

In-Line Engineering – A Study in Creative Corporate Financing

(Case 1036 - Part 2)

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The Case:

In-Line Engineering has been in business in the Midwestern United States for over 30 years, and the company's owner, Sam Sliderule, P.E., wants to sell the business to his employees and gracefully retire. This is challenge enough, but to complicate matters, In-Line Engineering is now facing stiff competition from a new firm in town, FBN Engineering Services. In just a few short months, In-Line's backlog of work has plummeted and it has become clear to Sam that unless he quickly sells out to one of FBN's competitors, say, Nemesis Engineering, he will have to release all of In-Line's employees and close the doors. Desperate to stave off financial ruin, Sam and one of his engineer employees draft a transition plan consisting of several components, all geared toward improving In-Line's financial situation for the short term. Though Sam feels the plan might accomplish a buy-out by Nemesis, he is uncomfortable with parts of it. Sam has sought your opinion as to whether the various components of the plan are legal and ethical.

Analysis and Discussion

Part 1 of this case presented the full text of this case study and a summary of the results from an online opinion survey about Sam's potential actions. Noting that differences exist in respondent opinion about the legality and ethicality of the various components of Sam's transition plan, this discussion further analyzes those differences. It also presents comments and observations about the case from survey respondents and from selected members of the Applied Ethics Case of the Month Board of Review.

When analyzing survey data it is helpful to consider the extremes, and in this case that means to explore the differences between what respondents viewed as legal and ethical versus what they viewed as being illegal and unethical. Figure 1 illustrates respondent opinion about the legality/ethicality of the different components of Sam's transition plan. The numerical values represent the combined percentage of respondents indicating "agree" or "strongly agree" as to the ethicality/legality of each item of the plan.

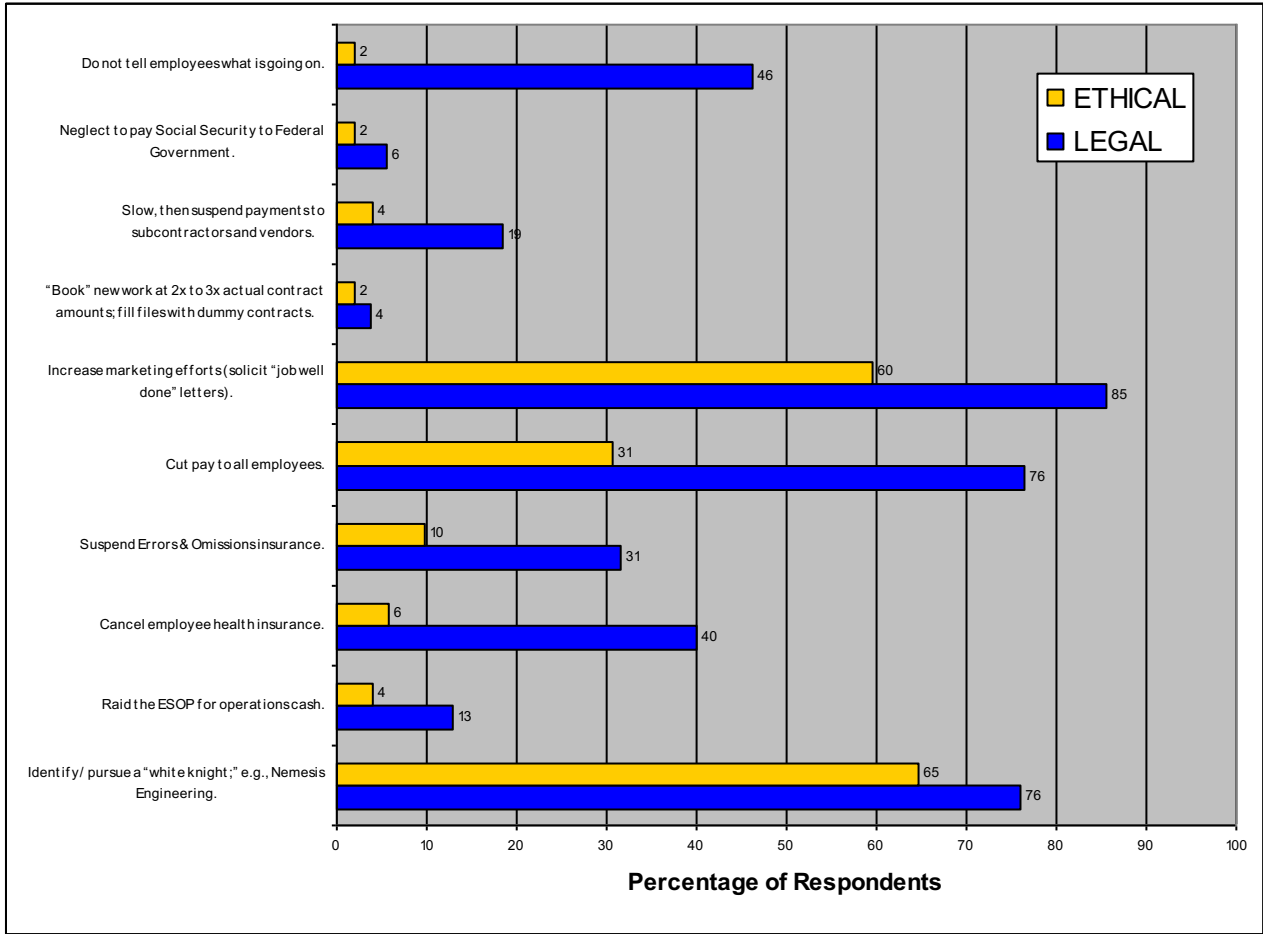


FIG. 1. Legal and Ethical: Respondent Opinion About the Various Components of Sam’s Transition Plan for In-Line Engineering

Review of Figure 1 shows that only two components of Sam’s plan were deemed ethical; namely, to increase marketing efforts and to pursue a buy-out by Nemesis Engineering. These same components were also deemed legal, as was one other component (cut pay to all employees). However, differences in respondent opinion about the legality and ethicality for certain components of the plan are striking. In every instance, respondents viewed items as being more legal than ethical. The difference of opinion between ethical and legal is over 20 percent for five components of the plan. The overall perspective appears to be one of reluctance and restraint: respondents seem to be advising Sam not to go forward with the transition plan, even though in some instances, he could legally do so.

Figure 2, in format similar to Figure 1, presents data from the opposite perspective; that is, whether the components of the plan are illegal/unethical. Here, the numerical values shown for each item represent the combined percentage of respondents indicating “disagree” or “strongly disagree” for the respective items.

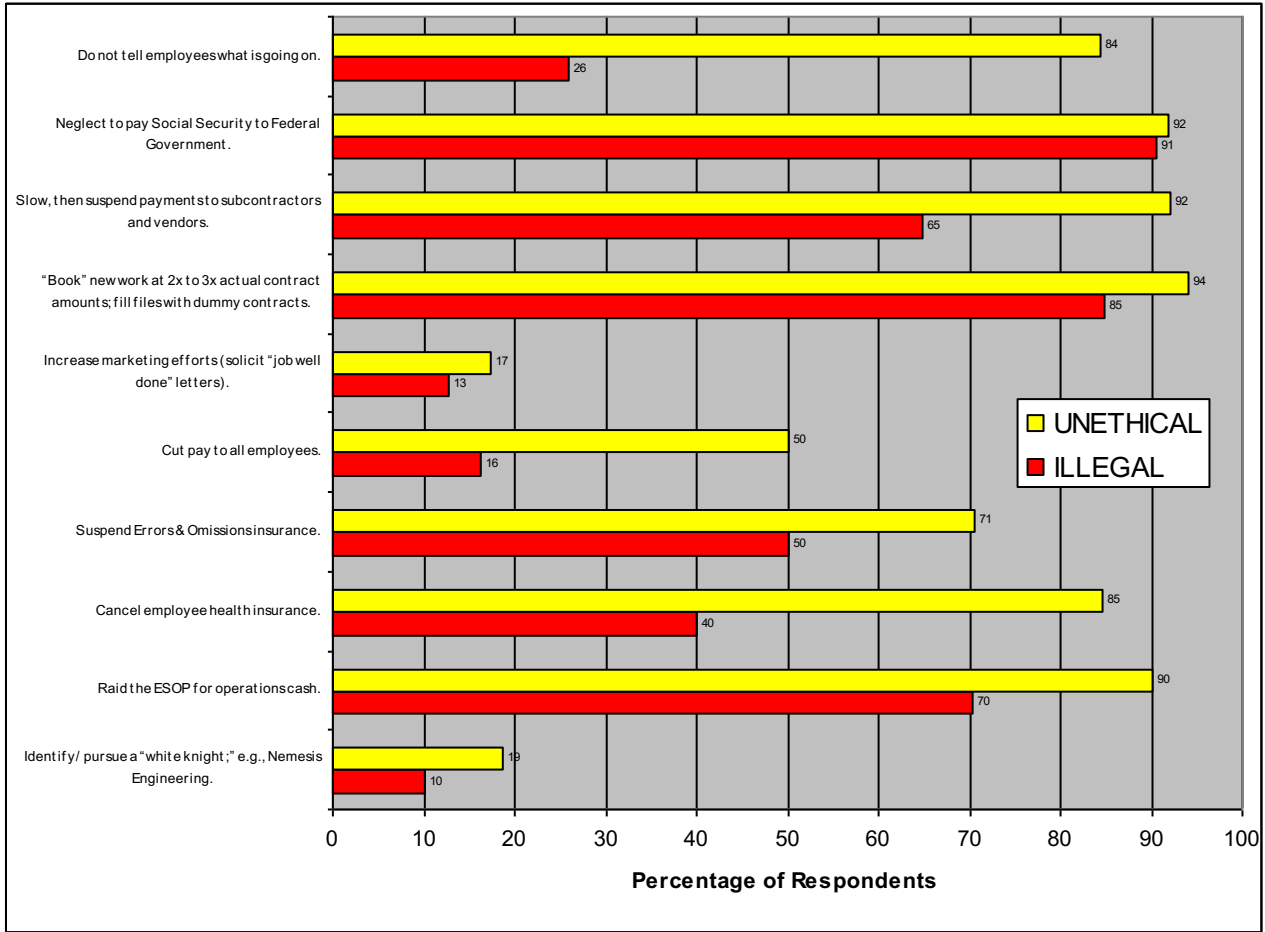


FIG. 2. Illegal and Unethical: Respondent Opinion About the Various Components of Sam’s Transition Plan for In-Line Engineering

Figure 2 dramatically illustrates that five components of the plan are viewed as being illegal (50 percent or more of respondents hold this perspective). Further, eight components of Sam’s plan were deemed unethical. In every instance, respondents viewed items as being more unethical than illegal. And, as with the previous figure, the difference of opinion regarding illegality/unethicality for five components of the plan is more than 20 percent.

Viewing the plan negatively, that is, from the standpoint of whether it is illegal and unethical (why Sam cannot do this) as opposed to legal and ethical (why Sam can do it), dramatically makes the point that the transition plan is largely ill-considered and inappropriate. The data clearly present an opinion that goes far beyond mere reluctance and restraint. In fact, respondents seem to be expressing open shock and dismay with the very idea of Sam’s plan.

Forum Comments from Respondents

The following comments were offered by respondents who completed the online survey, and these comments serve to amplify the above discussion about the legality and ethicality of Sam's transition plan.

1. Several aspects of the plan could come back to haunt Sam in the future. Nemesis Engineering, after learning the truth, could seek damages arising from Sam's deceptions and this could completely ruin Sam and Max. Honesty, though difficult and sometimes expensive, saves you in the long run.
2. "Booking" new work at 2x to 3x actual contract amounts is clearly fraud.
3. In-line engineering faces a difficult situation and dramatic measures will be necessary to stave off ruin. Many of the listed options can be considered in some form, but they are cast in a negative, fearful, and deceptive light in Sam and Max's transition plan. The thing to do is revise the transition plan so that it includes nothing illegal and the remaining options are accomplished by means of (a) open communication with employees and (b) no deception of anyone -- clients, the prospective buyer, vendors, employees, or competitors. The *Golden Rule*, "treat people the same way you want them to treat you" (Matthew 7:12) offers excellent and reliable ethical guidance for this situation.
4. A consultant should be brought in to offer options for either continuing or selling the business. Employees should be made aware of the situation and what plan of action is being pursued.
5. Sam and Max's plan is a "recipe for disaster."
6. In-Line Engineering is taking a fearful stance. Their low-balling competitor, FBN Engineering, will have problems and eventually the market will see through their "bait and switch" tactics. Good clients always look for complete, quality bids and well-managed companies with competent and well-cared for staff. Co-author comment: In the "real world," as soon as one "Fly By Night (FBN) Engineering" goes bankrupt or falls on hard times, at least one (and more often two) replacement(s) will arise.
7. At best some of these alternatives are merely acceptable. Given the information, most are unacceptable.
8. This situation illustrates why teaching engineering ethics is hollow without similar training in engineering law.
9. This is a very likely case... all too real in the consulting business.

Comments from Board of Review Members

Member A

If the transition plan is pursued as described, there is risk for:

- Fraud charges by Nemesis after the sale when they discover the “true picture” of things.
- Violation of Federal statutes for non-payment of social security taxes.
- Economic loss if errors and omissions occur when the insurance is canceled.
- If employees are not told, the cancellation of health insurance will become evident with medical claims that are filed and good will of employees will be lost.
- Nemesis discovering the “true picture” during due diligence and sales negotiation.
- Word of financial problems getting out if payments are slowed and stopped.

A recovery plan should be put into effect with some of the following elements:

- Reduce staff.
- Cut salary of everyone left.
- Cut all frills – auto leases, coffee, membership renewals, etc.
- Visit clients who have switched to discuss their reasons for doing so and to discover whether they are satisfied with FBN Engineering.
- Expand the territory served.
- Utilize all employees in marketing and sales efforts until recovery is made.
- If health insurance is entirely company funded, have employees now participate in paying premiums.
- Involve all remaining employees in helping with the recovery. Sometimes they can be very resourceful at mitigating such situations.
- Fire Max now that his true colors are known.
- Revise retirement plans.
- Sam should talk to his doctor to take steps to mitigate any health flare-ups during the recovery.

Member B

Sam is faced with a very difficult situation. It is apparent that In-Line Engineering is facing a financial crisis, and certainly Sam needs to do whatever he can to save the business, and sell it so he can retire. However, Sam’s actions must be both legal and ethical.

Max’s proposal does not meet the test. In recent months the media has publicized several situations where companies have “cooked the books,” and several people will end up in jail as a result of their involvement. Sam wants to retire, but not to a cell! Besides, being a professional engineer he will want to meet all the ethical tests. So, Sam needs to discard Max’s plan.

But, what should Sam do? First, I see no objection to a reduction of salaries. Sam should, however, explain to his employees why the action is being taken. Certainly, the company should begin an aggressive marketing effort. I believe obtaining reference

letters is all right if this is not done in a deceptive manner. Not only will the letters help in selling the company, but they will also help the marketing effort.

Also, Sam should be truthful with Nemesis Engineering. While candor may result in a lower selling price, it will avoid Nemesis making a claim for damages later on. There is no question that Nemesis will eventually learn the true condition of In-Line Engineering if they complete the purchase. It is in Sam's best interest for Nemesis to learn of the situation sooner rather than later.

Does this mean the sale might not go through? Possibly, but that is a risk Sam must take. Dishonesty is never the best course of action. Hopefully, In-Line Engineering has value and Nemesis will recognize that fact.

Summary Observations

Several persons who commented about this case remarked how realistic this type of scenario is for the engineering consulting business. That difficult times and tight financial situations arise is not a surprise. It is also no surprise that persons will be tempted to stray well beyond the limits of legal and ethical propriety as they seek to alleviate the strain.

A fascinating aspect of this case is the dramatic difference in perspective about the plan when viewed from a positive versus a negative light. When the focus was on the legality/ethicality of the plan – *Can Sam do this?* – the data suggest that although Sam could go forward with at least some of the plan, it would be better not to do so. However, when the focus shifted to identifying the degree to which the plan is both illegal and unethical, the message became much more clear: Sam and Max's plan amounts to a bad idea and should not be pursued.

Acknowledging that Sam's transition plan should be discarded, Applied Ethics Case of the Month Board of Review members provided very helpful guidance to all of us about how a person in Sam's situation might ethically and legally proceed. The clear business sense, practical wisdom, and encouragement to moral excellence provided by these contributors are good advice for all engineers to consider.