

69

BURTON GRAD ASSOCIATES, INC.

101 POST ROAD EAST
WESTPORT, CONNECTICUT 06880
(203) 222-8718
(203) 222-8728 FAX
BURTGRAD@AOL.COM

Sterling Commerce, Inc.
4600 Lakehurst Court
Dublin, OH 43017-0760

Invoice #2950
September 3, 1999
Project #: 263-18

Attention: John Blaine
Copy: Morgan Crew

INVOICE

Project: Valuation of EC Group Acquisition

Consulting Services: July 1 - 31, 1999

Burton Grad	1.5 days @ \$2,500/day	\$3,750.00
Total Fees		\$3,750.00
Total Invoice		<u>\$3,750.00</u>

Please Pay This Invoice Within 15 Days of Receipt

BURTON GRAD ASSOCIATES, INC.

101 POST ROAD EAST
WESTPORT, CONNECTICUT 06880
(203) 222-8718
(203) 222-8728 FAX
BURTGRAD@AOL.COM

SCA/EC Group

Sterling Commerce, Inc.
4600 Lakehurst Court
Dublin, OH 43017-0760

Invoice #2941

July 6, 1999

Attention: John Blaine

Project #: 263-18

Copy: ~~Lee McElrath~~
Steve Shiflet

INVOICE

Project: Valuation of EC Group Intangible Assets

Consulting Services: June 1 - June 30, 1999

Burton Grad	3 days @ \$2,500/day	\$7,500.00
Elizabeth Virgo	3 days @ \$1,500/day	<u>4,500.00</u>
Total Fees		\$12,000.00

Expenses Incurred:

Travel: Elizabeth Virgo (London to New York and return)		
Airfare	\$1,092.96	
Meals	35.00	
Ground transportation	<u>127.68</u>	1,255.64
Express delivery		22.50
Telephone/fax		<u>124.70</u>
Total Expenses		\$1,402.84
Total Invoice		<u>\$13,402.84</u>

Please Pay This Invoice Within 15 Days of Receipt

Caval ←

(1) Please correct the following pages in the EC Group report:

T of C pg 2
Exec Sum ii
III - 1
VI - 7
VI - 8
VII - 1
VII - 2
VII - 3
VIII - 1

(2) Please correct the following pages in the EC Group Appendices:

Appendix E (previously faxed - 6 pgs)
I-2 pg 1 + pg 2
I-4
I-5
J (XLS) - 3 pgs -
(sent by email - 7/27)
(also faxed for match-up)

(3) Type note to John Blaine
cc to Morgan Crew -
~~to be~~ attached.

fax this note to Blaine
with the attached pages
as indicated

Morgan-Crew
@ STERCOMM.COM

(Cover letter and)
~~cc~~ email note to Crew
with modified report (no
attachments or appendices)

Carol ←

✓ did we send an invoice # 2941
to SCI for \$13,402.84?
and Appendices

- make 3 copies of complete EC Group report, Fedex 2 copies to John Blaine, 1 for Blaine and 1 for Crew.

~~to~~ Fedex 1 copy to me in
Wed night package. Mark
no signature required.

Keep original for Chron

BURTON GRAD ASSOCIATES, INC.
101 POST ROAD EAST
WESTPORT, CONNECTICUT 06880
(203) 222-8718 FAX: (203) 222-8728
E-MAIL: BURTGRAD@AOL.COM

Date: July 28, 1999 **Number of Pages:** 23

To: John Blaine
Fax: 614-793-4040

Copy: Morgan Crew (E-mail)

From: Burton Grad

Subject: EC Group Valuation

Attached are a number of pages which need to be placed into the Valuation Report. Please discard the replaced pages. A complete new copy will be sent today for arrival on Thursday, July 29:

Report

Table of Contents, page 2
Executive Summary, page ii
III-1
VI-7, VI-8
VII-1, VII-2, VII-3
VIII-1

Appendices

E (6 pages)
I-2, pages 1 and 2
I-4
I-5
J (Tables 11, 21, 31)

Enclosures
5073

7/27/99

TO: John Blaine

CC: Morgan Crew

NOT
SENT

Subject: Valuation of EC Group

Enclosed ^{to you} BGAZ has sent you, by Fedex, a preliminary draft of the valuation report on EC Group.

The report is missing the valuation of the customer base, related to revenues from German and the value of the remaining goodwill which ^{cannot be} ~~depends on~~ ^{calculated until} the customer base value is determined. This means that

We have sent you a complete report except for the following:

Section VII - 2 and VII - 3 are missing certain values as is Section VIII - 1 and the Executive Summary. ^{for Appendix E and}

All of the Appendices are enclosed except that I-2 has not been completed nor has I-4 or I-5.

Appendix J has been omitted ^{until} since the customer base calculation has not been done.

We will try to fax you replacement pages on 7/28/99 so that you will have a complete report with Appendices.

	<u>% Buy</u>	
130 cost		
13 Large	60%	20 20K
26 med	30%	15K
1091 small	10%	10K

See David
Winkler
7/27/99

ECC Group

Subj: Fwd: Cornfield Human Resources Questions
Date: 7/8/99 10:52:04 AM Eastern Daylight Time
From: Burtgrad
To: Cancas

Forwarded Message:
Subj: Cornfield Human Resources Questions
Date: 7/7/99 5:41:09 PM Eastern Daylight Time
From: Morgan_Crew@stercomm.com (Morgan Crew)
To: burtgrad@AOL.com
CC: Caroline_Todd@stercomm.com

Richard
Needles

Burt—I've copied Caroline Todd on this message. Caroline is our Director of Human Resources in the UK.

Caroline—this matter relates to the Cornfield acquisition. Burt Grad has been retained by Sterling Commerce to perform an analysis of how much we could expect to "write-off" as part of the Cornfield acquisition. He is under a non-disclosure, so you should feel free to treat him as an insider to the deal.

Hello Burt:

In follow-up to our phone conversation of today, the human resource information that you requested for Cornfield is as follows:

Functional area	# At Acquisition	# Retained	Avg. Salary (at acquisition)	Avg. Salary (current)
Executive	2	1	\$92K	\$168K
Sales & Marketing	2	2	\$61K	\$70K
Senior Technical	2	2	\$52K	\$58K
Other Technical	5	5	\$36K	\$36K
Administrative	2	2	\$21K	\$21K
	<u>13</u>	<u>12</u>		

Per your request the above salary information does not include any gross-up for benefits. Caroline Todd should be able to give you guidance on our approximate benefits loading factor. Also, Caroline, could you please follow-up with Burt and answer two questions for him:

11

How much time would we expect it to take for an employee in each of the above categories to become fully productive if we had to hire them from the outside?

What process would we use to recruit for each of the above job functions (i.e., recruiter, advertisements, etc)? How much would this cost?

Hope this helps.

Morgan

SS2/Confirmed (ECG)

7/28/99

purchase price	4,650,000
(plus) acquisition costs	425,000
less ^{less} tangible assets	(557,000)
plus tangible liabilities	<u>412,000</u>
Intangible value	4,930,000

30% Grant
Asset: 1.5K/cant

Subj: **cornfield**
Date: 7/21/99 5:20:32 PM Eastern Daylight Time
From: John_Blaine@stercomm.com (John Blaine)
To: burtgrad@aol.com

Purchase price:

Paid to sellers	4,650,000
Direct costs	230,000 (estimated)
Integration costs	195,000 (estimated)
Total	5,075,000

Allocated as follows:

Cash	30,346
A/R	415,946
Inventories	14,384
Intangibles	4,928,625
Fixed assets	97,224

Total Assets 5,486,525

A/P	402,274
Long term A/P	9,251

Total Liabilities 411,525

Equity 5,075,000

Total A/P & Equity 5,486,525

----- Headers -----

Return-Path: <John_Blaine@stercomm.com>

Received: from aol.com (rly-yh05.mail.aol.com [172.18.147.37]) by air-yh02.mail.aol.com (v60.18) with ESMTP; Wed, 21 Jul 1999 17:20:32 -0400

Received: from ns1.stercomm.com (ns1.stercomm.com [209.95.244.32]) by rly-yh05.mx.aol.com (v60.18) with ESMTP; Wed, 21 Jul 1999 17:20:29 -0400

Received: from nuntius.stercomm.com (nuntius.stercomm.com [199.3.24.42]) by ns1.stercomm.com with ESMTP id RAA05747 for <burtgrad@aol.com>; Wed, 21 Jul 1999 17:20:28 -0400 (EDT)

Received: from smtpplnk2.stercomm.com (pressure.stercomm.com [199.3.24.9]) by nuntius.stercomm.com with SMTP id RAA10370 for <burtgrad@aol.com>; Wed, 21 Jul 1999 17:20:27 -0400 (EDT)

Received: by smtpplnk2.stercomm.com (Lotus SMTP MTA v4.6.3 (733.2 10-16-1998)) id 852567B5.00755702; Wed, 21 Jul 1999 17:21:39 -0400

X-Lotus-FromDomain: STERLING COMMERCE

From: "John Blaine" <John_Blaine@stercomm.com>

To: burtgrad@aol.com

Message-ID: <852567B5.007550BD.00@smtpplnk2.stercomm.com>

Date: Wed, 21 Jul 1999 17:19:50 -0400

Subject: cornfield

Actions

- 1) ZPR+D -
 for 3 products
 - core technologies
 - percent completion
 - up date descriptions
 - forecast assumptions
 - set up models
 - run models

- 2) Products - 2 products
 - history of sales + installed base
 - forecast assumptions / strategy
 - set up model
 - run models

- 3) Customer Base -
 - cross over products
 - customer statistics
 - likelihood of purchase
 - product characteristics
 - set up models
 - run models

- 4) Retained Employees
 - orig #, set # by category
 - salaries + benefits by category
 - fill in table on leaving curve, etc.
 - perform calculations

- 5) Acquisition cost analysis

- 6) Miscellaneous
 say date 6/1/99
 risk rate - N.A., full
 non-compete ?

- 7) Prepare report / appendices

Mark

Echani for The Web -

Pagrell

Subur of Bank Div.

Suci acquired - shut CA, → Texas

97 98 yrd 99.
99 sch → yr 2001. → 1998

Tom Williams / Mopa-

Rob Humphrey in Europe. Paris.

EC

\$000

	calen- 98	Jan-Mar 99	97	98	99
	£000'			<u>x1.6</u>	<u>x1.6</u>
E Partner	?	21 ✓			
G	296	74 ✓	250		
B	64	6 ✓			
R	8	3 ✓	7		
X	15	10 ✓	54		
I	42	14 ✓	21		
S	?	?			
	<u>425</u>	<u>128</u>			

E Chair

M	1	1 eq.	7
P	105	23 ✓	111
	<u>106</u>	<u>23</u>	

Total above	531	151
main bus 7	98	83
main bus 7 etc.	629	234
1 em.	51	2
unknown A	578	232
	30	12
	<u>608</u>	<u>244</u>

Electronic Commerce Group Limited

Revenue by Product Line

For the period January through December, 1998

Products	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL	%
A011 IBEX														
C000 - ETK-A					450.00		3,850.00	10,000.00		3,966.66	6,533.33	4,900.00	29,699.99	4.88%
C002 - ETK-G														
ETK-G1	4,900.00	9,800.00	82,250.00	4,900.00	7,350.00	4,900.00	9,800.00	2,600.00	7,350.00	5,050.00	9,800.00	2,450.00	131,150.00	21.53%
ETK-G1.1 lb1800	1,800.00	9,600.00	16,150.00	8,000.00	7,497.83	5,516.67	4,125.00	6,163.35	6,233.34	5,496.67	8,900.00	4,800.00	84,082.86	13.80%
ETK-G1.2 lb.2600	4,800.00	5,160.00							2,600.00	7,960.00		2,800.00	23,120.00	3.80%
ETK-G1.3 lb.3250					6,500.00	3,250.00	3,250.00	541.67			3,250.00		16,791.67	2.76%
ETK-G1.4 lb.4700								4,700.00					4,700.00	0.77%
ETK-G1.5 lb.5800					5,800.00		5,800.00	5,800.00		5,800.00	5,800.00		29,000.00	4.76%
ETK-G NT														
ETK-G (NT).1 lb1800										1,066.66	533.33		1,599.99	0.26%
ETK-G NT - Other										4,100.00	2,050.00		6,150.00	1.01%
ETK-G11 Products				69.00	(69.00)						314.00		314.00	0.05%
C002-ETK-G - Other														
ETK - Upgrade Users														
ETK - Upgrade - Other														
C004 - ETK-R														
ETK-R1	400.00	1,000.00	1,000.00	500.00	700.00	400.00	800.00	200.00	600.00	533.32	866.66	200.00	7,199.98	1.18%
ETK-R1.1	60.00	150.00	180.00	30.00	150.00	120.00	150.00	90.00	90.00	125.00	160.00	60.00	1,365.00	0.22%
C005 - ETK-M														
ETK-M1														
ETK-M1.1		100.00	100.00		75.00									
ETK-M1 - Other														
ETK-M2										230.00			230.00	0.04%
ETK-M2.1														
ETK-M2 - Other														
ETK-M2.2.1														
ETK-M3														
ETK-M3.1										320.00			320.00	0.05%
C006 - ETK-X														
ETK-X1														
ETK-X1.1		400.00	400.00	300.00	300.00	100.00		200.00	100.00	50.00		100.00	1,950.00	0.32%
ETK-X1 - Other		650.00		1,950.00	650.00	650.00			650.00	650.00			5,200.00	0.85%
ETK-X2													0.00	
ETK-X2.1										300.00			300.00	0.05%
ETK-X2 - Other														
ETK-X2.2.1														
ETK-X2.2.11										192.00			128.00	0.05%
ETK-X2.2.1 - Other														
ETK-X3														
ETK-X3.1			200.00	500.00	400.00	100.00	(200.00)	300.00	100.00	200.00		300.00	1,900.00	0.31%
ETK-X3 - Other				3,500.00	600.00	600.00	(1,200.00)	488.75	600.00	600.00			5,188.75	0.85%
C007 - ETK-I														
ETK-I1														
ETK-I1.1	100.00	100.00		100.00	845.00		645.00	100.00	100.00	366.66	(611.67)	200.00	1,944.99	0.32%
ETK-I1 - Other	650.00	650.00		650.00	5,600.00		4,300.00	650.00	650.00	1,408.32	(3,758.34)	1,300.00	12,098.98	1.99%

06/24/99

13:07

6814 793 5003

CVG FINANCE

006/010

ETK-I2													22,000.00	0.36%
ETK-I2.1	100.00			400.00			100.00	100.00	300.00	500.00	100.00	600.00	26,400.00	4.33%
ETK-I2 - Other	600.00			7,800.00			600.00	600.00	1,800.00	4,200.00	4,500.00	6,300.00		
2006 ETK-P														
ETK-P1													10,025.00	1.65%
ETK-P1.1	1,100.00	2,100.00	1,900.00	600.00	1,550.00	300.00	1,150.00	650.00	(250.00)	(175.00)	350.00	750.00	55,340.00	9.09%
ETK-P1 - Other	9,160.00	10,080.00	9,800.00	2,100.00	4,200.00	2,100.00	9,700.00			2,100.00	6,300.00			
ETK-P2													2,850.00	0.47%
ETK-P2.1							500.00							
ETK-P2 - Other							2,850.00							
ETK-P2.2.1													480.00	0.08%
ETK-P2.2.11							80.00							
ETK-P2.2.1 - Other							480.00							
ETK-P2.2.3									2,500.00	2,500.00			5,000.00	0.82%
ETK-P2.2.3.1														
ETK-P3													950.00	0.16%
ETK-P3.1			45.00	45.00	230.00	45.00	360.00				90.00	90.00	5,900.00	0.97%
ETK-P3 - Other			250.00	250.00	1,000.00	400.00	2,000.00			500.00	1,000.00	500.00		
ETK-P4													125.00	0.02%
ETK-P4.1							150.00			1,200.00	750.00	300.00	2,400.00	0.39%
ETK-P4 - Other							900.00						900.00	0.15%
ETK-P5											935.00		935.00	0.15%
ETK-P5.1											3,200.00		3,200.00	0.53%
ETK-P5 - Other													980.00	0.16%
ETK-P6					980.00								1,500.00	0.25%
ETK-P6.1					90.00		540.00				780.00		1,450.00	1.86%
ETK-P6 - Other					500.00		3,000.00			1,125.00	6,325.00	500.00	11,450.00	1.86%
ETK-P7			235.00	1,215.00	940.00		235.00	35.00		300.00	300.00		3,260.00	0.54%
C013 ETK-B														
ETK B1										1,180.00	1,220.00		8,815.00	1.45%
ETK B1.1	2,600.00	1,985.00	1,830.00										2,155.00	0.35%
ETK B1 - Other			2,155.00										7,800.00	8.65%
C013 ETK-B - Other	17,944.00	14,021.00	12,900.00										52,665.00	
C060 POISE														
C074 IBM Mailbox	10,000.00												10,000.00	1.64%
C075 BT*Net Monthly Charges	995.00		4,732.66										12,173.58	2.00%
C076 M & S lb. 150pm	107.80			103.21	5,448.74	(330.79)		7,668.34	91.48	150.00	150.00	150.00	13,538.78	2.22%
C077 M & S lb. 120pa	150.00	150.00	120.00	150.00	150.00	150.00	150.00	150.00	150.00	30.00	380.00		1,350.00	0.22%
C078 A# lb. 380	510.00				(90.00)		30.00			(120.00)			710.00	0.12%
C079 ETK-C	1,140.00							(380.00)				200.00	960.00	0.16%
C080 CIS					3,200.00			350.00					3,550.00	0.58%
C094 - Travel													6,077.20	1.00%
C095 Project Memberships	577.20	5,000.00			500.00									
C096 - Grants												24,710.00	24,710.00	4.06%
IPAPI							23,698.00						23,698.00	3.89%
C100 Projects														
C103 Paper Life Ltd.											600.00		(12,505.00)	-2.05%
C104 Stralfors	8,800.00	(12,530.00)	(9,375.00)										(37,953.00)	-6.23%
C100 Projects - Other	(37,953.00)												350.00	0.06%
C210 EDI Message Tables	1,050.00				(350.00)			(350.00)						
TOTAL INCOME	29,381	48,416	104,873	24,952	63,398	18,301	77,843	43,082	21,165	52,405	74,967	51,069	809,091.77	

January through December 1998

Balance Per
Aud. Report
Aud. Adjustment

603,967
5,124.77

08/24/99

13:08

0814 793 5003

CYC FINANCE

007/010

Electronic Commerce Group Limited

Revenue by Product Line

For the period January through March, 1999

Products	January	February	March	TOTAL	%
A011 IBEX					
E000 - e-Partner					
E002 - e-Partner-S			1,800.00	1,800.00	0.73%
E0092 - e-Partner-1 Mapping...			11,400.00	11,400.00	4.65%
e-Plan - Initial Planning...			3,500.00	3,500.00	1.43%
e-Proj. - Project Mngl			3,500.00	3,500.00	1.43%
E001 - e-Partner-A EDI Advice					
E007 - e-Partner-G NT4			8,150.00	8,150.00	2.51%
E009 - e-Partner-I					
E0091 - e-Partner-1 Mapping			(6,300.00)	(6,300.00)	-2.57%
E009 - e-Partner-1 Other			1,300.00	1,300.00	0.53%
				21,350	8.7%
contra-income		(1,412.00)		(1,412.00)	-0.58%
Interims			3,083.33	3,083.33	1.26%
C000 - ETK-A	(750.00)	2,100.00	6,300.00	7,650.00	3.12%
C001 - ETK-A					
ETK-S		2,525.00	1,800.00	4,325.00	1.76%
ETK-S1		487.00		487.00	0.20%
C002 - ETK-G					
ETK-G1		14,033.34	7,350.00	21,383.34	8.72%
ETK-G1.1 lb1600	1,600.00	8,650.00	11,800.00	22,050.00	8.99%
ETK-G1.2 lb.2600	4,800.00	7,600.00		12,400.00	5.06%
ETK-G1.3 lb.3250		3,250.00		3,250.00	1.33%
ETK-G1.4 lb.4700					
ETK-G1.5 lb.5800					
ETK-G NT					
ETK-G (NT),1 lb1600			2,875.00	2,875.00	1.17%
ETK-G NT - Other			12,300.00	12,300.00	5.01%
ETK-G11 Products					
C002-ETK-G - Other					
ETK - Upgrade Users					
ETK - Upgrade - Other					
				74,258.34	30.3%
C004 - ETK-R					
ETK-R1		1,200.00	1,000.00	2,200.00	0.90%
ETK-R1.1	80.00	300.00	240.00	600.00	0.24%
C005 - ETK-M					
ETK-M1					
ETK-M1.1		(100.00)		(100.00)	-0.04%
ETK-M1 - Other					
ETK-M2					
ETK-M2.1					
ETK-M2 - Other					
ETK-M2.2.1					

ETK-M3					
ETK-M3.1					
C006 - ETK-X					
ETK-X1					
ETK-X1.1	400.00	200.00	600.00	0.24%	
ETK-X1 - Other	2,600.00	650.00	3,250.00	1.33%	
ETK-X2		300.00	300.00	0.12%	
ETK-X2.1					
ETK-X2 - Other					
ETK-X2.2.1					
ETK-X2.2.11					
ETK-X2.2.1 - Other					
ETK-X3					
ETK-X3.1		200.00	200.00	0.08%	
ETK-X3 - Other	4,200.00	600.00	4,800.00	1.96%	
C007 - ETK-I					
ETK-I1					
ETK-I1.1	100.00	300.00	100.00	500.00	0.20%
ETK-I1 - Other		1,950.00	1,300.00	3,250.00	1.33%
ETK-I2					
ETK-I2.1	100.00	3,700.00	500.00	4,300.00	1.75%
ETK-I2 - Other		4,400.00	1,200.00	5,600.00	2.26%
C008 ETK-P					
ETK-P1					
ETK-P1.1	1,400.00	650.00	1,200.00	3,250.00	1.33%
ETK-P1 - Other	2,100.00	2,100.00		4,200.00	1.71%
ETK-P2					
ETK-P2.1		1,400.00		1,400.00	0.57%
ETK-P2 - Other					
ETK-P2.2.1					
ETK-P2.2.1.11					
ETK-P2.2.1 - Other					
ETK-P2.2.3					
ETK-P2.2.3.1					
ETK-P3					
ETK-P3.1	45.00	280.00	45.00	370.00	0.15%
ETK-P3 - Other	250.00		1,250.00	1,500.00	0.61%
ETK-P4			750.00	750.00	0.31%
ETK-P4.1					
ETK-P4 - Other					
ETK-P5					
ETK-P5.1		105.00		105.00	0.04%
ETK-P5 - Other		750.00		750.00	0.31%
ETK-P6					
ETK-P6.1		405.00		405.00	0.17%
ETK-P6 - Other			10,250.00	10,250.00	4.18%
ETK-P7		235.00	235.00	470.00	0.19%
C013 ETK-B					
ETK B1					
ETK B1.1	2,400.00	1,985.00	1,220.00	5,605.00	2.29%

23,450
10%

January Through March 1999

ETK B1 - Other
C013 ETK-B - Other

C060 POISE					
C074 IBM Mailbox	995.00			995.00	0.41%
C075 BT*Net Monthly Charges	56.43	3,334.82	103.52	3,494.77	1.42%
C076 M & S lb. 150prm	150.00	150.00	150.00	450.00	0.18%
C077 M & S lb. 120pa	120.00		60.00	180.00	0.07%
C078 All lb. 380	760.00			760.00	0.31%
C079 ETK-C			112.00	112.00	0.05%
C080 CIS					
C094 - Travel	370.50		(2,500.00)	(2,129.50)	-0.87%
C095 Project Memberships					
C096 - Grants					
IPAPI		14,225.00		14,225.00	5.80%
C099 Other Income			875.00	875.00	0.36%
C100 Projects					
C103 Paper Life Ltd.					
C104 Stralfors					
C105 MoDo Merchants	30,000.00			30,000.00	12.23%
C106 Securicor	5,000.00		15,374.97	20,374.97	8.31%
C108 Field			11,287.50	11,287.50	4.60%
C100 Projects - Other					
C210 EDI Message Tables	350.00			350.00	0.14%
TOTAL INCOME	49,907	81,803	113,561	245,271.41	100.00%

} 61,662.47 25%

① - Agrees to Total Income per Profit and Loss statements for the three month period ended March 31, 1999.

January Through March 1999

Ed Hofner
David Winkler

5/20/99

1) Internet Connectivity + Internet Browser

productize - web-based solutions

need to build/using browser at tasks

Fin
post →

• Echain/web - new product

Echain + new technologies

- consulting services

- processing services

2) ATLAS repl - no e

3) X25 - no e

4) AS400 - ~~no e~~ maybe

→ 5) Drag + Drop -

- productizing of ^{Echain} tool set

→ 6) Saiff DB (XML-like)

Saiff -
apply to XML

✓ Req 2 info req'd to Konjan...

ed - Hofner

@ STERCOMM.COM

David -

@

Konjan

@

SCS/Comfield
Valuation

5/7/99

Valuation potential for Tech. write-off

OK with Hafner + Winkler (and
Humphrey?) on products +
market opportunity using
new technologies:

Internet Connectivity
Internet Browser upgrade
Atlas replacement
K.25 Connectivity
K.400 Connectivity

applicability to:

e-partner - translator
e-chain - app. generator

up to \$15K for valuation of Acquired Technologies

up to \$20K for full valuation -
product
tech
cust base
employees
other tech
goodwill / gcv

finning
discussion with Hafner + Winkler

David Winkler
e-chat = 21-1-99

Conversation aimed at seeing which new products should be taken into forecast

23rd June 99.

Ed. Harper

Be-partner - no follow on into XML.

XML critical & diverse it's a need to have rather than optional.

like "not only capex" ie div, loc or small co. not enterpris sale"

	UK	Europe	US
New products	✓	✓	✓
	2/3 new products		

Old products	✓	✓	✓
--------------	---	---	---

WW? forecast v current

e partner → product 1yr → =

e chat → " " 1yr → =

opportunity ✓
 ramp up three' year sales every year.
 85 sales growth.
 10%.

Sensai name - proj
 -proj. (1q non) change because increasing recurring support revenue.

so 1q non proj.

e chat for int sub. ^{partner} & e chat. ^{chari} sold by the?
 ⇒ no more chat.

e chain applicat buildu. Don the compute +
e chain ? Yes, ~~but get a~~
do get e chain subs.

NB

∴ build up e chain subs to get e chain app
& e chain / a net.
100 → 100 limit because a
feature.

Cran on - Gentran? No

- Semi - moving as will move it to
Study network. Enhance BT,
100% move. Costs are same, but
revenue to CVG.

TRV Blair / Mega-Crew.
CVG - David O'Mara.

- ISG Gentran server.

23rd June 99

(192)

Ed Hafner & David

Development for WW we have to account.

Confirms drop a partner x ml from separate
forecast. Demand taken this week by market.
In case market not there yet BUT
could come.

Capgemis can only sell new product to e chain
customers.

Will e chain now buy by 2 new products?

Suggested application bundles will be successful
only 7%. (Capgemis + Gentis
take 10% customers

Amynthe

E chain for web - use up to 60% on
line.

Ux → his sheet, Be asked split $\left\{ \begin{array}{l} \text{con} \\ \text{new} \end{array} \right.$

Ed said take top 75% of e chain for web.

BUT e chain application will be sold
David said by status for say 5 years.

Ed & David

2/2

Application Builder attractive to Start → generally.

BUT how soon to be marketed to users?

Ed said if 300K price !!!

BG suggested royalty basis — David
tempted but not sold!

SC hasn't looked at this yet.

• cf on with what's been done on forms.

SME (small-medium enterprises) — SC will

all hub/industry sponsored applications, NOT vol.

SC → The Factory. making apps.

will get lots of independent users — ?

surely more than 10%.

Sell to large A/C

500K?

6 Comarcia exchange / a year - to non
 compete areas. Czech Brazil Greece,
 Bldn.

Comarcia Exch + Central. \$2m - each.
 specific to ind / gen loc

∴ 500 K for 3 per year.

(out of 6 days a year)

starting for 2001.

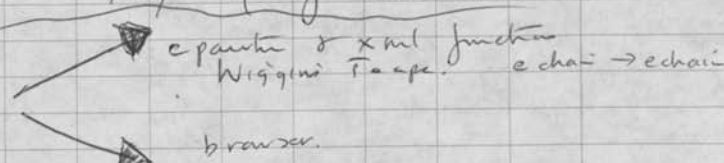
Sell entire e chain - product & include
 builder.

Wizards - 20% - exit June 99.

Wizards = 30% of market value

70% of functionality.

e chain
 for the web
 2



More far as the - layer to defining.

* Impact see can technology - CTV.
 Only discarded June 22nd 99.
 chain -> server OK browser to server.

e check for web - = light e camera app
capable of interacting on
web.

100 K is price for server? Product? ✓

125 —————> Services?

60 market/area hub/spot

90 market/area sphere

~~546-773 3084~~
~~Ben Husudg~~

e-chain + e-partner

- CVG will try to hold current customers
- CVG will sell add'l standalone in UK and Europe
- Primary strategy is to sell full function solutions which require both products plus e-chain for the web plus services.

Subj: What is your . . .
Date: 7/9/99 2:30:39 PM Eastern Daylight Time
From: Morgan_Crew@stercomm.com (Morgan Crew)
To: Burtgrad@aol.com

expected ETA on the Cornfield project? Is the invoice you sent for the completed project?

Regards,

Morgan

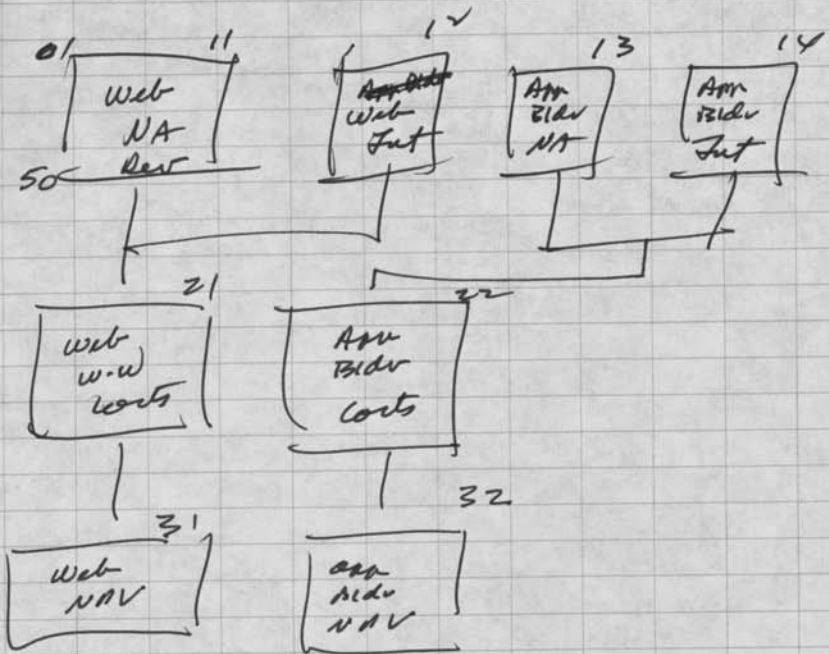
+ B's
1-2 days
total < 20k

Thu 7/15

----- Headers -----

Return-Path: <Morgan_Crew@stercomm.com>
Received: from aol.com (rly-yh05.mail.aol.com [172.18.147.37]) by air-yh03.mx.aol.com (v59.55) with SMTP; Fri, 09 Jul 1999 14:30:39 -0400
Received: from ns1.stercomm.com (ns1.stercomm.com [209.95.244.32]) by rly-yh05.mx.aol.com (vx) with SMTP; Fri, 09 Jul 1999 14:30:34 -0400
Received: from nuntius.stercomm.com (nuntius.stercomm.com [199.3.24.42]) by ns1.stercomm.com with ESMTP id OAA04259 for <Burtgrad@aol.com>; Fri, 9 Jul 1999 14:30:33 -0400 (EDT)
Received: from smtplnk2.stercomm.com (pressure.stercomm.com [199.3.24.9]) by nuntius.stercomm.com with SMTP id OAA15424 for <Burtgrad@aol.com>; Fri, 9 Jul 1999 14:30:32 -0400 (EDT)
Received: by smtplnk2.stercomm.com (Lotus SMTP MTA v4.6.3 (733.2 10-16-1998)) id 852567A9.0065E125; Fri, 9 Jul 1999 14:32:47 -0400
X-Lotus-FromDomain: STERLING COMMERCE
From: "Morgan Crew" <Morgan_Crew@stercomm.com>
To: Burtgrad@aol.com
Message-ID: <852567A9.0065DFFE.00@smtplnk2.stercomm.com>
Date: Fri, 9 Jul 1999 14:27:10 -0400
Subject: What is your . . .
Mime-Version: 1.0
Content-type: text/plain; charset=us-ascii
Content-Disposition: inline

App H

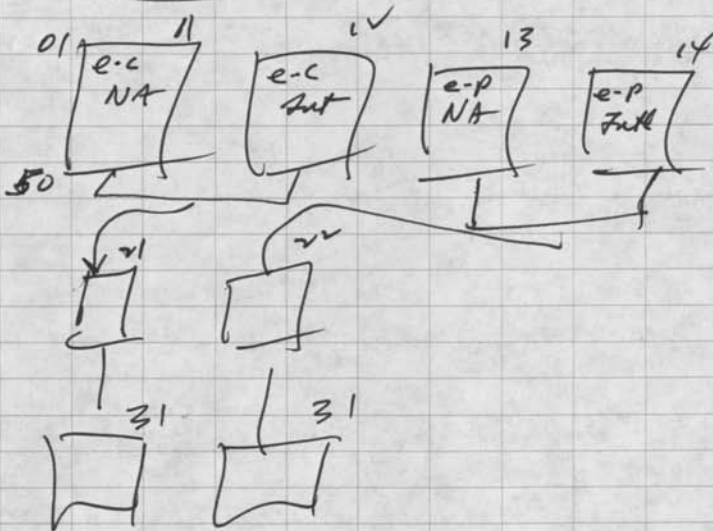


Ann F

~~EST-ZL~~

new SCIECG

Appendix F



~~15+16~~

~~23~~

see David
Wish/for

6/29/99

e-chain for The Web ---

delivery hub - { e-purchase -
e-chain -
e-chain for the web
Swift -
customizing

spoke - no software
can access bus. appls
conduct e-commerce

processing service
access fee
trans fee

30K prod
20K serv

[30K - prod -
20K - serv. / business (see prod serv.)

12K/yr.

Hub [prod maint = 12K -
proc serv = fixed fee (transaction)
48K for 150 spoke
trans fees only

increase
unit fee
as # spokes
grow about
1.50

6K/150 extra

Assumptions for e-chain for The Web facts -

avail for delivery - FY00 - init
FY01 - 2nd level
unit price - product \$50k

unit sales estimates - see below ^{Huber} 100_x customers

maint_x ^{proc serv} ratio (price) - 100%

maint erosion - 10%

init maint ratio - 100%

use 10 year forecast -

^{professional}
services ratio - 10%

add-on/upgrades ratio - 50% of init base

processing services - use C16 service
% of new sales

Sales in No. Amer	- FY01	50%
Sales in UK	- FY00	30%
Sales in Europe	- FY01	15%
Sales in other Intl	- FY02	5%

per Low
Mansel

37.5% - No Amer + Intl - otels - for 5/98

37% - No. Amer

25% - Intl

~~EC Group
for 6/99~~

or use 37% as blended,
conservative figure.

approximately six months ago. Four employees are now involved in Sales and Marketing (up from one employee six months ago) and six are involved in Customer Service and Development.

The following table presents a summary and forecast of EC Group's financial performance for 1997 through 2002 (dollars in thousands):

PROJECT CORNFIELD							
Income Statement							
Fiscal years ending December 31							
(Dollars in thousands)							
	1997	1998	1999	CVG 1999	2000	2001	2002
REVENUES							
Integrated solutions	\$ 397	\$ 751	\$ 1,202	\$ 401	\$ 1,802	\$ 2,523	\$ 3,533
Network	\$ 126	\$ 237	\$ 362	\$ 121	\$ 500	\$ 724	\$ 1,006
Strailfors	\$ 119	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other revenues	\$ 40	\$ 16	\$ -	\$ -	\$ -	\$ -	\$ -
Total revenue	\$ 683	\$ 1,004	\$ 1,564	\$ 521	\$ 2,302	\$ 3,248	\$ 4,538
growth %		47.2%	55.7%		47.2%	41.1%	39.7%
EXPENSES							
Cost of goods sold	\$ 146	\$ 181	\$ 281	\$ 94	\$ 244	\$ 344	\$ 481
Gross profit	\$ 536	\$ 824	\$ 1,282	\$ 427	\$ 2,058	\$ 2,903	\$ 4,057
Gross profit margin	78.6%	82.0%	82.0%	82.0%	89.4%	89.4%	89.4%
Operating expenses							
Employment costs	\$ 263	\$ 442	\$ 554	\$ 185	\$ 693	\$ 977	\$ 1,365
Travel and entertainment	\$ 37	\$ 55	\$ 74	\$ 25	\$ 93	\$ 111	\$ 134
Office rental	\$ 17	\$ 47	\$ 47	\$ 16	\$ 49	\$ 52	\$ 54
Printing and postage	\$ 11	\$ 12	\$ 18	\$ 6	\$ 26	\$ 37	\$ 52
Professional services	\$ 6	\$ 22	\$ -	\$ -	\$ -	\$ -	\$ -
Telecommunications	\$ 12	\$ 18	\$ 19	\$ 6	\$ 20	\$ 21	\$ 22
Other	\$ 37	\$ 87	\$ 87	\$ 29	\$ 104	\$ 125	\$ 150
CVG-European Savings	\$ -	\$ -	\$ (125)	\$ (125)	\$ (500)	\$ (530)	\$ (562)
Depreciation	\$ 27	\$ 28	\$ 10	\$ 3	\$ 50	\$ 50	\$ 50
Total operating expenses	\$ 409	\$ 710	\$ 684	\$ 145	\$ 535	\$ 843	\$ 1,265
Acquisition amortization (1)	\$ -	\$ -	\$ 232	\$ 232	\$ 695	\$ 695	\$ 695
Operating profit	\$ 127	\$ 113	\$ 367	\$ 51	\$ 828	\$ 1,366	\$ 2,097
Operating profit margin	18.6%	11.3%	23.5%	9.8%	36.0%	42.0%	46.2%

(1) Assumes a \$4.6 million net acquisition price (\$4.4 mm price, \$0.4 mm in transaction expenses, and \$0.2 mm in net equity). It is further assumed that there is no purchased R&D write-off associated with the acquisition, such that the \$4.6 mm net acquisition price is allocated evenly between purchased software (5 year amortization period) and goodwill (10 year amortization period).

Although EC Group includes software and network services in its commercial solution to customers, the company's core competency and business focus is on creating and developing a trading partner community by enabling this community to take part in electronic commerce. EC Group offers 'lite' EC solutions which fit a wide range of customer needs—from simple purchase order and invoice exchange for small customers to an integrated bar code and vendor managed inventory solution for larger customers. All EC Group products share a common theme—making EDI easy and of visible value for the smaller trading partner. The company packages British Telecom's EDI*Net network services and Atlas' translator software as the translation engine in its commercial solution.

We believe that in the immediate future, it is critical to integrate EC Group fully into CVG-UK. EC Group's technology could also be of interest to ISG. Our preliminary plan is to: (i) Replace BT EDI*Net with Amsterdam's COMMERCE:Exchange node as

Telco Paper Management

	Unit Price	2000	2001	2002	2003	2004	Total
New Customers		1	2	2	3	4	
Total Customers		1	3	5	8	12	
Implementation Charges at	\$100,000	\$100,000	\$200,000	\$200,000	\$300,000	\$400,000	\$1,300,000
Ongoing maintenance and Service charges	125,000	125,000	375,000	625,000	1,000,000	1,500,000	\$3,750,000
Total Reveune		\$225,000	\$575,000	\$825,000	\$1,300,000	\$1,900,000	\$4,825,000

Assumptions

Ongoing maintenance and service charges will be essentially the same as Straffors

Implementation charges will be \$100,000

Numbers do not include Straffors

These numbers are for the PTT/Telephone services only

E-chain for the Web

	Unit Price	2000	2001	2002	2003	2004	Total
New Customers		6	12	16	10	10	
Total Customers		6	18	34	44	54	
Implementation Charges at	\$50,000	\$300,000	\$600,000	\$800,000	\$500,000	\$500,000	\$2,750,000
Ongoing maintenance and Service charges - Hub	\$60,000	\$360,000	\$1,080,000	\$2,040,000	\$2,640,000	\$3,240,000	\$9,420,000
Ongoing maintenance and Service charges - Spoke	\$90,000	\$540,000	\$1,620,000	\$3,060,000	\$3,960,000	\$4,860,000	\$14,130,000
Total Reveune		\$1,200,000	\$3,300,000	\$5,900,000	\$7,100,000	\$8,600,000	\$26,100,000

Assumptions

Implementation charges will average \$50,000

Ongoing charges will average \$5,000/ mo. For Hubs

Spoke charges will average \$50.00/mo with 150 spokes

No ramp-up is taken into consideration

*Winkler
what is this?*

**Telco Paper Management
United Kingdom**

	Unit Price	2000	2001	2002	2003	2004	Total
New Customers		1	0	0	0	0	
Total Customers		1	1	1	1	1	
Implementation Charges at	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$200,000
Ongoing maintenance and Service charges	125,000	125,000	125,000	125,000	125,000	125,000	\$750,000
Total Reveune		\$225,000	\$125,000	\$125,000	\$125,000	\$125,000	\$725,000

**Telco Paper Management
Europe**

	Unit Price	2000	2001	2002	2003	2004	Total
New Customers		0	1	1	1	1	
Total Customers		0	1	2	3	4	
Implementation Charges at	\$100,000	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
Ongoing maintenance and Service charges	125,000	0	125,000	250,000	375,000	500,000	\$1,375,000
Total Reveune		\$0	\$225,000	\$350,000	\$475,000	\$600,000	\$1,650,000

**Telco Paper Management
US**

	Unit Price	2000	2001	2002	2003	2004	Total
New Customers		0	1	1	2	3	
Total Customers		0	1	2	4	7	
Implementation Charges at	\$100,000	\$0	\$100,000	\$100,000	\$200,000	\$300,000	\$800,000
Ongoing maintenance and Service charges	125,000	0	125,000	250,000	500,000	875,000	\$1,875,000
Total Reveune		\$0	\$225,000	\$350,000	\$700,000	\$1,175,000	\$2,450,000

Assumptions

Ongoing maintenance and service charges will be essentially the same as Stralfors

Implementation charges will be \$100,000

Numbers do not include Stralfors

These numbers are for the PTT/Telephone services only

Telco Paper Management

	Unit Price	2000	2001	2002	2003	2004	Total
New Customers		1	2	2	3	4	
Total Customers		1	3	5	8	12	
Implementation Charges at	\$100,000	\$100,000	\$200,000	\$200,000	\$300,000	\$400,000	\$1,300,000
Ongoing maintenance and Service charges	125,000	125,000	375,000	625,000	1,000,000	1,500,000	\$3,750,000
Total Reveune		\$225,000	\$575,000	\$825,000	\$1,300,000	\$1,900,000	\$4,825,000

Assumptions

Ongoing maintenance and service charges will be essentially the same as Stralfors
 Implementation charges will be \$100,000
 Numbers do not include Stralfors
 These numbers are for the PTT/Telephone services only

E-chain for the Web

	Unit Price	2000	2001	2002	2003	2004	Total
New Customers		6	12	16	10	10	
Total Customers		6	18	34	44	54	
Implementation Charges at	\$50,000	\$300,000	\$600,000	\$800,000	\$500,000	\$500,000	\$2,750,000
Ongoing maintenance and Service charges - Hub	\$80,000	\$360,000	\$1,080,000	\$2,040,000	\$2,640,000	\$3,240,000	\$9,420,000
Ongoing maintenance and Service charges - Spoke	\$90,000	\$540,000	\$1,620,000	\$3,060,000	\$3,960,000	\$4,860,000	\$14,130,000
Total Reveune		\$1,200,000	\$3,300,000	\$5,900,000	\$7,100,000	\$8,600,000	\$26,100,000

Assumptions

Implementation charges will average \$50,000
 Ongoing charges will average \$5,000/ mo. For Hubs
 Spoke charges will average \$50.00/mo with 150 spokes
 No ramp-up is taken into consideration

*E-chain for
 the web
 test from
 computer*

**E-chain for the Web
United Kingdom**

	Unit Price	2000	2001	2002	2003	2004	Total
New Customers		5	5	5	3	2	
Total Customers		5	10	15	18	20	
Implementation Charges at	\$50,000	\$250,000	\$250,000	\$250,000	\$150,000	\$100,000	\$1,050,000
Ongoing maintenance and Service charges Hub	\$60,000	\$300,000	\$600,000	\$900,000	\$1,080,000	\$1,200,000	\$4,140,000
Ongoing maintenance and Service charges Spoke	\$90,000	\$450,000	\$900,000	\$1,350,000	\$1,620,000	\$1,800,000	\$6,210,000
Total Reveune		\$1,000,000	\$1,750,000	\$2,500,000	\$2,850,000	\$3,100,000	\$11,200,000

**E-chain for the Web
Europe**

	Unit Price	2000	2001	2002	2003	2004	Total
New Customers		1	4	4	2	3	
Total Customers		1	5	9	11	14	
Implementation Charges at	\$50,000	\$50,000	\$200,000	\$200,000	\$100,000	\$150,000	\$750,000
Ongoing maintenance and Service charges Hub	\$60,000	\$60,000	\$300,000	\$540,000	\$660,000	\$840,000	\$2,460,000
Ongoing maintenance and Service charges Spoke	\$90,000	\$90,000	\$450,000	\$810,000	\$990,000	\$1,260,000	\$3,690,000
Total Reveune		\$200,000	\$950,000	\$1,550,000	\$1,750,000	\$2,250,000	\$6,700,000

**E-chain for the Web
US**

	Unit Price	2000	2001	2002	2003	2004	Total
New Customers		0	3	8	5	5	
Total Customers		0	3	11	16	21	
Implementation Charges at	\$50,000	\$0	\$150,000	\$400,000	\$250,000	\$250,000	\$1,100,000
Ongoing maintenance and Service charges Hub	\$60,000	\$0	\$180,000	\$660,000	\$960,000	\$1,260,000	\$3,120,000
Ongoing maintenance and Service charges Spoke	\$90,000	\$0	\$270,000	\$990,000	\$1,440,000	\$1,890,000	\$4,680,000
Total Reveune		\$0	\$600,000	\$2,050,000	\$2,650,000	\$3,400,000	\$8,700,000

Assumptions

Implementation charges will average \$50,000
 Ongoing charges will average \$5,000/ mo. For Hubs
 Spoke charges will average \$50.00/mo with 150 spokes
 No ramp-up is taken into consideration

Electronic Commerce Group Limited
Income by Customer Summary
 January through December 1998

17/04/99

	Jan '98	Feb '98	Mar '98	Apr '98	May '98	Jun '98	Jul '98	Aug '98	Sep '98	Oct '98	Nov '98	Dec '98	TOTAL
res													
Affcor (Europe)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,830.00	0.00	0.00	1,830.00
Ancor Packaging March	0.00	230.00	0.00	0.00	0.00	670.30	-66.67	1,930.74	0.00	0.00	261.91	0.00	3,026.28
Ancor Packaging Mold	0.00	-1,321.19	0.00	0.00	0.00	0.00	0.00	14.02	0.00	0.00	8.27	2,830.00	1,531.10
W Ajo Wiggins	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10,600.00	7,109.12	4,104.71	21,813.83
Arthur W Clowes Limited	0.00	0.00	1,800.00	3.00	830.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,230.00
Belmont Press Limited	0.00	0.00	5,939.57	980.00	503.05	0.00	0.00	4,208.82	0.00	0.00	0.00	0.00	11,631.44
BLP Print and Packaging	5.01	0.00	0.00	0.00	724.90	501.41	0.00	0.00	0.00	1,630.00	0.00	0.00	2,861.32
Bural Carwood	0.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,900.00
Cambridge University Press	0.00	0.00	0.00	0.00	900.00	0.00	0.00	0.00	31.94	0.00	987.27	0.00	1,919.21
Carltonmaster (UK) Ltd	0.00	1,950.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,950.00
Centarion Press Limited	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00	450.00
Chantry Web Ltd	120.00	0.00	56.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	176.46
CIP Group	0.00	0.00	0.00	0.00	0.00	4,295.38	0.00	332.83	0.00	0.00	0.00	0.00	4,628.19
Costas of Ireland	0.00	0.00	0.00	0.00	0.00	0.00	5,382.88	-41.94	0.00	514.99	0.00	0.00	5,855.01
Contract Papers Limited	0.00	0.00	0.00	1,479.00	0.00	-1,150.00	0.00	0.00	0.00	0.00	0.00	0.00	320.00
Cooper Clegg Limited	0.00	0.00	0.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	1,800.00
Crickley Label Technology	0.00	0.00	3,009.57	0.00	250.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,260.28
CSM Jarvis Field Limited	0.00	1,950.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1,950.00	0.00
Digital Print Services Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9,980.00	0.00	9,980.00
Donalds Paper Company	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,800.00
Double S Labels Limited	0.00	0.00	0.00	0.00	0.00	1,600.00	-86.87	0.00	0.00	0.00	0.00	0.00	1,513.13
DPS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4,961.71	0.00	0.00	-410.77	0.00	4,550.94
DSS In House Print	0.00	0.00	0.00	5,710.98	-209.58	0.00	700.00	2,336.40	0.00	0.00	112.93	0.00	8,650.73
Du Pont (UK) Limited	850.00	0.00	0.00	0.00	0.00	0.00	0.00	-850.00	0.00	0.00	0.00	0.00	0.00
Field Group PLC	150.00	-404.40	155.64	150.00	176.73	740.00	150.00	812.50	150.00	150.00	988.71	8,108.31	11,327.48
Field Packaging - East Kilbride	0.00	0.00	522.35	0.00	462.29	0.00	-66.67	258.75	0.00	2,780.00	283.52	0.00	4,220.24
Field Packaging - Newcastle	0.00	0.00	24,230.98	0.00	0.00	0.00	0.00	4,680.00	0.00	-1,724.58	0.00	0.00	27,186.40
Field Packaging - Thatcham	0.00	0.00	24,230.98	0.00	0.00	0.00	0.00	0.00	0.00	4,680.00	0.00	0.00	28,910.98
Field Portsmouth	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4,200.00	4,200.00
Fine Impressions Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,008.54	0.00	503.17	-251.59	3,260.12
GCM Print and Packaging Service Ltd	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,600.00
Gilmour and Dean	0.00	200.00	375.06	0.00	184.43	0.00	0.00	100.93	0.00	0.00	3,396.82	0.00	4,217.04
Globos	577.20	0.00	0.00	0.00	172.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	749.20
Graphic Communication Association	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H & L Slater	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,485.85	0.00	5,485.85
Hale Paper Company Limited	0.00	0.00	0.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	-239.94	0.00	1,360.06
Hawthorne Printers	0.00	3,644.41	-501.41	-320.84	250.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,073.87
Hedersboard	107.80	0.00	133.74	103.21	89.30	0.00	0.00	247.83	0.00	380.00	345.21	0.00	1,406.89
Iggesund Board Sales Limited	0.00	-8.27	0.00	1,459.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,850.00	3,301.09
Iwell Trading Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,008.54	0.00	0.00	0.00	3,008.54
J Howitt & Son Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,600.00	1,600.00
James Upton	0.00	0.00	0.00	0.00	9,545.98	-1,353.17	1,275.00	676.59	0.00	-8.00	652.44	0.00	10,800.84
Jarvis Porter	0.00	0.00	2,988.62	109.38	4,897.45	-481.88	0.00	3,708.00	0.00	5,800.00	2,545.18	0.00	19,556.73
Jarvis Porter IDB	12.94	0.00	128.15	0.00	86.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8,829.34
Jarvis Porter LS	0.00	5,144.41	-826.40	1,400.00	81.91	413.20	-1,400.00	283.42	0.00	922.00	5,800.00	0.00	7,163.21
Jarvis Porter PEHA	5.94	-274.25	0.00	0.00	0.00	0.00	0.00	-2.50	0.00	0.00	0.00	0.00	-270.81
Jarvis Porter Zwart B.V.	1,694.47	0.00	50.11	0.00	2,480.68	-3.47	-66.67	135.94	0.00	2,600.00	12.20	0.00	8,903.26
John Hampden Press Limited	0.00	0.00	0.00	0.00	5,800.00	30.00	-323.34	884.91	0.00	-303.23	349.28	0.00	6,437.82
Keating Graphic Systems	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.00	6,983.54	0.00	0.00	414.09	7,397.83
Ken Wilkins Print Limited	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,800.00	0.00	0.00	0.00	1,800.00
MoDo Merchants Ltd	10,004.00	908.00	250.00	0.00	800.00	350.00	30.00	0.00	0.00	950.00	0.00	328.00	13,612.00
Multiprint Labels Ltd	220.00	-120.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,700.00
New Era Packaging Ltd	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,600.00

05/03/99

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STERLING COMMERCE

Electronic Commerce Group Limited
Income by Customer Summary
 January through December 1998

	Jan '98	Feb '98	Mar '98	Apr '98	May '98	Jun '98	Jul '98	Aug '98	Sep '98	Oct '98	Nov '98	Dec '98	TOTAL
One to One Tutors	0.00	0.00	0.00	7.29	-7.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paper Management Services Ltd	850.00	0.00	0.00	0.00	-470.00	697.50	0.00	0.00	0.00	0.00	0.00	0.00	1,077.50
Pilans & Wilson	0.00	0.00	0.00	7,890.98	980.00	-839.46	0.00	245.00	1,824.82	900.00	0.00	0.00	10,801.34
Pira International Ltd	0.00	0.00	0.00	0.00	0.00	0.00	23,698.00	0.00	0.00	0.00	0.00	0.00	48,408.00
Pres Pharma	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8,510.83	0.00	0.00	8,510.83
RR Donnelley UK	0.00	0.00	309.06	0.00	3,318.88	0.00	0.00	275.22	0.00	0.00	0.00	0.00	3,902.96
SCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,328.74	3,843.31	795.33	9,965.38
SICPA UK Ltd	0.00	0.00	0.00	0.00	0.00	5,327.88	0.00	513.75	0.00	0.00	0.00	0.00	5,841.63
Slade Packaging Limited	0.00	0.00	1,914.93	500.00	0.00	1,918.87	0.00	200.00	0.00	0.00	0.00	2.08	852.06
Standard Photographic	850.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,800.00
Storoy Evans & Co Ltd	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,800.00
Stralfors	0.00	0.00	0.00	0.00	16,841.98	40.28	3,870.00	0.00	0.00	228.08	-4,771.40	3,500.00	19,708.92
Stralfors Plc	10,473.32	29,202.70	22,865.51	-2,013.71	4,358.22	2,670.23	12,251.03	10,208.04	0.00	1,180.00	12,955.72	-1,735.22	102,428.84
Strata	0.00	0.00	0.00	0.00	0.00	0.00	15,562.88	0.00	-514.08	0.00	1,028.17	0.00	16,078.95
Swale Process	0.00	0.00	0.00	0.00	0.00	0.00	5,052.88	0.00	0.00	0.00	0.00	0.00	6,081.03
Tadberry Evedale Limited	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	120.00
The Berkshire Printing Co	0.00	0.00	380.54	0.00	297.97	0.00	30.00	0.00	0.00	30.00	0.00	0.00	120.00
The Conde Nast Publications Ltd	30.00	0.00	0.00	0.00	0.00	0.00	-190.00	350.00	0.00	0.00	0.00	0.00	160.00
The Stampton Group of Companies Ltd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,010.00	0.00	0.00	0.00	0.00	2,010.00
Trekbrook Papers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,800.00	0.00	0.00	0.00	1,800.00
Trenton Box Co Ltd	0.00	0.00	0.00	0.00	0.00	501.41	0.00	0.00	0.00	0.00	1,630.00	0.00	1,635.01
UK Paper Plc	0.00	-496.40	0.00	0.00	0.00	0.00	0.00	0.00	-1,400.00	0.00	0.00	0.00	450.00
Waco Group plc	0.00	0.00	0.00	0.00	1,850.00	0.00	0.00	0.00	0.00	-1,146.00	0.00	0.00	1,564.46
Waterlomat	502.68	0.00	0.00	-5.55	0.00	0.00	-96.87	2,280.00	0.00	0.00	1,630.00	0.00	1,885.72
White Dove Press	0.00	0.00	0.00	0.00	-250.70	508.42	0.00	0.00	0.00	0.00	1,630.00	0.00	2,480.38
Wiggins Teape Ltd	-112.50	0.00	1,800.00	0.00	10,508.05	0.00	3,858.33	3,091.67	0.00	100.00	2,957.83	2,700.00	24,803.38
OTAL	27,840.86	42,397.01	92,931.46	20,941.28	65,255.70	19,632.88	69,724.25	44,115.31	16,511.36	49,004.27	67,648.63	53,305.22	559,468.01

Accounts > 5%:

Stralfors Plc	122,136
Pira International	102,428.84
Field Packaging	48,408.00
Jervis Porter	60,318.00
	<u>37,282.00</u>
	<u>268,144.00</u>
	<u>44.7%</u>

5 Largest Customers:	Total Revenue 6039
Stralfors	122,136
Field Packaging	60,318
Pira International	48,408
Jervis Porter	37,282
Wiggins Teape LTD	24,803
	<u>292,94</u>

Total Customers 79 with direct sales
 & - some customers act as resellers

Electronic Commerce Group Limited
Income by Customer Summary
 January through March 1999

	Jan '99	Feb '99	Mar '99	TOTAL
Amcor Packaging March	0.00	267.34	0.00	267.34
Arjo Wiggins	0.00	5,654.71	-81.25	5,573.46
Arthur W Clowes Limited	0.00	0.00	1,600.00	1,600.00
ATMS	0.00	3,141.64	0.00	3,141.64
Belmont Press Limited	0.00	0.00	410.00	410.00
BLP Print and Packaging	0.00	103.34	0.00	103.34
Brother	0.00	0.00	8,686.67	8,686.67
Cambridge University Press	0.00	70.44	0.00	70.44
Cartonmaster (UK) Ltd	0.00	850.00	0.00	850.00
CMB	0.00	-635.17	0.00	-635.17
Connaught	0.00	0.00	2,499.16	2,499.16
Critchley Label Technology	0.00	0.00	1,630.00	1,630.00
Deanprint	0.00	0.00	1,024.17	1,024.17
Dept T & I	0.00	0.00	9,374.97	9,374.97
Digital Print Services Limited	0.00	-508.62	0.00	-508.62
Donside Paper Company	0.00	0.00	1,600.00	1,600.00
DPS	0.00	374.88	0.00	374.88
DSS In House Print	0.00	82.13	0.00	82.13
EBS	0.00	3,601.98	0.00	3,601.98
Field - Nottingham	0.00	8,589.83	0.00	8,589.83
Field Group PLC	150.00	515.98	150.00	815.98
Field Packaging - East Kilbride	0.00	237.03	0.00	237.03
Field Packaging - Newcastle	0.00	71.56	10,051.72	10,123.28
Field Portsmouth	0.00	5,521.83	8,906.16	14,427.99
Fine Impressions Limited	2,170.00	137.56	0.00	2,307.56
FJ Beswick Paper	0.00	1,965.00	0.00	1,965.00
GCM Print and Packaging Service Ltd	1,600.00	0.00	-1,000.00	600.00
Gilmour and Dean	0.00	250.86	30.00	280.86
H & L Slater	0.00	514.09	3,150.00	3,664.09
Hale Paper Company Limited	0.00	750.00	0.00	750.00
Hawthorne Printers	0.00	1,630.00	0.00	1,630.00
Hedsorboard	56.43	142.15	103.52	302.10
Iggesund Board Sales Limited	0.00	-1,850.00	0.00	-1,850.00
James Upton	0.00	2,835.11	0.00	2,835.11
Jarvis Portar	0.00	380.32	-100.00	280.32
Jarvis Porter LS	0.00	251.30	0.00	251.30
Jarvis Porter Zwart B.V.	200.00	0.00	0.00	200.00
John Hampden Press Limited	0.00	69.86	0.00	69.86
Macfarlane Transport	0.00	0.00	2,029.98	2,029.98
Meias	0.00	0.00	3,841.65	3,841.65
MoDo Merchants Ltd	26,000.00	7,600.00	0.00	33,600.00
Multiprint Labels Ltd	995.00	-899.08	0.00	95.92
New Era Packaging Ltd	0.00	-1,800.00	0.00	-1,800.00
New Town	0.00	0.00	1,892.66	1,892.66
North Derbys TEC	0.00	0.00	875.00	875.00

17/04/99

Electronic Commerce Group Limited
Income by Customer Summary
 January through March 1999

	Jan '99	Feb '99	Mar '99	TOTAL
Paper Management Services Ltd	380.00	0.00	0.00	380.00
Perstorp	0.00	0.00	16,100.91	16,100.91
Pira International Ltd	0.00	14,225.00	0.00	14,225.00
Pres Pharma	364.50	-414.09	0.00	-49.59
Securcor	3,000.00	0.00	8,869.82	11,869.82
Slade Packaging Limited	0.00	0.00	100.00	100.00
Standard Photographic	850.00	0.00	0.00	850.00
Stewart Superior	0.00	1,727.58	0.00	1,727.58
Storey Evans & Co Ltd	0.00	0.00	1,800.00	1,800.00
Stralfors	0.00	-120.00	0.00	-120.00
Stralfors Plc	7,610.00	11,551.09	5,892.33	25,053.42
Sunstreet	0.00	2,211.66	1,630.00	3,841.66
Swift	0.00	0.00	6,386.67	6,386.67
Tekprint	0.00	3,729.16	0.00	3,729.16
The Berkshire Printing Co	0.00	232.66	200.00	432.66
The Conde Nast Publications Ltd	0.00	0.00	60.00	60.00
Wiggins Teape Ltd	0.00	-675.25	-1,600.00	-2,275.25
WW Group	0.00	0.00	2,211.66	2,211.66
TOTAL	43,375.93	72,183.68	98,325.80	213,885.41

94 Customers - 15 new in first quarter 99.

J

Rec Bk
Humphrey

e-partner - max

e-chain - part of e-partner

e-chain for the web

supply chain solutions
industry / applications focus

Detail

Transp.

selected w/g

chem

→ plow.

Spoke sale -

¥3K - 10K

Application Builder

	Unit Price	2000	2001	2002	2003	2004	Total
New Customers		4	8	8	6	4	
Total Customers		4	12	20	26	30	
Software	\$40,000	\$160,000	\$320,000	\$320,000	\$240,000	\$160,000	\$1,240,000
Ongoing maintenance and Service charges	12,000	0	48,000	144,000	240,000	312,000	\$756,000
Consulting	5000	20000	60000	100000	130000	150000	465000
Total Reveune		\$160,000	\$368,000	\$464,000	\$480,000	\$472,000	\$2,461,000

Assumptions

Software will average \$40,000

Implimentation consulting will be \$5,000 each

Maintenance will be 30%

Maintenance will be charged in year two

1998 CVG Commerce Payroll BU

Rev.	11.9M		
Cost of Sales	1.7M	14.3	15%
Mfg + Sales + Cont. Serv	2.8M	23.5	25%
R+D	3.4M	28.6	25%
G+A	2.9M 2.9M	7.8	15%
	<u>8.8M</u>	<u>73.9%</u>	<u>80%</u>
Open Inc.			<u>20%</u>

CRG Commerce Payroll Business Unit
 1998 Actual *Mix of budget / actual?*

Remun	S/W	4580		
	Trade services	<u>1598</u>	6,178	51.8
	Maintenance		4,516	37.8
	Network & misc		1,129	9.5
	Educate-		106	0.9
			<u>11,929</u>	<u>100%</u>
Car of sales	S/W	216		
	- Royalties	666		
	FAS 86 X Dep & amort	<u>658</u>	1,540	
	devel ← Maint	806		
service & deprec MIS	devel ← Maint Dep & amort	<u>603</u>	1,429	
	Semai		462	
	OK ← Royalties		324	31.5%
PDME	Trade	2553		
	X FAS 86 credit	(1425)		
	X Dep-	<u>112</u>	1,240	10.4%
Sales & mkgr			2,243	18.8
G & A			909	7.6
X Dep-			<u>101</u>	<u>0.8</u>
Total Cont abor			<u>8,268</u>	<u>69.1</u>
Operatg profiv.			<u>3,681</u>	<u>30.9</u>

Mark Johns

CVG COMMERCE PAYMENT BUSINESS UNIT
 1998 ACTUAL - 10Q REPORT
 ACTUALS THROUGH APRIL 1999

(\$ US)	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR
OPERATING REVENUE													
HARDWARE	-	-	-	-	-	-	-	-	-	-	-	-	-
SOFTWARE	144,615	148,374	694,070	179,095	38,675	602,535	463,285	449,095	612,265	148,640	308,089	791,865	4,580,603
LEASE AND RENTAL	-	-	-	-	-	-	-	-	-	-	-	-	-
LEASE CONVERSION	-	-	-	-	-	-	-	-	-	-	-	-	-
TRADE REV	43,491	77,910	72,917	83,755	108,569	232,946	45,617	105,602	240,353	185,762	108,727	292,072	1,597,720
DISTRIBUTOR DISC	-	-	-	-	-	-	-	-	-	-	-	-	-
PRODUCTS	188,106	226,284	766,987	262,850	147,244	835,481	508,902	554,697	852,618	334,402	416,816	1,083,937	6,178,323
MAINTENANCE	327,682	329,758	331,433	371,677	367,696	368,971	374,994	370,708	395,103	391,700	393,295	492,881	4,515,899
NETWORK SERVICES	86,919	94,248	85,087	95,834	89,951	85,291	104,085	100,254	90,062	103,841	95,799	97,307	1,128,679
FEDERAL SERVICES	-	-	-	-	-	-	-	-	-	-	-	-	-
MANAGED SERVICES	-	-	-	-	-	-	-	-	-	-	-	-	-
EDUCATION SERVICES	5,575	3,525	21,100	11,500	9,000	10,800	5,700	6,100	12,075	3,800	5,200	11,400	105,775
OTHER SERVICES	-	-	-	-	-	-	-	-	-	-	-	-	-
CATALOG SERVICES	-	-	-	-	-	-	-	-	-	-	-	-	-
SERVICES	92,494	97,773	106,187	107,334	98,951	96,091	109,785	106,354	102,137	107,641	100,999	108,707	1,234,454
INTERCOMPANY REV	-	-	-	-	-	-	-	-	-	-	-	-	-
INTER ROYALTY REV -SOFT	-	-	-	-	-	-	-	-	-	-	-	-	-
INTER ROYALTY REV -MNT	-	-	-	-	-	-	-	-	-	-	-	-	-
INTER ROYALTY REV -NET	-	-	-	-	-	-	-	-	-	-	-	-	-
INTRA ROYALTY REV -SOFT	-	-	-	-	-	-	-	-	-	-	-	-	-
INTRA ROYALTY REV -MNT	-	-	-	-	-	-	-	-	-	-	-	-	-
INTRA ROYALTY REV -NET	-	-	-	-	-	-	-	-	-	-	-	-	-

CVG COMMERCE PAYMENT BUSINESS UNIT
 1998 ACTUAL - 10Q REPORT
 ACTUALS THROUGH APRIL 1999

(\$ US)	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR
FISC/PROD REV ADJ	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL REVENUE	608,282	653,815	1,204,606	741,861	613,892	1,300,543	993,682	1,031,759	1,349,858	833,743	911,111	1,685,525	11,928,675
COST OF SALES													
HARDWARE - TRD	-	-	-	-	-	-	-	-	-	-	-	-	-
SOFTWARE - TRD	16,046	14,575	12,986	14,214	15,684	18,095	24,546	23,468	18,740	18,236	18,655	20,710	215,955
ROYALTIES - TRD	4,228	48,875	56,250	6,374	3,840	122,560	74,000	-	92,800	111,850	-	145,500	666,276
DEPR & AMORT-PROD	57,853	54,048	60,408	60,109	58,585	43,269	18,195	103,594	55,730	68,947	55,410	22,032	658,177
PRODUCTS	78,126	117,498	129,643	80,698	78,109	183,923	116,741	127,062	167,270	199,032	74,065	188,241	1,540,408
MAINTENANCE COST	9,461	69,866	60,838	77,872	77,847	68,589	59,860	51,000	82,190	84,547	86,737	97,435	826,243
DEPR & AMORT-MAIN	46,007	45,550	49,425	49,181	47,935	35,403	83,807	29,098	54,212	35,735	44,199	82,373	602,924
MAINTENANCE	55,467	115,416	110,263	127,053	125,782	103,992	143,667	80,098	136,402	120,282	130,937	179,808	1,429,167
SERVICES	25,695	22,557	19,912	25,039	21,096	28,833	40,877	86,443	(7,908)	28,663	138,403	32,856	462,466
CONSULT. NON-CHARG	-	-	-	-	-	-	-	-	-	-	-	-	-
NETWORK COSTS	-	-	-	-	-	-	-	-	-	-	-	-	-
DEPR & AMORT SVCS	-	-	-	-	-	-	-	-	-	-	-	-	-
DEPR & AMORT-NW	-	-	-	-	-	-	-	-	-	-	-	-	-
SERVICES	25,695	22,557	19,912	25,039	21,096	28,833	40,877	86,443	(7,908)	28,663	138,403	32,856	462,466
TOTAL	159,289	255,471	259,818	232,789	224,987	316,748	301,285	293,603	295,764	347,977	343,405	400,906	3,432,042

CVG COMMERCE PAYMENT BUSINESS UNIT
 1998 ACTUAL - 10Q REPORT
 ACTUALS THROUGH APRIL 1999

(\$ US)	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR
HARDWARE - IC	-	-	-	-	-	-	-	-	-	-	-	-	-
SOFTWARE - IC	-	-	-	-	-	-	-	-	-	-	-	-	-
SERVICES - IC	-	-	-	-	-	-	-	-	-	-	-	-	-
ROYALTIES - IC SOFT	-	10,200	65,829	(4,950)	-	28,000	-	-	55,800	-	-	-	154,879
ROYALTIES - IC MNT	11,794	7,519	12,084	14,460	13,579	13,702	15,556	15,164	15,915	16,512	16,512	16,598	169,395
ROYALTIES - IC NET	0	0	(0)	(0)	0	(0)	0	(1)	-	-	-	-	(1)
FISC/PROD ROYL ADJ	-	-	-	-	-	-	-	-	-	-	-	-	-
INTERCOMPANY	11,794	17,719	77,913	9,510	13,579	41,702	15,556	15,163	71,715	16,512	16,512	16,598	324,273
COST OF SALES	171,083	273,190	337,731	242,299	238,566	358,450	316,841	308,766	367,479	364,489	359,917	417,504	3,756,315
PDME - TRADE	153,364	141,864	141,135	174,926	144,970	194,812	213,891	216,539	257,495	318,516	275,950	319,182	2,552,643
FAS 86 CREDIT	(28,823)	(43,906)	(36,024)	(135,397)	(80,112)	(114,677)	(104,611)	(107,567)	(160,069)	(199,108)	(182,183)	(232,514)	(1,424,991)
PDME - IC	-	-	-	-	-	-	-	-	-	-	-	-	-
DEPRECIATION	6,347	4,672	12,556	5,558	6,224	14,659	7,811	1,700	9,311	12,836	17,867	12,417	111,959
PDME	130,887	102,630	117,667	45,088	71,082	94,793	117,091	110,673	106,737	132,244	111,634	99,085	1,239,611
FAS %	0	0	0	1	1	1	0	0	1	1	1	1	1
SALES & MARKETING	164,892	161,708	199,373	182,626	177,858	105,280	209,782	267,007	124,114	197,591	253,942	199,271	2,243,443
GENERAL & ADMIN	36,074	38,274	(17,518)	230,297	55,022	73,609	74,761	63,699	70,612	72,491	88,385	122,811	908,515
S G & A - TRADE	200,966	199,981	181,855	412,923	232,879	178,889	284,543	330,707	194,726	270,082	342,326	322,082	3,151,959
S G & A - IC	-	-	-	-	-	-	-	-	-	-	-	-	-
DEPRECIATION	9,590	7,916	3,425	8,488	8,689	31,564	9,748	(11,825)	7,651	8,927	8,898	8,367	101,438
S G & A	210,556	207,897	185,280	421,411	241,569	210,452	294,291	318,882	202,377	279,009	351,225	330,449	3,253,397

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e-partner-XML

~~omitted~~
not used

Product

e-partner-XML will provide light data mapping capabilities to/from SAIFF and XML. By providing this capability, the e-partner/e-chain suite will be able to tightly integrate with XML applications.

Functionality

Similar to e-partner-I that translates to/from a private format and the SAIFF, e-partner-XML will map to/from XML and the SAIFF. Today, the application developers of Cornfield create all data maps for the e-partner products. When an e-partner product is sold, the maps are sent with the software. In the future, this mapping service will be made available to the e-partner-XML customers. Optionally, the data mapping wizard capabilities sold with the e-chain Application Builder will allow customers to build their own maps. The functionality of e-partner-XML will include:

- Data mapping facility to/from
- Application API to integrate tightly with XML enabled applications
- Interface to the SAIFF to take advantage of e-chain Applications

Technology Used

The base technology of e-partner-I will be used to build e-partner-XML. Multiple prototypes have been created using e-partner-I that has established product feasibility. In addition, the XML-like structure of the SAIFF makes it a fairly straightforward development effort.

New Technology

The new technology is a modified version of e-partner-I. It also includes an application API, XML/SAIFF mapping tools, and an interface to the SAIFF.

Development Status

Working prototypes have been created that translates to/from XML. Approximately 6 additional months will be required to build the application API and the customer wizards for the mapping tools.

not used

e-partner-XML

Date Completed	Type of Resource	Work Months	Monthly Salary (not loaded)	Salary Cost (Not Loaded)
Inception to Acquisition	Owner	1	8,000	8,000
	Dev. Director	0	6,000	0
	Dev. Manager	2	5,333	10,667
	Developer	1	3,000	3,000
				<u>21,667</u>
Acquisition to FASB 86 (prototype to customer)	3/1/00 Exec. Consultant	0	8,000	0
	Dev. Director	0	6,000	0
	Dev. Manager	0.5	5,333	2,667
	Developer	1	3,000	3,000
				<u>5,667</u>
FASB 86 to G.A.	12/31/00 Exec. Consultant	1	8,000	8,000
	Dev. Director	0.5	6,000	3,000
	Dev. Manager	2	5,333	10,666
	Architect Assistance	0	6,667	0
	Developer	5	3,000	15,000
				<u>36,666</u>
Total				63,999

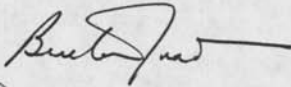
BG

BURTON GRAD ASSOCIATES, INC.
101 POST ROAD EAST
WESTPORT, CONNECTICUT 06880
(203) 222-8718 FAX: (203) 222-8728
E-MAIL: BURTGRAD@AOL.COM

Date: June 25, 1999

To: John Blaine

From: Burton Grad



Subject: EC Group Valuation

1. What tax rates do you want me to use for North America and for International?
2. I am looking forward to receiving the preliminary acquisition cost analysis for EC Group.

Original
②

DRAFT

**ACQUISITION MEMORANDUM:
EC GROUP (PrintEDI)**



TABLE OF CONTENTS

1. EXECUTIVE SUMMARY	4
2. ACQUISITION BENEFITS.....	7
3. THE COMPANY	8
3.1. OVERVIEW	8
3.2. HISTORY	8
3.3. TARGET MARKET	9
3.4. COMPETITIVE POSITION	10
3.5. MARKETING APPROACH	10
PRODUCTS AND SERVICES	11
4.1. ETK-S	12
4.2. ETK-G	12
4.3. ETK-B	12
4.4. ETK-R	12
4.5. ETK-M	12
4.6. ETK-X	13
4.7. ETK-I	13
4.8. ETK-P	13
5. MARKET OVERVIEW	14
5.1. INTRODUCTION	14
5.2. CUSTOMER APPLICATIONS	14
5.3. MARKET APPROACH	15
5.4. THE PRINT INDUSTRY	15
5.5. UK EXPORT OPPORTUNITY	16
6. TRADING PARTNER COMMUNITY MANAGEMENT.....	17
7. ORGANIZATION AND EMPLOYEES.....	18
7.1. ORGANIZATION	18
7.2. EMPLOYEES	18
7.3. OWNERSHIP	19
7.4. MANAGERIAL CAPABILITY OF MIKE SLINN	19
8. INTEGRATION PLAN	20
8.1. INTEGRATION PLAN	20
8.2. RISK FACTORS	21
9. FINANCIAL ANALYSIS AND VALUATION	22
9.1. REVENUES	22
9.2. EXPENSES	23
9.3. SUMMARY OF FINANCIAL FORECAST.....	25
9.4. VALUATION AND PURCHASE STRUCTURE	26
10. APPENDIX A – EMPLOYEE RESUMES	27
10.1. MIKE SLINN	27
10.2. KEN FOSTER	27

10.3. RICHARD WARD 28
10.4. JOHN PEARSON 29
10.5. MARK SEABORNE 29
10.6. MATTHEW SLINN 29
10.7. ALAN EATON 30
10.8. RUTH DODD 30
10.9. PHILIP BARGH 30

1. EXECUTIVE SUMMARY

The purpose of this memorandum is to recommend the acquisition of EC Group by Sterling Commerce. EC Group is a UK-based provider of integrated electronic commerce services focused on creating, building, enabling, enhancing, managing and servicing trading partner communities.

The reasons for acquiring EC Group are as follows:

1. The company is profitable today and will increase CVG's pro forma FY99 Plan revenue in the UK market by 54%;
2. EC Group provides EC communities with 'lite' vertical business solutions. Its technology, which was originally deployed in a small niche of the UK market, is now being utilized as a supply chain integration solution with applicability on a Pan European scale and possibly worldwide;
3. The company has strong management and remarkable credibility in the UK market. This credibility, combined with EC Group's 'lite' business solutions, will allow CVG to grow its offering, initially to our current UK customer base—and to other markets later—by taking our customers further into the supply chain;
4. EC Group's focus fits with CVG's philosophy as a provider of community management services, which includes creating, building, enabling, enhancing, managing and servicing trading partner communities; and
5. It offers upside potential in that its technology may be leveragable worldwide. EC Group has developed what it calls the Standard Application Interface File Format (SAIFF) which is a data transformation tool which allows a variety of incoming data (such as EDI, XML, etc.) to be converted to a flexible format which permits the company to quickly deploy and integrate 'lite' solutions tailored to the customer's needs. However, the financial projections developed for EC Group are based strictly on the forecast performance of EC Group in the UK market and do not incorporate this potential upside.

EC Group, located in Chesterfield, England, was founded in 1992 to provide consultancy services to the print and packaging industry. By 1994, EC Group had developed the concept of a flexible and simple to use EC application which supported the entire Printed Product Life Cycle. The company received the financial support of the European Union (EU), the Department of Trade and Industry (DTI), trade associations and over 40 companies to conduct a \$1.7m development program for further development of this concept. In late 1996, EC Group introduced its commercial services to the UK market. Since that time, the company has rapidly grown to a customer base of 150 (primarily UK-based) companies, including BT, Jarvis Porter, Stralfors, Field Group, and others. EC Group has earned exclusive endorsements from the British Roll Label and British Carton Associations.

EC Group's 1999 revenues are projected at \$1.6 million, an increase of 55% from their 1998 level. Somewhat unusual for a company of its size, EC Group is presently profitable. The company has 12 full-time employees, which is up from nine

approximately six months ago. Four employees are now involved in Sales and Marketing (up from one employee six months ago) and six are involved in Customer Service and Development.

The following table presents a summary and forecast of EC Group's financial performance for 1997 through 2002 (dollars in thousands):

PROJECT CORNFIELD							
Income Statement							
Fiscal years ending December 31							
(Dollars in thousands)							
	1997	1998	1999	CVG 1999	2000	2001	2002
REVENUES							
Integrated solutions	\$ 397	\$ 751	\$ 1,202	\$ 401	\$ 1,802	\$ 2,523	\$ 3,533
Network	\$ 126	\$ 237	\$ 362	\$ 121	\$ 500	\$ 724	\$ 1,006
Stralfors	\$ 119	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other revenues	\$ 40	\$ 16	\$ -	\$ -	\$ -	\$ -	\$ -
Total revenue	\$ 683	\$ 1,004	\$ 1,564	\$ 521	\$ 2,302	\$ 3,248	\$ 4,538
growth %		47.2%	55.7%		47.2%	41.1%	39.7%
EXPENSES							
Cost of goods sold	\$ 146	\$ 181	\$ 281	\$ 94	\$ 244	\$ 344	\$ 481
Gross profit	\$ 536	\$ 824	\$ 1,282	\$ 427	\$ 2,058	\$ 2,903	\$ 4,057
Gross profit margin	78.6%	82.0%	82.0%	82.0%	89.4%	89.4%	89.4%
Operating expenses							
Employment costs	\$ 263	\$ 442	\$ 554	\$ 185	\$ 693	\$ 977	\$ 1,365
Travel and entertainment	\$ 37	\$ 55	\$ 74	\$ 25	\$ 93	\$ 111	\$ 134
Office rental	\$ 17	\$ 47	\$ 47	\$ 16	\$ 49	\$ 52	\$ 54
Printing and postage	\$ 11	\$ 12	\$ 18	\$ 6	\$ 26	\$ 37	\$ 52
Professional services	\$ 6	\$ 22	\$ -	\$ -	\$ -	\$ -	\$ -
Telecommunications	\$ 12	\$ 18	\$ 19	\$ 6	\$ 20	\$ 21	\$ 22
Other	\$ 37	\$ 87	\$ 87	\$ 29	\$ 104	\$ 125	\$ 150
CVG-European Savings	\$ -	\$ -	\$ (125)	\$ (125)	\$ (500)	\$ (530)	\$ (562)
Depreciation	\$ 27	\$ 28	\$ 10	\$ 3	\$ 50	\$ 50	\$ 50
Total operating expenses	\$ 409	\$ 710	\$ 684	\$ 145	\$ 535	\$ 843	\$ 1,265
Acquisition amortization (1)	\$ -	\$ -	\$ 232	\$ 232	\$ 695	\$ 695	\$ 695
Operating profit	\$ 127	\$ 113	\$ 367	\$ 51	\$ 828	\$ 1,366	\$ 2,097
Operating profit margin	18.6%	11.3%	23.5%	9.8%	36.0%	42.0%	46.2%
(1) Assumes a \$4.6 million net acquisition price (\$4.4 mm price, \$0.4 mm in transaction expenses, and \$0.2 mm in net equity). It is further assumed that there is no purchased R&D write-off associated with the acquisition, such that the \$4.6 mm net acquisition price is allocated evenly between purchased software (5 year amortization period) and goodwill (10 year amortization period).							

Although EC Group includes software and network services in its commercial solution to customers, the company's core competency and business focus is on creating and developing a trading partner community by enabling this community to take part in electronic commerce. EC Group offers 'lite' EC solutions which fit a wide range of customer needs—from simple purchase order and invoice exchange for small customers to an integrated bar code and vendor managed inventory solution for larger customers. All EC Group products share a common theme—making EDI easy and of visible value for the smaller trading partner. The company packages British Telecom's EDI*Net network services and Atlas' translator software as the translation engine in its commercial solution.

We believe that in the immediate future, it is critical to integrate EC Group fully into CVG-UK. EC Group's technology could also be of interest to ISG. Our preliminary plan is to: (i) Replace BT EDI*Net with Amsterdam's COMMERCE:Exchange node as

the company's value-added service offering; (ii) Replace Atlas translator products with appropriate GENTRAN product offerings; (iii) Leverage SCI's UK customer base and CVG ID's sales resources to roll-out the UK market; and (iv) Leverage CVG's distribution system to extend EC Group's technology worldwide; (v) Dave Dodge to consider the Slinns for management positions in Europe.

EC Group presents CVG with a compelling acquisition opportunity in the United Kingdom, a market in which we have identified only EC Group and Kewill Systems as realistic near-term acquisition candidates. Compared with Kewill, EC Group is smaller but growing significantly faster and better positioned as a supply chain integrator. Furthermore, EC Group is an independent company whereas Kewill's EC division is an integrated part of Kewill Systems, making the integration of EC Group significantly easier and less time-consuming.

Our financial model for the business shows that the acquisition is expected to be neutral to Earnings Per Share in FY99 and accretive thereafter. We recommend that we proceed immediately to a letter of intent with EC Group with a view to consummating the transaction by May 31, 1999. If desired, we could announce the a transaction earlier to reinforce Sterling Commerce's commitment to international expansion and CVG's commitment to becoming a worldwide manager of trading partner communities.

2. ACQUISITION BENEFITS

An acquisition of EC Group by Sterling Commerce provides the following benefits:

1. Enhances CVG's market position and profitability in the UK market. Including CVG's recent acquisition of EDES, we estimate that, in 1999, ID will derive approximately \$2.86 million in revenue from the UK market. By acquiring EC Group, this figure will increase to \$4.42 million (an increase of 54%) on a pro forma basis. Furthermore, while CVG's current UK operation is expected to incur an operating loss of \$431 thousand in 1999, it is anticipated that EC Group will realize an operating profit (after acquisition amortization) of approximately \$51 thousand, which is forecast to grow to \$828 thousand in 2000.
2. Furthers CVG's strategy of Creating, Building, Enabling, Enhancing, Managing and Servicing trading partner communities through the application of 'lite' EC solutions which are of tangible benefit to trading partner communities. The EC Group is positioning itself squarely in the supply chain integration space, an area which is important to the future strategic direction of the Commerce Services Group.
3. EC Group's customer base is complementary to CVG's current customer base of retailers and manufacturers and further enhances our coverage of the supply chain. Furthermore, EC Group's customer base is generally upstream in the supply chain relative to CVG's current customer base, and therefore presents a new point of entry for these downstream customers.
4. An acquisition of EC Group would boost our UK growth rates. EC Group's financial performance in 1999 to date indicates that the business is on pace to grow its revenues by over 55% from 1998 levels.
5. EC Group has assembled an excellent management team which may be able to strengthen CVG's management team in Europe.
6. An acquisition of EC Group continues to signal Sterling Commerce's commitment to international expansion to Wall Street.

In addition to the benefits listed above, the acquisition contains potential upsides:

1. We believe that there is a real opportunity to leverage EC Group's EC technology across geographic and vertical market boundaries and to grow its revenue base.
 - EC Group's technological position in the UK could be taken worldwide.
 - A demonstrated competency of the company is to completely understand a business process and to deploy EDI-based tools such a manner as to solve a business process problem. The company is currently attempting to leverage this competency deeper into supply chains—in areas such as manufacturing and logistics—and is achieving some early successes. The opportunity to expand EC Group's technical and marketing model to other markets offers further upside potential to the acquisition.

3. THE COMPANY

3.1. Overview

EC Group is a relatively small UK-based company which specializes in building and managing trading partner communities by delivering a service which allows the benefits of electronic commerce to be better realized throughout the supply chain. EC Group bundles British Telecom network services with its EC offerings. Customers' EDIFACT, Tradacoms, and X12 EDI messages are parsed through the EC Group process to reduce them to a single level format which permits mapping to business systems and simple data extraction.

EC Group's core competencies are: (i) its ability to break a complicated business process down into smaller elements, which can be streamlined with the use of standardized EC tools; (ii) its ability to design and implement EC technologies in a manner that solves a business problem; and (iii) its business acumen and people. EC Group benefits from the management expertise of Mike Slinn, who has created an entrepreneurial culture, similar to that of Sterling Commerce. EC Group has a healthy balance sheet and is currently profitable. We believe that these impressive results are due to the conservatism and financial discipline of Mike Slinn and his management team.

Control of the company is held by Mike Slinn (approx. 50%), with key employees Richard Ward (20%), Ken Foster (20%), Matthew Slinn (10%), and John Pearson (1%) also holding equity stakes in the company. Initial discussions between Mr. Slinn and Sterling Commerce centered on a potential marketing alliance. However, during the course of these discussions, we have become convinced that EC Group is a better acquisition opportunity than alliance opportunity.

EC Group's stated goals are to:

- Understand the customer's business and its supply chain
- Add value for the customer and its trading partners
- Deliver practical, value-for-money solutions
- Focus on the key targets of margin, market share and customer service

3.2. History

EC Group Ltd (originally named Focus Technology) was founded in 1992 by Mike Slinn, formerly head of a business responsible for designing and implementing MRP and MIS application systems for over 400 blue chip clients. In this position, Mr. Slinn began to realize that as more organizations in the supply chain became computerized, further efficiencies could be realized by integrating these systems together.

EDI was developed to enable this integration to take place, yet was seen by many as more of a threat than an opportunity. This was largely due to the "hub and spoke" method of implementation where a large buyer (the hub) forced one EDI solution on

to their suppliers (the spokes). The spokes then found it difficult and costly to add further trading partners. Mr. Slinn's mission was to make EDI open, accessible and simple to implement. This remains the primary goal of EC Group.

Mr. Slinn's team analyzed the interaction of supply chain members in the complete product manufacturing life cycle from introduction through replenishment, distribution to payment. This £1m development program was completed with assistance from the EU, DTI, trade associations and over 40 companies. The output was a complete set of supply chain management messages developed as a neutral data set, which is compatible with EDIFACT, Odette and Tradacoms message standards as well as supporting many flat files unique to trading partners. It is now proven in hundreds of mission-critical trading relationships.

The company then set about building a team of consultants, analysts and software engineers to develop and implement the software components and applications now known as the Electronic Trading Kit (ETK). This is a modular e-commerce applications builder, which can be deployed at many points in a supply network. Now, supply chain information exchange supported by EC Group includes company, product and materials details and proceeds through demand forecasts, inventory, sales data, delivery documentation and financials. This provides EC Group with a visible value add and positions it to perform community management services for the graphic arts industry. **In 1997, EC Group received the ANA Supply Chain Management Award for its commercial approach.**

Most recently, EC Group has expanded outside of its vertical niche in the UK and is focusing on the supply chain integration market. EC Group's customers and their trading partners now increasingly expect EC Group to take a wider view of the supply chain from raw material through to the retailer. As a result, EC Group is positioning itself as a supply chain integrator with a specialty in upstream manufacturing, packaging and raw materials. In this regard, the company has recently changed its operating name from Print EDI to the Electronic Commerce Group, Ltd.

3.3. Target Market

EC Group's initial target market included pre-press, printing, and paper supply companies. EC Group focused initially on this niche because these companies had a business need to process EDI transactions generated from the diverse businesses of their customers and suppliers, who use a wide range of computer applications systems for distribution and manufacturing management. These companies consequently face high services costs for solutions, which are often restricted to one hub and a few message types. EC Group set out initially to provide this industry sector and its customers with simple and rapid integration over a wide range of message types from disparate trading partners.

Since that time, the EC Group has begun to reposition itself as a supply chain integrator with a specialty in manufacturing, packaging and raw materials.

EC Group considers its primary customers to be "supplier hubs," which would likely be classified as "spokes" or "key spokes" under the CVG business model. EC Group is utilizing a tiered network services pricing scheme in order to reinforce its value message to these customers. As its business model evolves, however, it should be expected that these "spokes" will develop into "key spokes" and small "hubs." As

this occurs, EC Group may be in a position to benefit from an expanded EDI relationship with these customers.

Presently, EC Group has approximately 150 customers. These customers are located primarily in the UK and include British Telecom, Conde Nast, RR Donnelley, Cambridge University Press, Jarvis Porter, The Stationery Office, etc. We do not believe that the company is significantly dependent on any single customer.

3.4. Competitive Position

EC Group cites Kewill Systems and GEIS (INS) as its two primary competitors. Versus these competitors, EC Group benefits from its end-to-end EC product and service offering and its focus on supply chain integration solutions which are inherently flexible and modular. However, EC Group cites the following as limitations: (i) as a small company, many prospective customers are concerned about EC Group's financial viability relative to the larger competitors, etc.; and (ii) with existing resources, rapid pan-European expansion is not achievable in the near term.

By combining with Sterling Commerce, each of EC Group's competitive challenges is addressed. The focused offerings of EC Group are combined with the strong financial position of Sterling Commerce and our marketing resources throughout the world. This should provide the opportunity for substantial growth in addition to what EC Group would be able to achieve on its own.

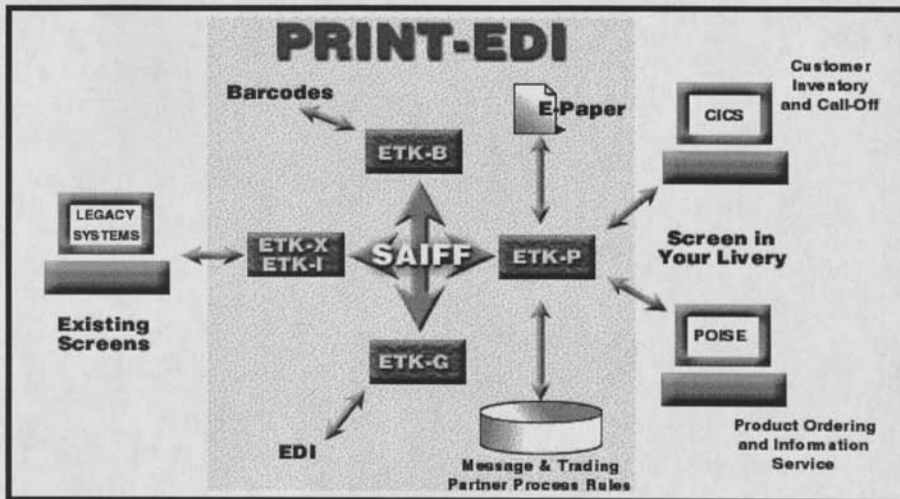
3.5. Marketing Approach

EC Group is focused on making EDI implementation easy, and therefore beneficial, for even the smallest trading partners. Much of EC Group's marketing approach is tailored to the needs and interests of this particular customer base.

According to EC Group, EDI has traditionally been forced through the supply chain by alliances between EDI service companies and "hubs," typically major product or materials buyers with several hundred suppliers or "spokes." In EC Group management's view, under this model, the EDI service company builds a standard EDI package for the Spokes which is specifically designed to satisfy the requirements of the Hub and must be implemented within a strict time limit. They believe that upgrades later desired which enable the Spokes to work with other customers or suppliers are reluctantly handled by the EDI service supplier and often the supplier is forced to take on additional EDI systems from new trading partners. Under this model, supplier resources are dissipated, costs escalate and service levels fall to both original and new trading partners.

EC Group's message to the Spokes is that they too can benefit from the implementation of electronic commerce rather than only the Hub. Over 60% of EC Group users are Spokes, with whom EC Group works closely to provide an open solution for all future customers and suppliers. Additionally, EC Group's solution enables the spoke with value added 'lite' solutions which bring benefits beyond EDI. These Spokes therefore have the opportunity to become Hubs in their own right.

4. PRODUCTS AND SERVICES



The EC Group range of products and services form a comprehensive and integrated electronic trading kit for effecting supply chain integration. Users may begin with a start-up solution which accepts the EDI orders of one customer and gradually upgrade to electronic trading with many other customers and suppliers.

EC Group's approach is to harness three key technologies to make supply chain collaboration a reality. EC Group blends: (i) EDI, (ii) the Internet and (iii) Bar Coding to produce a flexible set of modules which form the EC Group Electronic Trading Kit (ETK). It is open to all trading partners whatever message standards they use and is available at a predictable annual service fee.

EC Group was the winner of the 1997 ANA Award for Innovation in Electronic Commerce. EC Group's EC products are uniquely endorsed by the British Carton Association and the British Roll Label Association. The offerings of EC Group include the following software products, which are sold together with the necessary network services, hardware, etc. in order to create one simplified EC solution for the customer.

NOTE: The product descriptions that follow are based upon information from the EC Group received over one year ago. While it is believed that the product descriptions remain materially correct, it is possible that the EC Group's product naming convention has changed and that certain products have been combined for marketing purposes, etc. It is also possible that the EC Group's pricing model has changed since this time.

4.1. ETK-S

ETK-S is the company's starter service. It provides a rapid, professional and cost-effective solution to the EDI needs of a single customer. It includes: (i) software for VAN communications and EDI message translation, (ii) a translation table for a selected EDI message, (iii) e-paper for a selected message type, (iv) SAIFF for a selected message type, (v) a modem, (vi) a BT EDI*Net mailbox, (vii) training, and (viii) limited telephone support. The installation cost for ETK-S is approximately \$3,000. The annual maintenance cost is approximately \$1,000, which includes (i) software maintenance/upgrades; (ii) hotline telephone support; and (iii) EDI traffic up to 50 Kchars per month.

4.2. ETK-G

ETK-G is the company's open gateway product which makes EDI available for all customers and suppliers. ETK-G uses Atlas technology for its EDI translation capability. With ETK-G, all messages, regardless of source, destination, EDI standard (UN-EDIFACT, X12, XML, Flat File, etc.) or data content are expressed in the single-level SAIFF format. ETK-G includes the same features of ETK-S, except that ETK-G extends the translation tables, e-paper capabilities and SAIFF format to cover all recognized UN-EDIFACT and Tradacoms messages. The installation cost for ETK-G is approximately \$4,000. The annual maintenance cost ranges from \$2,600 (200 Kchar/month) to \$9,600 (7,500 Kchar/month), depending on the level of Kchars per month.

In 1997, total revenue (software, network and maintenance) attributable to ETK-G software was approximately \$250,000.

4.3. ETK-B

ETK-B is the company's Bar Code Integration product which makes remote control of stocks and replenishment viable, translates bar codes into Standard Applications Interface File Format (SAIFF). ETK-B links to other ETK offerings, allowing integration of item identities with transactions affecting each item (e.g., dispatch advice) (the transaction) and pallet numbers (the items described in the dispatch advice, or transaction). ETK-B also prints bar code labels for pallets, boxes and reels.

4.4. ETK-R

ETK-R is an add-on to the other ETK products offering remote support service. This product is actually PC Anywhere, for which EC Group acts as a reseller. EC Group charges an installation cost of approximately \$325 and an annual maintenance cost of \$50. Approximately 50% of these amounts are passed on to PC Anywhere.

In 1997, total revenue (software, network and maintenance) attributable to ETK-R software was approximately \$7,000.

4.5. ETK-M

ETK-M is an add-on to ETK-G which provides document management capabilities. ETK-M provides every desktop with access to EDI messages as formatted e-paper. Orders, delivery advices and other commercial documents are displayed as clear

business forms that may be retrieved by user-generated queries on any data items. The documents may then be printed, if required.

In a single-user environment, pricing for ETK-M is approximately \$1,600, with an annual maintenance charge of approximately \$250. In a multi-user environment, the server software and maintenance costs are \$2,200 and \$375, respectively, with the per workstation costs ranging from \$150 (\$25 for maintenance) to \$200 (\$35).

In 1997, total revenue (software, network and maintenance) attributable to ETK-M was approximately \$6,900.

4.6. ETK-X

The X-Keys system converts an EDI message into key strokes so that data may be input to existing applications without re-development. Available on Windows terminal emulators, direct data entry screens (e.g. order processing) and other applications such as spreadsheets. Is particularly effective where the business process demands intervention to check job specifications and order exceptions on-line. ETK-X enables EDI documents to be automatically transferred to or from existing computer applications, thereby eliminating the need for changes to the applications software and supporting business processes.

In a single-user environment, pricing for ETK-X is approximately \$1,075, with an annual maintenance charge of approximately \$165. In a multi-user environment, the server software and maintenance costs are \$1,575 and \$250, respectively, with the per workstation costs ranging from \$250 (\$40 for maintenance) to \$325 (\$50).

In 1997, total revenue (software, network and maintenance) attributable to ETK-X software was approximately \$54,000.

4.7. ETK-I

ETK-I is EC Group's interface file conversion program that allows ETK-G to exchange data directly with standard interface files where these are available on ERP, MIS or similar user applications. The data is loaded directly to/from ETK-G for automatic conversion of customer and supplier EDI messages. The pricing for ETK-I is approximately \$1,000, with a charge of \$165 per annum for maintenance.

In 1997, total revenue (software, network and maintenance) attributable to ETK-I was approximately \$20,600.

4.8. ETK-P

ETK-P is EC Group's Product and Supplies Electronic Commerce System (PASEC). Enables the rapid visual development of e-commerce applications using a data repository of EDI transactions. Typically used to enhance the scope of existing applications, where e-commerce partnerships demand message acknowledgements, product details, forecasts and inventory information. ETK-P enables the implementation of new business processes such as automatic replenishment, consignment stocks and co-managed inventory. The technology that is used within ETK-P can be leveraged to build other solutions with an emphasis on supply chain integration.

In a single-user environment, pricing for ETK-P is approximately \$3,500, with an annual maintenance charge of approximately \$500. In a multi-user environment, the server software and maintenance costs are \$4,700 and \$825, respectively, with the per workstation costs ranging from \$150 (\$25 for maintenance) to \$200 (\$35).

In 1997, total revenue (software, network and maintenance) attributable to ETK-P was approximately \$110,900.

5. MARKET OVERVIEW

5.1. Introduction

EC Group believes that the historic growth of EDI has been driven by the hubs, due to the benefits which accrue to them. The spokes have historically had little choice but to accept the solution recommended by their customer. EC Group seeks to avoid a coercive model and to provide solutions that have greater value to both the Hubs and Spokes in order to build the community and provide sustainable value. EC Group provides a solution which not only satisfies the hub's immediate needs but is also built to handle the spoke's needs as well. It is a system which is open to any other customer or supplier for one inclusive predictable annual cost.

EC Group's objective is to enable companies to implement techniques such as Efficient Consumer Response, Co-Managed Inventory and Continuous Replenishment. Although the initial vertical focus of EC Group was on the printing and graphic arts industry, EC Group has discovered that its EC products have application in a number of related industries, all predicated upon integrating supply chains.

5.2. Customer Applications

5.2.1. BT / Stralfors

EC Group provides EDI services and a lite bar coding solution to BT and Stralfors (a \$350 million dollar Swedish company) to improve the flow of paper from the point of manufacture of the paper to the point of consumption at BT's billing centers where customer invoices are created. There are more than 200 different stationary items which go into the making of BT's customer invoices including paper reels, envelopes, reminders, cut off notices, solicitors letters etc. There are nine suppliers of these stationary items to Stralfors and to BT at its three billing centers. All nine suppliers, BT, Stralfors, transportation companies are linked together by EC Group as part of a supply chain. There are thirty different documents involved in the process including inventory reports, dispatch advice, invoices etc. All documents are in EDI format. From the time the paper is first manufactured (the reel is given a unique identifier by EC Group's bar coding system) to its placing in a palette (the palette is given another identifier) to its inclusion in stock, to its call off, transportation, delivery and receipt into BT's billing center the EC Group service is creating and processing all associated EDI documentation.

The system and service created by EC Group could be attractive to any organization with intensive customer billing e.g. banks, utilities, etc.

BT paid EC Group a once off fee of \$400,000 to create and set the system up. It pays a further \$65,000 in annual recurring revenues.

5.2.2. Jarvis Porter

Jarvis Porter Plc is a label manufacturer with revenues of over \$250 million. EC Group aims to turn manufactures / suppliers into hubs dealing with its customers rather than the other way around. Jarvis Porter produces unique products (over two thousand items) for its eighty customers. With EC Group's help, Jarvis Porter has implemented a continuous replenishment system for its customers. Every twelve hours it creates and sends an inventory report to its customers of what it has in stock and what it is manufacturing. . These reports are transmitted as EDI documents over the EC Group service. At the customer end the information (in the EDI document) is translated into a user-friendly screen. The screen contains the information required for the customer to make a call down on any stock item. In all six documents are created and moved in EDI format between Jarvis Porter and its customers.

A great benefit of the EC Group service is that it overcomes the problem whereby prospective customers postpone a decision to use EDI until their legacy system is replaced. In cases such as Jarvis Porter the customer sees immediate benefits with proceeding now with the EC Group service.

5.3. Market Approach

EC Group's experience in the print industry has shown that a properly linked supply chain from shelved product right upstream to the forest, that produces the wood, that goes to a pulp mill to make the board, that goes to a packaging company to produce the packaging which is used by a first line supplier to box his product on a retailers shelf can produce savings and reduce lead times. This benefit is proving attractive to EC Group's customers and potential customers outside of the print industry, and has allowed the EC Group to expand its focus beyond the print industry to the larger supply chain integration market.

5.4. The Print Industry

Because the EC Group's initial market focus was on the print industry, it is worth examining the potential size of this market.

Every organization uses printed products and paper. These are supplied through a complex supply network of pre-press, printing, paper and graphics supplies companies. The products require detailed and highly technical specifications which need to be shared rapidly and accurately between trading partners. Presently, EC Group has positioned itself to capitalize on the information needs created in the print industry.

According to EC Group materials, the print market is a £10 billion business sector in the United Kingdom alone, involving products used by every company and individual. At present, there are approximately 20,000 UK companies making print and

packaging, including suppliers of paper, plates, inks and associated services. There are 10,000 commercial printers and 10,000 instant print shops, which are supplied by 5,000 companies. Importantly, EC Group estimated that the UK print market has less than a 4% EDI penetration rate.

5.5. UK Export Opportunity

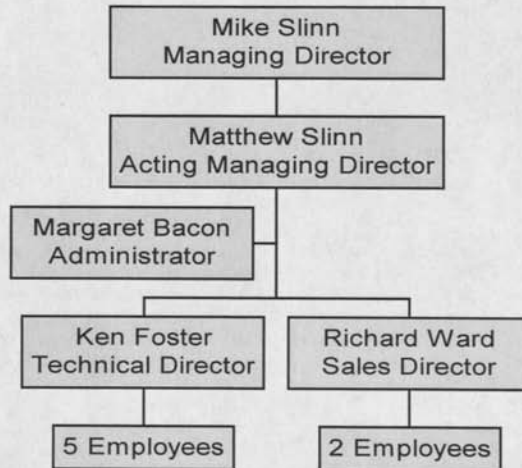
An opportunity has arisen as a result of EC Group's work this last two years on the UK Government Export committee. This has produced a set of EDIFACT MIGs (Message Implementation Guidelines) which are, for the first time, aligned to the UN set of printed export documents. The Department of Trade and Industry has selected EC Group's solution as an ideal base for ElecTra, the new UK export system which they are vigorously promoting. EC Group has started a government-funded trial with a freight forwarder specializing in Scotch whisky. This represents a potentially significant victory for EC Group, as GEIS had nearly locked this project up before EC Group came on the scene. British Telecom has offered additional sponsorship to EC Group on the basis that they have an option to be exclusive third party distributors of the ElecTra system (subject to meeting annual revenue targets). Under this arrangement, EC Group would retain intellectual property rights as well as the right to sell direct.

6. TRADING PARTNER COMMUNITY MANAGEMENT

Community Management Service	Examples of Community Service	CVG	ISG	MVD	CSG
CREATE Communities	<ul style="list-style-type: none"> ◆ Work with hubs to define communities ◆ Identify potential community offerings ◆ Perform supply chain analysis 	<ul style="list-style-type: none"> ◆ Community Analysis 			
BUILD Communities	<ul style="list-style-type: none"> ◆ Vendor implementation programs ◆ Transaction implementation programs ◆ Certification services 	<ul style="list-style-type: none"> ◆ Document Certification ◆ C:NOW! ◆ C:Locator ◆ VIP Program ◆ TIP Program 			
SERVICE Communities	<ul style="list-style-type: none"> ◆ Exceptional customer service ◆ Secure web self-help tools ◆ Automated proactive services ◆ Communication implementation services ◆ Product implementation services 	<ul style="list-style-type: none"> ◆ Telephone Consulting ◆ C Y2K ◆ Customer Services ◆ Communicatn Services ◆ Document Tracking Web Tools ◆ Proactive Services 	<ul style="list-style-type: none"> ◆ Customer Services 	<ul style="list-style-type: none"> ◆ Y2K Services ◆ G:Map ◆ G:Transition ◆ G:Upgrade ◆ G:Alliance ◆ G:Assist ◆ G:Enable ◆ G:Start ◆ EC Gateway Services ◆ G:Web Suite Services ◆ G:Server Site Analysis ◆ EDI Univ. 	<ul style="list-style-type: none"> ◆ Customer Services ◆ Software Distribution
ENABLE Community Members with EC Products and Network	<ul style="list-style-type: none"> ◆ Provide full EC client software ◆ Provide high value network service ◆ Provide secure and reliable infrastructure 	<ul style="list-style-type: none"> ◆ C:Network ◆ C:Advantage ◆ C:Connection ◆ C:Connexion ◆ C:Doculink ◆ C:Exchange ◆ C:Forms ◆ C:Mail ◆ C:Webforms 	<ul style="list-style-type: none"> ◆ G:Basic ◆ G:Server ◆ G:Structur ◆ G:Viewpoint ◆ G:Client ◆ G:Dataguard ◆ G:Director ◆ G:Smartforms ◆ G:Integrator ◆ G:Plus ◆ G:Realtime ◆ G:Server Application Extensions 		<ul style="list-style-type: none"> ◆ C:Direct ◆ C:Express ◆ C:Mailbox ◆ C:Manage ◆ C:Remote
ENHANCE Communities with 'Lite' Vertical Business Solutions	<ul style="list-style-type: none"> ◆ Bar code solutions ◆ Advanced ship notice ◆ Shipment tracking ◆ Industry data warehouse applications ◆ Partner with solution providers to resell 	<ul style="list-style-type: none"> ◆ C:Banker ◆ C:Fedwire ◆ C:Online ◆ C:Catalog ◆ C:Tracker 	<ul style="list-style-type: none"> ◆ G:SellSuite ◆ G:Web-suite ◆ Web Merchandising Integration 		
MANAGE Communities	<ul style="list-style-type: none"> ◆ Hosting services ◆ Remote management ◆ Community proactive services ◆ Sales support 	<ul style="list-style-type: none"> ◆ Hosting Srvcs ◆ Outsourcing Support ◆ Sales Support ◆ Automated Monitoring ◆ Proactive Services 		<ul style="list-style-type: none"> ◆ Outsourcing Services 	

7. ORGANIZATION AND EMPLOYEES

7.1. Organization



7.2. Employees

EC Group has 12 FTEs. Two employees (Richard Ward and Andy Coote) are on self-employed terms but are committed full-time and long term to the business. Andy Coote operates from his home in the London area. Employees include:

Bacon, Margaret	Administrator
Bargh, Phillip	Support Consultant
Coote, Andy	Business Development (Sales) (new hire in 1998)
Dodd, Ruth	Support Consultant
Eaton, Alan	Support Consultant
Foster, Ken	Operations/ Technical Director
Myers, Andree	Marketing (new hire in 1998)
Pearson, John	Development
Seaborne, Mark	Development
Slinn, Matthew	Managing Director (Sales) (new to the business in 1998)
Slinn, Mike	Managing Director (Chairman)
Ward, Richard	Business Development (Sales)

Mike Slinn is actively involved in a number of UK EDI government and standards committees which provide him with excellent visibility within the UK market and give him excellent insight into the trends of the electronic commerce industry. Mr. Slinn

is the only UK representative to the Pan-European ECR Committee as well as the only service provider representative to that committee. We believe he would be a valuable addition to CVG's management staff.

7.3. Ownership

EC Group is a privately-held company owned by several of its employees. Ownership interests are as follows:

Mike Slinn	50%
Ken Foster	20%
Richard Ward	20%
Matthew Slinn	10%
John Pearson	1%

7.4. Managerial Capability of Mike Slinn

EC Group benefits from the management experience and expertise of Mike Slinn, Managing Director. Mr. Slinn has an extensive and successful history of transforming UK start-up data processing companies into the mainstream.

- ◆ In 1966, Mr. Slinn founded Electronic Data Processing Ltd., which is now a £50 million fully-listed computer services company.
- ◆ In 1971, Mr. Slinn founded Slinn Computer Group and remained 90% equity owner until the company was sold to Radius Plc. in 1988. Mr. Slinn was retained by Radius Plc for 3 years after the acquisition in order to manage the transition of the business. Today, the former Slinn Computer Group is a highly successful part of Radius Plc, which itself has grown to £30 million in annual turnover.
- ◆ Mr. Slinn has been appointed as the only EC vendor representative to the European Efficient Consumer Response (ECR) Committee.
- ◆ Mr. Slinn is a Member of the UK Cabinet Office Technology Foresight IT and Electronics panel.

All of these accomplishments are significant and speak to Mr. Slinn's managerial capability and credibility in the UK. Retaining Mr. Slinn for at least 2-3 years after acquisition will be important in maximizing the benefits of the EC Group acquisition, and we may wish to consider an earnout structure to help ensure his tenure.

8. INTEGRATION PLAN

8.1. Integration Plan

Although a more detailed due diligence review must be performed in order to develop a complete business strategy and integration plan for EC Group, the preliminary plan consists of the following elements:

- ◆ Integrate EC Group into CVG-UK. It is important to keep the EC Group team intact during their early years to continue their vertical focus, profitability, and entrepreneurial spirit. Although there are elements of EC Group that may fit within ISG, we believe that, due to its small size and market focus, we must keep the company together within CVG for a period. In this way, we will be better able to leverage CVG's community management expertise in order to roll out the EC Group's lite solution offering, potentially on a worldwide scale.
- ◆ Transition all EC Group customers off of BT EDI*Net onto the Amsterdam COMMERCE:Exchange node. Because EC Group presently does no in-network translations, this should be a relatively simple transition.
- ◆ Replace all Atlas products with the appropriate GENTRAN product. If necessary, we should consider giving the software to existing EC Group customers in exchange for their signing a one- or two-year maintenance agreement.
- ◆ Package GENTRAN with ETK-G and ETK-S for all future customer offerings.
- ◆ Leverage ID's existing UK customer base as well as its sales and marketing resources in order to drive EC Group's penetration of the UK supply chain management market.
- ◆ Extend EC Group's technology worldwide and evaluate EC Group's DTI Export solution and Bar Code solution to determine if this either solution could be extended worldwide.
- ◆ Communicate the acquisition effectively to the UK market. EC Group has disclosed to us that they are presently disadvantaged relative to GEIS and Kewill because they are perceived as a small company with limited resources. By effectively communicating the acquisition to the UK market, this perception will be eliminated.
- ◆ Communicate the acquisition effectively to existing EC Group customers. We must reinforce EC Group's value message to these customers and emphasize what is not changing as a result of the acquisition.
- ◆ Change the EC Group "ETK" naming convention to the "COMMERCE" naming convention.

8.2. Risk Factors

Due to its small size, we view the risk factors associated with EC Group to be very small. The major risk is that EC Group management may not be retained. On three separate occasions, Sterling Commerce personnel have visited with the management team of EC Group. In each instance, we have been highly impressed by their capabilities and their knowledge of the European market. It is therefore of value to the future of the business that the Slinns are retained for some period of time after acquisition.

However, we believe that the aforementioned risk is mitigated by the fact that EC Group's management team is at present very involved in and committed to the business and has indicated to us their desire to continue to grow the business.

9. FINANCIAL ANALYSIS AND VALUATION

EC Group has historically been profitable. With its business operations historically focused on providing EC solutions for its customers in the print industry, EC Group has a successful financial model in place. However, EC Group's growth has been limited due to its small size and scale. Only recently has the company added a second full-time salesperson as well as a full-time marketing professional to provide additional sales support.

By combining with Sterling Commerce's existing operations, we believe that the opportunity exists to grow EC Group's revenues more rapidly than the company would be able to on its own. In addition, existing Sterling Commerce customers, such as H.H. Pegg (acquired with the EDES acquisition) would provide attractive opportunities to further develop and enhance trading partner communities in the UK market.

The financial model created for EC Group makes a number of assumptions related to the future revenues and expenses of EC Group if it is acquired by Sterling Commerce.

9.1. Revenues

9.1.1. EC Tools

By far the two leading 'lite' EC solution offerings of EC Group are ETK-G (Gateway) and ETK-P (EC system). Excluding the project revenue that EC Group earned for the BT/Stralfors and other projects, ETK-G software accounted for 21% of revenue in 1997 and 33% of revenue through the first three months of 1998. Also excluding project revenue, ETK-P software accounted for 20% of revenue in 1997 and 15% of revenue through the first three months of 1998.

The financial forecast created for EC Group assumes that EC Group grows its software-related revenues at a rate of 60% in 1999, 50% in 2000, and 40% thereafter.

9.1.2. Network Services

Network services are sold in a tiered manner, with the per kilocharacter pricing ranging from approximately \$1.12 per Kchar at the lowest usage tier (2,400 Kchar / yr.) to approximately \$0.11 per Kchar at the highest usage tier (90,000 Kchar / yr.). As mentioned previously, EC Group considers its target market to be "supplier hubs." However, the network usage pattern of EC Group's customers suggests that these supplier hubs would likely be viewed by Sterling Commerce as "developing spokes." Approximately 75% of 1997 network sales and 100% of 1998 network sales to date (three months) have been in lowest two tiers of EC Group's offering.

Annual Network Volume Tier	Print EDI		CVG
	Rev / Kchar (1)	Rev / Kchar (2)	Rev / Kchar (3)
<2,401 Kchar	\$1.12	\$2.25	\$1.93
2,401 - 8,999 Kchar	\$0.49	\$0.77	\$0.74
9,000 - 14,999 Kchar	\$0.36	\$0.46	\$0.60
15,000 - 47,999 Kchar	\$0.16	\$0.25	\$0.51
48,000 - 89,999 Kchar	\$0.11	\$0.14	\$0.44
90,000+ Kchar	??	??	\$0.20

Notes:

- (1) Calculated at the maximum tier level.
- (2) Calculated at the midpoint of the tier.
- (3) All inclusive (i.e., Mailbox fee, etc.)

By contrast, the top three tiers above (i.e., >15,000 Kchar per year) account for approximately 84% of CVG's Network Services revenue. This highlights the fact that the Cornfield customer base consists primarily smaller companies. At the lower three usage tiers (<15,000 Kchar per year), which is EC Group's "sweet spot," the company's per kilocharacter revenue averages compare closely to CVG's. Based upon the foregoing, it is difficult to anticipate that we will be able to increase EC Group's pricing significantly from current levels.

The table below presents our assumptions regarding the future growth of EC Group's network services revenues. As indicated, we have assumed that the general trend of smaller users of network services continues, as it is these customers who would likely prefer the tiered pricing strategy. It is unknown if any of EC Group's present customers are with another VAN, so there has been no allowance for the conversion of these customers to Sterling Commerce upon acquisition.

Network Tier	1999	2000	2001	2002
1600 (200 Kchar / mo.)	50.0%	40.0%	50.0%	40.0%
2600 (750 Kchar / mo.)	55.0%	40.0%	40.0%	40.0%
3250 (1250 Kchar / mo.)	60.0%	35.0%	40.0%	40.0%
4700 (4000 Kchar / mo.)	50.0%	25.0%	30.0%	20.0%
5800 (7500 Kchar / mo.)	60.0%	20.0%	20.0%	20.0%

9.2. Expenses

EC Group has historically been very good at controlling costs. In 1997, EC Group earned operating profit margins of 16% and in 1998, operating margins are forecast at 13%.

9.2.1. Cost of Sales

In 1997, EC Group's cost of sales approximated 22% of revenues. Included in EC Group's cost of sales are the following items:

- Network costs from BT. EC Group resells BT's network services. Therefore, it should be expected that Sterling Commerce can lower EC Group's costs significantly in this area. Because it appears that EC Group's pricing is comparable to CVG's, we have assumed that the cost of sales for network services is reduced from current levels of approximately 15% of network revenues to 5% of network revenues.
- Commissions. We have not assumed any reductions in this area. We need to better understand the commission payout structure, etc.
- Atlas software. EC Group uses Atlas as its general translator on which it builds its ETK-G solution. It is anticipated that we would replace Atlas with the appropriate GENTRAN product and thereby reduce costs significantly in this area. We have assumed that costs can be reduced from approximately 20% of ETK-G revenue to approximately 14% of ETK-G revenue (a 30% reduction).
- PC Anywhere software. For remote maintenance (ETK-R), EC Group resells PC Anywhere at a 100% markup. This is a very small portion of total revenues (and thus, expenses) and, therefore, no savings have been estimated in this area.
- Hardware. As a solution provider, EC Group does have hardware as a minor component of its cost of sales. No reductions have been assumed in this area.

Through nine months of actual 1998 performance, EC Group's Cost of Sales is approximately 18% of total revenues. Assuming that a 18% cost of sales could be repeated in FY99 implies a Cost of Sales equal to approximately \$281 thousand. By applying the expense reductions highlighted above, we believe that EC Group's 1999 cost of sales could be reduced to approximately \$166 thousand on a pro forma basis, which is 10.6% of EC Group's forecast revenues (\$1.56 million) in 1999. We expect that there are additional opportunities to gain further efficiencies in this area as the business grows. Therefore, beginning in the year 2000, we have assumed that cost of sales represents 10.6% of revenue.

9.2.2. Operating Expenses

The forecast does not assume significant savings in the operations of EC Group, due to the fact that the company is presently very well managed from a cost containment perspective. However, over the past year, EC Group has added human resources and moved into a new facility, both of which indicate that it has the ability to grow its revenues without additional investment in these areas for some time. Our operating expense forecast is as follows:

Expense as a % of Revenue	1997	1998	1999	2000	2001	2002
Employment costs	39.8%	44.0%	35.4%	30.1%	30.1%	30.1%
Travel and entertainment	5.4%	5.5%	4.7%	4.0%	3.4%	2.9%
Office rental	2.4%	4.7%	3.0%	2.1%	1.6%	1.2%
Printing and postage	1.5%	1.1%	1.1%	1.1%	1.1%	1.1%
Professional services	0.9%	2.2%	0.0%	0.0%	0.0%	0.0%
Telecommunications	1.7%	1.8%	1.2%	0.9%	0.6%	0.5%
Other	5.4%	8.6%	5.5%	4.5%	3.8%	3.3%
TOTAL	56.0%	67.9%	51.1%	42.8%	40.7%	39.2%

9.2.2.1. *Employment Costs*

Employment costs increased from approximately 40% of revenue in 1997 to an estimated 44% of revenue in 1998. The increase in salary and related expenses as a percentage of revenue is largely due to the addition of Matthew Slinn, Andree Myers and Andy Cootie, all within the past year. This is significant, as we believe that EC Group has already made the investments in people which will be necessary in order to grow the business in the future. Accordingly, as this growth occurs, salary expenses as a percentage of revenue should be expected to decrease. The forecast assumes that this occurs until 2000, when salary expense reaches 30% of revenue and remains at that level throughout the forecast period.

9.2.2.2. *Travel and Entertainment*

Travel and entertainment expense increased from 5.4% of revenue in 1997 to an estimated 5.5% of revenue in 1998. Due to the addition of Sterling Commerce sales and marketing resources in the UK as well as EC Group's remote salesperson located in the London area, the financial forecast assumes that travel and entertainment expense will continue to grow at a slower rate than revenue.

9.2.2.3. *Other Operating Expenses*

EC Group's other operating expenses include printing and postage, professional services, telecommunications and other expenses. In aggregate, these expenses were approximately 10% of revenue in 1997 and are estimated at approximately 14% in 1998. The financial forecast assumes that EC Group's professional services expense can be eliminated by sharing ID and CVG administrative staff. Accordingly, these other expenses are assumed to decline as the business grows.

9.3. *Summary of Financial Forecast*

In the financial forecast attached to this memorandum, all of the above assumptions regarding the revenues and expenses have been taken into account. Due to the assumed growth of EC Group and the continued prudence in managing expenses, the attached financial model illustrates what we believe to be an achievable financial model. By FY2000, we believe that operating margins can increase to 36% (66%

before estimated acquisition amortization) from 12% in 1998 and an estimated 10% (54% before estimated acquisition amortization).

9.4. Valuation and Purchase Structure

Based upon the assumptions outlined herein and incorporating the savings to ID's existing UK operation resulting from a restructuring related to the acquisition, the EPS model calculates that at a purchase price of \$4.4 million, EC Group is EPS neutral in 1999 and accretive thereafter (assuming no purchase price write-off).

10. APPENDIX A – EMPLOYEE RESUMES

10.1. *Mike Slinn*

Date of Birth. 26th. May 1939

Status. Married. Three children

Qualifications:- B.Sc. Pure and Applied Mathematics.
Fellow of the British Computer Society
Member Institute of Printing

Experience:-

1961-1966. United Steels. Operational Research and Computer Management Officer.

1966-1971. Founder Director and General Manager of Electronic Data Processing Ltd. Now a 50m. fully-listed computer services company.

1971-1991. Managing Director Slinn Computer Group. Founded company and remained 90% equity owner. Sold to Radius Plc. in 1988. Relinquished position at end of three-year contract in 1991 to seek new opportunities.

1988-1991 Director Radius Plc. A 30m. turnover listed computer services company.

1991-1995 Consultant/Director Newcastle University Ventures

1992-Date Executive Director Focus Technology / EC Group.

1993-Date Member of UK Cabinet Office Technology Foresight IT and Electronics panel.

10.2. *Ken Foster*

Date of Birth:- 7th. May 1954

Status:- Married, no children.

Qualifications:- B.Sc. Special Honours.
Pure Mathematics. Sheffield University.
Member of British Computer Society.

Training:- Management Development at Sundridge Park Management College.

Quality Assurance.

Experience:-

1975-1976. Coggon Computers. Computer programmer.

1976-1991. Slinn Computer Group. Software Development Manager.
Customer Services Manager. Director Customer Services.
Director Product Division.

1992- 1995 Consultant Newcastle University Ventures.

1992- 1995 IT Consultant Royal Institute British Architects

1992- Date Director Focus Technology Ltd.

10.3. Richard Ward

Status:- Married, 1 Child

Qualifications:- Formal Marketing and Sales Training throughout career
Member of British Computer Society

Experience:-

1968-1975 Rank Xerox Salesman, Senior Accounts Manager, Major Accounts Manager. Outstanding track record of developing and gaining new business. Consistently exceeded quota and gained numerous awards.

1975-1980 Computer Peripherals London. Major Accounts Manager, Northern Sales Manager.

1980-1984 Wright Computer Logic. National Sales and Marketing Manager. Developed North UK Sales Office.

1984-1987 Cincom Corporation Major Accounts Manager. Responsible for ICI account world-wide.

1987-1992 Slinn Computer Group/Progress Software Ltd. Progress Sales Manager Developed UK Sales Operation Transferred to Progress as Regional Sales Manager. Perfected sales channel to such an extent that Sheffield office was most successful world-wide for 4 consecutive years.

1992-1993 Consultant and Company Director. Sales Strategy outline for Client Server Ltd. Consultant Beck Associates Ltd. Product and Market Consultancy NUV

1993-Date Focus Technology Ltd Business Development Manager

10.4. John Pearson

DOB:- 12th October 1957

Qualifications:- B. Eng. Electronics and Electrical Engineering

Experience:-

1980-1982 Sheffield University Microsystems Unit

1983-1986 Consultant designer/developer industrial control systems

1986-1996 Designer/developer business management applications.

1986-Date Focus Technology / EC Group Ltd. Product development

10.5. Mark Seaborne

DOB:- 11th February 1965

Qualifications:- M.A. Economic and Social History
M.Sc. Information Management

Experience:-

1992-4 University of Sheffield Researcher in Information Management

1994-6 Nottingham University Information management software development

1995 -7 Agricola Services Ltd CBT Software Development

1997 EC Group Ltd

10.6. Matthew Slinn

DOB:- September 1966

Qualifications:- UK General Certificate of Education

Experience:-

1986-1992 Slinn Computer Group Systems installations and sales

1992- 1995 Comshare Europe Sales Executive and Manager
Top of European league 1995

1995-1998 Centura UK Sales Director

10.7. Alan Eaton

D.O.B. 1954

Qualifications B.Sc Mathematics and Computer Science.

Experience:-

1975-9 Slinn Systems Ltd – Programmers

1979-91 Glass Gover - Analyst Programmer

Vink Plastics – IT Manager
Implementation of 160 seat JD Edwards system

1997 EC Group Ltd

10.8. Ruth Dodd

D.O.B:- 13 th September 1960

Qualifications:- B.A. Mathematics and Computing

Experience:-

1978-80 Slinn Systems Ltd Programmer

1980-1993 Triumph Adler Uk Support Manager

1993-97 RD Associates Training and Support Consultant

1997-Date EC Group Ltd

10.9. Philip Bargh

D.O.B.:- 1973

Qualifications:- B.Sc. Computer Science

Experience:-

1995-96 Programmer EC Group Ltd

1996-98 Support Analyst EC Group Ltd

To: Burt Grad

From: John Robinson Starkey Commerce

Phone: 614-793-5985

Date: June 24, 1999

Pages: 10 counting lead sheet

Subject: Financial Information For E.C. Group

Mr Grad,

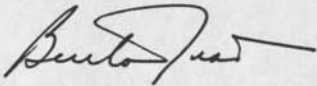
Please find attached the following:

- 1) statement of Profit and Loss for the Period Ended December 31, 1998 and Balance sheet for the same ending date.
- 2) statement of Profit and Loss for the Period Ended May 31, 1999 and Balance sheet for the same ending date.
- 3) Revenue By Product Line for the period January through December 1998 and the period January through March 1999.

BG

BURTON GRAD ASSOCIATES, INC.
101 POST ROAD EAST
WESTPORT, CONNECTICUT 06880
(203) 222-8718 FAX: (203) 222-8728
E-MAIL: BURTGRAD@AOL.COM

PRIORITY
net to BG
BG.
EV to match
to see what's
missing.

Date: May 20, 1999
To: Morgan Crew
Ed Hafner
David Winkler
Copy: John Blaine
From: Burton Grad 
Subject: Cornfield Valuation

As discussed in our May 20, 1999 conference call, BGAI plans to value the following acquired intangibles:

- **Software Products** — e-chain and e-partner
- **In-Process R&D Technologies** — e-chain/Web, e-chain/ToolSet and SAIFF/XML with appropriate reductions for core technologies (from Cornfield) and for percentage of work not yet completed (related to FAS86 technical feasibility); NPV of projected cash flow
- **Non-Compete Agreements** — Contracted value and time period (if any)
- **Retained Work Force** — Cost savings from not having to recruit, train and bring replacement employees to full productivity; adjusted for taxes
- **Customer Base** — Opportunity to sell other current CVG products and services to the Cornfield customers; NPV of projected cash flow
- **Developed Technologies** — Value/replacement cost for previously delivered or other new technologies for future products
- **Going Concern/Goodwill** — Remainder of acquisition cost not covered by tangible or other intangible assets

I am sending certain work sheets for you to prepare to provide the information that I will need to carry out the valuation process. The following items are enclosed:

- Attachment 1 Information Request List
- Attachment 2 Information needed to determine core technologies contributions (for each new offering)
- Attachment 3 Information needed to determine percent completion (for each new offering)
- Attachment 4 Retained employee cost savings analysis form
- Attachment 5a Cornfield Customer Base analysis form
- Attachment 5b Cornfield Customer Base potential for specific CVG products/services

Please prepare writeups on the three planned new products, including technical descriptions and market opportunities.

Information Required for Product and Technologies Valuation

1. List of principal Cornfield customers for preceding three years and the revenues from each of these accounts for each year
2. Analysis of Cornfield installed customer base including installation dates, maintenance status, platforms
3. Financial statements for Cornfield and SCI/CVG for the preceding three years
4. Effective SCI/CVG U. S. tax rate (federal and state) and international tax rate for budget purposes as of the acquisition date
5. Discount rate for SCI/CVG as of the acquisition date
6. Organization chart for Cornfield, with number of employees by function
7. Marketing materials for Cornfield
8. List, description, size and market share of principal competitors to Cornfield for networking software and services.
9. SCI/CVG acquisition analysis materials for Cornfield including financial projections
10. SCI/CVG business and strategic plans for acquired Cornfield products and technologies including planned products, types of services, pricing, development projects, etc.
11. SCI/CVG sales, marketing and support plan for acquired Cornfield products (both delivered and in process) and customers
12. Technical analysis of relevant Cornfield SCI/CVG products and in-process development activities in terms of applications, industries and system functionality
13. Technical plans for utilizing and incorporating acquired Cornfield technologies in future SCI/CVG products and services
14. Information on costs of replacing employees: recruiting, training, productivity

<Note: Many of these items were received during due diligence>

Core Technologies Contributions

The key steps are:

1. Identify primary functions for each of the new CVG products. For each primary function, identify principal "technologies" required.
2. Identify corresponding functions from previous Cornfield or CVG products (e.g., core technologies).
3. Map significance of functions in #2 to functions in #1.
4. Establish relative market value of each functional area, and then calculate weighted contributions of the core technologies.
5. The sum of the core technologies contributions will be deducted from the computed value of each of the new CVG products.

Percent Completion Analysis

The key steps are:

1. Establish an overall development plan covering start of project through general release; identify principal elements in the development process.
2. For each element, determine development effort/cost incurred (if completed or in process) or expected.
3. Lay out corresponding time schedule.
4. Identify development costs to acquisition date.
5. Determine date when new product can be expected to pass FAS86 technical feasibility test.
6. Identify development costs from acquisition date to FAS86 clearance date.
7. Identify remaining development costs -- from FAS86 date to general release date.
8. Are there any special technological complexity factors that would make the work done to date more valuable than the work still to be done prior to FAS86 clearance?

Employee Cost Savings Analysis

For retained employees, please fill out a table like the one below:

Employee Categories	Number of Employees	Average Monthly Salary	Time (months) to be Fully Productive	Recruiting Cost (% of Salary)
Executive/Senior Management				
Sales/Marketing				
Senior Technical				
Other Technical				
Customer Service				
Training				
Services				
Finance and Administration				
Total				

Customer Base Analysis

For customer base, fill out a table like the one below:

Customer Category	Number of Companies	1998 Annual Revenue	% Overlap with CVG	Average No. Years as Customer
Top 10%				
Next 20%				
Remaining 70%				
Total				

Customer Base Potential

For customer base potential, fill out a table like the one below:

CVG Products

Customer Base	1	2	3	4	5
Percentage of Customers who will Buy					
Price/Unit Sale (large, medium and small)					
Add-on/Upgrade (%)					
Retention Rate (%)					
Maintenance (%)					
First-year Maintenance (%)					
Services (% of NSS)					
Operating Margins (%)					

BURTON GRAD ASSOCIATES, INC.

101 POST ROAD EAST
WESTPORT, CONNECTICUT 06880
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(203) 222-8728 FAX
BURTGRAD@AOL.COM

May 20, 1999

Mr. Steve Shiflet
Sterling Commerce, Inc.
4600 Lakehurst Court
Dublin, Ohio 43017

Dear Steve:

At your request, Burton Grad Associates, Inc. (BGAI) would be pleased to perform a valuation of the intangible assets obtained by Sterling Commerce, Inc. (SCI) and its Commerce Services Group (CVG) in its acquisition of certain assets from EC Group (EC Group), a U.K.-based software and services company.

These acquired assets consist primarily of software products and technologies related to E-commerce-related applications. Other acquired assets include trained personnel and an existing customer base.

The technologies incorporated in the existing products and other technologies under development will be of significant value to SCI/CVG in its future software plans.

BGAI has been requested to determine the value of the products, technologies and other intangible assets acquired by SCI/CVG from EC Group. These assets may then be capitalized or written off as of the acquisition date according to appropriate SEC, FASB and other accounting rules.

SCI wishes to retain BGAI because of its extensive experience over the last 19 years in valuing software companies and their assets. BGAI will perform this independent valuation, using generally accepted valuation techniques. These valuations may be used by SCI to support financial (book) capitalization/amortization and in-process technology write-offs.

Work Plan

BGAI will perform this valuation study following these steps:

1. SCI/CVG will collect materials related to EC Group and SCI/CVG as specified by BGAI which will provide the basis for the valuation study. An initial list of materials requested is shown in Attachment B.

2. BGAI will examine these materials and conduct telephone interviews with selected SCI/CVG and EC Group executives to obtain information not available from the source materials or to amplify or clarify these materials.
3. BGAI will use selected valuation methodologies (principally net present value of projected cash flow; actual or reconstruction costs of technologies, etc.) and analyze materials and interview notes so as to construct the valuation models needed.
4. For these product and technology models, key valuation factors will be determined including customer revenues, operating costs, maintenance renewal rates, NPV factors, projected tax rates, etc. Using these factors, the recommended product and technology values will be determined.
5. For the other intangibles, appropriate models will be constructed using information on personnel, customers, etc. This will provide the basis for valuing the other intangible assets.
6. A valuation report will first be delivered in draft form to ensure that all information is accurate and complete and that the logic and calculations used are clear. Then the final report will be prepared and submitted, including appropriate appendices.

Staffing

The principal valuation work will be performed by Burton Grad. Sidney J. Dunayer, a BGAI Associate, will assist in the technology assessment activities. No other BGAI Associates will be used without prior approval by SCI/CVG including approval of assignments and rates. Grad's professional profile is enclosed as Attachment A-1. Dunayer's profile is Attachment A-2.

SCI/CVG and EC Group will assign liaison people to work with BGAI to provide financial, market, organizational and technical information as required.

Schedule

SCI/CVG and BGAI will agree on a specific time schedule for the valuation study. It is BGAI's current intent to start work on this project on May 24, 1999 and to complete the assignment by June 15, 1999. Meeting this schedule will depend upon timely availability of the source information and prompt interview responses by SCI/CVG and EC Group personnel. Preliminary valuations will be provided during the study if needed by SCI.

Confidentiality

BGAI will treat all information received and developed as confidential to SCI/CVG and EC Group and not disclose this information to any third party without prior written authorization from SCI/CVG.

Costs and Payments

This SCI/CVG valuation project will be performed on a time and expense basis. Burton Grad's consulting rate for this work is \$2,500 per day. Sidney Dunayer's rate is \$1,500 per day. From the information currently available to BGAI, it would appear that the project will require approximately 6-8 days of consulting services, assuming that no on-site meetings are required and that there are no substantive changes in the scope of the project. The total fees are estimated at \$20,000. SCI/CVG will be informed in advance if the projected costs may exceed this estimate.

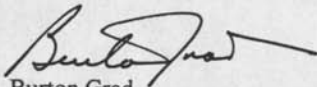
Authorized expenses including travel, telephone, facsimile and express delivery charges will be invoiced at cost. These will be minimal (under \$500) since there are no on-site meetings planned.

Project costs will be invoiced monthly; upon completion of the study, the total remaining fees plus expenses will be invoiced. All invoices are payable within fifteen days of receipt.

If the above project description is satisfactory, please sign below and return a signed copy to BGAI.

Sincerely,

Accepted for: Sterling Commerce, Inc.



Burton Grad
President

by _____
signature

Enclosures

BG:5045

cc: John Blaine
Morgan Crew
Ed Hafner
David Winkler

Information Required for Product and Technologies Valuation

1. List of principal EC Group customers for preceding three years and the revenues from each of these accounts for each year
2. Analysis of EC Group installed customer base including installation dates, maintenance status, platforms
3. Financial statements for EC Group and SCI/CVG for the preceding three years
4. Effective SCI/CVG U. S. tax rate (federal and state) and international tax rate for budget purposes as of the acquisition date
5. Discount rate for SCI/CVG as of the acquisition date
6. Organization chart for EC Group, with number of employees by function
7. Marketing materials for EC Group
8. List, description, size and market share of principal competitors to EC Group for networking software and services.
9. SCI/CVG acquisition analysis materials for EC Group; product revenue and income projections
10. SCI/CVG business and strategic plans for acquired EC Group products and technologies including planned products, types of services, pricing, development projects, etc
11. SCI/CVG sales, marketing and support plan for acquired EC Group products (both delivered and in process) and customers
12. Technical analysis of relevant EC Group and SCI/CVG products and in-process development activities in terms of applications, industries and system functionality
13. Technical plans for utilizing and incorporating acquired EC Group technologies in future SCI/CVG products and services
14. Information on costs of replacing employees: recruiting, training, productivity

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ELECTRONIC COMMERCE

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Matthew Slinn
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Web: www.e-commercegroup.co.uk

SOLUTIONS FOR THE SUPPLY CHAIN

e-chain



e-partner



JARVIS PORTER

WINE & SPIRIT DIVISION

*Working in partnership
with their customers in the
wine and spirits industry*



**supply chain
integration**

case study



JARVIS PORTER IS ONE OF EUROPE'S LEADING LABEL PRINTERS SERVING THREE DISTINCT MARKETS - INTERNATIONAL DRINKS & BEVERAGES; HEALTH & BEAUTY; COMPUTERS AND ELECTRONICS. THE COMPANY HAS ENJOYED STRONG GROWTH IN RECENT YEARS AND NOW HAS A TURNOVER OF OVER £100M. IT OPERATES 21 PLANTS THROUGHOUT EUROPE AND THE USA AND EMPLOYS OVER 1,000 PEOPLE.

The Wine and Spirit Division supplies premium branded labels into highly focused international markets. It provides high standards of service through Efficient Customer Response (ECR).

Quality has always been the watchword at Jarvis Porter. The Company has gained over 20 awards for quality, innovation and cost reduction, and meets all relevant international standards for products and manufacturing processes. Over the last few years continuous programmes have been operated to increase efficiency and reduce lead times. Jarvis Porter has won a number of customer awards, of which the latest was a gold award for business improvement.

The organisational structure is account team based to ensure effective and responsive communications. Jarvis Porter's commitment to ECR is now further demonstrated by the implementation of accelerated customer response programmes providing Electronic Data Interchange (EDI) and networking capabilities.

Innovative Customer Inventory & Consignment/Call-off System (CICCS)

Jarvis Porter has long recognised that Information Technology was key to many aspects of business improvement. This has now been underlined by several recent developments in the Wine & Spirit Division. One development in particular allows customers to enter data directly to the Jarvis Porter delivery schedule, thus ensuring both accurate and timely processing.

The Customer Inventory and Consignment/Call-off System, CICCS, is a customer-integrated link for component call-offs and consignment stock usage. Developed with Jarvis Porter, it is supplied and supported by Print EDI - the upstream supply chain integrator. CICCS uses international standard EDI messages for exchange of inventory and replenishment information. Having been installed on customers' PCs at a number of sites, the software provides detailed information on replenishment status, stock and work-in-progress of labels supplied by Jarvis Porter.

Call-offs and consignment stock usages can be entered directly by the customer against this schedule to ensure effective and efficient processing. The system checks instantly against label quantities and ensures that lead times are feasible. Replenishment orders are returned by EDI to Jarvis Porter and enter the Company's MIS/MRP system directly without any re-keying of data.

CICCS is already having a positive effect by significantly reducing manual administration. James Bland, Process Manager I.T., says "Customer care teams are gaining extra time to serve the needs of the customer and this will increase further as more of them adopt the process. This has been an excellent opportunity to work directly with customers in projects which provide significant benefit to them without any additional cost or resource. We are now keen to discuss how the system works with all our customers".

Wine and Spirit Managing Director, Peter Holt, says "These major enhancements are the beginning of this initiative, not the end. There is still too much manual intervention which we can remove. The focus of attention is to work closely with our customers. By sharing information we can meet the increasing demands for speed of response and accuracy in supply in the ever decreasing timescales expected".

How the service was developed

Jarvis Porter is currently undertaking a number of initiatives aimed at achieving world class status. A cornerstone of this strategy was a review of EDI opportunities within the Wine and Spirit Division. It was recognised that EDI software was

developing rapidly and the Division was keen to exploit the potential benefits of joint ventures with its customer base. The best way to make this happen was considered to be through forming a strategic partnership with a single EDI service provider.

James Bland, Process Manager I.T., said "We looked for a system which would help us to maintain competitive advantage, providing additional benefits at no extra cost to the customer and enabling direct computer to computer contact between ourselves and our customers. Service, reliability and an understanding of our business were key factors in choosing Print EDI. They took on most of the development pressure which allowed us to concentrate on our business and deliver an even better service".

Jarvis Porter's Process Support Manager I.T., Michael Patchett, was equally enthusiastic about the involvement of Print EDI. "All suppliers are different but Print EDI's adaptability, speed of response and 'can do' attitude was particularly impressive. Their whole approach was business focused and customer oriented."

Implementation of the service

The CICCS software was installed at a number of key customer sites during the latter half of 1997 and was rolled out to other customers throughout 1998. Significant benefits are being realised and Jarvis Porter is working closely with its customers to ensure that the service continues to satisfy their requirements.

BENEFITS FOR JARVIS PORTER & ITS CUSTOMERS



- Inventory control** - significantly improved resulting in reduced stock levels
- Customer product identification** - errors virtually eliminated
- Re-keying of information** - eliminated with delivery errors reduced
- Administrative productivity** - increased with a substantial reduction in clerical processes
- Customer relationships** - maintained and improved
- Lead times** - shorter and more achievable due to faster, more direct communication

a case study by the

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Solutions

for the

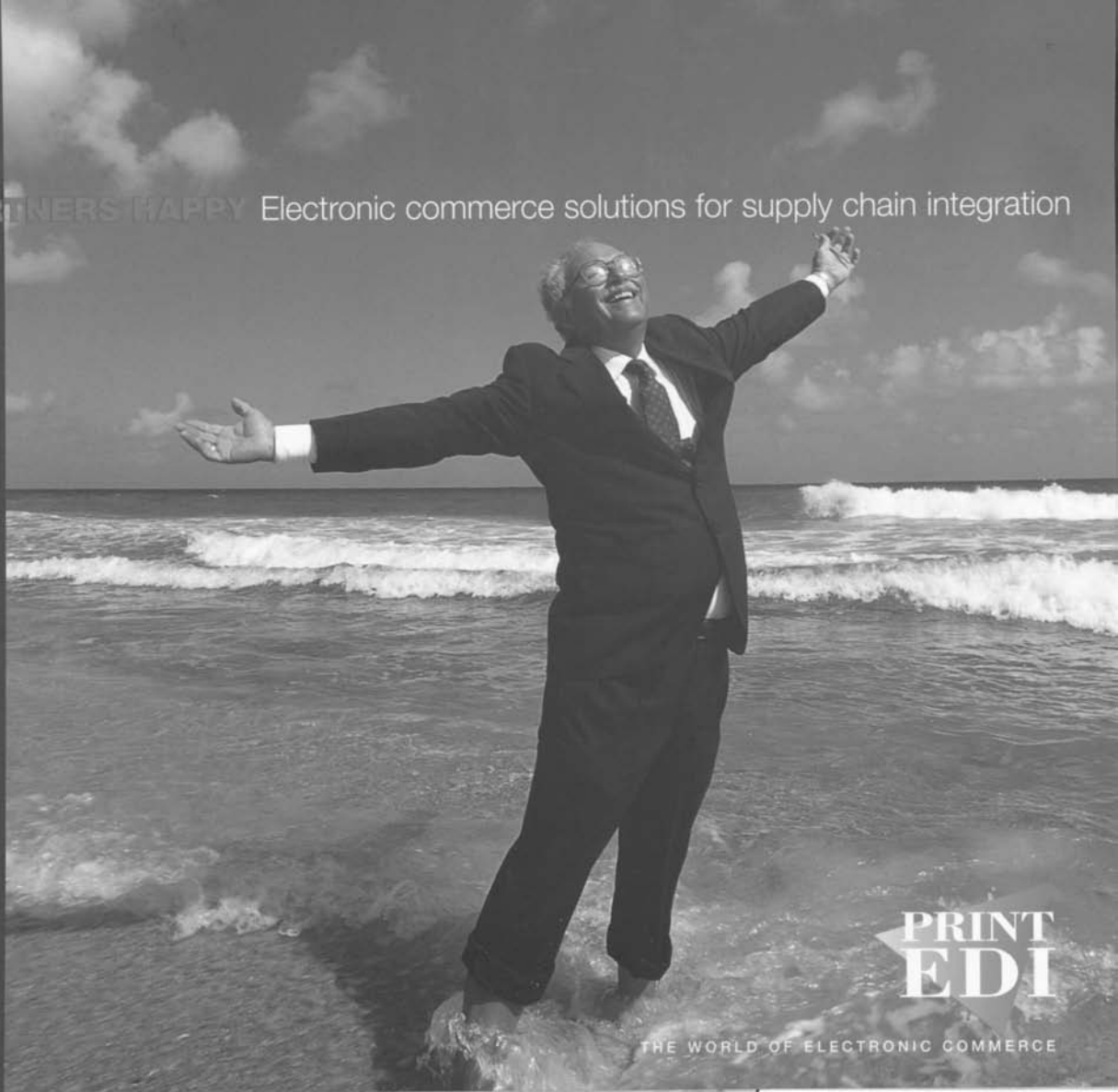
supply chain

e-chain  *e-partner*

ELECTRONIC COMMERCE GROUP LTD
TAPTON PARK INNOVATION CENTRE
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TELEPHONE: 01246 279700 FACSIMILE: 01246 230117
EMAIL: info@e-commercegroup.co.uk
WEB: <http://www.e-commercegroup.co.uk>

Keepings

YOUR TRADING PARTNERS HAPPY Electronic commerce solutions for supply chain integration



**PRINT
EDI**

THE WORLD OF ELECTRONIC COMMERCE

Print EDI

IN ACTION



In recent years technology has overturned traditional business practices. It has transformed the expectations of customers and the way companies manufacture and distribute their products. At Print EDI we believe that the benefits of trading electronically are overwhelming: better service levels, less investment in inventory, lower administration and increased customer retention, to name but a few.

Print EDI offers dedicated electronic trading, messaging and bar coding solutions for complete supply chain integration. Since its inception in 1992, the Company's mission has been to make data interchange open, accessible and straightforward to implement. A major milestone was the development of the Company's unique Standard Applications Interface File Format - the result of a

3-year, £1 million development programme. This neutral and simple-to-use middleware is compatible with national and international standards, including EANCOM, EDIFACT, Odette, Tradacoms, ANSI X12 and the rapidly emerging XML/EDI. It forms the heart of Print EDI's Electronic Trading Kit - a modular applications builder that can be deployed at any point in the supply chain.



Through innovative software design, Print EDI has opened up the world of electronic commerce to all

businesses. It doesn't matter where your company is in the supply chain nor what messaging standards your trading partners use; Print EDI can offer affordable e-trading solutions backed by a world class team of development and applications engineers.

servicing

A DIVERSE MARKET



Extended supply chains and complex trading relationships are a feature of today's global market. Print EDI has developed generic solutions which benefit any size and type of trading organisation from corporate businesses wishing to standardise systems across divisions and trading partners, to small producers operating in a regional market.

Whatever the scale of your operation and the nature of your market, Print EDI can provide a fully integrated electronic commerce solution:



integrating

THE SUPPLY CHAIN



Channels of supply have always been complex.

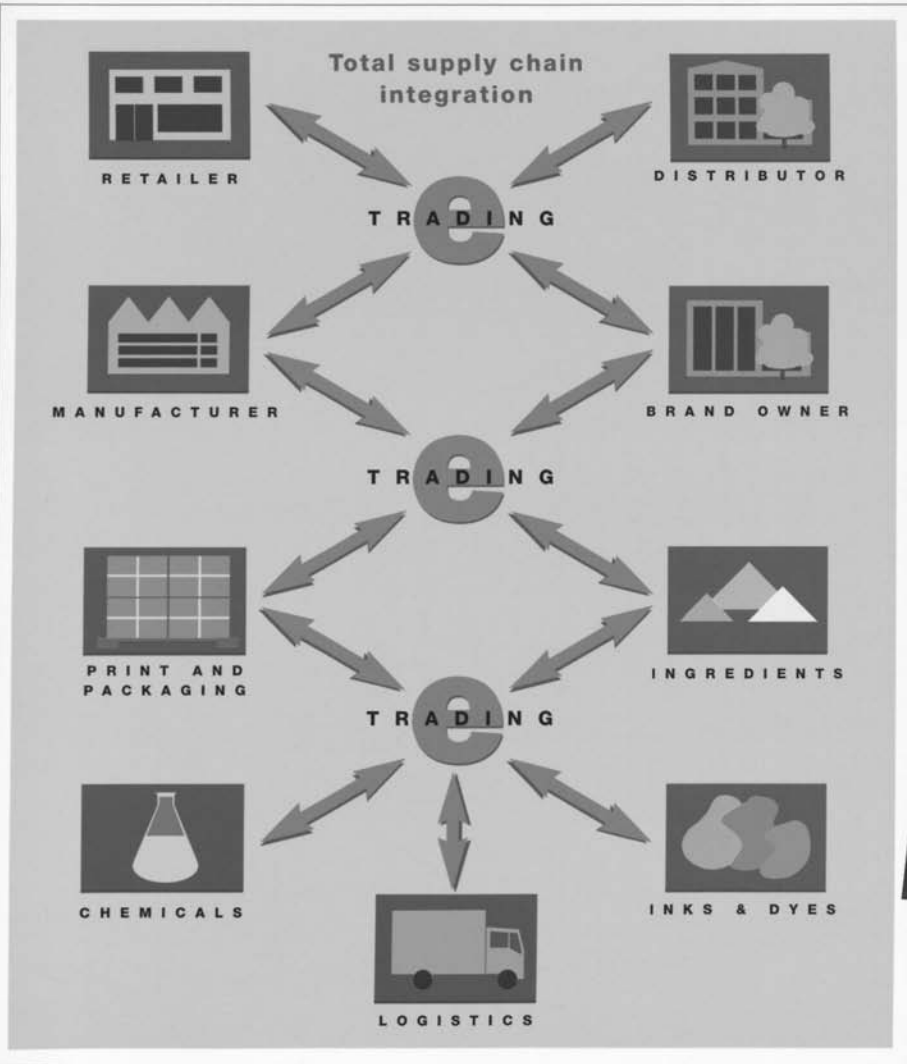
The changes have been in expectations of quality and delivery...and those of your customers.

Effective supply chain management depends on retailers, manufacturers and their upstream suppliers sharing information - accurate, timely data to enable parties to make judgements on scheduling, quantities and shipments.

Information which is vital to optimise inventory levels and anticipate forward demands. Ultimately the aim of all businesses in the supply chain should be to satisfy the end user, but unfortunately a chain is only as strong as its weakest link.

The foundations of the Electronic Trading Kit are complete product and material life cycle studies undertaken by Print EDI consultants. This work enables the company to deliver electronic commerce solutions which integrate the supply chain through all stages. Whether you choose to adopt a Print EDI solution independently, respond to an initiative by your biggest customers or roll-out software to your suppliers, our Electronic Trading Kit will provide an open solution for all trading partners.





The value of business-to-business electronic commerce is predicted to grow from £5 billion today to around £200 billion in 2002. Print EDI can help to safeguard your company's success by investing in trading technology. In this way you can benefit from initiatives such as Efficient Consumer Response, Co-managed Inventory and Continuous Replenishment, which enable you to forge stronger links in your supply chain.



WINNERS OF THE ANA SUPPLY CHAIN MANAGEMENT AWARD

total

E-TRADING SOLUTIONS



The Print EDI range of products and services forms a comprehensive and integrated electronic trading kit covering the complete spectrum of users. Small businesses may begin with a start-up solution, which accepts the orders of their key customers, and gradually upgrade to electronic trading with all customers and suppliers.

SAIFF Standard Applications Interface

File Format: At the centre of this award winning technology is the Standard Application Interface File Format. This powerful 'middleware' translates all messages into a single level simple-to-use file format. It allows companies to exchange data in any form, safe in the knowledge that not only can it be read by the recipient but also integrated into their core systems.

ETK-G Open Gateway: Makes electronic messaging available to every customer and supplier. All information irrespective of source, destination, standard (UN-EDIFACT, ANSI X12, XML, Flat-File, etc.) or data content is expressed

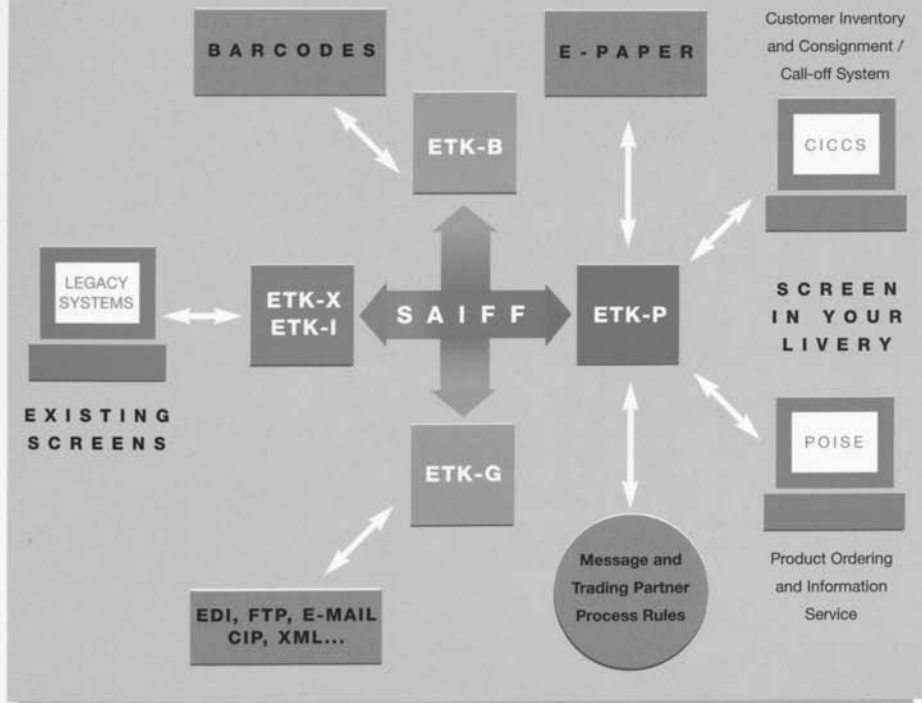
in one single-level Standard Applications Interface File Format which can be rapidly integrated with existing applications.

ETK-B Bar Code Integration: Makes remote control of stocks and replenishment viable, translates bar codes into Standard Applications Interface File Format. Allows integration of item identities with transactions affecting each item, e.g. despatch advice (the transaction) and pallet numbers (the items described in the despatch advice or transaction). Prints bar code labels for pallets, boxes and reels.



ETK-X X-Keys System: Converts the electronic message into key strokes so that data may be input to existing applications without re-development. Available on Windows terminal emulators and other applications such as spreadsheets.

The e-trading kit



The system is particularly effective where the business process demands intervention to check job specifications and order exceptions on-line.

ETK-I Interface File Conversion: Exchanges data directly with standard interface files where these are available on MRP, MIS or similar user applications. The data is loaded directly to or from ETK-G for automatic conversion of customer and supplier messages.

ETK-P Product and Supplies Electronic Commerce System: Enables the rapid visual development of electronic commerce applications using a data repository of messages. Typically it is used to enhance the scope of existing applications, e.g. where e-commerce partnerships demand message acknowledgements, product details, forecasts and inventory information. The system enables the implementation of new business processes, such as automatic replenishment, consignment stocks and co-managed inventory.

Setting the Standard

THE STANDARD



Print EDI sets the standards for others to follow.

The Company is totally committed to the advancement of standards for data exchange and automatic product identification. We contribute directly to development groups, including EDIPAP and ECR Europe Upstream, XML/EDI, UN-EDIFACT and EAN.

Our software solutions are the result of extensive research, innovative use of technology and painstaking development and testing. Our proven solutions are now being used by a growing list of corporate clients. A measure of our success is that 50% of new business comes from users of competitive systems. But don't take our word for it. This is what some of our customers say . . .

"We installed the Print EDI system at our Leeds factory in early 1997. This quickly provided us with improved response from a major customer and gave us the confidence to move forward with further installations including JP Zwart in Holland. The back-up service we have received is exceptional."

James Bland, Jarvis Porter

"We have worked closely with Print EDI to offer our customers an EDI ordering and invoicing service. Their understanding of the paper and board supply chain was a key factor in very quickly achieving a successful installation."

Bob Harland - Iggesund

"A customer in the automotive components supply business asked to send delivery schedules using an ODETTTE EDI message. Print EDI had us up and running within days and we are very pleased with the software and back-up service."

Dennis Marshall - Storey Evans

total

CUSTOMER COMMITMENT



UNIQUE DEAL

*ALL-INCLUSIVE ANNUAL
SERVICE CHARGE INCLUDING*

—
NETWORK TRAFFIC

—
FULL TRAINING PROGRAMME

—
NEW MESSAGE MAPPINGS

—
ON-SITE IMPLEMENTATION

—
UNLIMITED TELEPHONE AND
REMOTE DIAL-UP SUPPORT

—
SOFTWARE UPGRADES

People are the lifeblood of any organisation. To support the implementation of our leading-edge technology, we need highly skilled people - method/data analysts, software technicians, consultants, project managers and installation engineers. We understand just how important it is to manage change and system integration in a sensitive way.

Our team gives the utmost attention to detail at all stages to ensure smooth implementation. Our objective is to install systems, which will satisfy the current and future needs of your business and those of your trading partners. Electronic trading systems, which deliver real and measurable business benefits.

Print EDI's service levels are second to none. We understand that installing the system is not an end in itself. Our experience of hundreds of successful

implementations enables us to provide a fully tailored training programme. The Print EDI 'Unique Deal' provides services which are inclusively priced - service, support, maintenance and upgrades are all covered in an agreed annual fee.

Telephone and remote dial-up support services are available at no extra cost. You can budget irrespective of the number of new trading partners and messages. You'll also be safe in the knowledge that your system will be open to all customers and suppliers whatever message standards they use. Trading relationships can be established in hours rather than days. Whatever your existing systems and platforms - Mainframe, AS400, Unix or PC, we can quickly and cost-effectively automate the flow of data.

The Print EDI 'Unique Deal' - total customer commitment at a predictable fully inclusive cost.



shaping

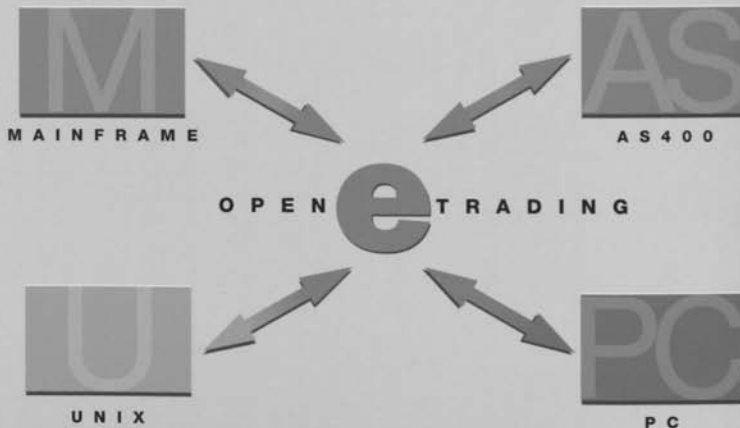
THE FUTURE

Technology is advancing every day. The rapidly emerging XML and XSL web are now joining standards such as UN-EDIFACT. Print EDI is at the forefront of this new technology and is in a unique position to blend Electronic Data Interchange, Bar coding and Internet solutions to provide fully integrated e-trading systems.

But how can you be sure that the messaging system you select will be compatible with systems operated by your trading partners?

Print EDI's Standard Application Interface File Format provides the ultimate open link. Any EDI standard or discrete 'flat-file' is automatically translated by the Electronic

Multiple standards-One common e-trading language



Trading Kit, so that applications see only one consistent set of logical data. This ensures that your Print EDI system will communicate with other systems internal or external to your organisation and from any vendor.

Through their unique vision, Print EDI has shaped the future of electronic trading - open, accessible, generic solutions for supply chain integration.

OUR MISSION

*UNDERSTAND YOUR BUSINESS
AND ITS SUPPLY CHAIN*

*ADD VALUE FOR YOU AND YOUR
TRADING PARTNERS*

*DELIVER PRACTICAL,
VALUE-FOR-MONEY SOLUTIONS*

*FOCUS ON THE KEY TARGETS
OF MARGIN, MARKET SHARE
AND CUSTOMER SERVICE*

**PRINT
EDI**

HOW

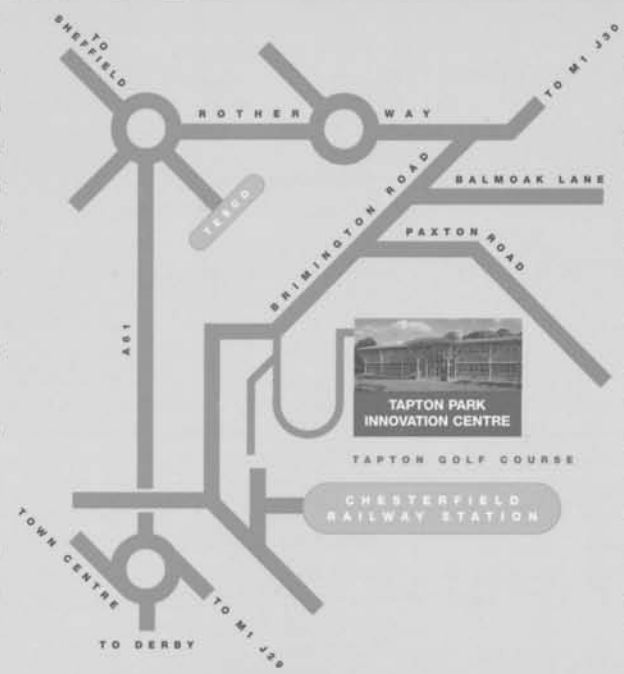
TO FIND PRINT EDI

BY RAIL

Chesterfield is on the main London (St. Pancras) to Sheffield line with fast trains to the Capital every hour. Trains from the South West, the North East and Scotland also stop.

BY AIR

Manchester International Airport is only 1 hour 15 minutes away. From here you can catch daily flights to all parts of the world. Sheffield Airport, Humberside International, East Midlands, Leeds/Bradford and Birmingham International are all within half an hour to 2 hours drive.



BY ROAD

From Junction 29 northbound on the M1 follow signs for Chesterfield. Turn right on the A61 towards Sheffield and turn right at the next roundabout (Tesco on the right) towards Tapton. Turn right into Tapton and the Centre is half a mile on your left.

From Junction 30 southbound on the M1 follow signs for Chesterfield. Travelling through Stavely and Brimington (approx. 7 miles) turn left towards Tapton. The Centre is half a mile on the left.

From Sheffield and Derby keep on the A61 until the Tesco roundabout, then follow signs for the Centre.



AN ELECTRONIC COMMERCE GROUP COMPANY

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**PRESS
RELEASE**

Ref: "OPINION" – Print Week

ARTICLE:

INTER-TRADING . . . THE FUTURE'S ELECTRONIC

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The forum for future print and packaging trade is on the Internet. Matthew Slinn looks at the forces driving the changes, and what companies will need to do in order to preserve and expand their trading positions.

Whilst print and packaging companies battle to get technology and operations right on the shop floor, the parameters which govern trading relationships between organisations are set to become ever more critical. Fail to get trading technology right and you could fail to win new contracts. You might be well equipped to trade in shop floor terms, but if your organisation isn't 'electronic commerce ready' then you might find yourself out-manoeuvred by a competitor who is already geared up.

The supply chain consists of all the businesses that need to trade in order to achieve a completed order. Electronic commerce or Electronic Data Interchange (EDI) assist the process by enabling the automatic transmission of documents such as sales orders, purchase orders, enquiries, invoices, goods received notes, export documentation and confirmation of payments.

The 'rules of trade' in today's highly competitive markets are defined by major driving forces outside our direct control. The first of these is the Economic Monetary Union (EMU). As EMU gathers momentum, it is highly likely that trading legislation will enforce electronic trade as a means to achieve trading efficiency and, more importantly, better international trading control. Although the UK can perhaps afford to sit on the sidelines for a short while and see how the game unfolds, ultimately there will probably be no choice but to fall into line.

SOLUTIONS FOR THE SUPPLY CHAIN

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The second driving force is the pressure exerted by the strongest members within the supply chain. Those closest to the source of the demand, for example big supermarkets, tend to act mercilessly in defining the rules. In order to achieve maximum speed of response and shorter lead times, companies who are not able to trade electronically will be cut out of the supply chain in favour of those who can.

The third driving force is the possibility within the next few years of legislation covering global efficiency and eco-friendly trading. As the trading mechanism which uses the fewest resources to effect trade between companies, e-commerce will have a significant role to play. These developments will gradually unfold in the months to come, but print and packaging companies can derive many benefits today from promoting and using e-commerce with immediate trading partners to drive down costs, reduce mistakes and improve efficiency.

The supply chain is a complex and finely balanced mechanism, which is constantly changing according to trading conditions. Weak links in the chain are gradually replaced by stronger ones. As national and international trading becomes increasingly Internet based and Electronic Data Interchange is defined by international standards, companies need to implement an electronic trading product in order to secure their position in the chain.

Electronic commerce gives the benefits of quick reaction, speed and ease of trading to the whole supply chain. Companies may be chosen automatically and electronically in the future as part of a new supply chain. Your company will advertise on the web as 'ready to trade'. International product definition rules will be applied. Your customer's computer will automatically check your stock levels, lead times and price to a set of pre-determined parameters and then, assuming it gets a match, it will place the order with your computer system – the whole process achieved via a set of EDI transactions!

- *Matthew Slinn is Managing Director of Print EDI Limited, which provides Electronic Data Interchange, Bar Coding and Internet solutions with a specialism in the Print, Packaging and Paper supply chain.*

**PRESS
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3 November 1998

JARVIS PORTER ENTERS INTO THE 'SPIRIT' OF ELECTRONIC TRADING

International label producer, Jarvis Porter, believes that future success in its highly competitive global market is dependent upon forging stronger links with trading partners. A cornerstone of this strategy is the adoption of electronic trading within the Wine and Spirit Division. Their quest was to find a leading edge EDI service provider with specific knowledge of the print, paper and packaging sector. That company was Print EDI.

Jarvis Porter's Process Manager I.T, James Bland, said "We looked for a system which would help us to maintain our competitive advantage and provide additional benefits at no extra cost to the customer by enabling direct computer to computer contact between ourselves and our customers. Service, reliability and an understanding of our business were key factors in choosing Print EDI. They took on most of the development pressure which allowed us to concentrate on our business and deliver an even better service".

The challenge facing Print EDI was to implement a system which would allow Jarvis Porter's customers to enter data directly to the delivery schedule, thus ensuring both accurate and timely processing. The solution was to adopt Print EDI's CICC'S software - the Customer Inventory and Consignment/Call Off System. CICC'S is a customer-integrated link for component call-offs and consignment stock usage. It uses international standard Electronic Data Interchange messages for exchange of inventory and replenishment information.

Installed on customers' PCs at a number of sites, the software provides detailed information on replenishment status, stock and work-in-progress of labels supplied by Jarvis Porter.

SOLUTIONS FOR THE SUPPLY CHAIN

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Replenishment orders are returned by EDI to Jarvis Porter and enter the Company's MIS/MRP system directly without any re-keying of data.

The CICC software is already having a positive effect by significantly reducing manual administration. James Bland adds: "Our customer care teams are gaining extra time to serve the needs of the customer and this will increase further as more of them adopt the process. This has been an excellent opportunity to work directly with customers in projects which provide significant benefit to them without any additional cost or resource".

Print EDI has worked closely with Jarvis Porter staff at all stages from specification through to system implementation. Print EDI's Managing Director, Matthew Slinn, says "The key to successful electronic trading is to fully integrate all links in the supply chain. Our considerable knowledge of the print sector, coupled with our ability to develop and apply leading-edge technology, has enabled us to implement e-trading solutions which will allow Jarvis Porter to forge better relationships with customers and suppliers alike".

Jarvis Porter's Process Support Manager I.T., Michael Patchett, was equally enthusiastic about the involvement of Print EDI. "All suppliers are different but Print EDI's adaptability, speed of response and 'can do' attitude were particularly impressive. Their whole approach was business focused and customer oriented."

But what of the future? Jarvis Porter regards these major enhancements as the beginning of the initiative, not the end. The Wine and Spirit Managing Director, Peter Holt, says "There is still too much manual intervention which we can remove. The focus of attention is to work closely with our customers. By sharing information we can meet the increasing demands for speed of response and accuracy of supply in the ever decreasing timescales expected".

ends

Print EDI provides Electronic Data Interchange, Bar Coding and Internet solutions with a specialism in the Print, Packaging and Paper supply chain. Its solutions help customers and suppliers to realise the tangible rewards from supply chain integration.

For further information contact:

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**PRESS
RELEASE**

20 March 1999

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THE ELECTRONIC COMMERCE GROUP *RE-SHAPING THE FUTURE OF BUSINESS TO BUSINESS E-TRADING*

Business to business e-commerce is now on the brink of a new era, where fully integrated open e-trading spans an entire supply chain. For the last decade, there has been a global race between academics and developers. The goal was to create a solution for the extended enterprise with companies trading computer to computer regardless of each system's capabilities and format.

The Derbyshire based Electronic Commerce Group Ltd. has won this race with the introduction of its *echain* product suite. Following a £1million, three-year development programme, a set of radical software tools has been developed, backed up by exemplary training and dedicated user support.

Blending copyrighted 'between-ware', traditional EDI, Bar Coding and the Internet, *echain* links the extended enterprise. Entire upstream supply chains are now able to effect near perfect replenishment.

Strategies such as Vendor Managed Inventory (VMI), Customer Managed Inventory and Continuous Replenishment promise so much. Hitherto, their implementation has been extremely cumbersome to say the least, simply because the right application software has not been available. With the introduction of *echain* companies can now initiate VMI trading relationships

SOLUTIONS FOR THE SUPPLY CHAIN

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throughout the whole upstream supply chain in days. The effect is profound. Lead times are dramatically reduced; costs are slashed; slow-moving inventory is confined to the history books.

Reaching out across the supply chain and connecting SAP to Baan to SSA to Pegasus to JDE to People-Soft to Spreadsheets to bespoke applications and enabling these solutions to share sales forecasts, consumer demand, work-in-progress, stock, lead-times and in-transit data has for years eluded even the most forward thinking and innovative software business. That is, until now.

Matthew Slinn, Electronic Commerce Group's Managing Director, says " *e-chain* is revolutionising the supply chain and helping to remove the shackles which have for years prevented companies from trading efficiently". Having been instrumental in starting the silent electronic revolution, what does he believe the future holds? Matthew has a stark message for organisations that don't 'trade up': "Failure to invest in e-trading technology will result in failing to win new contracts or even retain existing customers. The future of business lies in electronic trading. Those who fail to embrace it will make themselves inaccessible to their target markets; certainly not a good recipe for success in the millennium and beyond".

The Electronic Commerce Group is based in Chesterfield, Derbyshire and can be contacted on 01246 279700, via the web <http://www.e-commercegroup.co.uk> or via e-mail info@e-commercegroup.co.uk

Ends

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PrintWeek

Reprinted from 9 October 1998

E-commerce

Print lags behind in EDI take-up

A black and white photograph showing a hand pointing at a computer monitor. The monitor is tilted and shows a bright, indistinct area. A keyboard is visible in the lower right corner of the image.

Only a handful
of UK Printers are
using Electronic
Data Interchange.
For a concept with
so much promise,
why isn't it more popular?

**PRINT
EDI**

PART OF THE ELECTRONIC COMMERCE GROUP LIMITED

EDI Why The Hold Up?

For a concept with so much promise, why aren't more UK printers welcoming Electronic Data Interchange with open arms?
Karen Charlesworth reports

Picture your order processing department. You get orders coming in by fax, by phone, by post, from the reps, from customers calling in, maybe one or two by email or on a disk along with the artwork.

Sometimes the fax scrambles an order; sometimes the handwriting's illegible; sometimes an order gets lost on your desk, or a careless coffee-ring obliterates an essential detail. Every one of your customers lists their requirements in a different order, and one or two have even forgotten to give you all the information you need – a stock weight missing here, a quantity missing there – so you have to make some calls.

It all adds up to inefficient working practice, wasted time and delayed jobs. But what if you could get all your orders in the same format, by computer, and all you needed to do was press a key to watch them slide effortlessly into your sales order processing system? Well, you can. It's called Electronic Data Interchange (EDI), and it's probably even better for your sales clerk's headache than a few paracetamol and a strong cup of coffee.

"If customers can simply type into an on-screen form and hit a button to send you their order, it makes them more likely to get their print from you than from the printer down the road"

Matthew Slinn
Print EDI

The basic principle of sending and receiving information by electronic means has probably been around as long as there have been computers to talk to each other, but it's only in the past eight or 10 years that EDI proper has grown into a multi-million pound industry across the world. It's largely being pushed by the

retail industry, whose requirements in terms of rapid response, accuracy of quantity and precise delivery times have increased dramatically over the past few years.

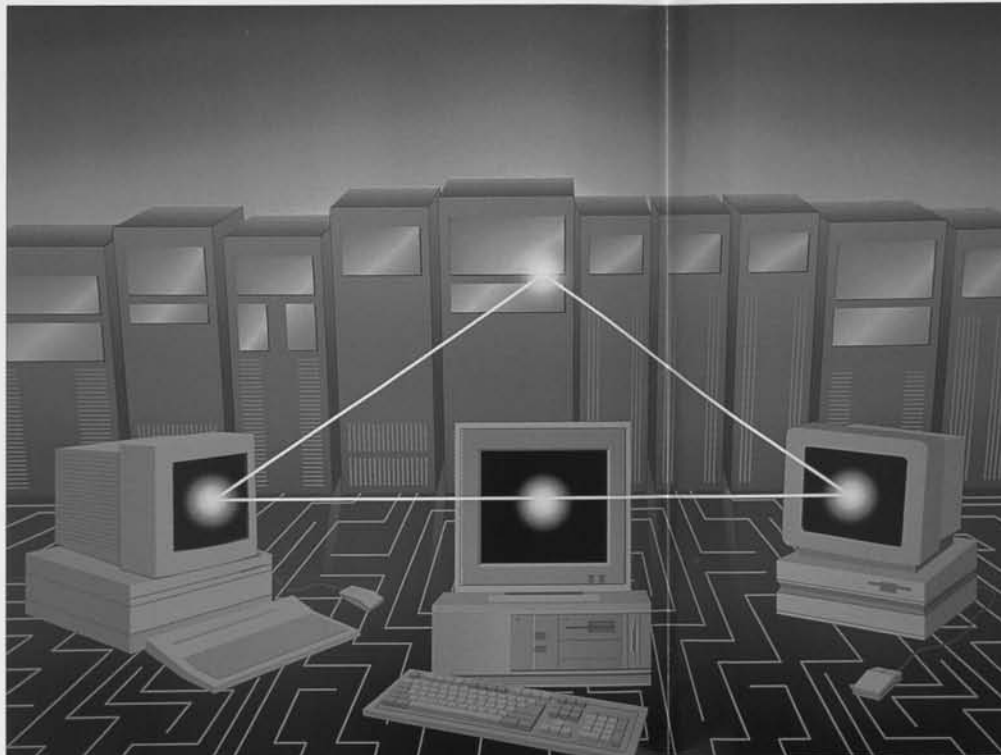
EDI has applications wherever a supplier and customer need to trade regularly with each other. You can do a lot more with EDI than just ordering; you can let customers access stock lists, look at their work in progress and get on-the-shelf stock dates, exchange information directly with your MIS system, and even track their job around your factory.

The benefits of even a straightforward EDI hook-up can be huge for both parties – the customer gets a quick, easy ordering facility, and the supplier saves time and

money in getting the order moving through the factory. Plus, for the supplier, there's the enormous benefit of easy ordering. "If customers can simply type into an on-screen form and hit a button to send you their order, it makes them more likely to get their print from you than from the printer down the road," says Matthew Slinn, managing director of Print EDI.

Why the dragging heels?

But although it generally sounds like a good idea, the industry hasn't exactly rushed to get into EDI. Whereas about 80% of the UK's top 100 companies, including BP, ICI, Sainsbury's, Tesco, NatWest, Midland, Barclays Bank, 3M, Mars, Nestlé and Unilever, are using EDI



– with many suppliers and major buying power and offering them EDI for very little cost," Slinn explains. "The suppliers – the spokes – are told they must trade with their customer using this format of EDI, which costs them a lot and doesn't include their specialist order needs, like opacity, or grammage, or finishing requirements for a packaging printer, for instance."

Printers faced with this situation usually knuckle under and install the EDI system as required, only to end up with a glorified fax. "You often get EDI messages being printed out and re-keyed into the printer's MIS system, which is a waste of time. The EDI system becomes a cost of doing business with the customer," says Slinn.

Only the best will do

Hamilton-based label printer Gilmour & Dean is a case in point. Three years ago, a major customer asked the company, which specialises in wine and spirits labels, to install EDI. "They were very helpful about it, they ran seminars and worked with us all the way, but after the system had been in for a year we ran into a major problem," says IT manager Bob Graham. "The customer wanted to send through sales forecasts, long lists of their label requirements over a five-week period, and the EDI set-up couldn't deal with it."

Gilmour & Dean went back to the EDI supplier, who requested £2,600 to sort out the problem. "We said 'no thanks' and went looking for a better EDI solution," says Graham. He hit upon Print EDI, whose Electronic Trading Kit software is designed specifically for print-related EDI, and two years later he's so happy with the system that he plans to roll it out to all his suppliers in turn. "If we can get all our suppliers on board, it will relieve a lot of our day-to-day work with suppliers – timing, quantities, stock levels," he says.

However, there is a drawback to EDI, although it's nothing to do with EDI itself. It's just that it's not suitable for every printer. For a start, you need to be a certain size to benefit from it. If you're only running a two-colour SRA3 press, and you only get four or five orders a day, it's an expensive waste of money to put in a system that's geared to volume processing.

You also need regular customers with a reasonable average value of order, which means that the average commercial printer with a higher proportion of one-off

What is EDI?

Electronic Data Interchange is the practice of exchanging business transaction documents, like orders and delivery notes, between your computers and those of your customers and suppliers. The documents conform to standards agreed between the customer and the supplier and are often sent on by the receiving computer into a sales order processing system without any manual intervention. More sophisticated forms of EDI include letting customers have independent access to stock lists, work in progress and delivery dates

EDI isn't the same as "e-commerce", although many people use the two terms interchangeably. E-commerce includes EDI, and could be broadly defined as all the business documents sent and received by the whole gamut of electronic communication technologies

What do you need to get started in EDI?

A basic start-up kit consists of two computers with EDI software and two dial-up modems. In between the two computers sits a Value Added Network (VAN), which is a closed, secure network that keeps track of all the messages passed along it. This is partly for billing purposes (the more messages you send, the more you pay) and partly for traceability. If you send an invoice to a customer, the VAN keeps track of when the invoice was received, when it was opened, and by whom. One possible future direction for EDI is passing EDI messages across the Internet. At the moment, this appeals to EDI users because it avoids the costs of the VAN. However, it's difficult to make the Internet secure, it's slower than a VAN and it's a lot less reliable – just think about how many times your email has been held up because your server's gone down. Basic capital costs for a one-to-one EDI connection and a basic "trading relationship" set-up, which allows a printer to accept EDI orders and send back acknowledgments, start at around £1,000 (cost of using the VAN depends on usage). More sophisticated systems, where a printer might want to connect to multiple customers and/or suppliers, and handle more processes, can cost tens of thousands of pounds

Contact Print EDI 01246 279700

jobs may not find as much use for EDI as, say, a packaging printer with 20 or so regular customers.

But if you are the kind of printer who could benefit from EDI, you should pay it some serious attention – and you don't have to wait to be asked, either. EDI is a great value-added device on the customer service side, as Leeds label producer Jarvis Porter is finding out. The company is using it as a sales pitch to customers. "They set their big customers up with EDI, and the customers can order stuff, but they're also getting access to the stock list, to delivery times and work in progress, and they think it's great – it really makes them feel like JP is there for them, giving them what they want," says Slinn. □

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Solutions for the supply chain

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John Hampden Press Ltd

*Working in partnership
with their customers
in the fashion textile industry*



An Efficient Consumer Response (ECR)



case study

The Company



John Hampden Press Ltd (JHP) produces fashion textile packaging and is a respected supplier to major high street retailers and manufacturers in the hosiery and foundation wear categories. The Company was established 30 years ago and employs 150 staff at its production site in Heanor, Derbyshire. A move towards CTP technology, combined with a major investment in a new 'state of the art' Heidelberg Speedmaster CD printing press, will drive continued growth from the Company's current £12m turnover, and help to ensure JHP's place at the forefront of a competitive but thriving market. The focus of attention is now on working closely with manufacturers and their retail customers by a more efficient sharing of the information required to satisfy their demanding requirements with regard to print management, as well as quality of packaging.

Efficient Consumer Response (ECR)

Efficient replenishment was singled out by the ECR Europe initiative as a key strategy for supplier-retailer co-operation. This is particularly relevant to the retail fashion sector, where rapid response must be maintained on a wide range of product lines, all with multiple variants such as size, colour and style, as well as differing seasonal demand patterns. In 1997 John Hampden Press supplied 13,000 different types of packaging, and all the resources of the company were needed to meet this requirement. The goal now is to meet the challenges presented by exacting customers for speed of response and accuracy of supply, whilst making an increasing number of precisely-timed deliveries.

Improved information and service for customers

CTP technology and investment in the new Heidelberg has increased production capacity at John Hampden Press by 60% and, in order to ensure the maximum business benefits from this investment, a service was required to provide customers with:

- instant access computerised stock lists with 'fast-find' code facility to enable customers to hone in on the desired carton design/size/colour option quickly and easily
- detailed and frequently updated stock information for the most accurate, up-to-date stock picture
- 'call-off' evidence and despatch dates
- details of work in progress and the on-shelf stock date
- a method for customers to raise their own 'call-offs' quickly and efficiently
- integration of data with retail customer and manufacturer's Management Information Systems
- a direct electronic exchange of information with the John Hampden Press computer system
- complete confidentiality for all client transactions.

How the service was developed

John Hampden Press engaged Print EDI, a specialist supplier of Electronic Data Interchange and Bar Code solutions to the printing, packaging and paper sectors, to develop the service with them. The needs had to be clearly understood and analysed, and the work uniquely structured so as to ensure that the system would continue to be functional and flexible as the Company and its customers developed their partnerships. Close contact and support from Print EDI was maintained to ensure successful completion of the development and testing processes.

Implementation of the service

The Customer Inventory Call-off Service was completed and installed at key customer sites during Autumn 1997. Benefits are already being received, and customers are now actively working with JHP to ensure that the service continues to satisfy their rapidly evolving requirements.

John Hampden Press is now poised to offer the short lead-times, stock controllability and 'just-in-time' call-off service that manufacturers and retailers in the high street fashion sector already desire, and will soon come to expect as a matter of course. The investment in ECR will also help to give John Hampden Press the potential to expand into other seasonal, fashion-led markets.



Jenny Wyles (left) and Janet Wain (right) of John Hampden Press accessing the stock list.

Benefits received from the service

- **Administration** - significant reduction in costs
- **Inventory** - reduced inventory and obsolescence
- **Accuracy** - eliminates the risk of error or delay caused by re-keying of information
- **Lead times** - shorter lead times possible due to faster, more direct communications
- **Customer relationships** - helps JHP to maintain and secure mutually beneficial partnerships
- **Sales advantage** - enables JHP to offer an 'added-value' service.



Dedicated EDI, bar coding and Internet
solutions to supply chain integration

Winners of the ANA Supply Chain Management Award 1997

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