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“Enterprise Applications

Software”

(Enterprise Resources Planning)

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.(Change)

(Efficiency)

(Quality)

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(Flexibility)

(Innovation)

.2010/8/10

2009/4/7

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(Risks)

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%80

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.(Hall,2004)

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."Extended Enterprise

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Advanced)

(Manufacturing Technologies

.(Leon, 2002)

(Barua et al. 1995;)

Davenport, 2000; Huang and Palvia, 2001;

Spathis & Constantinides, 2004; Gattiker &

.Goodhue, 2004; (Sprakman, 2005

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.(Leon, 2002)

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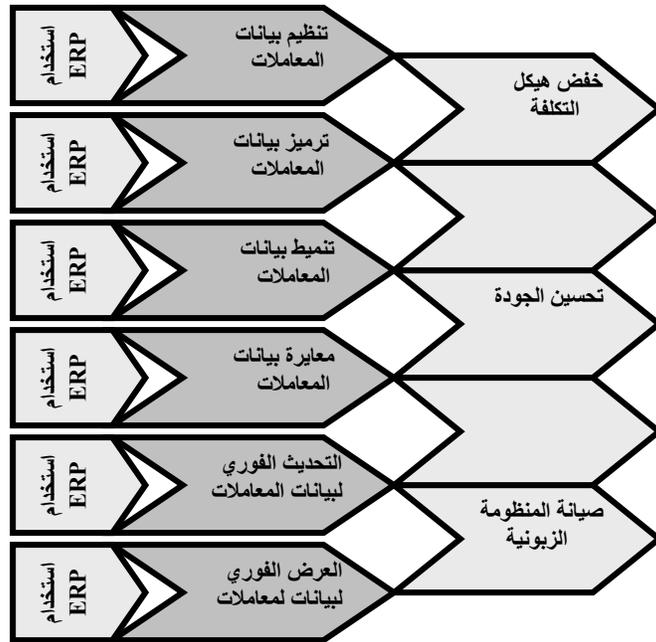
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(1)

.(Leon, 2002)

.(Leon, 2002)

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:(1)

(Inventory Tracking Systems

Material Requirement)

Enterprise)

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:(Resources Planning

(Manufacturing Resources Planning II

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(Extended ERP)

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(Norris et al. 2000)

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ERP

(Brady et al, 2001)

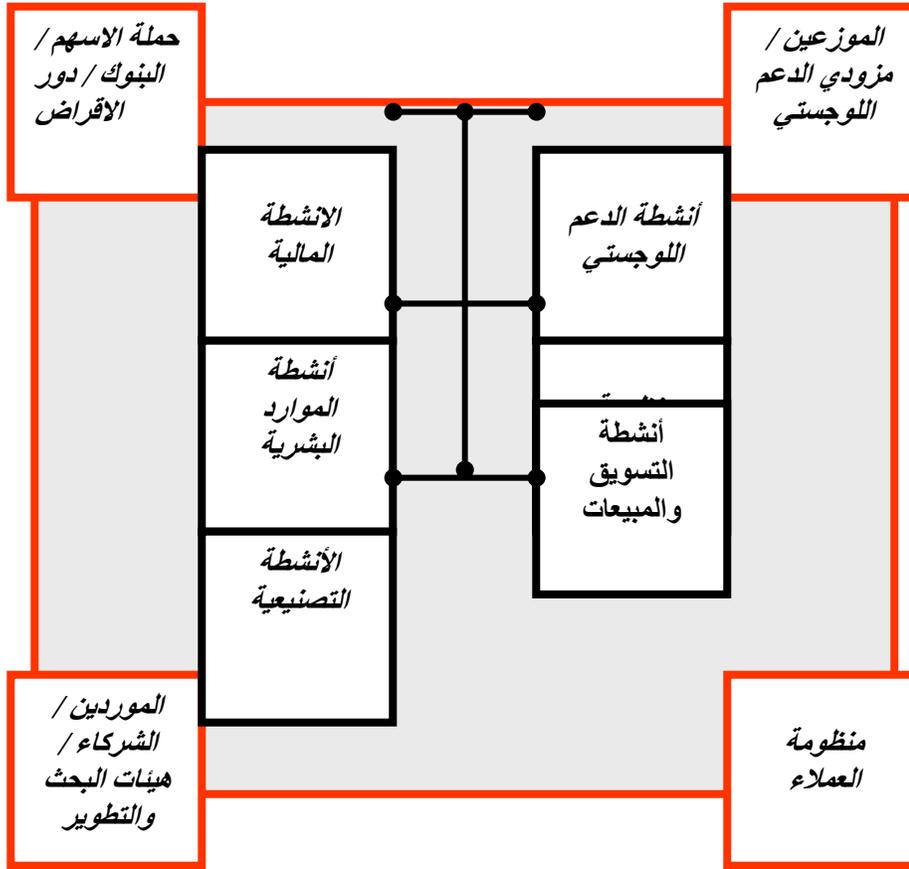
ERP

(2)

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(Janice, 2001)



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: (2)

(Alexis, Leon 2002 :)

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Workflow

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(Automation Systems

ERP

ERP)
 "Information Technology Solutions (Electronic Data Interchange
 BAAN, Qad, IFS, Ramco Systems, -
 .SAP, Microsoft, Oracle, & Peoplesoft
 . ERP
 ERP MRP (Database) -
 (Routings)
 Imaging
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 (Internet-)
 .(oriented ERP Solutions
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 (Live Database) ()
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 (Monk & Wagner, 2006) %30

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Spathis &)

(Constantinides,2004
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Poston and Grabski,)

(2001

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Bradford and)

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(Florin, 2003

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:(1)

(Spathis & Constantinides,2004 :)

Mode	Median	Standard Deviation	Mean	
5.00	6.00	0.92	5.73	
6.00	6.00	1.29	5.31	
6.00	5.00	1.51	4.73	
5.00	4.00	1.25	4.27	
4.00	4.00	1.56	3.96	
1.00	3.00	1.43	2.73	

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(Spraakman,2005)

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 ((Davenport, 2000) (Barua et al. 1995)
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 .ERP)
 ERP (Gattiker & Goodhue 2004)
 .(2) ERP

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:(2)

(Davenport, 2000 :)

	%70	
	%51	
	%60 %80	
	%38 %31	
]]	%67 %61 %99 %30	

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.(3)

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:(3)

() ()	(ERP)	()
		:(6)
	ERP.net	(1)
	SQL-Ingress	(2)
	Tally-IT TaTalyt	(3)
	Oracle	(4)
	Acbac	(5)
	Oracle	(6)
		:(3)
	Oracle	(1)

() ()	(ERP)	()
	SQL Server	(2)
	Oracle	(3)
		:(2)
	Oracle-Baan	(1)
	Oracle	(2)
	Oracle	:(1)
		:(2)
	Oracle	(1)
	SQL Server	(2)
	ERP-JDE	:(1)
	Oracle	:(1)
	16	

ERP

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ERP %52.4- %90.4
 4) .(5) %72.0
 .()
 () ERP .90.4%
] 52.4%
 ERP :
) One Sample) .[100
 (5.275) t (t-test
 .(5 .(p=0.05) t

(One-Sample t-test) : (4)

			t	t	
2.1433	.001	8	3	5.275	
2.0744	.002	8	3	4.683	
1.2840	.070	8	3	2.087	
1.7919	.002	8	3	4.719	

ERP :(5)

			ERP
90.4	.707	6.33	
85.7	1.118	6.00	
79.4	2.007	5.56	

			ERP
78.6	2.138	5.50	
78.6	2.070	5.50	
77.7	1.236	5.44	
76.1	1.936	5.33	
74.6	1.481	5.22	
74.6	1.481	5.22	
74.6	1.394	5.22	
73.0	1.833	5.11	
73.0	1.691	5.11	
73.0	2.147	5.11	
73.0	1.364	5.11	
68.3	1.716	4.78	
67.9	2.121	4.75	
66.7	1.581	4.67	
57.1	2.121	4.00	()
52.4	1.936	3.67	
72.0		5.04	()

ERP

.(%92.9)

.(%55.6)

ERP

ERP

(6)

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ERP One) t (%68.4) (4.79)
 t (4.683) (Sample t-test
 .(p=0.05)
)
 .(ERP
 . ERP .(4)

ERP : (6)

			ERP
92.9	1.069	6.50	
84.1	1.965	5.89	
82.6	2.108	5.78	
74.6	1.986	5.22	
71.4	2.398	5.00	
71.4	1.195	5.00	
69.9	2.088	4.89	
69.9	.928	4.89	
66.7	1.871	4.67	
66.7	1.658	4.67	
66.7	2.062	4.67	
65.1	1.236	4.56	
63.4	1.810	4.44	
63.4	2.297	4.44	
61.9	2.500	4.33	

			ERP
61.9	2.000	4.33	
61.9	2.121	4.33	()
57.1	1.871	4.00	
55.6	2.421	3.89	
68.4		4.79	

t (4) p=0.05
t

ERP

ERP (7)

ERP

ERP

(ERP)

7)

.%61.1

.(

ERP

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.(73.0%)

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(One) .(%44.4)

(2.087)

t

(Sample t-test

t

ERP :(7)

			ERP
73.0	2.088	5.11	
68.3	2.333	4.78	

			ERP
68.3	2.279	4.78	
67.9	2.375	4.75	
66.7	1.936	4.67	
64.3	2.268	4.50	
63.4	2.128	4.44	
63.4	2.351	4.44	
61.9	2.236	4.33	
60.3	2.386	4.22	
60.3	2.333	4.22	
59.0	2.232	4.13	
57.1	2.179	4.00	
57.1	2.121	4.00	
57.1	1.852	4.00	
57.1	2.291	4.00	
54.0	2.279	3.78	()
54.0	2.386	3.78	
44.4	2.315	3.11	
61.1		4.28	

ERP

(8)

ERP

()

One)
(4.719)

t (Sample t-test ERP
t
(.4) p=0.05 . 92.9%

ERP

ERP

ERP

ERP : (8)

			ERP
92.9	1.069	6.50	
84.1	1.965	5.89	
82.6	2.108	5.78	
74.6	1.986	5.22	
71.4	2.398	5.00	
71.4	1.195	5.00	
69.9	2.088	4.89	
69.9	.928	4.89	
66.7	1.871	4.67	
66.7	1.658	4.67	
66.7	2.062	4.67	
65.1	1.236	4.56	
63.4	1.810	4.44	
63.4	2.297	4.44	

			ERP
61.9	2.500	4.33	
61.9	2.000	4.33	
61.9	2.121	4.33	()
57.1	1.871	4.00	
55.6	2.421	3.89	
68.4		4.79	

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ERP (ERP)

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ERP (Davenport, 2000)

• (Garg & Venkitakrishnan, 2001)

) ERP (Sprakman, 2005)

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The Impact of Use of Enterprise Resources Planning (ERP) on Optimisation of Value Creation In Jordanian Manufacturing Organizations

Ahmed A. Mohammad, Ebrahim Mansour and Lina Waraad

ABSTRACT

Enterprise applications software have been evolved over the past decade as a strategic tool to gain competitive advantages regarding quality improvement, cost reduction, and profit maximization. Enterprise Resources Planning (ERP) are key software of these applications which have been widely used to integrate primary and supported business processes. Early researches on the subject of ERP have focused on the operational impacts. At the beginning of the second millennium, a new strategic trend was emerged. Facilitation of value creation by the use of ERP has formed the core of this trend. This research is an attempt to explore empirically the value creation role of ERP in Jordanian Manufacturing Organizations (JMO). The sample of the research consisted of 16 manufacturing companies listed in the Amman Exchange Market (AEM). These companies have been carefully selected and the data have been collected by the use of professional questionnaire designed to match the research requirements of this paper. A number of illustrative hypotheses have been tested statistically to examine the impacts of ERP on optimization of value creation processes. By the use of SPSS, mean score, standard deviation, and one-sample t-test have been calculated. The findings of this research indicate the high level of results about the impacts of ERP on value creation parameters such as cost structure reduction, product quality improvement, and customer base support. In addition, this paper concludes to a key fact that applications of ERP in Jordanian manufacturing environment still lack efficient implementation of Business Process Reengineering (BPR) methodology. To reach an effective use of ERP, the paper recommends JMO to look for the innovative use of ERP beyond the traditional one.

KEYWORDS: ERP Software, Value Creation Process, Information Systems Integration, Product Cost Structure, Product Quality, Customer Base, Jordanian manufacturing Organizations, Jordan.

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