\*

2003 ( ) (54)

. (%89)

(ATM) :

.

.

.1

.

(Web Trust) (1)

(Web Trust) (1)
.(2)
.2006/2/28 2004/11/9

. / 2007 © - 33 -

•••

.

.1

.2 (Effectiveness)

.3 (Efficiency)

.

```
(C 2 B)
                                                   .3
                              .Customer to Business
Customer to (C 2 C)
                                                   .4
                                        .Customer
                 (Ray and Jaworski, 2001)
(B 2 G)
                           (Business to Government)
            .(Government to Customer) (G 2 C)
                                                                   (Wang and Strong, 1996)
                                                   . 1
                                                   .2
                                                                                                              .2
                                                   .3
                                                   .4
                                                                      1996
                   :(2003
                               )
                                                   .1
          .(
                                                   .2
                                                            (Muir and Douglas, 2001)
                                                                                              (Best, 2000)
                                                   .3
                                                            (Kotler and Armstrong,
                                      .(
                                                 )
                                                                                                            2001)
                                                   .4
                                                   .5
                                                                                 (Ray and Jaworski, 2001)
                      .(Dunn, 2000)
                                                                                                                .1
                                                            Business (B 2 B)
                                                   .1
                                                                                                   .to Business
                                                                                                                .2
                                                            (B 2 C)
                                                                                          .Business to Customer
```

```
.2
.(2003
                                                                                         .3
              )
              :
                                                 )
                                                                            :(2003
                        .(2004
                                     )
                                                                                         .1
                                                                                         .2
                                                                                         .3
                                                                                         .4
                                                            (2002
      .(2004 )
                                                             .(ITC, 2001)
            .(2003
                                                             )
                                                                        (
                 (AICPA)
                    :Security
                                    .1
                                    .2
                  : Assurance \\
```

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```
:Reliability
                                                                                               .3
                 (Nearon, 2000)
                                                               AICPA
                                                                          CICA
             (2000
                         )
                                                   (Yogen, 1998)
              (2004
                  (
                                                                                 (Web trust)
            (2004
                                                                                               .1
                                                                                               .2
)
                                                                                               .3
    (2003
                    )
                                                                          (Marcella,1998)
(Smart Cards)
                (Network Money)
  (Digital Purse)
```

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...

```
(Micro-Processor)
                           (2004
                                        )
                              )
                                                                                          (2002
                                                                                                       )
                              (Information Services)
          (Communication Services)
     (Transactional Services)
                                                                      .(499:2004
                                                                     (500:2004
                           (2004
                                        )
                     (24)
                                .(
                                              )
                                                                              (2004
                                                                                            )
.(
                                                                    (E-Business)
                                                         E-)
                                                                                  (Virtual Office)
                                                                                                 .(Commerce
                                                                  (Global Village)
                                                                                               (Globalization)
                                                .1
```

```
2000
                                           (28)
                                                                                                     .2
                                      (92)
                                                                           (Credit Card)
                                                      (
                           (13)
                                                                 )
                                                                                (ATM)
                 1952
                            (30)
                                                                                         (Debit Card)
                            2001
                                       (37)
                                                                      (Charge Card) (
                                                                             .(Eft-pos Card)
                                                                                                     .3
                                                                   :(Electronic Money)
                                                                (Electronic Checks)
          (85)
2001
                                        (41)
            :
                                              .1
                                              .2
                                                                               .(*)
                                              .3
               (34-7)
                                                                               1997
                                                                                          (23)
                                                                  (113)
       (5 4 3)
                                      - :(3)
                                                            .(528-477:2004
                                                                                )
                                                                                                    (*)
```

- 39 -

.4 :(4) - :(5) 2003 (54) (%89) (48) .3 ) (

ATM ."

( .( .(1) (1) (1) (2) (3) (4) (5) (12-6) (23-13)(35-24)) .( T-Test ) Reliability ( ) (t) ( Analysis ) %73 .(106:2005 (Amir and Sonderpandian, 2002) (%60) .5

% 81 (2)

.(%79)

(%87.5) (%56)

(

(2)

				)	
%81.2	39				
%6.3	3				
%8.3	4				1
%4.2	2				1
-	-				
%100	48				
-	-				
%52.1	25				
%35.4	17				2
%4.2	2				2
%8.3	4	(	)		
%100	48				
%14.6	7				
%12.5	6				
%29.2	14				3
%43.7	21				3
-	-				
%100	48				
%4.2	2	3			
%8.3	4	6	3		
%58.3	28	9	6		4
%18.8	9	12	9		
%10.4	5		12		
%100	48				
%33.3	16				
%45.8	22				
%4.2	2				5
%16.7	8				3
-	-				
%100	48				

:Ho1

(3)

(3)

		<u>:</u>	
1.012	4.260		6
0.974	3.809		7
0.801	4.432	.(ATM )	8
0.769	4.376	.( )	9
		)	
1.007	2.071		10
1.007	3.871		10
		.(	
		)	
	4.400		
1.134	4.108		11
		.(	
		)	
0.965	3.518		12
		.(	
0.748	4.053		

(3) ) (ATM (4.432) ( ) (4.376) (3.518) (ATM) . (2004 )

(4.298)(0.916) (3) (16) (4.053)(0.748) T-Test (t) (4) (4) (Wang and Strong, 1996) (4.053) (5) (t) .(3)  $(0.05=\alpha)$  %95 .(0.819) (3.927)T-Test :Ho2 (t) (6) (6) (5) (3) (3.927)(t)  $(0.05=\alpha)$  %95 (5)

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(4)

T-Test

Sig. (*)	t			
0.000	3.85	0.748	4.053	·

Sig. (\*

(5)

	•		1
0.681	4.005	<u>:</u>	13
0.978	4.018		14
1.004	3.984		15
1.011	3.096		16
0.793	4.190		17
0.862	4.103		18
0.916	4.298		19
1.103	3.875	·	20
0.821	4.011	·	21
0.984	3.809		22
1.216	3.812		23
0.819	3.927		

...

(6)

T-Test

Sig. (*)	t				
0.000	2.89	0.819	3.927		
				(Sig.)	(*)

(Sig.) (\*)

(7)

0.891 4.195 24 1.127 3.274 25 26 1.009 3.710 0.761 4.090 27 4.213 0.692 28 4.301 0.701 29 0.826 4.127 30 1.210 3.720 31 32 1.237 3.028 3.107 1.195 33 0.910 3.679 34 3.580 1.301 35 0.798 3.752

(7) :H<sub>0</sub>3

(7)

(29) (4.301) (3.752)(28) .(0.701) .(0.798) T-Test (t) .(Wang and Strong, 1996 2004 2000 ) (8) (7) (8) T-Test Sig. (\*) t 0.000 0.798 2.69 3.752 (\*) (Sig.) (8) ( -2 (3) (3.752) (t)  $(0.05=\alpha)$  %95 .6 -3 -1 (ATM) )

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...

.7

. 2002

2003 : (14)

2004 .325–291 2004

.25-21 2003 .

. (19) . 2004

(23) . 1997 . 2000 (28)

. 2002

. 2001 (37) (85) 2001 2005

2003

. 2003 2002

2004 2004

- Muir, L. and Douglas, A. 2001. Advent of E-Business Concept in Legal Services and its Impact on the Quality of Services, *Managing Services Quality*, 11(3).
- Nearon, Bruce H. 2000. Auditing E-business, *The CPA Journal*, 23: 1.
- Nicolaou, A. 2000. A Contingency Model of Perceived Effectiveness in Accounting Information Systems: Organizational Coordination and Control Effects, International Journal of Accounting Information Systems, 1, Issue 2: 91-105.
- Raupelien, A. and Stabingis, L. 2003. Development of A
   Model for Evaluating the Effectiveness of Accounting
   Information Systems, EFITA 2003 Conference, 5-9
   July 2003, 339-345, www.date.hu/efita.
- Ray Port, J., and Jaworski, J. 2001. Electronic Commerce, 2<sup>nd</sup> Edition, Mc-Graw Hill.
- Wang, Richard Y., and Strong, Dianne M. 1996. Beyond Accuracy: What Data Quality Means to Data Consumers, *Journal of Management Information* System, 12(4): 5-34.
- Yogen, A. 1998. Accountant Chip in to Build Trust in E-Commerce, *Computing Canada*, 24, Issue 44: 28-34, www.ebscohost.com.

2004

.

- Amir, D., and Sonderpandian, J. 2002. Complete Business Statistics, 5<sup>th</sup> Edition, McGraw-Hill, New York, USA.
- Best, R. 2000. Market-Based Management: Strategies for Growing Customer Value and Profitability, 2<sup>nd</sup> Edition, Prentice-Hall, Inc., New Jersey.
- Dunn, R. 2000. Development an E-Commerce Strategy, *Plant Engineering*, 54, Issue 11.
- International Trade Center and Jordan Export
  Development and Commercial Center Corporation,
  (ITC). 2001. Secrets of Electronic Commerce,
  Amman, Jordan.
- Kotler, P. and Armstrong, G. 2001. Principle of Marketing, 9<sup>th</sup> Edition, Prentice-Hall, Inc., New Jersey.
- Marcella, Albert. 1998. Electronic Commerce, IT Audit, 1, Issue Sep., <a href="https://theija.org">https://theija.org</a>.

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## The Contribution of E-Commerce and Modern Communications in Developing Accounting Information Systems in the Jordanian Commercial Banks

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## **ABSTRACT**

This study aims at identifying the contribution of E-commerce and modern communications in developing accounting information systems in the Jordanian commercial banks and at identifying the new banking services provided by the Jordanian commercial banks via E-commerce and modern communications, and the extent to which they contribute to increase the effectiveness and the efficiency of accounting information systems in these banks.

For achieving the objectives of this study, a questionnaire has been designed and distributed by hand to the financial managers and staff of the financial departments and accounting departments of the head offices of the Jordanian commercial banks listed in Amman Stock Market for the year 2003, being nine banks. 54 questionnaires were distributed, 48 of which were adopted for analysis and study purposes, representing approx. 89% of the distributed questionnaires.

Study results indicated that E-commerce and modern communications have contributed to the spreading of several modern banking services, such as: issuing of credit cards and on-line marketing cards, providing ATM services, the payment services through cards for purchased goods, and several banking services via internet, stationary telephone and mobile telephone. It also indicates that E-commerce and modern communications have contributed to increase the effectiveness of accounting information systems in the Jordanian commercial banks and to increase their efficiency.

Keywords: E-commerce, Modern Communications, Accounting Information Systems.

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