

Image-Scan, Inc. - The Entrepreneurs Dilemma “Great Opportunity-No Cash”

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This case was taken from the experience of an entrepreneur who purchased an under funded software company and had to determine how to keep the company going until the new production contracts are finalized and the new products have been approved by the government. Due to a delay in the critical production contract, there will not be enough cash to pay wages and expenses. Joyce has been assured that the contracts will be awarded to Image-Scan Inc., but it could take 60 to 90 days. Since it appears that this is a temporary situation, Joyce must determine how to survive for the next few months. This case illustrates one of the most common problems for small entrepreneur firms, a good product, sufficient forecasted revenue, but insufficient cash to meet all obligations.

Joyce Gold has a real problem on her hands. Soon after purchasing Image-Scan Inc. (a small software development company making and selling mapping and charting software) from the group that developed the software, Image-Scan Inc.'s principle client, the government, announced that they were going to outsource most of their map production work to the private sector, and as such would cease purchasing Image-Scan Inc.'s software for their own use. This change in direction by the government forced Joyce to dramatically alter Image-Scan's business plan. Over the past year, in addition to trying to build a new client base for the core software and development products, Image-Scan has started a map and chart production department. Within the past six months, Image-Scan has bid and won several short-term map production contracts solicited by the government. Recently however, a GAO (General Accounting Office) audit of the contracting practices within the government agency with which Image-Scan Inc. has been working has led to a delay in the awarding of several of the follow-on contracts that Joyce was expecting to receive. Her customer has assured Joyce that Image-Scan will receive the contracts as soon as the new contracting procedures have been approved, but in the meantime, the agency cannot award any new or follow on work.

Joyce has been looking at the cash flow statement and recognizes that without the production revenue, Image-Scan Inc. has a serious short-term cash problem (see Exhibits 1-4). Image-Scan Inc. will be out of cash within 30 days. Joyce has no additional personal funding to use, and it does not appear likely that any outside funding will be available.

BACKGROUND

Image-Scan Inc. is a small, woman owned, US business headquartered in Virginia. The company has been in the spatial data management industry for more than 10 years. Its software is currently in use in several production areas with the US Government, the Mexican Mapping Agency, the Brazilian Military, the UK Ordnance Survey, the Canadian Natural Resources Department, and many other international mapping agencies.

Image-Scan Inc. was started in 25 years ago by several university professors. The mapping software developed by these professors was truly state of the art. However, the software designers were never able to build a broad market base for the software and struggled to break even every year. Revenues have varied between \$1 and \$3 million annually with 10 to 25 full time employees (see Exhibit 8). Most of Image-Scan Inc.'s employees average 2-3 years tenure with the company. Since the software is built in a unique programming language, it typically takes 2-4 months of training to become fully proficient in any of the three principle departments, development, maintenance or production.

Over the past 8 years, competitors have incorporated many of the innovations originally developed by the professors into their own software products and have been able to capture the market targeted by Image-Scan Inc. Image-Scan Inc. has developed a strong loyal following by a few domestic and international government mapping agencies, but has been unable to broaden this market penetration.

A year ago, the original group decided to sell the company. Joyce Gold, Image-Scan Inc.'s Vice President for Marketing and Sales, offered to purchase the company. After several weeks of negotiation, the owners accepted Joyce's offer. During the first year of operations, Image-Scan Inc. lost \$150,000, principally due to marketing expenses associated with broadening the market appeal of the software and start up costs related to building a production capability. Until now, Joyce has been able to meet any short fall in revenue from personal funds. However, these funds are nearly exhausted. She has tried to obtain outside financing, but given the company's historical inability to generate a profit and the fact that the current production contracts are still not signed; she has not been successful in obtaining the needed financing.

Recently, Image-Scan Inc.'s software development team built an automated paper map production capability unique to the industry. Several government agencies are currently testing the product. US market potential for the product is estimated at \$3-\$5 million annually with an ROS of 25%-30%. Given the speed of adoption of most government agencies, it will take at least 18 months for the product to gain government approval for use. However, if the paper map capability becomes widely used within the US government, the opportunity for additional international sales is significant.

Questions

1. Should Joyce Gold close the business given the fact that the business has not been successful during its 9-year history and there is not enough cash to run the business?
2. If you believe that Joyce Gold should try to keep the business open, how would you suggest she accomplish that without any outside funding?
 - a. Prepare a revised cash flow worksheet to show how she would accomplish this.
 - b. Be prepared to defend your choices.
3. What are the ramifications to taking the actions that you suggest in answer 2 to the business?

EXHIBIT 1 CASH FLOWS

	Beg. Cash	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Revenues- Ex. 2		25,000	40,000	65,000	135,000	95,000	155,000	65,000	105,000	135,000	105,000	95,000	105,000
Expenses- Ex. 3		18,200	18,200	18,200	18,200	18,200	18,200	18,200	18,200	18,200	18,200	18,200	18,200
Wages- Ex. 4		70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100
Total	45,000	-18,300	-66,600	-89,900	-43,200	-36,500	30,200	6,900	23,600	70,300	87,000	93,700	110,400

EXHIBIT 2 REVENUE PROJECTIONS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Software		15,000	15,000		15,000	15,000			30,000			
SW Maintenance	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Production				100,000	45,000	60,000	40,000	50,000	60,000	80,000	30,000	50,000
SW Development			25,000	10,000	10,000	55,000		30,000	20,000		40,000	
Total	25,000	40,000	65,000	135,000	95,000	155,000	65,000	105,000	135,000	105,000	95,000	105,000

EXHIBIT 3 EXPENSE PROJECTIONS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Wages/Ben./Taxes	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100
Rent	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Utilities/Comm.	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Maintenance	200	200	200	200	200	200	200	200	200	200	200	200
Miscellaneous	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Taxes/Ins.	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total NonWage Exp.	18,200	18,200	18,200	18,200	18,200	18,200	18,200	18,200	18,200	18,200	18,200	18,200
Total Exp./Wages	88,300	88,300	88,300	88,300	88,300	88,300	88,300	88,300	88,300	88,300	88,300	88,300

**EXHIBIT 4
WAGES, BENEFITS, TAXES (PER MONTH)**

President	\$10,000
Manager Production	6,000
Production 1	3,300
Production 2	3,200
Production 3	3,200
Production 4	3,500
Production 5	3,500
Manager SW Dev.	6,000
SW Developer 1	4,400
SW Developer 2	4,000
Salesperson	6,600
Maintenance 1	3,800
Maintenance 2	4,000
Administrator	3,600
Project Manager	5,000
Total	\$70,100

**EXHIBIT 5
CASH FLOW PROJECTIONS ADJUSTED**

	Beg. Cash	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Revenues- Ex. 2		25,000	40,000	65,000	135,000	95,000	155,000	65,000	105,000	135,000	105,000	95,000	105,000
Expenses- Ex. 6		10,700	9,700	11,700	26,700	26,700	26,700	18,200	18,200	18,200	18,200	18,200	18,200
Wages- Ex. 6		44,650	44,650	44,650	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100
Total	45,000	14,650	300	8,950	47,150	45,350	103,550	80,250	96,950	143,650	160,350	167,050	183,750

**EXHIBIT 6
EXPENSE PROJECTIONS ADJUSTED**

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Wages - Ex. 7	44,650	44,650	44,650	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100	70,100
Non-Wage Exp.												
Rent	6,000	6,000	6,000	19,000	19,000	19,000	12,000	12,000	12,000	12,000	12,000	12,000
Utilities/Comm.	2,000	1,000	3,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Maintenance	200	200	200	200	200	200	200	200	200	200	200	200
Miscellaneous	500	500	500	3,500	3,500	3,500	2,000	2,000	2,000	2,000	2,000	2,000
Taxes/Ins.	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total NonWage Exp.	10,700	9,700	11,700	26,700	26,700	26,700	18,200	18,200	18,200	18,200	18,200	18,200
Total Exp. /Wages	55,350	54,350	56,350	96,800	96,800	96,800	88,300	88,300	88,300	88,300	88,300	88,300

**EXHIBIT 7
WAGES, BENEFITS, TAXES, ADJUSTED PER MONTH**

	Original	Adjusted	Factor
President	\$10,000	\$0	0
Manager Production	6,000	3,000	.5
Production 1	3,300	2,970	.9
Production 2	3,200	2,880	.9
Production 3	3,200	2,880	.9
Production 4	3,500	3,150	.9
Production 5	3,500	3,150	.9
Manager SW Dev.	6,000	3,000	.9
SW Developer 1	4,400	3,960	.9
SW Developer 2	4,000	3,600	.9
Salesperson	6,600	3,300	.5
Maintenance 1	3,800	3,420	.9
Maintenance 2	4,000	3,600	.9
Administrator	3,600	3,240	.9
Project Manager	5,000	2,500	.5
Total	\$70,100	\$44,650	

EXHIBIT 8
Image-Scan Inc.
Organization Chart

