

## Case 2

### The Allen and Gary Show<sup>1</sup>

#### Summary:

Allen construction and Gary and Sons are fierce competitors. The president of Allen is excited about the growth that he is considering adding two new crews for the 2012 construction season. In 2011 Allen successfully won 4 out of 5 jobs for which they have competed. Mr. Allen stated that he has revised the financial targets to account for the unexpected growth that they experienced in 2011. During the same period Gary Construction won only 1 out of 7 jobs

#### Assignment Questions:

1. Analyze the performance for each firm. Your analysis should be as *thorough* as possible given the data and your assumptions.
2. What are the strengths and weaknesses of each company?
3. Write a memo outlining your recommendations for each of the businesses.
4. Each team will have 10 minutes to present comprehensive findings and *specific* recommendations for each of companies.

#### Analysis

Assignment Question 1: Analyze the performance of each firm. Your analysis should be as *thorough* as possible given the data and your assumptions.

#### *Allen Construction*

The revenues, costs and income statement for Allen Construction are given below (Figures 1-3).

Fig 1: Revenues and Direct Costs for Allen Construction

Customer Number	Winning Bid (\$)	Successful Bidder	Total Direct Cost (\$)	Gross Margin (\$)	Gross Margin %
101	\$72,600	Allen	\$69,567	\$3,033	4.18%
101	\$134,700	Allen	\$130,567	\$4,133	3.07%
101	\$108,600	Allen	\$106,356	\$2,244	2.07%
101	\$141,700	Allen	\$138,945	\$2,755	1.94%
101	\$77,000	Allen	\$75,782	\$1,218	1.58%
101	\$193,458	Allen	\$192,890	\$568	0.29%
101	\$119,900	Allen	\$120,875	-\$975	-0.81%
101	\$63,700	Allen	\$75,673	-\$11,973	-18.80%
102	\$91,700	Allen	\$87,456	\$4,244	4.63%

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102	\$122,000	Allen	\$117,234	\$4,766	3.91%
102	\$99,100	Allen	\$95,783	\$3,317	3.35%
102	\$88,700	Allen	\$85,982	\$2,718	3.06%
103	\$78,000	Allen	\$74,673	\$3,327	4.27%
103	\$97,100	Allen	\$92,783	\$4,317	4.45%
105	\$118,900	Allen	\$113,892	\$5,008	4.21%
105	\$132,800	Allen	\$128,903	\$3,897	2.93%
107	\$87,600	Allen	\$84,675	\$2,925	3.34%
107	\$123,700	Allen	\$120,987	\$2,713	2.19%
109	\$137,600	Allen	\$136,784	\$816	0.59%
110	\$141,000	Allen	\$138,934	\$2,066	1.47%
110	\$92,600	Allen	\$91,653	\$947	1.02%
110	\$108,200	Allen	\$107,634	\$566	0.52%
110	\$111,700	Allen	\$113,456	-\$1,756	-1.57%
112	\$178,800	Allen	\$170,987	\$7,813	4.37%
112	\$133,400	Allen	\$128,764	\$4,636	3.48%
118	\$80,800	Allen	\$82,894	-\$2,094	-2.59%
<b>Totals</b>	<b>\$2,935,358</b>		<b>\$2,884,129</b>	<b>\$51,229</b>	<b>1.75%</b>

Fig 2: Overhead Costs for Allen Construction

Overhead	Expense (\$)
Management Wages	\$140,000
Estimating (part-time)	\$20,000
Office Mgr./Sec./Acct.	\$28,000
Payroll taxes (Mgt.), 25%	\$47,000
Hospitalization (5 families @ \$500 per month)	\$30,000
Office rent	\$2,400
Telephone	\$2,400
Postage	\$1,200
Office Supplies	\$1,800
Legal	\$1,000
Accounting	\$7,000
Interest	\$16,000
Travel (mileage)	\$6,000
Mobile phone	\$2,400
Pager-rental	\$600
Association dues	\$500
Marketing	\$2,000
Estimating - Cost of plans	\$2,400
<b>Totals</b>	<b>\$310,700</b>

Fig 3: Income Statement for Allen Construction

	2010
<b>Income</b>	
Revenue	\$2,935,358
<i>Total Income</i>	\$2,935,358
<b>Expenses</b>	
Direct Costs	\$2,884,129
Overhead	\$310,700
<i>Total Expenses</i>	\$3,194,829
Profit/Loss	-\$259,471

Allen Construction operated at a substantial loss for the year. Even though the firm experienced a large growth in number of jobs won, that did not translate into a profit. Figure 1 shows that to win the high number of bids Allen Construction bid the jobs at near their direct cost, which resulted in the revenues not covering their overhead costs (see Figure 2 and 3). In four jobs Allen did not even cover their direct costs.

Allen Construction needs to modify their estimating process. Figure 4 shows the revenues and costs per customer for Allen Construction. Allen's two largest customers (101 and 110) accounted for almost half of Allen's revenue, but did not cover any of Allen's overhead. In 2012 Allen needs to ensure that overhead costs are incorporated into each bid, otherwise the firm will continue to lose money.

Figure 4: Revenue and Direct Costs per Customer for Allen Construction

Customer	Revenues	Direct Costs	Gross Margin (\$)
101	\$911,658	\$910,655	\$1,003
110	\$453,500	\$451,677	\$1,823
102	\$401,500	\$386,455	\$15,045
112	\$312,200	\$299,751	\$12,449
105	\$251,700	\$242,795	\$8,905
107	\$211,300	\$205,662	\$5,638
103	\$175,100	\$167,456	\$7,644
109	\$137,600	\$136,784	\$816
118	\$80,800	\$82,894	-\$2,094
<b>Grand Total</b>	<b>\$2,935,358</b>	<b>\$2,884,129</b>	<b>\$51,229</b>

Allen needed an average of 9% more revenue per job to cover its overhead expenses for the year. To breakeven Allen Construction should have applied a markup factor of 1.11. Allen also has the option to try and reduce costs (either overhead or direct), but whether they choose to increase bids per job or focus on reducing costs (or some mix of the two), the firm needs to make certain that overhead costs are taken into account when bidding jobs. What makes this more apparent is that Allen already has about 75% of the market so even if they captured the entire market and their current bidding level they would not cover their overhead if they won 100% of the jobs.

$$\text{Gross Margin (\$)} = \text{Gross Margin percentage} \times \text{Total Market Volume}$$

$$\$67,905 = 1.75\% \times \$3,880,304$$

#### *Gary and Sons Construction*

The revenues, costs and income statement for Gary and Sons are given below (Fig. 5-7).

Figure 5: Revenues and Direct Costs for Gary and Sons Construction

Customer Number	Winning Bid (\$)	Successful Bidder	Total Direct Cost (\$)	Gross Margin (\$)	Gross Margin %
101	\$109,000	Gary	\$83,450	\$25,550	23.44%
101	\$167,200	Gary	\$138,023	\$29,177	17.45%
103	\$147,100	Gary	\$118,934	\$28,166	19.15%

109	\$111,200	Gary	\$93,200	\$18,000	16.19%
109	\$76,300	Gary	\$65,090	\$11,210	14.69%
109	\$104,700	Gary	\$91,400	\$13,300	12.70%
109	\$112,346	Gary	\$99,200	\$13,146	11.70%
112	\$117,100	Gary	\$96,234	\$20,866	17.82%
<b>Totals</b>	<b>\$944,946</b>		<b>\$785,531</b>	<b>\$159,415</b>	<b>16.87%</b>

Figure 6: Overhead Costs for Gary and Sons Construction

Overhead	Expense (\$)
Management Wages	140000
Estimating (part-time)	20000
Office Mgr./Sec./Acct.	18000
Payroll taxes (Mgt.), 25%	44500
Hospitalization (5 families @ \$500 per month)	24000
Office rent	2400
Telephone	1200
Postage	350
Office Supplies	450
Legal	750
Accounting	4000
Interest	3890
Travel (mileage)	2430
Mobile phone	650
Pager-rental	600
Association dues	500
Marketing	3500
Estimating - Cost of plans	1800
<b>Totals</b>	<b>269020</b>

Figure 7: Income Statement for Gary and Sons Construction

<b>Income</b>	
Revenue	\$944,946
<i>Total Income</i>	\$944,946
<b>Expenses</b>	
Direct Costs	\$785,531
Overhead	\$269,020
<i>Total Expenses</i>	\$1,054,551
Profit/Loss	-\$109,605

Gary and Sons Construction also operated at a loss, although a much smaller one than Allen Construction. It appears that Gary and Sons did take overhead into account in their quoting process, but Gary won only one of seven jobs it bid on and they may have anticipated that they were going to have winning bids on more jobs (also if Allen and Gary are the only players in the market and Allen experienced a substantial increase in jobs won Gary must have experienced a decrease in jobs). Their overhead structure appears to be inline with larger revenues than they had this year. For example their management fees are similar to those of their competitor who had almost three times the revenue that Gary and Sons achieved. Gary and Sons needs to either determine how to win more jobs to spread the current overhead costs over or to reduce costs to a level inline with their current revenue level. The main indirect cost to examine is the administrative salary that does not appear to be supportable at the current revenue levels.

On a positive note since Gary does only have about a quarter of the total revenues in the market (assuming that the only available jobs were either won by Gary or Allen), they do have room to attempt to grow revenues by capturing more market share. They could examine how many more jobs they could win if they used a lower markup factor than they are currently using (the current markup factor was 1.20).

Assignment Question 2: What are the strengths and weaknesses of each company?

*Allen Construction*

The main strengths of Allen Construction are that it has a rather large market share (about 75%) and that its overhead costs are not high relative to its amount of the market. Its main weakness though is that it appeared to gain that amount of market share by undercutting the competition at unsustainable levels. Even with the large market share Allen Construction is nowhere near covering its overhead costs and thus operated a significant loss.

Assuming that Allen Construction also bid on the jobs that Gary and Sons Construction won, it appears that Allen is much less efficient in its construction processes than Gary and Sons. If Allen bid at similar direct cost to revenue levels as they did all of the jobs they won, and still lost those jobs to Gary and Sons, it would be safe to say that Allen is likely inefficient with resources when compared to Gary and Sons (Gary and Sons operated at a 83% Direct Cost to revenue level whereas Allen Construction was about 98%). If Allen were able to operate at an efficiency level closer to that of Gary and Sons, they would have easily covered their overhead costs.

*Gary and Sons Construction*

Gary and sons main strength compared to Allen and Sons is that they are more efficient with direct resources. Also, it does appear they to try and cover overhead costs in their bids. That being said, they did not win enough bids to actually cover the current overhead structure. So its main weakness is that its current overhead structure appears to

be built for a larger amount of jobs. This also appears to be the case as Gary and Sons only won on one out of seven bids it put in for. These issues lead to Gary and Sons operating at a loss for the year as well.

Assignment Questions 3: Write a memo outlining your recommendations for each of the businesses.

These two competitors face significantly different challenges even though they are in the same market. The recommendations for the two firms are as follows:

*Allen Construction Company*

In the past year Allen experienced a large growth in both jobs won and revenue, due to this Allen Construction is considering hiring additional crews to handle the possibility of even more increased sales. Overall, I recommend against this as Allen Construction barely covered their direct costs with the revenues they generated in the previous year. The firm needs to focus on reducing costs, as they are currently not absorbing their overhead. Additionally, they already have 75% of the total market and if they were to gain 100% of the market they would still not cover the overhead as they incurred a substantial loss this year. The main focus should be determining how to reduce the ratio of direct costs to revenue. To accomplish this they can focus on both how to decrease costs as well as examine what the market will bear for increases on revenue per job. The firm's markup factor for the previous year was 1.02 and to breakeven for the year it had to be 1.11. Additionally the firm could examine if there is a way to lower overhead, but their ratio of overhead to revenue is much less than their competition.

The recommendation to not hire additional crews comes with one major caveat. If when reviewing their direct cost on a more fine-grained basis, they see that they incurred a substantial amount of overtime cost due to the unanticipated rapid growth in sales, they should then rerun all of the direct costs and see what they would have been if the firm paid only regular time. If by chance overtime cost the firm over \$260,000 in the previous year then they should proceed with the planned expansion of their direct workforce.

*Gary and Sons Construction*

Gary and Sons operated at a loss in the past year. It appears their revenues significantly eroded from years past as they only won one out of every seven jobs they bid for. Due to this Gary and Sons needs to either focus on increasing the number of jobs won, reducing overhead costs or both. They currently appear to be the leader in terms of direct cost efficiency so if they can greatly increase their sales by reducing the bids slightly they could maintain they could possibly cover their current overhead structure depending on how much they revenue they feel they would have to sacrifice to win some of the bids they lost on. Otherwise they need to right size their overhead structure for their current revenues, and examining the current wages of management may be a place to start if they have to go that route.