable performance outcomes	1.000	.765

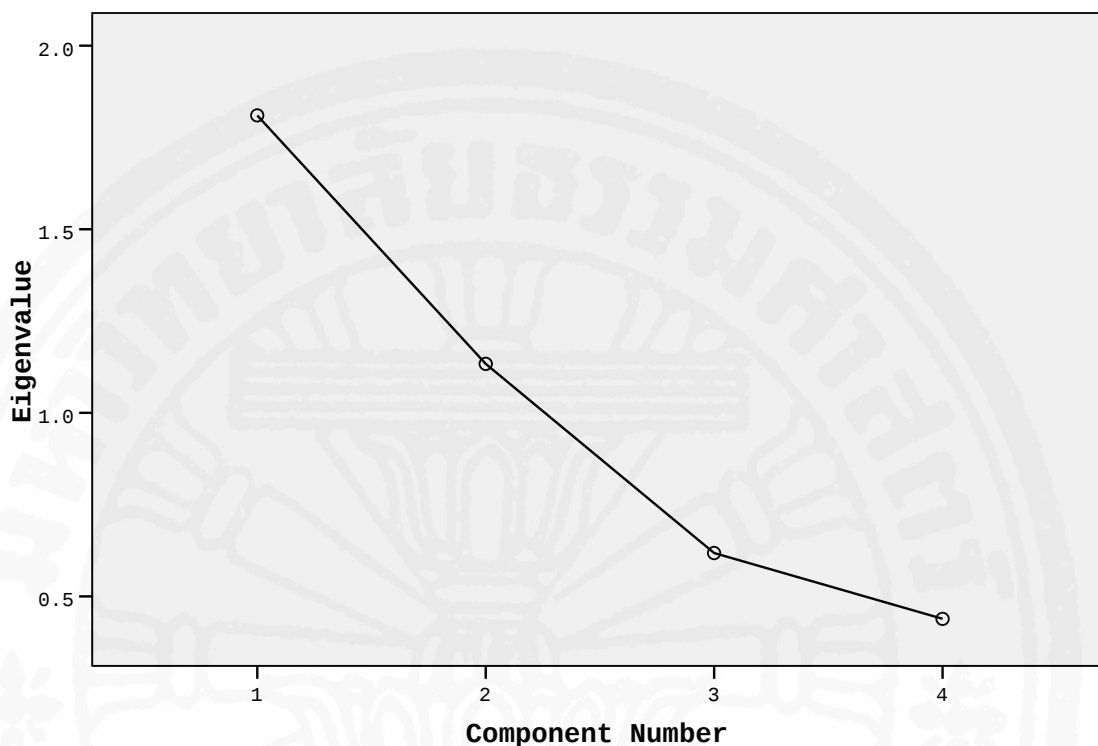
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.810	45.243	45.243	1.810	45.243	45.243	1.622	40.550	40.550
2	1.133	28.333	73.576	1.133	28.333	73.576	1.321	33.026	73.576
3	.618	15.452	89.028						
4	.439	10.972	100.000						

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix(a)

	Component	
	1	2
Stability, continuity, order	.800	-.344
Predictable performance outcomes	.762	-.429
Reutilization, formalization and structure	.665	.450
Control, centralization	.383	.792

Extraction Method: Principal Component Analysis.
a. 2 components extracted.

Rotated Component Matrix(a)

	Component	
	1	2
Predictable performance outcomes	.874	
Stability, continuity, order	.862	.129
Control, centralization		.875
Reutilization, formalization and structure	.328	.733

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

วัฒนธรรมแบบมุ่งเน้นผลสำเร็จ (Rational culture)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.811
Bartlett's Test of Sphericity	Approx. Chi-Square	414.732
	df	6
	Sig.	.000

Communalities

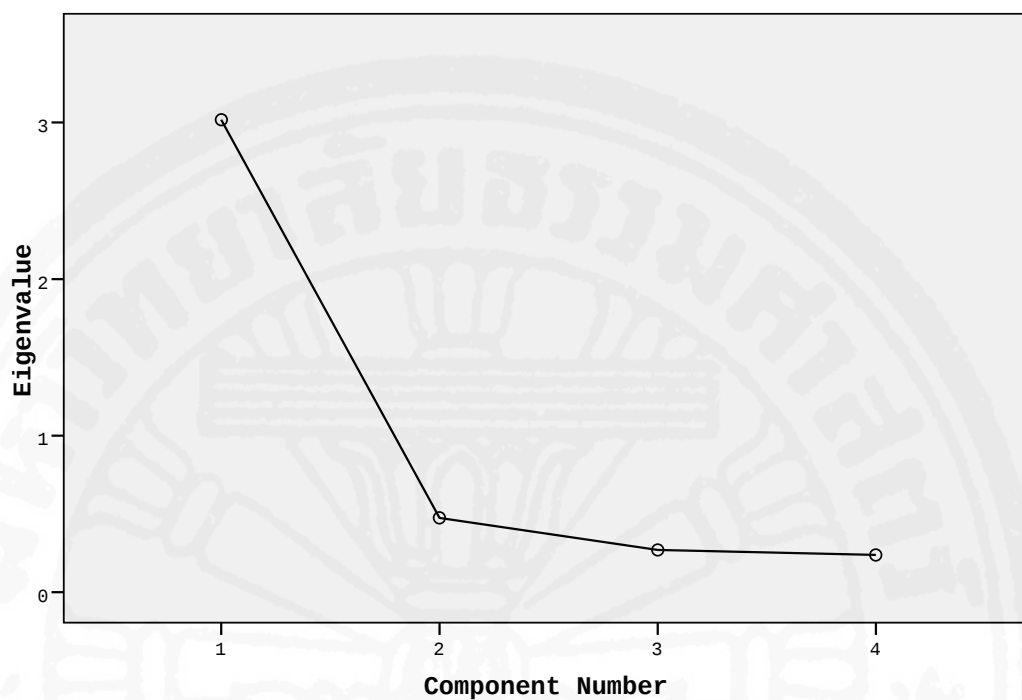
	Initial	Extraction
Task focus, accomplishment, goal achievement	1.000	.694
Direction, objective setting, goal clarity	1.000	.797
Efficiency, productivity, profitability	1.000	.712
Outcome excellence, quality	1.000	.814

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.017	75.435	75.435	3.017	75.435	75.435
2	.475	11.865	87.300			
3	.270	6.753	94.053			
4	.238	5.947	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot**Component Matrix(a)**

	Component
	1
Outcome excellence, quality	.902
Direction, objective setting, goal clarity	.893
Efficiency, productivity, profitability	.844
Task focus, accomplishment, goal achievement	.833

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

ผลการวิเคราะห์เพื่อจำแนกประสิทธิภาพขององค์กร

คุณภาพของผลิตภัณฑ์ (Quality of product)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.782
Bartlett's Test of Sphericity	Approx. Chi-Square	576.270
	df	6
	Sig.	.000

Communalities

	Initial	Extraction
Performance of products	1.000	.742
Specifications of our products	1.000	.728
Reliability of products	1.000	.816
Durability of products	1.000	.780

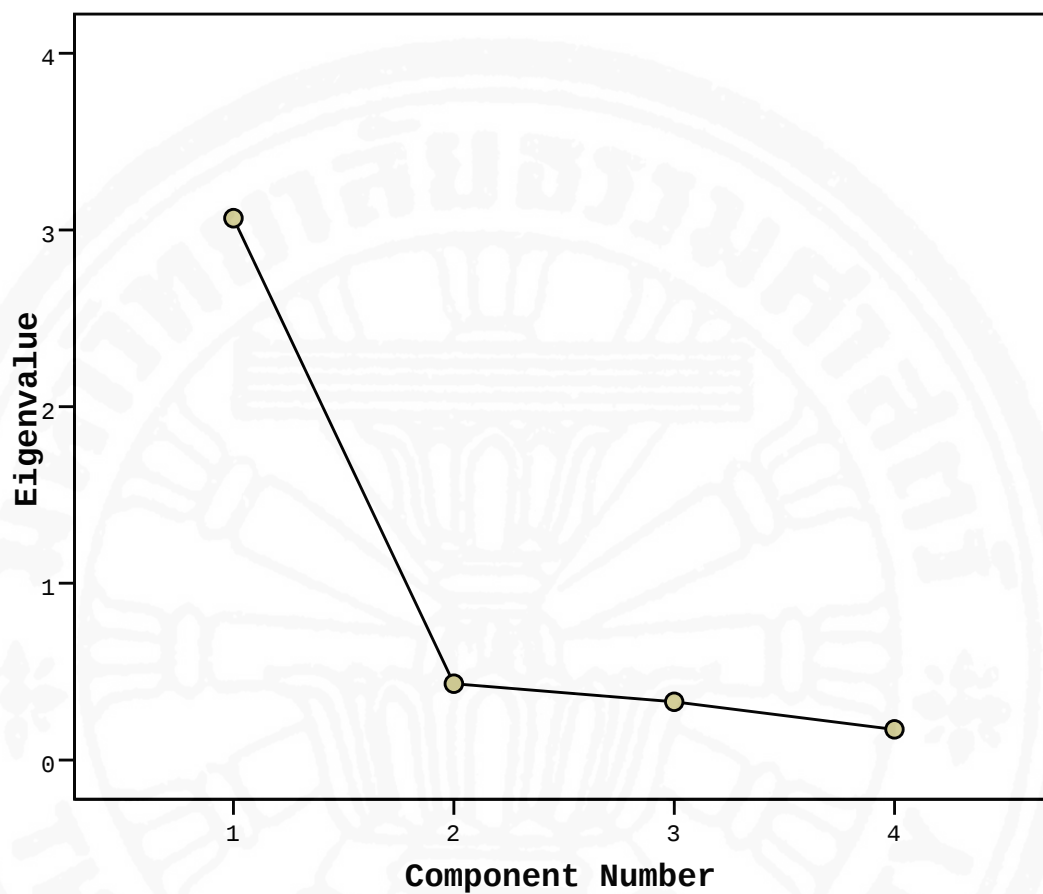
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.066	76.656	76.656	3.066	76.656	76.656
2	.432	10.789	87.446			
3	.329	8.235	95.681			
4	.173	4.319	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix(a)

	Component
	1
Reliability of products	.903
Durability of products	.883
Performance of products	.861
Specifications of our products	.853

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

นวัตกรรมของผลิตภัณฑ์ (Product innovation)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.891
Bartlett's Test of Sphericity	Approx. Chi-Square	831.934
	df	10
	Sig.	.000

Communalities

	Initial	Extraction
The level of newness of firm's new products	1.000	.730
Latest technological innovations in new products development	1.000	.755
Speed of new product development	1.000	.766
Number of new products that introduced to the market	1.000	.846
Number of new products that is first-to-market	1.000	.777

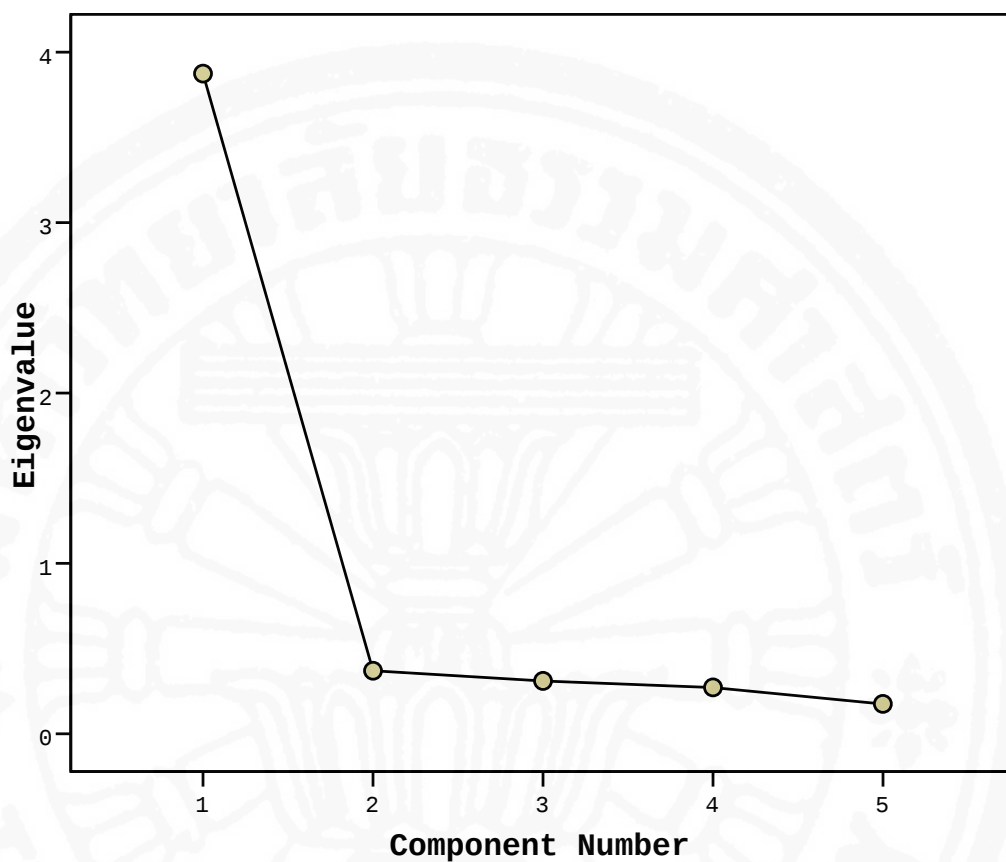
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.874	77.487	77.487	3.874	77.487	77.487
2	.370	7.392	84.879			
3	.310	6.196	91.074			
4	.271	5.426	96.500			
5	.175	3.500	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix(a)

	Component
	1
Number of new products that introduced to the market	.920
Number of new products that is first-to-market	.882
Speed of new product development	.875
Latest technological innovations in new products development	.869
The level of newness of firm's new products	.854

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

นวัตกรรมของกระบวนการ (Process innovation)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.787
Bartlett's Test of Sphericity	Approx. Chi-Square	710.969
	df	6
	Sig.	.000

Communalities

	Initial	Extraction
Technological competitiveness	1.000	.756
Latest technological innovations in our processes	1.000	.806
Technology used in processes	1.000	.839
Rate of change in processes, techniques and technology	1.000	.819

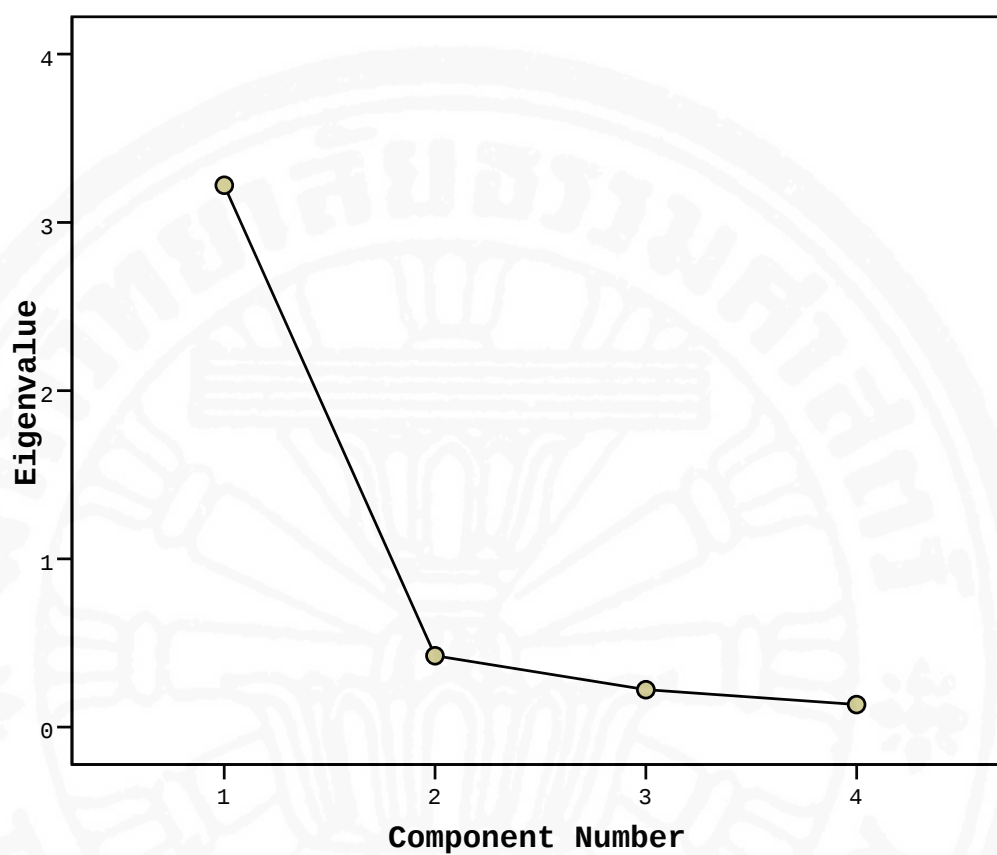
Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.220	80.501	80.501	3.220	80.501	80.501
2	.424	10.603	91.104			
3	.222	5.553	96.658			
4	.134	3.342	100.000			

Extraction Method: Principal Component Analysis.

Scree Plot



Component Matrix(a)

	Component
	1
Technology used in processes	.916
Rate of change in processes, techniques and technology	.905
Latest technological innovations in our processes	.898
Technological competitiveness	.869

Extraction Method: Principal Component Analysis.
a. 1 components extracted.