

"

"

:

164

.SPSS (V.17)

:

(TQM)

:

.

:

.(Chang 2005)

(Gomez et al., 2005)

.(TQM)

.(Salopek, 2006)

.2011/6/13

2010/12 /1

/

2011 ©

(2005 Soltani)

:

.1

.2

. (Orsini,2006)

.3

" Sigma "

3.4

:

(Davison & Al-

.1

.Shaghana, 2007)

.2

.3

.4

(Ciptono, 2005)

.5

:

(Peon et al., 2008)

-

(Ching-Chow, 2005, p. 1127)"

(Bartol & Martin,1991)

(Chen and Huang,2006)

Defects Per Million : .1

%100

(Warzynski, 2005)

3.4 (Harry,1998)

.2

(0.05 ≥ α)

(0.05 ≥ α)

(Goh, 1994)

" (Tomkins ,1997)"

:Six Sigma

(Lee & Choi, "

.2006)

- (

(

-

3.4

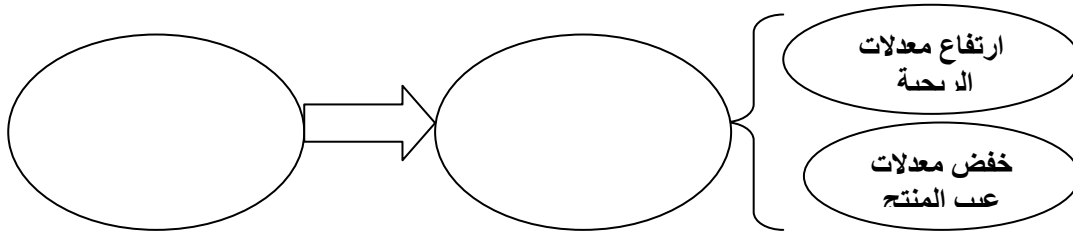
% .99.99966

:

"

.(2009

)



(1)

"

-

.(Wiele, Dale & Williams, "

1997)

"

)

"

.(2006

:

..

)"

.(2003

)"

(2001)

(2005)

:

(2003)

:

:

:

.1

:

.2

:-

:

.3

:

-

)

(2006)

(2007)

:

(292)

(Hahn,2001)
(Sigma Six)

(2007)

Motorola
(6σ)

Motorola

()

(- SO GOOD-)

www. westgard.) .

(com

(6σ)

Controlling

(2007)

Improving

Measuring

()

(Maguire,1999)

(6σ)

(6σ)

(Breyfogle,1999)

(Maguire,1999)

-

:

(2008)

(Chong & Rundus, 2004)

(Smadi & Al-

Khawaldeh,2006)

(Parajogo & Brown,2004)

(2006)

(Hansson, 2003)

:

-

-

:

:

(Baidoun & Zairi,2003)

(Baidoun,2003)

:

78

(650)

:

:

(%40)

(260)

(650)

(260)

	(15)	(17)	(%69.6)	(181)
			(%63.06)	(164)
(0.80)			(% 25.23)	
			:	
		:		
	(Flynn et al., 1994)	(0.70)		
:				
	-	.1		
	(0.875 = α)	(15-1)		
		.2		
	(0.87 = α)	(22-16)	:	
		.3	(15)	()
	(0.89 = α)	(28-23)		
			2008	2006
			Dhar, 2005;	Duque & Cadavid, 2007,
			:	(Elshennawy,2004.
			:	
			(7)	
				(22-16)
(SPSS (SPSS.17)			(6)	(28-23)
:	Icorporation,2008)			
Descriptive)	-	4 =	5=)
	(Statistic Measures	2 =	3 =	
				(1 =
	Reliability			
Kaiser-Meyer-Olkin and the	-			
	Bartlett's Test of Sphericity			(The internal consistency measure)
Factor Analysis	-			(Cronbach's alpha)
Simple Regression	-			(25)
	Analysis			

(Kaiser-Meyer-Olkin and .1
Bartlett's Test of Sphericity)
 Factor Analysis

(Kaiser,1974)(0.60)
 Bartlett's Test of Sphericity

(1)

(Flynn,et al. 1994)

Kaiser-Meyer-Olkin and the Bartlett's Test of Sphericity (1)

Bartlett's Test of Sphericity			Kaiser-Meyer-Olkin Values	
Sig.	Df	Approx.Chi-Square		
0.000	1	420.651	0.808	
0.000	3	186.225	0.682	
0.000	3	346.719	0.756	

:Factor Analysis .2

(0.50)

(2)

: (2)

% of Variance	Eigenvalue	Factor Number	Factor Loading		
			0.912		.1
			0.858		.2
			0.827)	.3
				(...	

% of Variance	Eigenvalue	Factor Number	Factor Loading		
51.675	3.901	1	0.898		.4
			0.878		.5
			0.767		.6
			0.687		.7
			0.840		.8
			0.817		.9
			0.803		.10
			0.742		.11
			0.868		.12
			0.864		.13
			0.834		.14
0.776		.15			
()					
64.907	2.987	1	0.785		.16
			0.756	20	.17
			0.693	3.4	.18
			0.853	20	.19
			0.796		.20
			0.663		.21
			0.713		.22
()					
			0.776		.23
			0.764		.24

% of Variance	Eigenvalue	Factor Number	Factor Loading		
77.588	3.453	1	0.863		.25
			0.667		.26
			0.817		.27
			0.903		.28

(Likert)

:

(3)

(1)	(2)	(3)	(4)	(5)	
1.79-1	2.59-1.8	3.39-2.6	4.19-3.4	4.2	

(2)

()

)

(3.81)

(

)

(2002)

(

(4.28)

:

(

)

(4.16)

)

(

(4.10)

(4)

(2006)

(4)

	0.76	3.81		1
	0.88	4.16		2
	0.45	3.66	(...)	3
	0.76	3.55		4
	0.83	3.79		5
	0.55	3.67		6
	0.47	4.10		7
	0.67	3.71		8
	0.56	4.28		9
	0.87	3.66		10
	0.45	3.81		11
	0.35	4.05		12
	0.74	3.37		13
	0.71	3.73		14
	0.65	3.85		15
		3.81		

(Chong & Rundus, 2004)

(2007) (2008)

:

(3.15)

"

"20

"

(5)

(2.91)

"

"

3.4

(2.49)

:

()

"

"

(3.21)

":

(5)

	0.97	3.21		16
	1.46	2.91	20	17
	1.37	2.49	3.4	18
	1.37	2.88	20	19
	1.29	2.51		20
	0.67	3.15		21
	1.34	2.75		22
	2.84			•

(6)

:

(3.32) ()

(3.08)

(3.59)

(3.52)

(6)

	0.67	3.08			23
	0.77	3.59			24
	0.87	3.12			25
	0.55	3.19			26
	0.96	3.52			27
	0.88	3.41			28
		3.32			*

(7)

Sig.	T	T	R ²	R				
0.000	14.165	3.090	0.584	0.675	1	46.033	Regression	H ₀₋₁
					163	58.399	Residual	
					164	104.432	Total	
0.000	12.125	3.090	0.601	0.693	1	48.677	Regression	H ₀₋₂
					163	48.035	Residual	
					164	96.712	Total	

H_{0-1}

$(0.05 \geq \alpha)$

$\beta=0$

$\beta \neq 0$

(t)

(7)

$(.7)$

(t)

(14.165)

(3.090)

(t)

$(0.05 \geq \alpha)$

.1

α

(

)

)

%58.4

(

(4.28)

(4.16)

H_{0-2}

$(0.05 \geq \alpha)$

(3.37)

(2006)

$\beta=0$

(2007)

$(.7)$

$\beta \neq 0$

(12.125)

(t)

(7)

.2

(t)

$(0.05 \geq \alpha)$

(3.090)

(t)

α

)

%60.1

(

(3.21)

(

)

(2001)

.5

(4-3)

(0.50)

(1997)

:

(Hansson,2003)

.1

.3

()

.2

(3.59)

(3.52)

(2007)

3.4

.3

(2007)

.4

(%58.4)

()

.4

(%60.1)

)

.(

.5

.1 2 " 2009
 2008 ."
 " 2007
 .3 4 2001 ."
 : : 1997
 .1 29 "2007 .37
 " 2006
 "
 2002 .
 : 2006
 .(2)14 "

Baidoun, Samir & Zairi, Mohammed. (2003). A Proposed Model of TQM Implementation in The Palestinian Context, **TQM & business excellence**, Vol. 14, No. 10.

Baidoun, Samir, (2003) "An Empirical Study of Critical Factors of TQM in Palestinian Organizations", *Logistics Information Management*, **Emerald**, Vol. 16, No. 2.

Bartol, KM and Martin, DC. (1991). **Management**. New York, McGraw-Hill.

Chang, H.H. (2005, May). The influence of continuous improvement and performance factors in total quality organization. **Total Quality Management**, 16(3), 413 – 437.

Chen, K.S., & Haung, M.L. (2006). Performance measurement for a manufacturing system based on quality, cost and time. **International Journal of Production Research**, 44(11), 2221 – 2243.

Ching-Chow, Y. (2005). The Refined Kano's Model and Its Application. **Total Quality Management & Business Excellence**, 16, 1127 – 1137.

Chong, Vincent K. & Rundus, Michael J.(2004) "Total Quality Management, Market Competition and Organizational Performance", **The British Accounting Review** 36.

Ciptono, W.S. (2005). Exploring the linkages between Deming's principle, world-class company, operational excellence, and company performance in an oil and gas industry. **Gadjah Mada International Journal of Business**, 7(2), 205 –239.

Davison, L., & Al-Shaghana, K. (2007). The link between Six Sigma and quality culture – an empirical study. **Total Quality Management**, 18(3), 249 – 265.

Dhar, S. (2005). Evolving a high performance culture: Learning from a turnaround. **IIMB Management Review**, 93 – 97.

Duque, D.F.M., & Cadavid, L.R. (2007). Lean manufacturing measurement: The relationship between lean activities and lean metrics. **Estudios Gerenciales**, 23(105), 69 – 83.

Elshennawy, A.K. (2004). Quality in the new age and the

- body of knowledge for quality engineers. **Total Quality Management**, 15(5)(6), 603 – 614.
- Flynn, B.B., Schroeder, R.G., and Sakakibara, S. (1994). A framework for quality management research and an associated measurement instrument, **Journal of Operations Management**, Vol 11 No 4, pp 339-366.
- Goh, T.N. (1994). Integration of necessary but insufficient capabilities for quality improvement. **Total Quality Management**, 5(6), 391 – 395.
- Gomez-Gras, J.M., & Verdu-Jover, A.J. (2005). TQM, structural and strategic flexibility and performance: An empirical research study. **Total Quality Management**, 16, 841 – 860.
- Hansson, Jonas, (2003). **Total Quality Management – Aspects of Implementation and Performance (Investigation with a Focus on Small Organizations)**, Doctoral Thesis, University of Technology, Sweden.
- Harry, M.J. (1998). **The Vision of Six Sigma**, 8 volumes, Phoenix, Arizona, Tri Star Publishing.
- Kaiser, H. F. (1974). Analysis of factorial simplicity", **Psychometrika**, Vol 39 No 4, pp 31-36.
- Lee, K., & Choi, B. (2006). Six sigma management activities and their influence on corporate competitiveness. **Total Quality Management**, 17(7), 893 – 911.
- Orsini, J.N. (2006). W. Edwards Deming the first management engineer. **IET Engineering Management**, 46 – 47.
- Parajogo, Daniel & Brown, Alan. (2004). The Relationship between TQM Practices and the Role of Formal TQM Programs: An Australian Empirical Study", **QMJ**, Vol. 11, No. 4.
- Peon-Escalante, I., Olivia-Lopez, E., & Badillo-Pina, I. (2008). Methodology for an organisational development process: An integral and sustainable qualitative transformation of complex inter-institutional networks, working on social and environmental problem situations. **Journal of Organisational Transformation and Social Change**, 5(1), 31 – 11.
- Salopek, T.K. (2006). Leadership for a new age. **T&D**, 60, 20 – 23.
- Smadi, Majed S. & Al-Khawaldeh, Khleef (2006). The Adoption of Total Quality Management (TQM) in Dubai Manufacturing Firms, **Jordan Journal of Business Administration**, Vol. 2, No. 4.
- Soltani, E. (2005). Top management: A threat or an opportunity to TQM? **Total Quality Management**, 16(4), 463- 476.
- SPSS Incorporation. (2008). **Statistical Package for Social Science Version 17**, Chicago, Illinois.
- Tomkins, R. (1997). **GE beats expected 13% rise**, Financial Times, (10October), p.22.
- Warzynski, C.C. (2005, August). The evolution of organization development at Cornell University: Strategies for improving performance building capacity. **Advances in Developing Human Resources**, Vol. 7, 338 – 350.

...

The Influence of Top Management Support and Commitment on Total Quality Management Indicators from Managers and Heads of Departments Viewpoint: A Case Study of Sahab Industrial City"

Kamel M. Al-Hawajreh, Hussein Ali Al-Zeyoud, Sulieman Al-Hawari, Anbar I. Shalaash

ABSTRACT

The purpose of this study was to determine the commitment and support level by top management in order to implement Total Quality Management Indicators represented by lower product defect and higher profitability rates. A survey was conducted to collect data based on 5- point a Likert-scale. There were 164 respondents; all were managers from the Sahab Industrial City.

Results of this study showed that a company that has a strong top management commitment and support able to impement TQM Indicators results in lower defects and higher profits. The research recommended companys managers to be clear in supporting quality, and the quality is everyone's job. Top management has to set clear goals related to quality , provides appropriate resources, acts as a training source to employees, focuses on building teamworks, and does not have work groups competing with each other. Finally top management has to be involved with quality.

KEYWORDS: Top management, Total Quality Management, 6sigma, Product Defects rate, Profitability Rate.

hawajreh2005@yahoo.com

Kamel Al-Hawajreh, Department of Business, Petra University.

Hussein Al-Zyoud, Department of Business, Al-albayt University.

Suleiman Al-Houri, Department of Business, Al-albayt University.

Anbar Shalaash, Department of Marketing, Petra University.

Received on 1/12/2010 and Accepted for Publication on 13/6/2011.