

مجلة

# عالم الجودة

الالكترونية

10

الجودة مسؤولية الجميع



عالم الجودة

أمانتنا أمتنا و عالمنا الجودة و النشر العلمي المتخصص في عالم الجودة غايتنا

مجلة علمية عربية متخصصة في علوم و تطبيقات الجودة و نظم الإدارة



العدد العاشر سبتمبر 2016

الابتكار الوجه الجديد للجودة  
نظريّة المعرفة  
من مدير سائق إلى مدير قائد  
تزوجيه مهندساً  
معايير جودة المنتجات الغذائية



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2016



No.5740279UK مسجلة دولياً بتصريح من بيير منجهام البريطانية للطباعة و النشر برقم





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## مجلة عالم الجودة



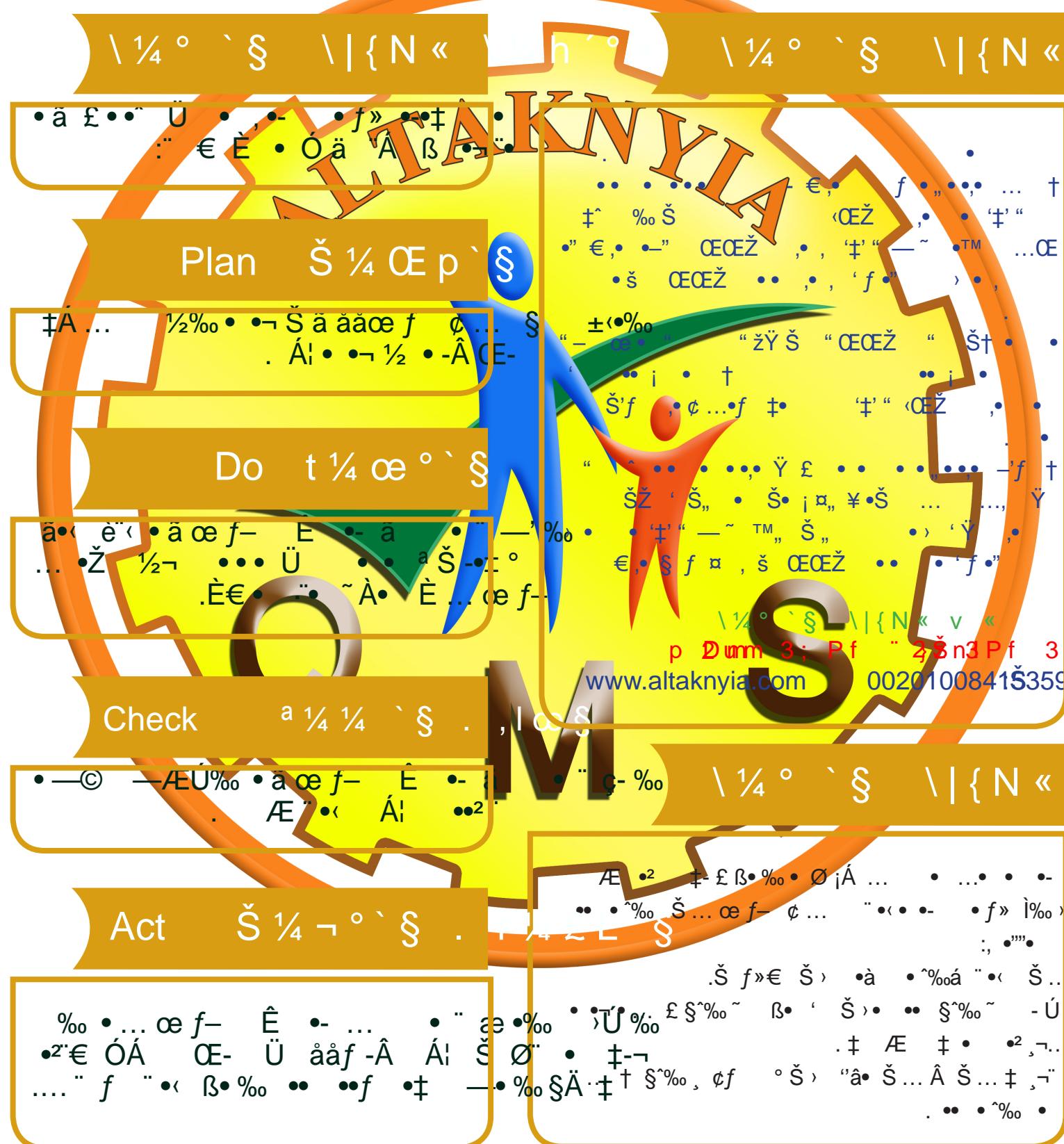
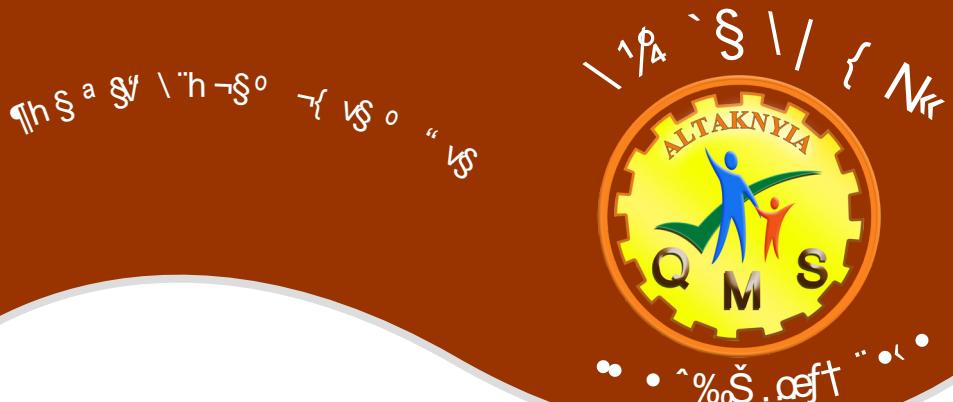
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تدريب . تأهيل

استشارات . أنظمة جودة

البرنامج التدريبي الدولي

# مدير جودة معتمد

## Certified Quality Manager

معتمد من المعهد الامريكي للدراسات الاحترافية



### أولاً: مقدمة عامة: Introduction



إن نجاح المنظمات بات مرهوناً بنجاحها في المحافظة على علامتها الحالية وقدرتها على كسب عملاء وفتح أسواق جديدة ومن أجل تحقيق هذا الهدف الإستراتيجي للمنظمات أصبح التوجه نحو إدارة الجودة وقيادتها للمنظمات من خلال أنظمة عالمية للجودة ورقابة محكمة للمنتجات والخدمات من خلال أعمال متقدمة لمراقبة الجودة ويتأتي ذلك من خلال قيادة واعية ومدركة لتحدي المنظمات نحو البقاء وحيث أن المعنى بهذه القيادة هم مدراء الجودة في هذه المنظمات، لذلك وجب أن يكونوا هؤلاء المدراء على حرفية ومهنية عالية تمكّنهم من القيام بأدوارهم القيادية سواء لنظم توكيد الجودة أو مراقبة الجودة داخل المنظمات ومن منطلق الدور الرئادي لمؤسسة التقنية وخبراتها المتراكمة في أعمال إدارة الجودة في الكثير من المنظمات بإختلاف منتجاتها وخدماتها وأحجامها، ورؤيتها للأدوار الرئيسية والقيادية لمدراء الجودة في هذه المنظمات فقد قمنا بوضع هذا البرنامج التدريبي والذي هدفه الرئيسي تأهيل مدراء للجودة بتفكير عالمي مبني على خبرات عربية وعربية وعربية وعربية وعربية لجودة في المنظمات العربية ووضعت برنامجاً عربياً خالصاً يهدف لتأهيل مدراء الجودة وتأهيلهم لممارسة أعمال مهنتهم بمهنية وإقتدار.

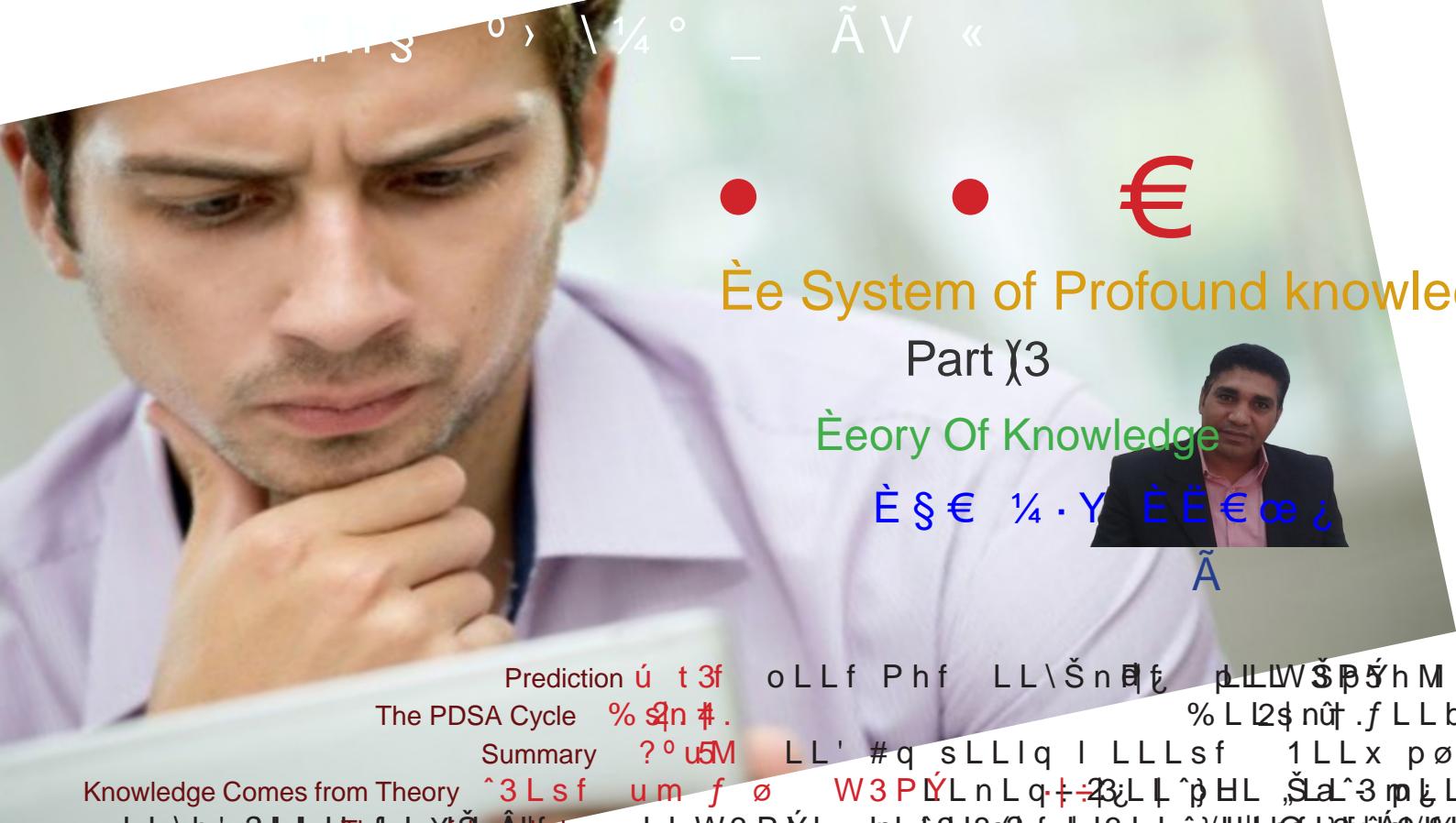




# ISO 37001 TÉMÁÔ 4 ÍNÍ



A photograph showing two men in dark business suits shaking hands over a white tablecloth. The man on the left is holding a US dollar bill in his right hand, which is extended towards the other man. Both men are wearing white shirts and dark ties. The background is slightly blurred, suggesting an indoor office or meeting room setting.



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## Èe System of Profound knowledge

### Part 3

#### Èeory Of Knowledge

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Prediction ú t 3f oLLf Phf LL\Šnøf pLLWŠBÝhM  
The PDSA Cycle % 2n #.

Summary ?° u5M LL' #q sLLIq I LLLsf 1LLx pø  
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LLLq j „LL- }LL\ 3LLC pM „WLL-p / L E m { L L q f ^p Hf || „fS & KLD  
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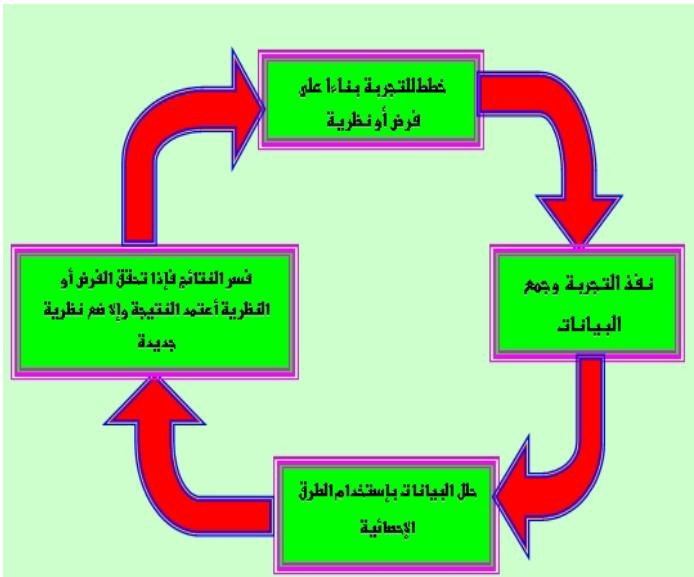
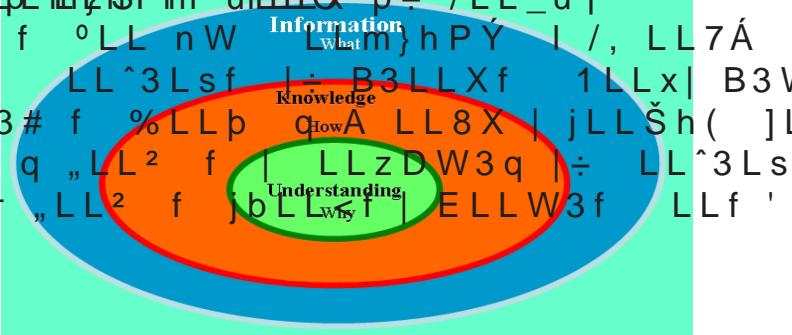
#### Deming's System of Profound Knowledge

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Y Š \_ Š b t f . W3P Y ^ 3 L q } x | f f ô 5 h M „ 2 f j 8 h  
W / @ h f ^ A q . Y Š \_ | Knowledge Comes from Theory ^3Lsf q u m 1 f ø  
Examples h 2m ÷

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 LL^3 f ~ / LL Y ~ „ LL 8Q c Q L E O q LLL f z h ŠT Lk. f . d [ / | Šh  
 o Šh L L 28 \ Y ú, LLL t O Q L L D t p ÷ u L L a n t Q L L b @ Y ` p h P L Z B k f p L L 3 E  
 p o L L A p L L b t Q E L M L p L L t L n \_ . / L L p p / WL [ } f p t / f # t · | ÷  
 3 L L m | ? „ LL - h b L b Y L L 7 . / L L Š b h L L L p g ÷ / X L L S D t h L p M " Ū q p ÷  
 p5 L L u ] L L O } H Y o h P h f " Ü 7 ù F 3 < f „  
 LL W 3 P m j L L n ( t p ` 0 u p d L L Š ^ f p ÷ L L s n h P L L W 3 P W 3 P Y L ^ 6  
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### Information, Knowledge & Understanding



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 / L L B L L Š h ' Q L L m & L L @ f u  
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The PDSA Q L L m A L L \_ / L L ' „ L L ^ 2 ^ m u L L L m ÷ L L B # Š p 5 o B L 13 ! Á s f \ L  
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 L L z Q 2 y Š L L ; L A L L - L f | 2 j ) L A L L Š t n # A L L L f s t n , L A L L A L L O W L L Š h O o L L s  
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 6 LL7 ÷ „LL' ØL uHLaf L L LT U ÷ uQ \$ leSpLnsO | p L L S h n P h L c 2 L 2 D Á t ÷  
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þLLsW/^| ô LLn h Pþ LQ/Lþ h Pþ h m|L 2 xB þLW j2 ĀL LþWj þL•Šf ß •^ B  
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LLO A +. 9 L Lpþ E L2 /XL1Lþ + LþLmþA ^|3LLL; T fA L,LL L+<sup>2</sup> c L L h x  
3 LLþ G ] LL G |2L þL` \ þLjLLf " LLLLQ W3 111) aSxPBR t bW13U1pþ c|LpL þLf8 ( •  
{ LLfº + u L L m [ThePDSACycle](#) P Y/, jL-þ\q/( þLþ t a @mn } x  
LL^3 Lq } LLx| LLW3 P Y I L L L q ðu L L Lb ( L Lcfl Lfq üðñ5 LcLLHNM1 \_ þBLLþ a  
... 1 LLf | ŠLL8 Xsf LLW3 P m } L"LLþ|ØQ L% L3fp ôsfpL LþMŠ L•L;L- ðELLla  
j LL m ` u L L O { LLŠW /LLþþ L þLþ 9 LL m + ô 5 LL! { LL P þLþ R  
þL P{ LLþ 5 þþ LþL(lq| LLLLW3P Y ÷ I LL L q

#### P=PLAN

- Define a problem or opportunity.
- Analyze the situation. Study and define the problem: brainstorm for causes and corrective actions; and think creatively to determine the best approach and best possible corrective action.
- Develop an implementation plan.

#### D=DO

- Implement corrective action.
- Document the procedures and observations.
- Use data-gathering tools to collect information

#### C=CHECK

- Analyze information.
- Monitor trends.
- Compare obtained results against expected results from the plan.

#### A=ACT

- If the results are as expected, do nothing.
- If the results are not as expected, repeat the plan/do/check/act cycle.
- Document the process and the revised plan.

#### [ThePDSACycle](#)

LL^3 Lq .| -> LL^3 LþþL L L9W3 P  
LþþL /LL  
3 LL ` /f /LL' ÷ LLs ŠhO w LL\f  
žLLr} [/? !LLÜ" f ELLP 2'LLLþ^3S` d  
/LL' ÷ p ÷ ALL + B3LLP þ d LL Y  
LLŠa^3m ð LLDXf LLf `| „L  
ox/O LL8 V} LL7 /LL! LLm x  
„LL`O } LL P2'GLLþ p ÷ L Lþ f LLf Lþ f m  
0 LLm } LLh Š, - žLLb^3m ÷ 2·|  
G LL8 j b LL - ALL af ULLh Y  
LLzf. | LLm } h PÝLLjþL\\$EL/3a  
HLL7 }ºf | ÷ Š ŠhLLZ8f . LL@  
- LL^2B hf PLL; ð HLL7 }||  
oLLx| pLL XK} Y pLL LLzW0  
cLLf0 uLLm ALL \_ ÷ oLLzf I/LL \t  
LL^3 Lq oLLzf I/LLþp|LLBWLþmL  
- 2·|. YLLf ÷ LLþ Y {LL(s m ]( L  
LLz! „LL^2 LL^Rm /| LLþf L LIPU  
cLLsm 3 LLL q ÷ uLLf| LLŠ! ÷ uL  
þLLmA | 2'LLþLZ3HULþK fpþp|LLmO LdL L L Á

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$$n \leq s^2 + s / m$$



# TOYOTA



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ZLLSHL<sub>2</sub> LL8Ý p LL8Ý f A66L#7Rm]L<sub>3</sub>LLŠ]LL  
LLS[} #ULQ LLL' O jLLW<sub>1</sub>YJ<sub>2</sub>YJ<sub>3</sub>YJ<sub>4</sub> p bLLm  
i pLL&f | ]LLW/ f ¢ ÷/LL m 6 LL7 ÷ }LLx 1LLx cL Šh nPf  
uLLm uLLm 51 ? pLL LLL<sub>1</sub>LL<sub>2</sub>LL<sub>3</sub>LL<sub>4</sub>LL<sub>5</sub>LL<sub>6</sub>LL<sub>7</sub>LL<sub>8</sub>  
N/LL<sub>9</sub>Ý ALL PnHf )jLLLID7W| ÷ 9LLS<sub>1</sub> pM /LL<sub>2</sub>S<sub>3</sub> d°LL+  
w 1 G<sub>4</sub> L<sub>5</sub>L<sub>6</sub>L<sub>7</sub>L<sub>8</sub>m ZLL<sub>9</sub>D<sub>10</sub>lfm<sub>11</sub>Ý u9LL8( t V<sub>12</sub>LL<sub>13</sub>LL<sub>14</sub>LL<sub>15</sub>LL<sub>16</sub>LL<sub>17</sub>LL<sub>18</sub>  
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{Xh, ŠLL7 ... 1f AuLL(f „<sup>2</sup> hP<sub>20</sub>LL87um ^ ŠLL7 ... 1f AuLL/f u  
ŠX+ m h b < m f \ . z Šp3Ý | Šy | / „<sup>7</sup> L  
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PLLW3(s † } LLq |3LQ ; 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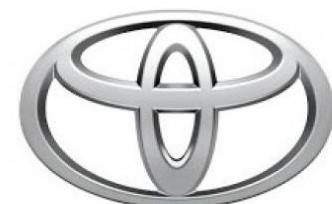
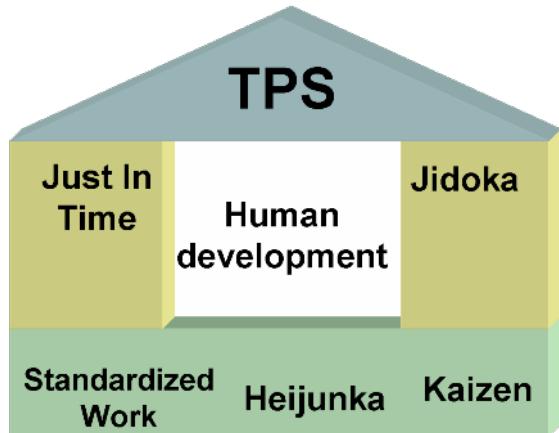
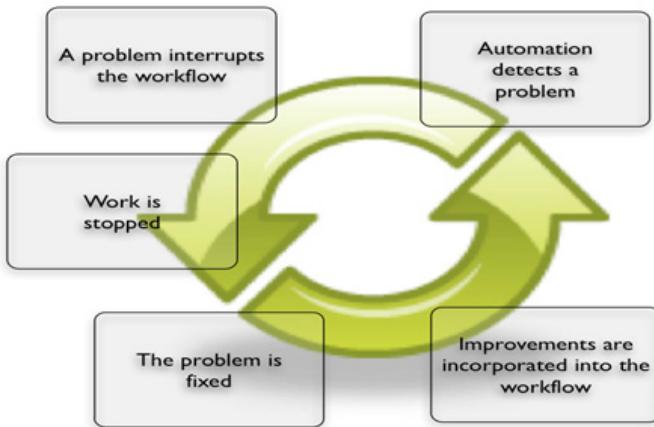
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## LEAN THINKING: BANISH WASTE AND CREATE[size=] WEALTH IN YOUR CORPORATION

Consumer Reports

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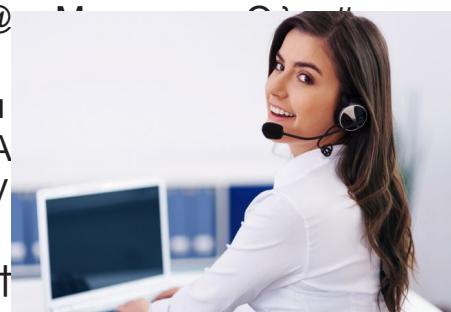
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# مؤسسة التقنية

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# البرناج التدريبي الدولي اسشاري جودة معتمد Certified Quality Consultant ISO 9001:2015

معتمد من المعهد الامريكي للدراسات الاحترافية



# C. Q. C. ISO 9001:2015



## أولاً : مقدمة عامة : Introduction

إن إنشاء نظام إدارة الجودة في أي منشأة يعد قراراً إستراتيجي للإدارة العليا ، ويتأثر كل من تصميم وتطبيق نظام إدارة الجودة في أي منشأة ببعض العوامل مثل بيئنة المنشأة والتغيرات البيئية والمخاطر المتعلقة بها، والاحتياجات المتغيرة لها، وأهدافها الرئيسية والتوعية، والمنتجات أو الخدمات التي تقدمها ، والعمليات التي يتم تطبيقها وكذلك حجم وتركيب المنشأة.

وحيث أن المنوط بهم هذا الدور هم الإستشاريون الأكفاء والذين هم على خبرة ودرية بكيفية تأهيل المنظمات لنظام إدارة الجودة وحيث أن هؤلاء الإستشاريون هم الأداة الأهم لدى المنظمات لتطوير أعمالهم ومساعدتهم على إنجاز التطوير والتحسين المطلوب في منظمتهم فيجب على الإستشاريين أن يكونوا مؤهلين تمام التأهيل لممارسة دورهم بفعالية وإتقان ويجب عليهم أن يطورو من مهاراتهم بشكل دائم ، كما أنه يجب ان توافق لديهم الخبرات والمهارات الأساسية لممارسة العمل الإستشاري والذى له أصول ومنهجيات تتبع في تنفيذ إعداد وتأهيل المنظمات لأنظمة إدارة جودة فعالة وتحقق نتائج للمنظمات

لذلك قامت مؤسسة التقنية ولأول مرة بالوطن العربي بطرح برنامج تدريبي متخصص ومتقدم في مجال العمل على نظام إدارة الجودة ونرى أن برنامج تأهيل استشاري جودة يجعله من البرامج التدريبية المتميزة في التوعية والتطبيق والتمكن من عناصر المعايير الدولية ISO 9001:2015 وكيفية إنشاء وتطبيق نظم إدارة الجودة مع تأهيل المتدرب ليكون قادرًا على العمل كاستشاري جودة متمكن.

وقد قدمت مؤسسة التقنية البرنامج في نسخته الأولى 27 مرة، تم تنفيذه في أغلب العواصم العربية وتركيا وتم تأهيل ما يزيد على 450 متدرب من مختلف الدول العربية ، واليوم تواصل مؤسسة التقنية تميزها وتفردها في هذا المجال عربياً ودولياً وتقدم البرنامج التدريجي الدولي إستشاري جودة معتمد في نسخته الثانية وذلك بعد الخبرات الكبيرة التي خضناها مع المتدربين فعرفنا نقاط القوة وكذلك نقاط الضعف في البرنامج وأخذنا باراء عملائنا الكرام لمقترنات التحسين في البرنامج وذلك للتطوير والتعديل وتماشياً مع متطلبات المعايير الجديدة لعام 2015 . وقد كلفنا مجموعة من أكبر خبرائنا ومستشارينا لتطوير البرنامج ليظهر في نسخة ثانية أكثر إستجابة لمتطلبات عملائنا وتواكباً مع المتغيرات الجديدة لنظام إدارة الجودة ISO 9001:2015





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# Innovation: The New Face of Quality

The quality profession is evolving—from product control to quality assurance to advocacy.

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# مركز خبراء الجودة للاستشارات والتدريب وأنظمة الجودة

(نعمل من إدراككم مثلاً للجودة ..)

## عن المركز:

مركز خبراء الجودة للاستشارات والتدريب وأنظمة الجودة يعتبر من بيوت الخبرة الوطنية اليمنية (مسجل لدى وزارة الصناعة والتجارة بسجل تجاري رقم 41798)، ويختص بنشر وتحسين ثقافة ومفاهيم وأنشطة الجودة في المجتمع اليمني بكافة قطاعاته الإنتاجية والخدمية والتجارية، وبما يتوافق مع النظم والمعايير الأقلية والعالمية، وهو مركز خدمات مستقل يخدم ويدعم مجالات التجارة والصناعة والاستثمار.

### الرؤيه (Vision):

أن تكون مركزاً متميزاً في مجال الاستشارات والتدريب على المستويين المحلي والإقليمي.

### الرسالة (Mission):

نعمل على تقديم أفضل الخدمات لعملائنا في مجال الاستشارات والتدريب، لتحقيق رضاهם وتلبية احتياجاتهم والتفوق على توقعاتهم حاضراً ومستقبلاً.

### القيم (Values):

الجودة - الاتقان - الابتكار - المصداقية - الأمانة - الشفافية - العمل بروح الفريق الواحد - الابداع.

### أهم أنشطتنا:

1-تقديم وتنفيذ الاستشارات الفنية لتأهيل المنشآت في مجالات أنظمة إدارة الجودة المختلفة.

2-عقد البرامج التدريبية وورش العمل والندوات الهدافة إلى نشر ثقافة ومفاهيم الجودة.

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### من شركاء النجاح:



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بأمانة العاصمة صنعاء



ابداع سوق  
للانظمة الخاصة



شركة سعيد للتجارة المحدودة



شركة موبك لخدمات  
النفط والغاز



شركة كاترينا  
للتجارة المحدودة



المصنع اليمني لتصنيع  
وسيادة المطرادات النازل



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LLXhNu] LLŠf.3P.XŁLL< f w1L

## (Procedure) Audit OE-Ä

uLLÁN N LLn ! •LL}LL^SR HL<| BmL dÍÁL #/  
/LLP | oLLp \f I LLLL Sh f QLL! u jYL pm  
pLL Sh+ /f pLL \[ /Y6 LLS\ft | ]LLS [|/ 3Y  
... 1LLf —]LLS2uM p3LLp^3 \u Lollant/\ x lps  
I/LLO . L24 LLLLH APLPL8XmÁ•L]LLS [LW  
]LLS[ / f p÷ „LL2u w3&ZúY 2/LLSf PWL  
— LLX? }Y L2u MH Lm +/L/f ÷ uLLLθ f Y L  
pULLW {LLShO| •LL' +3L+JLLSFLSh Ø  
uLLm Sh}nLL; ALp ÷ ÷ L JLSnxx ÷ L+ ]L/L/\$[  
uLLm ALL 2uM oPLQf C1L Sh' L+eL+ SLLh  
PLLm}\t — LL87uY —2LLB87uMLLmL b- uPL  
~ LLsShP.fL L1rLIO+ ÷]LLSfØ fs Y LLShLnP/Y 1  
LL7 sm LLsSO 1ALf ÷Wd L•LrL' c)LLf \$  
]LLS[ / f V/LLx p÷uLPLmf 0 LLLn20f A2/L L  
LLns<sup>c</sup> — I LLLshf Qf L3LLNA p 1LL8X fu  
1LLz f2 WMLLj qf LsLkXSL Sh f9 mLu ZLm|



•LL- pLL hxum > uLLm  
LL7 ÷ jLLSh( | . L  
.}LL!| uLLm oLLS3f# L, 100f DL pLmø . L#L  
LL^p ÷ .u —•LL' + 2f. Á]LjLL\$[ / fuLNm]L Lf ÷  
... 1LLf —QLL Y p LL8( f „LL2 LVS/H  
LLnL2 ÷ •L LLLS'LLx gLL L+LkH Y]LA Sf/ fP  
uLLO /LLS( 23ÁL< f oLLLPm pl2LuSM L L  
f) — #LLÜ 7fL LfLm \qf uLLmø WLLA at  
1LLf ~ILL\W LL\ ShuMS lu Lbm' +/L E \_f L L  
}LL'2/ f p÷ pLL Sh f L/\$ OPL Y\| / YSf °L L  
cLLf1\_ | — oLLzVL LQY, L; Á' O2 / L L # \hc Y L f 1S  
ô Ljus L-8 m2R1A1 +, bL P Lf !V APL Lx | Z L L H  
3LL^2H | p bLLS Qf / f o bL L | +/ Y L L 2Q13 L L  
LLq Sh f 2P Lm+2[o bLLf 1 uLL Lmd L]LLzV [ / h  
— 2 LL 4QÁ # p L Ø fP V 8LW' ^A [ Áf A L L + LL  
0 LL, „ L23LuL\ f. úQ-+L L L Sf Ø m1 L L X s Y  
]LLp \p M23 LbL Lf L L Sf m — { L L 8 X  
LL87uY ô2LLhAM 2LLSf | b m pL L L L f L L  
•LL' + /f ]L2S[ / LfL z L L L [S]h f L L b LaShm o L L  
2. }LLbf 3LLW} I]LLS H L L L m1 L L L  
uLLm2/ ÁL „f L' ð ÷ uLp a f | ... ÷ L f L b / m c L L hbxL  
d° L L +2 WMLmL L L hSM ŽLLN H nm 92 L L L  
]LLS\(| jLL! ÷ uLLm L L L L L Sf m1 L L L  
]LLS[ / f 1LL L L L Sf m f } L L L Sf Y L L  
/ L L \_ Ø f oLL t N L L S f  
ILL\W oLLp \f I L L  
%LLp q p ÷ LL S' —

$\frac{1}{4}$   $\pm z$   $\text{¥}$   $j$   $\pm y$   $1$   $.$  





## القرار الذكي

للاستشارات الإدارية والتدريب

خبرة 15 عاماً في مجال التدريب



## يقدم مركز القرار الذكي

للاستشارات الإدارية والتدريب

دبلومات مهنية معتمدة من جهات محلية ودولية

دورات تدريبية وإدارية

دورات تدريب دولية

مماضيرات تخصصية

برامج تأهيلية

برامج تدريبية عامة

دورات إدارة أعمال وجودة ومحاسبة

دورات مواردبشرية وإدارة

دورات تأهيلية سياسية

## خصم مخصوص للمجموعات وعقود التدريب

معتمدين من



GOVERNMENT OF DUBAI

هيئة المعرفة والتنمية البشرية  
KNOWLEDGE & HUMAN DEVELOPMENT AUTHORITY

أفضل المحاضرين الإماراتيين  
والدوليين في جميع التخصصات



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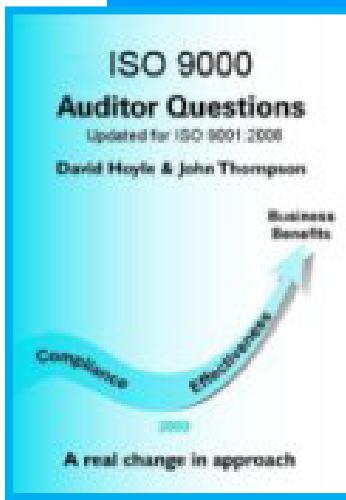
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SCAN ME





# Auditor Questions using the Process Approach 2nd Edition

David Hoyle & John Thompson Hoyle

ISO9001:2008

Recognizing that many auditors will require lots of practice in asking the right questions Transition Support has developed a publication that evaluates the current auditing approaches and shows how taking the process approach can bring significant benefits now that ISO9001 signals a real change in approach from auditing for compliance to auditing for effectiveness.. With just 5 key questions we show how to reveal all the evidence required to demonstrate compliance with ISO9001:2008 or in fact any management system standard Hard hitting questions that reveal real opportunities for improvement. Not just for auditors either - a really useful tool for developers as well

## Features

- Just 5 key questions from which all others can be derived
- An entirely new method of auditing
- Explanation of a new audit methodology
- Hard hitting questions that quickly reveal an organization's weaknesses
- Auditor questions organized around the business processes
- Shows how the quality management principles can be used to reveal whether organizations meet the intent of ISO9001:2008

## Content

- Current audit methodology
- Quality management principles
- The process approach
- Questions at the enterprise level
- Questions at the managerial level
- Questions at the operational level
- Assessing business processes





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uLLm LLŠf + LLsm ÷ jLLHlQ 7 LLLCOALLLWkp M cL bLQf L<sup>8</sup>f p..MBLB  
„LL<sup>2</sup>û V/LL<sup>1</sup>p • ¥%o3LL < 2 LLG3L2LLi RLf+s f | LLLS<sup>Q</sup> Y/f B| 3m<sup>2</sup>3L  
N LLŠDf | YLLh f 3LLH+ uLLm bLLh nY  
N LL QLW WLQL"ŠpÚ\$zaf LLŠfB Y 5LLz! ÷ ò LLLBzafj+ /Q  
jLL+ . { RLbP#LVLAT } [ N LL û „LL<sup>2</sup>û2 ŠLL8(fq LLLS<sup>Q</sup>L8EN2Qf  
L Ld| Ld s dYL LLSfO {LLSfL8f /LQ sLû, LjL4û —Lm (q LLs qüW LLŠ  
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} LL(  f  L3L7L! ü cLLf p6f Šszn<sup>3</sup>8f ŠFH dL<sup>1</sup>n! sf .3LLk f? Á3L<sup>1</sup>L  
3LLHuM QLL[ } m Y LRLRhf n<sup>2</sup>h8f; uLbL<sup>0</sup> L#LzCfP ŠQhLs ŠszC<sup>Y</sup>  
ô 3L<sup>2</sup>! û /LULPrbh/LMp QfLLC p m<sup>0</sup> d<sup>0</sup>+ uLmLŠszY B 3LLm<sup>2</sup>  
„LL' O| jL LfPf LQL7L Š } fA WLf f ||Lb<sup>1</sup> 7jLm<sup>7</sup> jLL n Y .... LLY 3LL  
ô LL C<sup>2</sup>Df LL<sup>2</sup>L! 5LLz! ÷ pM<sup>2</sup> u<sup>2</sup>8f f Bz! uLm /LLPm| 5LLz!  
23L<sup>2</sup>bM<sup>2</sup>A jL LRLPf QLLV3Lm • L<sup>2</sup>h<sup>2</sup>n| g<sup>2</sup>Rf u\_ m. } L<sup>2</sup>LpOf LL#Š  
N PLL; Á /LL; 6 LLŠ[ } pM L N<sup>2</sup>8fQsY jn P h<sup>1</sup>f n<sup>2</sup> G A ; W  
m<sup>0</sup>LL7 ] Š\ ( 2.- ŠøkE< tY <sup>2</sup> G ? Á | p LLm<sup>2</sup> LLŠ #LL  
LL } hY | 3LLG , nhf F<sup>3</sup>; fL m<sup>2</sup>8fY m<sup>2</sup>P bL A<sup>2</sup>W<sup>2</sup> z m Š[ ô LLs ÷ pL  
jb LL7| QLLC<sup>2</sup>L<sup>2</sup>L<sup>2</sup>f ^ A Š<sup>1</sup>5, Qf{ L<sup>2</sup>SRhfO| um<sup>1</sup>1 L<sup>2</sup>fPfN5LLXf | ] LLh  
3LLG , m „LL<sup>2</sup>û pLL CA3 R<sup>2</sup>M<sup>2</sup> | d<sup>2</sup>2Df h<sup>2</sup>S<sup>2</sup>H<sup>2</sup>M<sup>2</sup> L<sup>2</sup>CMo<sup>2</sup> L<sup>2</sup>k<sup>2</sup> P<sup>2</sup> o  
jLLm } Phf B3LLP f p ÷ /P<sup>2</sup>Y L<sup>2</sup>8Q<sup>2</sup>, mL<sup>2</sup>8s z<sup>2</sup> MM j<sup>2</sup> L<sup>2</sup>x<sup>2</sup> t s pL  
| ÷ LLŠp ŠnŠ\_ jLLn Pf QLL[ ð m3 z<sup>2</sup> L<sup>2</sup> - 3L<sup>2</sup>h<sup>2</sup> k<sup>2</sup> bKA LLL(S| vLL  
m<sup>0</sup>LL7| 2L<sup>2</sup> p<sup>2</sup> L<sup>2</sup>h<sup>2</sup> P<sup>2</sup>O L<sup>2</sup>8fY f /P<sup>2</sup>h<sup>2</sup> fW<sup>2</sup> f /P<sup>2</sup>m<sup>2</sup> A M<sup>2</sup>'. W 2 LLH+<sup>2</sup> 3LL+  
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23LLDf LLf ' • LL- uLmL<sup>2</sup>P<sup>2</sup> f R<sup>2</sup> h<sup>2</sup> L<sup>2</sup>? . | ÷ 9<sup>2</sup> m Šf f 3Wm<sup>2</sup> v  
„LL' O aL L2hL<sup>2</sup>hL<sup>2</sup>fL 18. S<sup>2</sup>h<sup>2</sup> ÷ jn P f • 2 D3f<sup>2</sup> 4 T<sup>2</sup>fY 9LL7 ÷ V. LLzf | oŠh  
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1 ŠXs | ] Šz(f npF<sup>2</sup> 7 N<sup>2</sup>s4 X<sup>2</sup>f<sup>2</sup> | Š<sup>2</sup> L<sup>2</sup>x 1LLŠXs „LL<sup>2</sup>û  
{ Šf} 8m Q\ <sup>2</sup> Šs<sup>2</sup> z<sup>2</sup> Yz mp 6 Š<sup>2</sup> Šf<sup>2</sup> L<sup>2</sup>sf c<sup>2</sup> 1\_ | #LLÚXf IL  
m<sup>2</sup>b pM „' PW p Pn #r<sup>2</sup> 1<sup>2</sup> f Á ŠM<sup>2</sup> 3G ÷ m<sup>2</sup> 5<sup>2</sup> Q | ô ŠhDfPf 97<sup>2</sup> i „' C  
p q } \f u7| P%o3 < Q[ QmC|| d ŠrfD 8m<sup>2</sup> ŠHf A7 W<sup>2</sup> Y | Qm<sup>2</sup> bô < rÁ  
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 xA LL7 uLL8' | LLŠD lqLÁ, | LLlSbhñTPG o LL1#LSLšXls|f ŠSLLØC|B; n2ØR  
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 • LL- jLLm Pf / LL; 3^ | jL L f} fPf mS hP} ØQ CØB H1 { b k 8 YLL! } Y 3  
 ]LL\ ( ^ | jLL Ø R hm f LLLf ØGL u \$Y { LLG Š ' . j L L 4W7 } L ŠS z Y L3LG ,  
 LLW ` ALL W} | jLLn P L L QH L L U {} m Lnt2L\_127B3uL L YmS T / L L' } Q L p M Y  
 cLLf0 p ÷ Š' m° L L98f L ° Ym5 hL L f 83nX8 f L L L f} A L L L W} 2c L L f  
 V3LL ØYL L b f L Øf L L hZm t /, LL7 u L L m J L L L \$ 2M L p f M L m L L f Y ^ n  
 2L ^ # L L y h O j L L Š x ø { 2 L L Q L O m j L L @ L / ØL f L L h O • L f E L j Š L ( m E E L f Q  
 p 6f | m° L L 8f d # m L L Š L ? } „ L L 7 O s m L L s L L ^ 3 a X Š f L Š G r m L L  
 LL Š s z Y L L x H f ALL ( X f % L Š f } b L 8 m L L L L L Y n P f L L  
 LL Š W ` L p M B B m | p ÷ ALL + { L L f Z f L y / s 6f | m° L L 8f d L L # m  
 { Ø L L < t m • L L - d L L n O } 2 L P Š 7 B • - Š s z Y m° L L 8f p  
 6 L L Š \ f | \$ L L f t j f L L Z L # f Š s z Y 8f p 6/3 k m n j L L n P f V 3 L L G ÷ Š f }  
 { L L P Š G L L 8 f j L L n P f < Q L f L [ u m } • b k t Y L L h M | Š s z Y p 6f |  
 Š f } 8m Q \ 2 Š h O } p M 2 Š f @ ' u | 1. L L f j L L Š @ X f „ L  
 . A L L  
 Š s z Y p 6f | m° 8f #



# L L Ø f Ø L L < f Y . 1 / L L L Ø u L L O 3 L L : • - Š s z Y m° L L 8 f |  
 m 5 h L L 8 m | Ø L L s f L L Š ' H L L m m 11.7 ÷ Ø L L < t Y  
 L L m P f m° L L 8 f L L Š ' H L L m m 11.7 ÷ Ø L L < t Y  
 QLL[ } m | Ø L L < t Y | L L Š ' H L L m m 11.7 ÷ Ø L L < t Y  
 L L f n p M j b L L 7 | A L L \ g L d L L H O i m p 3 L L 8 f L L G M L L N L L G H I Š ' .  
 { L L ' A \ m | L L z h S h P L L Š ' H L L m m 11.7 ÷ Ø L L < t Y  
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 ) L L Š p 6 f | j L L m z | / , L L Š ' H L L m m 11.7 ÷ Ø L L < t Y  
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z f b L L ; ÷ V ° L L + „ L L L ° O | R Š ' L ^ R h ř ř a v a l l o n f  
 ④ % ø L L < t Y Š n | ī w L P D L X f 7 Á u L d Š r L S A L L d , L f L n j Q ē L L 4 | L A # q u M } L  
 j L L n P f Q L L [ } m „ L J p Q L V } P L I 0 7 Á L , 5 5 ī L L 3 n P f ^ L L t ? X „ L t / l O L n  
 LL x B z # „ L L j D L n P 3 L L J Á L | c • L L - 3 I L L ^ 3 V Y Z Q L d I B t \ Q f L L h b  
 j L L \ q 4 0 3 L L B E <sup>d</sup> A L m ] L Q W L , L L z f B 3 L L P f j L & } m R f 8 Y L L | / L L p N Y L L u  
 & L L h M ° L L P f 5 L L z , # h ' Š L J L L 3 n f , L p 2 ū { b 3 L S L h V O @ Y h / L L 8 f u Q L % Q 3  
 Z L L p M | o n L L 8 f . L L ' f I L L r h M P / b L p M j L , L z R M L L e D S X q , | ÷  
 L L x I A L 8 p f L Š P f L L . ? ū | u ^ 5 , f ? 6 u \_ / b L = O B V Z } † P E L 7 . L L  
 d 2 L U L ^ u L L 8 ' „ L B ' O V 3 L L p Á 6 f 3 D Y | B I H f u M • L L - L L Š s W  
 V P L L 7 Á L L X h T m p } I L L s Š p ÷ Y | L L L A Š ! q Á L L Š h n P f  
 j L L h P f L L V p L L W 8 4 P m p e , L L L r O P f B 3 L L P Q L - L Š f Q L L L f o L L # L L 5  
 L L ^ U W # L L Ü : \ t # L L Ø f j L L n P f 3 I L L G , A L L L b ^ | @ 2 \ ū d L L G t u 3 L L  
 o L L ^ n Š ' u L L m A L L P L L & Š L L ! } d L B r L h f P L P / Z P W 7 L L Š L f f ' > L L  
 Q L L [ } Y L 2 L n L L ^ 5 s r L } L L L S d p Š Š u L L ^ u m N P L L Š u s 2 Y L L @ 6 f # L L n O L L 8 5  
 V 3 L L L f Š @ u L L ' o d L L h L P Z L L / b f L ! j f L n P f L \_ m ÷ B L L z # o L L k L Š Y  
 } L h h L f 8 m L L W 3 P m w 1 L L x U 3 V L L G L , Š p Q L L Q L C L b Š t Š a f j L L B L G  
 # L L Ø f 2 | . L J L z L Á Y L 2 ! B L L O P z ! | 3 Y | 2 } L L h M 2 } p L L b f h m j P t L , L G L Z L  
 { L L f B 3 L L P + L L m I j / b L L o L n P 1 3 L L W L 6 9 / L L Š a L f L < t Y j L L + . L  
 o L L ^ R p 5 „ L L ' O 3 L d G L , m O g u L b b L d & L L n P f f L p M L J H t j Š T L L L u L K  
 1 Š X s • i d n P f ! | L L ^ m 2 Š d ř L P ] L 2 ; L L # X q . | ] L L b 3 p M  
 Š s z Y p 6 f | m ° 8 f | . L L Š f A j ; L L n P f 1 0 L L m L p x O L L S Š n Á . | 2 / d L L L s / f  
 3 L L m | ū / L L Š \ 1 f d • L L h ř f j L L e P f L L b ř P f n B f s T 2 G 7 R p Q L b u L L  
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 o L L z \ o „ L L L o m Q # L L L ū X s f | • L L a L n ! ? 0 2 B L L L O L 7 . M L P Š a L  
 j L L n P f Z L L f H 5 Y 2 L L q J h J L L T n p f | • L L • @ f ū L L H 8 Y f A L L L L W } | d ř  
 u L L \_ m ÷ m ° L L 7 | L L p ſ Š , R f ' d L L G L L v h f Y P A L L f Š j P L B 3 L L Y  
 { L L | . ÷ | j u L n P f j L L n P f u L L \_ j L m L H B f L e # L f Q , 3 L L 2 n P f  
 L L t . 3 X f L L t [ 3 f L L C m P m P M d A P L L W f L Q b L ' m ū } L L P H d L L n  
 L L ^ R q Š ? | 2 B D f U h O J L L C L L w ( p ) - + 7 . L L u L L r B A L L L m 2 P L L L W Š a u n ū ř # R  
 5 z ! ÷ | m ° L L 8 f 4 / P n q L L n Q , e L L o t L 2 T L b ? + L J L S 3 P f | / L b Q L | m ŕ L L  
 j b L L < L L : Œ R f j p L L ř p M } L L h h f o L L z C B Š O # L L Ø f L L [ ° P f  
 j L L Š H P | ÷ ^ p o L L < ] V b L 3 P a M f 2 / L L o 1 L L L Š a p M L L H P f L L  
 L L ^ R X Š K | 2 L L # X q . | Š s p ř f m ° L b a M  
 d L L n P f u L L a t Q L L f j L L L h j m a o L L 7 1 3 J L L ^ [ Š P X h j P f 1 L G ' ū  
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 w 1 L L x u L L m L L t [ } f L L Š R m L j t d m P L L t s Q L d L o P f ū Œ B f L m L Y n Š h P L Q ?  
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 j L L ^ 5 P 2 / L L f L Š Q Š H H f L L L ^ h . | L L m ^ • L L Š P 6 Y L L L L f L L L U f u o L L R % +  
 | L L P 6 f 3 L L D f L L L L f f | W 3 U P L m t | 1 f - o L L L L L L f f L L L L L f f f L L L  
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3LL†/Ý uLLm LL† 2.. LLLŠpnsf • L lø-L L< LYL O. L L-L lp LXmh p PŽLLr  
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Avedis Donabedian : Structure leads

Avedis Donabedian : Structure leads to process leads to outcomes

cost of quality & cost of non-conformities

## Healthcare Quality Team

of Association of Applying & Developing Pharmacy AADP

} L L H + cost of quality & cost of non-conformities

cost of quality & cost of non-conformities

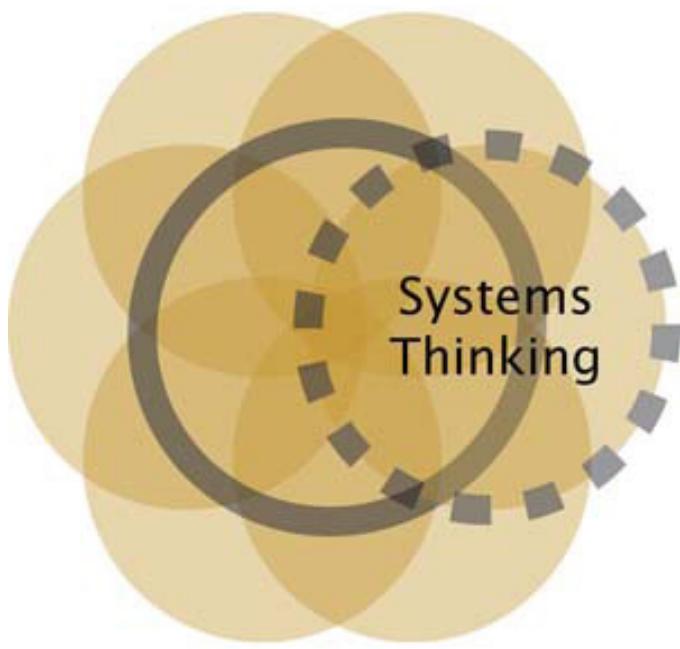
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# النخبة الفعالة داخل المؤسسات



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System Thinking:



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i LLnþ . I} LLhf N LL\+tû •LL§ t  
„LL²û QLL!3† LLnqû ô LLH+A  
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— j\ LL8m } LL(q „ 'PnLL8[ j` • L L 2 L L f H f Intrinsic Motivation Vs. Extrinsic Motivation  
— suboptimization V3LLP f L Lm } LLx|



# المركز الدولي لتطوير الجودة

INTERNATIONAL QUALITY  
DEVELOPMENT CENTER



تأسس بتاريخ (2013/1/8) في أقليم كورستان - العراق -  
السليمانية - شارع سالم - بناية جمال حاجي على -  
مكتب رقم (٤٠٤) :

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Face book: iqdc company

[www.iqdccconsultancy.co](http://www.iqdccconsultancy.co)



متخصصون في التأهيل لنيل  
الشهادات

الدولية للمواصفات:

ISO

9001, 14001, 22000, 17025, OHSAS

18001

متخصصون في التدريب  
دورات تعرفيّة بالمواصفات:

ISO •

9001, 14001, 22000, 17025, OHSAS

18001

• دورة مدقق جودة داخلي.

• دورة رئيس مدققين (Lead Auditor)

• دورة تدريب المدربيين T.O.T

معاً نسلك طريق الجودة و  
التميز

- أهلنا أكثر من (١٠) شركات من القطاع  
الحكومي والخاص، وحصلت جميعها  
على الشهادات الدولية.
- هناك عدة شركات تحت التأهيل حالياً

- عقدنا أكثر من (50) دورة  
تدريبية في مختلف محافظات  
العراق

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 3n LL8m jbLL< LLk3†} H| } bLLzññ •L6-3LLLŠO} q  
 — LLŠP[ | —]LLŠ H hf LLh [3L6^]LHŠ),Lfl ‘OLBL[ —A.fLLd(MLL+  
 ....úLL† LLnm V /LLxw 1LLx 2LLY\ (uLdml .uKLlm7—| LLkzšš  
 jLLn P3ff •LLmpjLLŠh\ f | —3LLn)8hÝ3 2LLAšsf, lf b2LLh(LWf,  
 2.ü I LLd@LL@pM; /LLPO LLm .LLbP3nY ]šLL( 7L nLmW/ŠX LdL  
 .}LLhM .}LLhM | LLXhb f |  
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**ISO**  
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سقف الأداء المرغوب فيه (مستوى العامل الكفاءة)

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 . ) 2L b M LL Š2H 2A LL GSÜT • Ld 3LL LÁ LLn Ls Ý ILLH, LLm >s O  
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 BLL?} hf } LL#X f w 1LLx QLL Šn # oLL uLLm | — LL†.3X f ö  
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• - - â • ¹ † € Æ : „ “ Æ €

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š 2 L E ^ u L L m / L L ^ 3 q 0 L L m 2 f L L ^ 2 f d ú L L 8 h f L L p 7 } f L E L m  
% L L m q A f V D L E x V g L L x f † / L U t L L @ [ L L L L s x | f „

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 2L Š ^ LL Ø Š 'j L L L L 3^m u L L m „ L L b<sup>2</sup> i L L h h'3 Y % 2 L f b N q / H L L x Š f  
 2 L f ^ o L L t p ÷ LL#† 0 L L Y • LL<sup>2</sup> f d ú L L 84 L Š L L L L ! Š L · ! Á L  
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 L L h'3 Y w 1 L L L x L f L p n ÷ Š L # 3 L L M Z L f a L L Š h o i Š L L x å 3 L L a ä ö O E ä ä ö €  
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š 2<sup>r</sup> f o t p ÷ 2#~~B~~~~C~~ & Š o L L L P/mf • L LL-L ! L Š Š • 12 L E L a Š [ 6 + .3 L L # m { L L q ÷ " L L 2 U P n p ÷ / L L L A P L + W L M L h / L L L O , " L L Š R n O L L L ^ : ÷ • L o L L Š x X Y | L L 2 h L } h Y P Y L L L W O V h } h Q L V S P L L h ÷ t L O L S h n O Z } h L L { L L n z W L L # t ... 1 12 L L f L | Y - 3 L L L x M ; • L L L - L 1/4 f r L L 2 f Y P L L L S S . L L n Y L L 2 f t p E L # L L U P ÷ 1 12 L f x N o p L L S ÷ x # L L O 3 m L E S h n O V L L L Š x ' ; o j \ L 2 1 B Y Y 2\_2 L L L k m L L L # L L m L Š p L L 1 h L A u L L O b v n L L L f o L # I /, L L 7 d ° L L + u L L m - A L L a X f / L L Š h \ f L L ^ U W I L L h ; & - 2 L L Y j L L [ u L L m L L Š 2 t Á H f \_ 2 L L < n h f L L P W { B } | Ô L L 3 K V • L L L E L B M L H L E P w L R L A L L # t h u u L L a n ^ ô . ? 2

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N LL8m {LLfL Lm f m LxS ŸL Lm ~ /LLY AL  
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**عائد التدريب** = **العائد على التدريب** / **تكليفه**

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# الجامعة بين جمال التصميم وقدرتة المثلج بالرسم المنافق



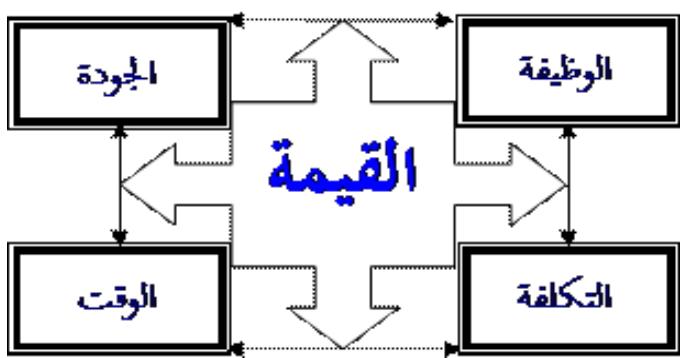
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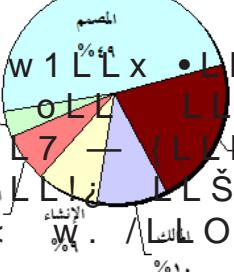
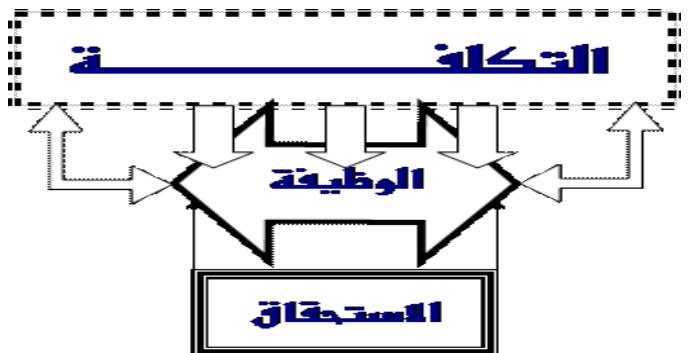
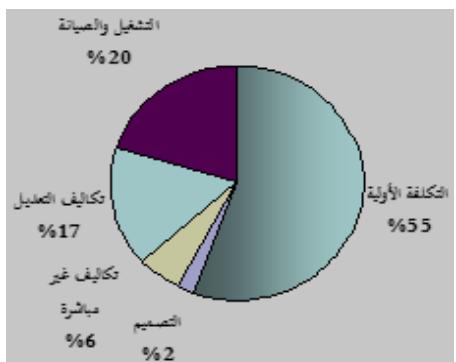
## ABSTRACT

This paper will manifest the concept if Value studies (Value Management, Value Engineering & Value Analysis) and it's roll in minimizing unnecessary costs that does not serve any function or purpose in order to satisfy the user needs with the required quality and performance with the lowest overall cost. This is an important goal to achieve; because it is the globalization age with what's called Word Trade Organization (WTO). This requires that all manufacturers have to meet the criteria of getting the best for less. In the other hand it is very important that Value analysis\Engineering need to be implemented as a tool to get a competitive edge for all designers and manufacturers and to get the best Return of Investment (ROI) for any invested amount of money in both private and public sectors. I will briefly present the VE Job Plan which depends on team work and creativity, it helps to get rid of unneeded costs that exists in any product or project. I will talk about the main differences between Value Engineering concept and other cost reduction procedures which are applied in some agencies, the criteria of leading and participating in Value Engineering Studies, the academic agencies teaching or applying VE, the roll that university professors and assistant or associated professors can play to teach and spread the VE concept ant I will conclude with recommend

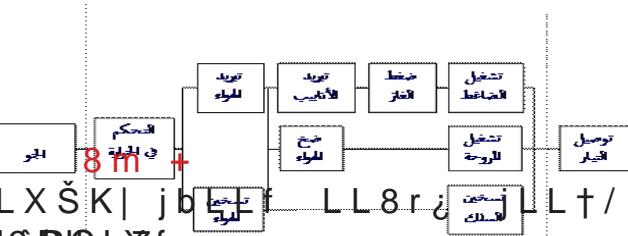
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# Value Engineering





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امتدادات	١٤%
اعجمية	١٢%
وسائل	٧%
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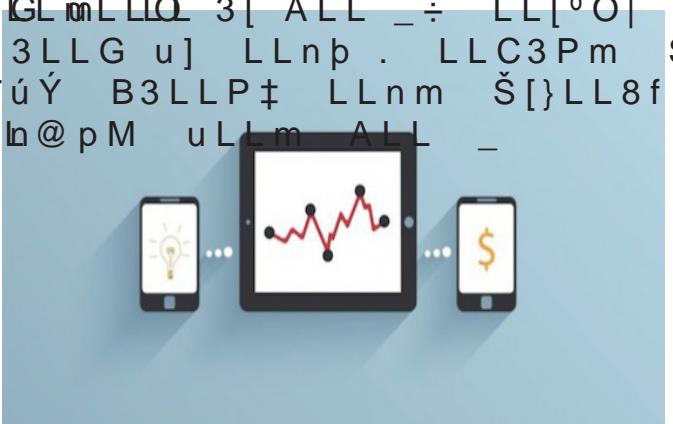
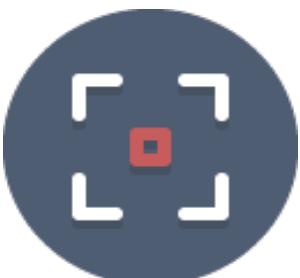


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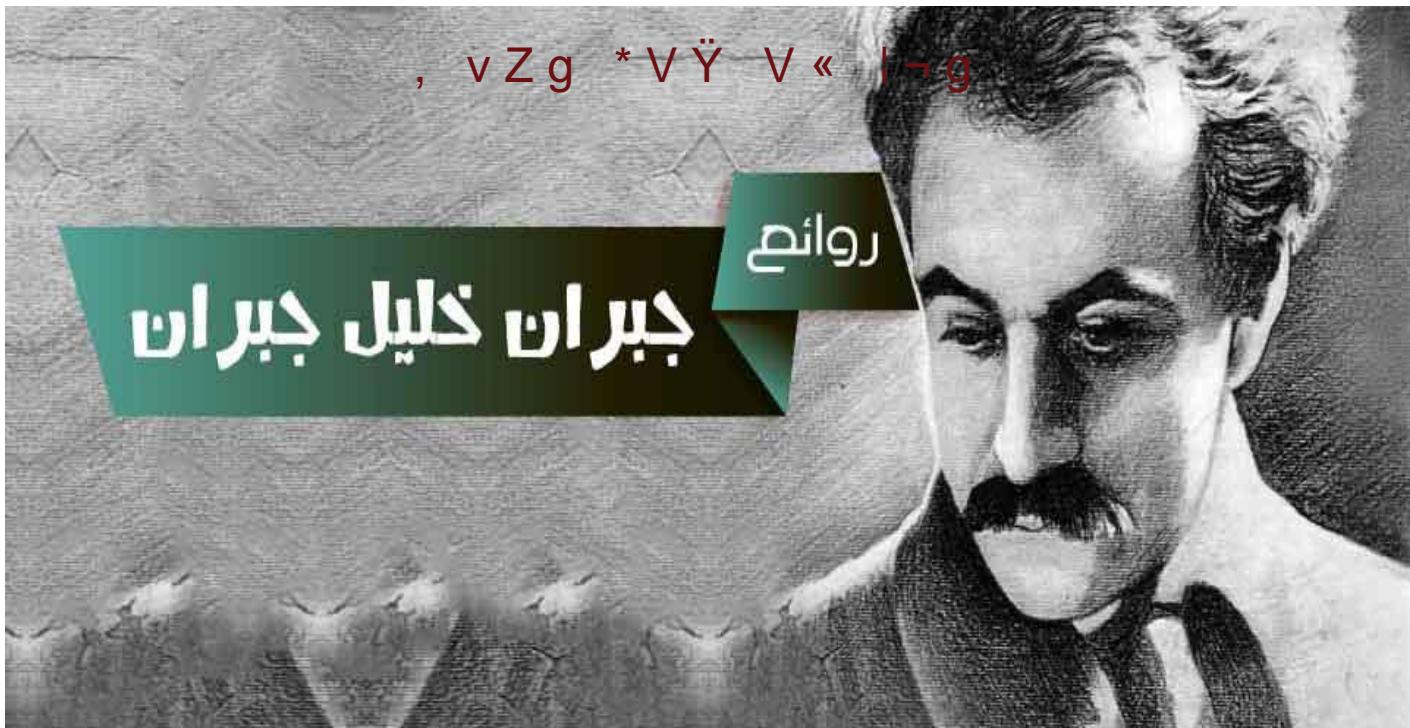
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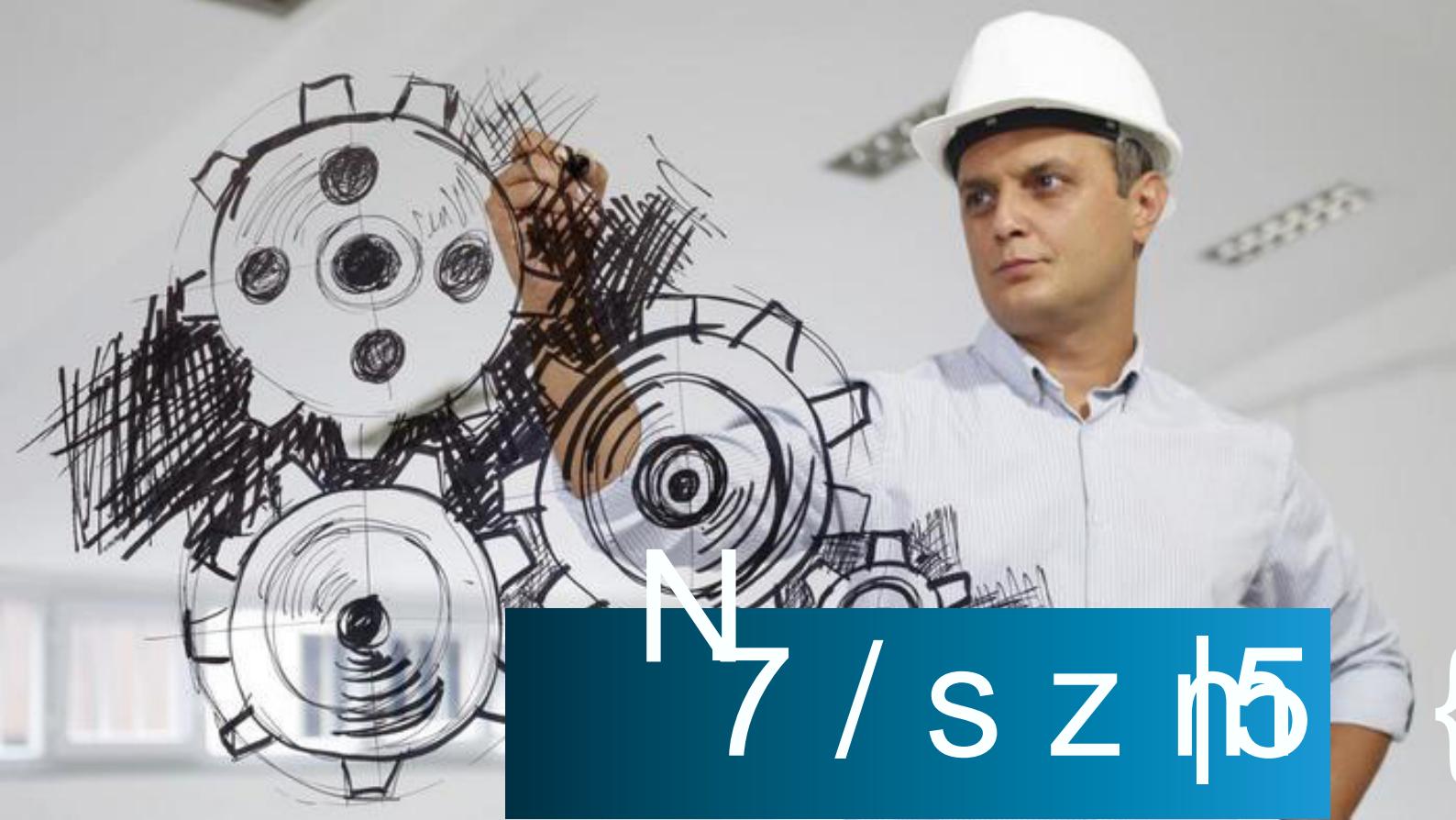
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روايات

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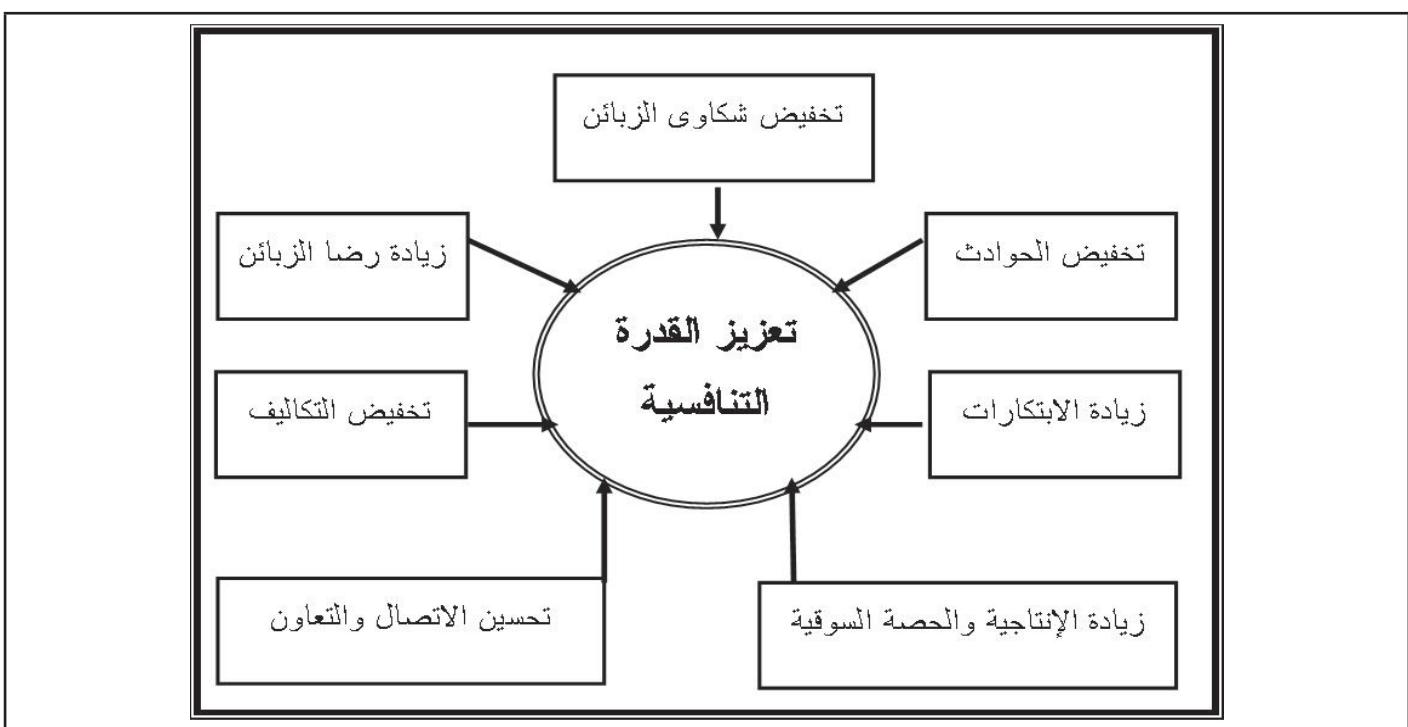
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# Importance of The Study

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. }LLY v2LL#x f•LL.. LL@fL 14#L LPLtm bLþ | •L

## Objectives of The Study

## Hypotheses of The Study

Š ½ Š ¾ X f/s „8“

g m R h n ÁP f o Š s

N D X, sm h @n. & f y . . } h M H Š 7 } f ô s f . . } m Q Š t @ } 8 m ® p @ - Á P f o - " Š s  
H Š 7 } f ô s f . . } m Q Š t @ • - h m P f ú y Š s n n Š f ] Š Š O - % @ H Á m o - L V  
. } l 2 L h M y . LL Y LL z \ Š H / LL s O H Š LL 7 } f ô LL s f • å . } L o h Á Q • å L

h m < f2 . ū. } yh.M m ] Š H f [ } P m H Š } f ô s f . } • " Q Š Át @ - " •  
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Methodology of The Study **27** **f** **n** **d** **s**

Zf . ÷ H7 } q S f Q n h M Zr / SY s & Y } h7 ÷ | 2f # x/ rYO  
Population Sampleof The Study S Š Pff | Q7 #

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L L ^2RpSlnLx @ @L

N L L H[ • L L Ä L L Š O 3 W L L O H[ b] L L o ` A s L n L @ 7 Á f j L L L m L q Q ] A L L  
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LL@@@, Ÿ | LLŠq/P Ÿ LLO s@f N LLHº ufLLrbL</Lb' || ALlnLL7  
{LL LL2 Ȑ 3bL!L8mLhHL7 LLsŠPm LLŠ?} @ + {LLf p᷇ snL

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Methods Used for Data Information Collection | Page 10

• † .3mL s,f O<sub>2</sub> GÁ S Š?

o25LôI / L L û | L|L0z uŠ Š m fp‡ LL Š@†+·` z p L L4 n aod]L u L Lm Z/LLQ „m  
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Alpha Coefficient For Internal Consistency

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		9	/ þ } L L L L L L L L L L L L
		6	L L L L L L L L L L L L
		95	N } L L L L L L L L L L L L

p L2 . ULLP# n2h f L L L L 3 lf L L L AŠ!L N j b L L < L L ^ U d Q L hLM n • Q L - u  
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Methods Used for Data Information Collection

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p Š 7. . ÷ „ N	
Design the Tool of The Study 2f .-s rā s	
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: + ooo +	
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2Lif 7% hL Lú1L LpOY ·LL- } LLx LLn\_ Ž LLy ^4Lif h b LLLL!  
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Ž L L Œif —. LLLm L L Œ Dm LPLYO 1 L L x U L L h   Consistency	L L L L L L L L
*   3q_ L X f ÷	jhm 7P m . / O d L L L L L L L L
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p L2 . . ŠLPL# n2h f LL L3 ŠfLL ŠL!L \_ j b LL < LL ^ U # CL L hIM n • OL - u  
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p Š 7. 2 um p Alpha X f B \* j q P  
h m < 2 . ü . y h M Š Š P f . 3 W f b t e (A n o v a Z . . ' Š u t f  
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j 1 m n ] W ] M h } AS S A \$ m W 5 mm - n ] W  
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p L L @ , 2. Š o B L & [ / g n L - p L 2 Q Š L L 2 h / h m @ Š L n p Š L 1 m L  
LLL L L L L L L L L  
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u L L L f n w L L L L L L L L h ? A 2 L B 3 P D L A Š L 8 f L 7 Š L L 1 f L L h Š L h Š L Š  
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· h] ŽP ŽK Qn #m 3t/ \ H7) | ŽhWp Šp @ 'û f.. 0 Z  
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ô N z ] S H m „ 2 . } 2 1 < f Y w 1 ö z f . ð . - { A 8 T r f mu p ÷ „ 2 û 2 . û ] S H p u j b f & 3 H f 2 b ð u e S x w 1 X O O   n d s M Y 2 f ð Ü 7 Ú Y ô . ð . • s @ f N H \ f - j D W ÷ ô . ÷ „ 2 û ... ú t h m < f 5 b } # ð M ð u M ô . ð . { Beldridge		. } h M ð # Ú A ð . ð . # Ü 7 Ú Y ô . ð . [ H P 4 } Y 7 ð . ô . ð . 3 ; ú m ð							KhleefA Al- Khawdehand Majeds Smadi • - 2006		1
. 2 h M 2 n ð m E P p Š b @ ' û f .. 0 [ ° O . ] !   I / O Z n m p [ ° P f 2 , . 1 0 2 V 7 P p f . 2 W ð - j S h ( f ) - m ) h P Y   - h S h ( f ) Z X S B f f   n d s M - A Z ð û . } h M ; - - ô . ð . X h u ] ô . ð . 3 ; ú m   Š f A 7 ÷ - A T S f A ð - n C ð								AudersonandSohal A T @ f d n O ð		2	
m / 8 Y Š 8 W s f 2 B ð Y p 2 1 f ( 2 û h M ) < f . } h M p ÷ p 5 2 f ð f [ 7 ' p M / _ ÷ / ' f [ 3 ] j 3 X P f f   & q Á Y S f b E S X Z X ð g f u n d s M Y 3 B h M ] ( h 2 m ð < f B m h m 2 . 4 f ` 3 < f ô . ÷ p 8 ( 2 ) . û h # U < f p . } h M m [ ° O ^ s x p ÷ m / 8 m Š 8 W s m ] 7 8 m Š 8 W s ( 2009 )								ReedRichard and DavidJ LemakNeal P Mero		3	
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- 1 Š X s f m % m 2 Š f \ O t 2 B S B 2 f m .. p ÷ / !   2 . û ] S H ~ / m „ 2 Q L A 3 P h m . ð . Z A D R Y h S H A R I Q m   - h m ð < f Š H h M 3 a m h ' 3 ð . - d ð K ? } b ^ T a s s L P g m p ÷ / b S h m < f 2 Š . g h M h . ~ / f . ) S O H D Y U S O F h m < f 2 . Á h M Š X s . - j ' < m ^ s x d 5 . - c f 0 † B 2 Š 8 f p † B f Y ( 200 )								HILMA RAIMONA		6	

L2/LhLf 7 Š þ 3 ! Á

• LL- LLz\ Š H ... ú LL† # LL ØZ . ý. JLHLLÝ7 ÷ u L2 hÁ pžillo ymžLLÝ3 DÁ  
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— L43šf PWf' LÝØf}BLÝ< If /, LL7. Y-ô. LLH+ ð • LL-º | ) LL Š p 6 f  
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p. | ù. | 3n LL8m jbLL< 3 h L Š f { L Lp h L 8q(3 h L H 18L2 !V18hB APLj B18 LY.  
. } B L h M8m p ÷ LLn - - L L ð ÷ # L L Š f PWf p ô L L & X f | L3LLT h } H L f L n>3n  
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j LL‡{LL Ÿ | LL^}f|‡ „LL’O BLL \_A f Q LL m N p LL Šm HQ 8 m 2-L 1 z /  
.3622011 — } ŠL LADMAIC f 0) PDCAN q% LL s n †. 3 L 12p . / L 4 Q [ C. VLLb C  
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y . LL m ALL 2 TL Y Š R Š Y L L 8 Š L 25 L 26 L Š L h ML 8 p ML 21 LL 7 } H Š L h ML 8 h L Š L  
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Q X 3 m		0.68	3.86	44 39	j [ ô H + z u m 4 + t [ ] f z O } [ ]
Q X 3 m		0.63	3.81	24 16	3 n 8 Y p 8 ( 5
Q X 3 m				29 25	Š n Š L s f W 6 \ f
Q X 3 m		0.56	3.85	44 1	h m < f 2 . û } h y M m

Ž ½ } (sf „ O 26. Ú ýh m+řk 8 řč Hjh BM dřp h M 8 fm  
 s LLf3 Ž LL8pM ILL7} Ž 4sL lf h břk L ř5 lf+ • 3AÝ-L,, ITL nO f j LLLSpnf B  
 LL[°Pf d°LL+ u2L jnL LcŠnL PØ 3,LLLzD^|BLL L\_LAS fLQ ToLL! Šn LL 302LL<f  
 LL# s Ž 26> þL @@ ,L LøL L,,^LL 'O 3 ř L LL&m 'j bQLL<m jllölo b P | # P L L Ønf P f  
 o L2]xL LcŠ \ ( „ L L 2 ū ... ú L L + ... 1 L L f  
 ILL7} Ž ULLh LL Š' 4s fAL LL LT Ahf tLLp-f 3YL13LHfl E5DPLnL 18fY2 L,LL2  
 ALL W} „ LL 'O jLLnP‡ / LL Š! LL m} h P b nT h LL Š qL L 389 nL Ls Šf3 řx/ ř  
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„LL' O LL [3f • LL- LL Šb @ 'Á 3 LL :ú Y LL TH H Šu LL 1386. ŠUWŠ

.} LLhM „LLÓ N LLDWf .} L|LhM / „LLÓ uLLQ[3f • LL- LLnL  
 3.81 sLLf3Ý Ž LL8pM ILL7} Y 4ULfLh LLLkLAŠ'f → LAL9LTLmhfMLL5  
 .} LLhOf 3n LL8Y p LL8( f „LL2ü LLWz f ILLlHTuLM 8LLlm8rL  
 h m LL<2nm} p LlhIM( LL2S & SLDWL(.q LphIM h p Plf8  
 sLLf3Ý Ž LL8pM ILL7} Y 4ULfLh LLLkLAŠ'f → LAL16.TLbBf6BL  
 LLz\SH „LLÓ QhLLp} Lb}LphO,fL LL'On Q3LLfL SLLh\$ sSYLLW  
 LLnLsm p ÷ #LLTUhP Š1LL3885 -LLSIm x & LQBLX 3m2 80LxL7f m AL  
 LL#S sf w1ULx h{m LL2<> |y..}LLHPK] 13mš HL! oLL^n HSLL7}f  
 l n x .)! „²ü h? }X Š#h0f || 2012+4 } 2006—p Š2005^5# ſy|S2n {fS f ü Lb? }  
 •2LL@ [ .} LL!|2012L² p 2006H? E L 2t{100fS LL7LLh? } L L2mū QYL LlmL YrlL  
 LLx. P ÷ L2Wü k. LHmr  
 HSLL7}f ô LLs f .} LLm QLLSt@L LbRbLp#m LLL'Q ALLhst PflLm0  
 .} LLm QLLSt@ d LL#m •LLL8rbhpñ P LfLj DLALhDñf, \$LLlOshn \$L  
 LLPX 3m 2.kumý LLfY .H  
 :•%o •-Á" •- " Š%o ÄE  
 .} LLm QLLSt@ •LL- LLh m 2P.fü yLLSs mŠfLLSLSO sl@f h H lmL &LL  
 HSLL7}f  
 Š 8tf .2 ŠšnPKY | V 3(q. 26Ž 208/þMM lP} TÝ → 2.kumý < f m ])Šh M} 8mh Ht m  
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 LL&sSf LL 3m2 .kumý .LLkfm ]LLShM .2LLbB PnY VA BIL LT( 26q ŠZLL  
 H7} Y

8'~ 8Y 17} Y	Š 8tf	Ša xŠP Y	Vs ŠS(Y. 17} Yq} († #Øf	A\Kf Y	I
QX 3m			3.98	56 53	% s Y o Šn @
QX 3m		0.68	3.94	52 45	Š hP. Á I B f 2
QX 3m				80	• Š A 7. I Šh , f
QX 3m		0.90		62 "	j n PZ W ô s 4
QX 3m			3.66	63	p h m Pf2 Šn \$   ^
QX 3m		0.66	3.81	80 45	h m < f 2. ū lym m ]S H

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 ^ A LL; | I LL8[ Ž YLLh , m2p]LLh + L,LL'L' ŠLLm8 ſL L  
 .} LLh 20L LpWL L8f - LLnL  
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ožl̄m̄n 3 LL^} H j L2L! ? . uALLlm Vp̄L L,, XIK}@ hJfL LlnIPŠ LLT hL s Š Lp̄386L L  
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 — L L T h Š L  
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H Š 7 } f ô s f . } m Q Š t @ - h m Pf Š s n Š f Š  
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17' } m		1.23	3.40	] Š H f h f ] Ÿ } Ŷ . A Š @ , Š' u Ÿ. Ÿ h j r Š H f 2 w Á Ÿ M Š P P f I	B Ø 1 Y	P C2	
17' } m	66.9	1.06	3.35	n L s Ŷ . Á Ÿ 3 n 8 Ŷ A Š T f	95	3	
17' } m	65.9	1.12	3.30	h m < f 2. Ÿ } H Š M H h H m Q m ] W } + n n L s Ÿ 4	W 4 A	Š T	
17' } m		1.13	3.28	. } h M p 8 ( % m q A f n L s Ŷ Ž X K } m 9 2   \ m 5			
17' } m	65.2	1.12	3.26	š u M   Š h + / f . @ . a ; Š h O W Y B 3 C		6	
17' } m	66.8		3.34	A T n h f • 2 n ! Á 17' } Ŷ			

المتغيرات	من 20 إلى أقل من 30 سنة	من 30 إلى أقل من 40 سنة		من 40 إلى أقل من 50 سنة		من 50 سنة فأكثر		قيمة F	مستوى دلالة
		30	40	50	30	40	50		
Sig (F)		$\delta$	$\bar{x}$	$\delta$	$\bar{x}$	$\delta$	$\bar{x}$	$\delta$	$\bar{x}$
0.63	0.58	0.61	4.09	0.57	4.00	0.48	4.12	0.65	3.93
0.52	0.76	0.77	3.60	0.49	3.96	0.65	3.99	0.71	3.81
0.95	0.12	0.84	3.71	0.55	3.82	0.68	3.86	0.61	3.78
0.93	0.16	1.04	3.76	0.28	3.64	0.79	3.73	0.84	3.61
0.56	0.70	0.96	3.87	0.41	4.03	0.63	3.89	0.59	3.76
0.95	0.12	0.99	3.97	0.30	3.91	0.75	3.86	0.73	3.81
									الوقاية من الأخطاء قبل وقوعها

0.85 Šh b ff~}. LL 8 m p ' Š' -2j. kú\_ ý . h mn L|IŠ-0f05 :} h M Y L 8mnS W/m f A} L+ 2nd / ph-M u m p  
LL Š' —3 LL R P f b A l2b mT yÝL k~. lnP BUL ŠM H s Š P f . 3 LL Vl3-L WL L } U! N L L Š- b @# Š b d  
‡ L L W q}/LL! h M / L L DOL m p L l2 . û tý —L L3 ÝL X \$ m 8 2fLm \ Lm k~ ÷ . } BUL ŠM P fs L L f l3 Y R Vž j B l b  
LL ~} \$R 8 m u lE Sig A l3E L L 8 mL b ^ T mL l2 ŠL L f y . h m lnL 4fL L 4fL b M Lns Š P f } L L Š L L W ÷  
. } l2L k M y . L ~} lnL 8 MLOŠ L H-E } lslP8mn / L L s O |3 L L Šv p / @L' d} †. B-L f; X @@ B A L L L S X f .. } 1 L L f r  
3 L 4fL R P f L L L Š O L L n  
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3 L ŠL R P h f 5 L L S N 24 L H [  
# ý Šh P8 f h P 2f7 s Š O n L s Y 2 . û- ý h mm< f ~} #8m IŠ-05H ^} Š P8mn / s O Š b | Š WU / ! } †. -  
h m < f 2 . û} h y M m g t | 3 X f Z / † / ( f ... ' ð 2 Š P Y f j Š h ß ( % b 30 Š / ! 8 p M  
# ý Šh P8 f h P 2f7 s Š O n L

( $\alpha$ ) 8 m „'O Šp @ 'u  
L E Š h b f L L 8 m p ' LL Š 2 . u j y \_ L b nm L P 05 Š L H f t B M P E t L H L A Š B M ad AL h M u L  
A L - b L T P Y j b \_ 2 h r a y L k t b m B L h S M H L s Š P f . 3 L L W 3 L L W L . } L L ! + L L Š p O @ Š D U P q A  
— . 3 L L X s n . u h y . L L < Ŧ . L B L h S M Y 2 L L d ÷ W — p b L L y . Š b P f f s L L f Ţ Ŧ P X 3 m L Š p M L B L Š  
F Sig L f L L 8 m p ' L L Š ū y . h m b m L e f L L d b k a L b M L s Š P f ] L L Š L H V 8 L L W d y / L L ! h N L L L C  
L L } Š P 8 m u L L m  
. } L L h M y . L f m L Š L H - E } Š L P 8 m / L L s O | 3 L L Š p / @ L d } t . B L L x L @ Š D B A L L K t . t . 1 L L f  
# L L y Š L h P Š Š b P f L L Š Š O L L n  
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f · ľ Sig F	8 m F	n Š [	A _ ø10/		s 7 s 15 „14 ū u m		} s 10 „5 ū m		} 57 u m j [ ÷		A T Ÿ		
			δ	ꝝ	δ	ꝝ	δ	ꝝ	δ	ꝝ	A	T	Ŷ
0.19	1.65	0.60	4.14	0.52	4.06	0.55	4.09	0.56	3.80		j Š n P f „ ‘ O B	_ A	f
0.56	0.69	0.60	3.91		3.93	0.63	4.01	0.66			] þ \ p N s 2 3 0 f	0 ,	
0.91	0.18		3.81		3.82	0.58	3.89	0.53			3 n 8 Ÿ p 8 (	f	
0.96	0.10	0.64		0.86	3.61			0.81	3.63		Š n Š L s f	W	\ f
0.38	1.04	0.60	4.01	0.69	3.81	0.63	3.90	0.50			Š h n P f „ ‘ O	B	_ A
0.69	0.49	0.61	3.99				3.86	0.63	3.80		z O } [   j [ ô H + ð	u m	
0.66	0.54	0.55	3.93	0.66	3.83	0.53	3.91	0.55			h m < f 2 . ô ) l ý M	m	

(α" → 8 m „'O Š þ @ 'ū  
L E Š h b y f L 8 m p ` LL Š 2 . û j þ . L b mn L p l o s Š L H - t u s h Š m P E t L h L A Š B m ad A L h M u L  
A L - 5 L T P Y j b \_ 2 h . n û y L t f b n d h Š V H L s Š P f . 3 L L W 3 L L W L . } L L ! + L L Š þ O @ Š D 6 0 P ð A  
p L L + — . 3 2 L u X ſ m L h M L L L d f 8 t f . } 2 L L L M h m p - A L L 1 L u M s ſ t k L L Y P X L 3 L m V ð p M L L F L  
j E I S lg f L L f L 8 m p ` L L Š ū - y . h L n L b M L b M L s Š P f ] L L Š L H L V 3 L L W L L d y L L L ! K N L L  
L L } L s IP 8 ź m u L L r  
. } L 2 L h M y . L t b m L o s L H - t } L s IP 8 ź m / L L s O | 3 L L Š þ / @ L ' ð } t . B L L 1 . X L @ Q D B A L L L K L ' . t . 1 L L f  
A L L 5 M L 2 f } s L L L 7 Š O L L n  
• L L - h n . ū L y . f L L . ) h L L Š h M Š L H - | 3 L L Š W @ ' ū ! } t L 2 D 1 B L q 0 L  
L L m / u M P / L S L Y L S N 2 4 L H [  
; " " " " " ... 4 E .  
Š 2 ^ f 2 / h f 2 f 7 s Š O n L s Ŷ 2 . û y h m m < f - } # 8 m J Č O S H ^ } \$ P 8 ź m / s O Š þ | @ W ū ! / ! f .  
h m < f 2 . û . } y . M t h g t i | 3 X f Z / t / ( f . . . ' z 2 Š P Ŷ f j Š h ß ( 0 % þ 3 2 9 / ! 8 p M  
Š 2 ^ f 2 / h f 2 f 7 s Š O n L

} 8 m f .. Sig F)	F	n Š [	9 n +	u m	A n + ÷ „ 2	ŵ m	J [ ø V 2 . 0	... ÷ • - ^	A ; - I/O
			2 .	2 .	2 .	2 .	2 .	2 .	A T Y
0.52		0.64	3.90	0.43	4.28	0.56	4.08	0.58	j Š n P f „ ' O B _ A f
		0.63	4.03	0.64	4.12	0.66		0.66	] þ \ p N s 2 3 0 f 0 ,
0.49	0.81			0.30		0.63	3.90	0.61	3 n 8 Y p 8 ( f
0.65	0.55	0.86	3.86	0.46	3.83		3.65		Š n Š L s f W \ f
0.32	1.18	0.68	4.02	0.40	4.06	0.55	3.93	0.61	Š h n P f „ ' O B _ A
0.85		0.82	3.89	0.44		0.59	3.92		z O } [   j [ ô H + ?
0.63	0.63	0.65	3.91	0.38	4.06	0.56	3.89	0.56	h m < f 2 . ü } h y M m

(α" ~) 8 m „'O Šþ @'ū  
L E Š h b f L L 8 m p ` LL Š 2 .-j þ \_ L b nm L P O S Š L H f L B M P E t L b L L Š B M ad A L h M u L  
A L -b L T P Y j b \_ 2 h. m y L k f b m b L h Š V H L s Š P f . 3 L L W 3 L L W L . } L L ! + L L Š þ O @ Š P D P Q A  
— . 3 L L X s n ð . û h y n . L L < y 2 f L L B M M 2 L L b M V M j þ L L Š . 1 L L f s L L f Š Y P X 3 b M f p M L L S E  
F Sig L f L L 8 m p ` L L Š ū ſ y . h L b L b L b L b M L s Š P f ] L L Š L H V 8 L L W L d y / L L Š h N L L L C  
L E } ls IP 8 y m u L L m  
. } L 2 L l a M y . L f b M L S L H -E } ls IP 8 m m / L L s O | 3 L L Š þ p / @ L d t . B L L ; X @ 10 L A S L L S X f .. + 1 L L f r  
2 L Š 2 / L -b L P f L L L S Š O L L n  
: O • ' " " 5  
ž X Š K } 5 P 5 2 \$ h h \$ Š O n L s Ÿ 2 .-j y h mm < f ~} # 8 m N Č O H ^ } \$ P 8 m m / s O Š þ | Š W U / ! f . .  
2 L f 7 L L s Š O L L 2 L Ÿ Ÿ . • L L b M L Š K H f / Z L H L k h f M ... 2 Š E Ÿ u L L W 3 f q B B k Š Š h L L L  
ž L L X Š K Š E L B L

j 8 m f .. Sig F)		A , m		o 8 [ 2 ̄ p		2 . û 3 † / m		Š ̄ Oû		A T Y		
F	n Š [	δ	ꝝ	δ	ꝝ	δ	ꝝ	δ	ꝝ			
0.50	0.80			4.21	0.61	3.95	0.08	4.06		j Š n P f „ ` O B _ A f		
		0.68	3.80	4.10		3.84	0.40			] p \ p M N s 2 3 0 f 0 ,		
0.69	0.49	0.62		3.95	0.59		0.08	4.06		3 n 8 Y p 8 ( f		
0.66	0.53		3.62	3.81	0.56		0.14	4.10		Š n Š L s f W \ f		
0.89	0.21	0.54	3.95	0.54	3.95	0.84		0.00	4.00	Š h n P f „ ` O B _ A f		
		0.41	0.69	3.85	0.68	3.93		3.62	0.12	4.08	z O } [   j [ ô H + ē u m	
0.56			3.81	0.56	3.99	0.60		0.05	4.14	h m < f 2 . û } h y M m		

•• œ • ... £ Ö OE-  
 h m < f2 . û } y.M m Q Šn! 423 CH |  
 2. Á ^ } 8 Y Yh , m •-2 . } h  
 z \ Š H um . X 7. | h #< f „ : 3h N  
 p h m2 B fm ê / C†2 Øn P1Ls. Š Cjf+ 3 @ s P f4 |  
 Øm } \t # Øf d2 Øf 0 , h P - Yp4 , h Ø P f  
 •• œ • ... £ Ö OE-  
 h m < f . } h M 2% Á 3 | ^ } . 8 Y M Yh , m •-| Ø fh m% P1l A Q Š  
 o z of Š z 8 f o †/ \ | p h m P f B X( | . } h M \h( V3 P f m un C23 C } 8 Y  
 • x n h M j n P 23 VQ Šh C | j jn P f „ 3 O p  
 ] Š H f h f | 2 } Y . A Š @ , Š' u 2n. û h | Š 2w Áh M Š ØK P f | j m b44 o C  
 p ah ^ R28 Y ! ' QSm l ö # sm o f/ \ |  
 . 3 W j m O 3 2 ö Á # ¼ / t ^ • Š Šh PA 72 . Ø P ! h  
 •• œ • ... £ Ö OE-  
 h m < f2 . û } y.M m ] Š H um ^ T a n # Øf 7 Š 8 f | Š 23 Øj 2  
 & # sf 3 ? s O 2 u m O 3 @ b Ø2 Øk y. Øx M ^ . Š \ f23 ØN  
 n L s Y Á 2 Y 3 n 8 Y 3 A Š  
 h m < 2 . û . ] Š M H f [ ] f | 2 ) Š Y W A Š 302  
 j n P 2 | : ||/ sf / \ O d ° + um . } h M p 8 ( % m 5q A f  
 h m < 2 . û y. h M m Q m J W } n L s Y j Ø .  
 2. Á p m } h P Y j Š 2 } u M z | 8 f S h . f / f j b < f @ . Š ! a  
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 : Ø Ž å .

— p 4 Lfn | 0 3 2 1 Q f b % 1 ZL 8 7 ú m — „ L L 2 | ï 2 L 2 0 7 1 H f Ó — L L L Q ^ 3 L | 8 B p L M 2 + A 1 1 Š  
 p2  
 p2 — p n O 4 - f | 0 3 4 t h f | Ø % 8 Y 2 . — 2 , 2 0 0 0 — B K H f A 2 - D h n  
 p2 — p n O 4 - f | 0 3 4 t h f | Ø % 8 Y 2 . — 2 . û f — Ø K H f A 3 - D + h  
 B ^ 3 4 f — Ø % t h f 2 G 3 [ I + 2 0 1 9 H M G / Š P 7 — Ž r 3 4 x 5 f  
 B ^ 3 4 f — Ø % t h f G 3 [ — 2 B 1 3 n - f / \$ P & 7 # s Ž r 3 5 x 5 f 3  
 p2 f - Ø p 4 - f Q % 3 < t h f ô X ? 2 . — „ 2 | ï 2 . 2 0 0 6 p - m Ø B f n f 6 m / + .  
 p2 f - Ø p 4 - f Q % 3 < t h f ô X ? 2 . — „ 2 | ï 2 0 0 2 2 f G — p f m p f — n L  
 3 @ m — 4 3 f x | \ 3 s t h Q % 6 x ; n ! 3 — \ Š H | ý . 2 . 2 0 0 9 9 7 I + A h 8 n \$ % f 8 A t . |  
 p2 — p 4 n f Q 3 - Q % 4 Š h h P f . — 2 h 2 0 0 8 < f " Ü . ) 1 0 M — 2 + [ 2 9 y - 1 0 f  
 p2 — p 4 n f Q 3 - Q % f 4 Š s n h P f . — W 2 0 0 9 < f , 2 2 0 0 6 M P A 4 h f m 1 0 9 -  
 4 % f | 3 < t h f 2 j b + p2 n O p - „ 2 | ï P H 2 . Á - 3 l m q b z Y | 2 0 0 1 m - s e Ž X , ? j B 1 1 + 0 m  
 p s f — Ø Á A 1 1 Q % 3 < t h f p 8 c — 2 2 0 1 0 — 4 . h f p 1 2 3 f W  
 p2 — p 4 n f Q 3 - Q % f 4 Š s n h P f . — W 3 P 2 Y P L 2 0 1 2 — d h r M 0 | + 2 3 1 0 —  
 3 x 4 f f — 3 Q % t h f ^ A t û — „ 2 | ï 2 P 2 0 0 0 — / 3 M 4 - < 2  
 3 @ 2 h s a - Á — Š P X m f h | M . 2 3 f f | B n h f • Š } f } s a f 2 . l Š H , f ^ B W 5 ! —  
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2010 A 14138 . / Š P L L 8 ... } L L  
3 L L n úY „ 2 L 2 ū L 2 L h b n M m 2 L L L n O z V S D T ! } h Q L L 7 L - m L L 2 m Ž z X m - 2 . B B L H 2 L f s  
I 3 2 5 2 4 u s L t L m A L L X 3 h f L < . P . f . A . s L L D I A f  
— • L L • 3 f / L L b P f | j L L + / f „ L 2 L Œ O h b n L 2 A & f d y L } Š ) f L b M 2010 L L Ž L L f f q s f . ) # \*  
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# Ž h P f ( f f \ h m — w / ! s t / 2 2008 - u N P f  
2 . Á L L Š h ` ô . ÷ 3 L L ^ } H f Ž L L 3 P f 2 . f L L X L H Y 8 h W • 2003 Š P H L f b & A Š 15 P L n t  
ž L L 7 — L L h ' — 2 L L Š Š s ! ? N Š q @

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# Total Quality Management and Organizational Performance

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**Abstract** Total quality management (TQM) is considered a very important factor for the long-term success of an organization. TQM implementation has been an important aspect for improving organizational efficiency. The links between TQM and performance have been investigated by numerous scholars. While examining the relationship between TQM and performance scholars have used different performance types such as financial, innovative, operational and quality performance. Recent research on total quality management has examined the relationships between the Total quality management and organizational performance. TQM focuses on continuous process improvement within organizations to provide superior customer value and meet customer needs. TQM is a popular guideline for organizational management adopted for developing strategic info maps and info charts for an information organization.

**Keywords** total quality management, organizational performance, quality practices

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## 1. Introduction

Total Quality Management (TQM) is considered an important catalyst in this context. This is why the TQM concept has captured the attention of all sides of commerce and industry, as well as that of politicians and academics. The large number of articles being published in this area is a testimony to the high level of interest in quality issues. During the past decade, quality improvement has become one of the most important organizational strategies for achieving competitive advantage. Improving the quality with which an organization can deliver its products and services is critical for competing in an expanding global market. TQM begins with the primary assumption that employees in organizations must cooperate with each other in order to achieve quality for the needs of the customer. One can achieve quality by controlling manufacturing/service processes to prevent defects. TQM, however, does not only consist of quality tools and techniques. TQM processes also depend on a certain set of values and beliefs shared by all organizational members. The concept of quality has migrated from being considered a non-price factor on which imperfect competition in the markets is based to being considered as a strategic resource of firms. In other words, quality went from being

a one-dimensional attribute of the product to being considered a multi-dimensional construct which has to be managed and the implementation of which leads to a dynamic capability of firms [1]. Despite the large number of articles and books on TQM, total quality management remains a hazy, ambiguous concept [2]. This may be due to the fact that the term TQM means different things to different people. Quality "gurus" such as Deming [3] and Juran [4] have proposed their own frameworks. Quality teams provide companies with the structured environment necessary for successfully implementing and continuously applying the TQM process. Quality training is conducted and the continuous improvement process is executed through a well-planned team structure. The ultimate goal of the team approach is to get everyone, including contractors, designers, vendors, subcontractors and owners involved with the TQM process. Prior studies [5,6] suggest that TQM strategy that focuses on increasing customer levels of satisfaction does have a significant and positive impact on performance. Iltner and Larcker [7], for example, suggest that attaining customer satisfaction is thought to increase the profits of the organization by decreasing costs through fewer returns and increasing revenues.

through customer loyalty. The links between TQM and performance have been investigated by numerous scholars. While examining the relationship between TQM and performance, scholars have used different performance types such as financial, innovative, operational and quality performance. Although the effects of TQM on various performance types are inconsistent, quality performance generally indicated strong and positive relations [8].

Gurd et al. [9], for example, examined the factors that either encourage or inhibit accounting lag following the implementation of TQM practices. Specifically, they found that industry sectors' management commitment, organizational structure, participation, and financial performance have an impact on accounting lag.

Studies have claimed that marketing and TQM are complementary business philosophies [10, 11]. From Saraph et al. [12], many studies have attempted to develop an appropriate set of critical quality management constructs to represent an integrated approach to TQM implementation in a business unit [13]. Some scholars, e.g., [14, 15, 16] have claimed that the effects of TQM practices on various types of performance measures differ. In addition, few empirical studies have investigated the mediating effect (indirect relationship) of one type of performance measure on the relationship between TQM practices and another type of performance measure, e.g., [16, 17, 18, 19].

## 2. Total Quality Management (TQM)

Total quality management (TQM) is a systematic quality improvement approach for firm-wide management for the purpose of improving performance in terms of quality, productivity, customer satisfaction and profitability. Since TQM practices have been embraced by many firms around the world for decades, they have earned the attention of many researchers from diverse areas.

TQM is a management philosophy that is intended to empower every member of the organization. It is intended to promote continuous, sustained and long-term improvement in quality and productivity and to eliminate employees' fear of change. Its basic principle is that the cost of prevention is less than the cost of correction. Bellis-Jones et al. [20] suggest that TQM is not just another management fad; it is capable of delivering real competitive advantage. The TQM approach integrates the fundamental techniques and principles of quality function deployment, statistical control, and existing management tools in a structured manner.

TQM focuses on continuous process improvement within organizations to provide superior customer value and meet customer needs. TQM is a popular guideline for organizational management adopted for developing strategic infomaps and infocharts for an information organization [21, 22, 23]. TQM can be defined as a holistic management philosophy that strives for continuous improvement in all functions of an organization, and it can be achieved only if the total quality concept is utilized from the acquisition of resources to customer service after the sale. TQM practices have been documented extensively in measurement studies as well as in the studies that have investigated the relation of TQM practices to various dependent variables. TQM is an effort that involves every organization in the industry in the effort to improve performance. It permeates every aspect of a company and makes quality a strategic objective. TQM is achieved through an integrated effort among personnel at all levels to increase customer satisfaction by continuously improving performance. TQM focuses on process improvement, customer and supplier involvement, teamwork, and training and education in an effort to achieve customer satisfaction, cost effectiveness and defect-free

work. TQM provides the culture and climate essential for innovation and for technology advancement.

## 3. The Total Quality Management (TQM) Strategy

Four components frequently cited as critical to a successful TQM strategy are customer satisfaction, employee involvement, managerial leadership and process improvement and control. Marketing theory has long recognized the importance of customer satisfaction to the business organization. Quality focused organizations must identify their customers (both internal and external), determine the specific needs of these customers, integrate all activities of the organization (including marketing, production, finance, HRM, and IS) to satisfy the needs of these customers and finally, follow up to ensure the customers have been satisfied [24]. JIT, TQM, and SCM represent alternate approaches to improving the effectiveness and efficiency of an organization's operations function.

The cost of quality is considered by both Crosby and Juran to be the primary tool for measuring quality. In their approach, it is used to track the effectiveness of the TQM process, select quality improvement projects and provide cost justification to doubters. By bringing together these easily assembled costs of review, inspection, testing, scrap and rework, one can convince management and others of the need for quality improvement.» Cost of quality has received increasing attention in recent years. It is effective in its intended purpose of raising awareness about quality and communicating to management the benefits of TQM in terms of dollars. Under TQM systems, product/service design efforts have two objectives: designing manufacturable products and designing quality into the products [25]. Designing to simplify manufacturing utilizes cross-functional teams to reduce the number of parts per product and standardize the parts

[26], which results in more efficient process management by reducing process complexity and process variance [27].

Effective supplier quality management is facilitated by long-term, cooperative relationships with as few suppliers as possible to obtain quality materials and/or services. Maintaining a small number of suppliers improves product quality and productivity of buyers by encouraging enhanced supplier commitment to product design and quality [28]. Quality creates not only a price/value advantage over competitors but also enables the firm to charge a higher per/unit sale price through differentiation [29]. A strategy of high quality leads to a sustainable competitive advantage [29]. Firms competing on quality pursue an operational strategy that controls quality of the product/service and seeks continuous improvement.

#### 4. Theory of Total Quality can be Summarized as Follows

1. Quality leads to lower costs as defects are reduced.
2. Quality is made in the boardroom; it cannot be instilled into shopfloor without the initiative and commitment of top management.
3. Most defects are caused by the system not the worker;
4. Inspection is too late; aim to reduce defects during production and eliminate mass inspection;
5. Eliminate numerical quotas slogan, exhortation and targets for the workforce and promote sustained and continuous improvement of process and quality of output;
6. Drive out fear of change from workers; institute a vigorous program of education, training, and retraining to help the workforce improve continuously and to increase their job security;
7. Breakdown barriers between staff areas and abandon review systems that will destroy teamwork and create rivalry;
8. End the practice of awarding business on price tag alone; look for suppliers committed to quality and develop long term relationships with them.

**5. Total Quality Management and Organizational Performance**  
Performance measurements are integral part of all management processes and traditionally has involved management accountants through the use of budgetary control and the development of financial indicators such as return on investment. However, it has been claimed that conventional aggregate financial accounting indicators are inappropriate in TQM settings [30]. Several authors have claimed that an important part of ensuring that TQM leads to sustained improvements in organizational profitability is that direct quantitative measures of manufacturing are used to assess the effectiveness of management efforts to manage the development and implementation of TQM programmes [31, 32, 33]. With the growing awareness that quality of final products and services is a strategic competitive variable, companies have recognized also that the concept of high quality must be applied to production processes to generate quality products and minimize costs. TQM has evolved as a philosophy that emphasizes the need to provide customers with highly valued products and to do so by improvements in efficiency by way of eliminating waste, reducing lead times at all stages of the production process, reducing costs, developing people and improving continuously [34]. While TQM provides a potential for organizations to enhance their competitiveness, there is evidence that many organizations have been disappointed in the extent to which TQM has been associated with sustained improvements in organizational profitability [35]. Performance management systems are a cornerstone of human resource (HR) management practices and are the basis for developing a systems approach to organization management. In theory, a performance management system links organizational and employee goals through a goal-setting process.

and subsequently links employee goal achievement to a variety of HR management decisions through a performance measurement process. Shank and Govindarajan [36] and others argued sometime ago that quality practices had become so important that management accounting could no longer ignore TQM. Traditional accounting supports cost and production analysis but not quality analysis [36, 37]. The thrust of the TQM philosophy is that quality and its management have to be built in from the beginning and that the accomplishment of quality standards and improvement is the responsibility of everyone [38, 39]. Waldman and Gopalakrishnan [40] claim that quality is, in fact, largely a customer perception based on how well the product or service meets the customer's needs and expectations. Poor quality occurs when these needs are not met. Satisfying the customer is an important aspect of the manufacturing process and this requires the customer's input at all stages of manufacturing [41].

#### 6. Conclusions

Recent research on total quality management has examined the relationships between the Total quality management and organizational performance. Many researchers have examined the link between total quality management (TQM) and financial performance. Researchers such as [7, 42, 43], provide evidence to show that effective TQM implementations improve long-term profitability and stock returns. Flynn et al. [44] report that higher intensity of TQM practices results in improved quality performance. In a review of the literature covering the relationship between TQM and innovation, Prajogo and Sohal [15], identified two competing arguments. The first argument suggests that TQM is positively related to innovation performance because it establishes a system and culture that will provide a fertile environment for organizations to

innovate [45]. The opposing argument holds that the implementation of TQM principles and practices could hinder organizations from being innovative [46]. There is a growing body of empirical research supporting a direct relationship between the adoption of Total Quality Management (TQM) and improved firm performance [43, 47]. Reed et al. [48] argue that the content of TQM can be distinguished based on the issue of two business orientations: customer orientation and process orientation. With customer orientation, organizations will focus on gaining a market advantage where they can outperform their competitors in terms of attracting more customers with distinguished products and charge a premium price.

Dean and Bowen [2] argue that from a strategic management perspective TQM is concerned more with strategy implementation, or deployment, rather than strategic choice, or intent. Another strong implication about the association between TQM and cost leadership is suggested by Gobeli and Brown [49]. In their framework on strategic approaches to innovation, they label TQM as a value leader since it places more emphasis on process innovation than product innovation. By focusing on process innovation, TQM can be linked to Porter's cost leadership strategy. Some studies have found that the use of TQM practices reduces manufacturing process variance, eliminates reworks and scrap, and improves quality performance [44, 50]. In addition, there is considerable anecdotal evidence Harmon and Peterson [34] on the extent to which TQM initiatives enhance the potential for firms to improve their performance. Moreover, some studies have found that TQM firms do not outperform non-TQM firms [51].

Prior studies [52, 53] suggest that TQM strategy that focuses on increasing customer levels of satisfaction does have a significant and positive impact

on performance. Ittner and Larcker [52], for example, suggest that attaining customer satisfaction is thought to increase the profits of the organization by decreasing costs through fewer returns and increasing revenues through customer loyalty. During the production process, the customer may request access to the quality data used in statistical process control, to evaluate the quality of the goods. Waldman and Gopalakrishnan [54] claim that quality is, in fact, largely a customer perception based on how well the product or service meets the customer's needs and expectations. There is considerable anecdotal evidence on the extent to which TQM enhances the potential for firms to improve organizational performance [55, 56]. In addition, the empirical findings of Kim and Miller [57], based on a survey of the manufacturing strategies of 111 firms in the U.S.A., showed that activities associated with TQM (such as conformance quality, product reliability, on-time delivery and performance quality) together with price were the most important capabilities for manufacturing firms in the 1990s. Schmenner (1988) and Schmenner and Cook (1985) demonstrated that throughput time reduction, improved quality and inventory reduction all enhance productivity [58, 59].

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# لأول مرة في مصر و العالم العربي

بإعتماد مؤسسة التقنية و المنهج الأمريكي للدراسات الاحترافية

## دبلومة الادارة الاستراتيجية

لتعزيز القدرة التنافسية

50 ساعة تدريبية

في الفترة من إلى



لماذا أصبحت الادارة الاستراتيجية ضرورة ادارية في ظل عالم متغير

ما هو دور الادارة الاستراتيجية لزيادة فاعلية الادارة و اتخاذ القرار

كيف تستخدم الادارة الاستراتيجية كمدخل متكامل لخلق الميزة

التنافسية واستدامتها

كيف تستخدم خليل البيئة الخارجية والداخلية في اتخاذ قراراتك الاستراتيجية

كيف تحول منظمتك من الادارة التقليدية الى الادارة بالاستراتيجية

بطاقات الأهداف المتوازنة ودورها في بناء وتطبيق الخطط الاستراتيجية

كيف تستخدم أدوات التحليل الاستراتيجي في اختيار وبناء خططك



## يقدم الدبلومة: خبير نظم الادارة ، النخطيط الاستراتيجي



استشاري و خبير دولى في نظم الادارة للعديد من الشركات والمؤسسات

مدرس في الادارة الاستراتيجية ونظم الادارة

خبرة عملية في ادارة وتطوير الشركات والمنظمات

مدير عام الادارة الاستراتيجية سابقا - مجموعة شركات ومصانع العربي

ماجيستير في إدارة الأعمال الدولية

نائب رئيس مجلس إدارة مؤسسة بادر لريادة الأعمال

**المهندس / جمال عرفة**

## المعنيون بهذه الدبلومة

رؤساء وأعضاء مجالس إدارات الشركات واملنظمات

المديرين التنفيذيين

أصحاب الشركات الصغيرة وامتوسطة

رواد ورائدات الأعمال ومبادرين من الشباب

القيادات العليا وامتوسطة باملنظمات الأهلية الغير ربحية

المدراء بالإدارات العليا وامتوسطة بشركات القطاع الخاص والحكومي



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خاتمة العدد

ISO 9001:2008

ISO 14001:2004

ISO 27001:2005

ISO 22000·2005

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