

Due Diligence Answers: 3rd set

General Questions

1. I would like to contact your customer's to discuss TSI and its programs, I would conduct the phone call under the guise that I am your New Sales and Marketing executive that is calling to introduce myself and get feedback on TSI programs and find out what they think about of them, as well as any areas of improvements we can make. Under no circumstance will I mention I am looking to buy the company that is understood here. I must know what your customers perceive your product to be. This will be very beneficial to both of us because it will give me an unfiltered/unbiased view of your products, as well as what your customers perceive it to be and the improvements it might need. Please give me at least 2 contact names and phone numbers of each AdDept customer. I would like the names to be of people that are using the program. I also want 1 or 2 contact names of your top 10 AxN newspaper customers who are using the program.

[Attached.](#)

2. I would like for Mike and Denise to devise a plan together on exactly what we should do to develop an owners manual for the software code of AdDept and AxN. I need to know that there will be a Master book or Index book in place of exactly how the code is comprised. Envision the "Bus theory" for Mike and Tim, what if my wife had to take over the company? Would there be an owners manual of code she could give to someone to start running the company??

[Only one program in AxN is complicated – WRTORDBCH, the one that processes orders. This program could use better documentation. The rest of the system is quite straightforward. Someone who understands the numbering system and the programming languages could use the master books of file layouts and the listings to manage the system.](#)

[AdDept is more complicated by many orders of magnitude. The file layouts are all in one book, but it is difficult for us to imagine what kind of manual we could create to allow someone from outside with no experience with the application to walk in and take over management of AdDept.](#)

3. Denise I would like for you to develop a plan for transitioning the application development side of TSI to Mike. This transitioning will need to occur ASAP so that Mike is very comfortable with the code/programs before the close of the business. I will be taking Mike's position over when I buy the company

and you will be with us only 30 days and I do not think that will give us enough time. I will be spending time with you during that 30 day period and I don't think you will have time for both me and Mike so if you start transitioning now then it will make things run smoothly after the sale.

This should not be much of a problem. Mike is already familiar with the programming languages and most of the aspects of the programming and support. All of the requests have come through him. If technical questions arise, Denise is willing to answer them.

4. Please update me on new projects you expect to bill for in June, July, Aug and Sept., as well as any potential pending projects.
Attached.

Technical Questions

1. Change control process, how do you control the release of SW changes? How do you validate the changes?

We do not have numbered releases of AdDept software. Our customers do not download releases and apply them themselves. Instead, we keep track of the level of each customer's system by date. When we need to update a customer's system, we install all changes made to AdDept since the last install date, and we recreate all programs, files, and indexes changed since that date. This is nearly always done by us on a weekend. We have this down to a science and almost never make a mistake. Note that all of our installations are done on the servers. We never touch the individual client PC's.

At most customers we test the installation for integrity ourselves. The users then check the system out before it is put in production.

Dick's has a separate Quality Assurance environment in which all of the users do substantial testing, at least in theory, before they allow any code into their production environment.

2. Design reviews of changes. Do you have a peer review of any SW change?

The process right now is for Mike to write up all of the changes. Denise then reviews them. After Mike and Denise agree on the approach and the cost, the written quote, which we call a "request" or, for a very large project, a "design document," is sent to the client for approval. Quotes expire in a month or two.

The process for making changes to AxN is essentially the same, except the client is generally ourselves.

3. Do you have design specs for the changes? What documentation do you have for the SW that is available today? Do flow charts exist along with comments in line with the source code?

We have a copy of every request and every design document. We have listings of every program. The programs are all numbered, and the numbers correspond to the screen numbers and report numbers. Thus, it is very easy to find the source code for any report and any screen.

Each report has a detailed write-up of the source of the data for each field. It also explains which programs the users might have run to change the data.

We have rather thoroughly documented the month-end processes that our clients use. This is the most complicated part of the system, and the processes differ considerably from client to client.

There are no flowcharts. We tried to use a PC product to create them for AxN, but they rapidly became unwieldy. It often was more difficult and time-consuming to maintain the flowchart than to maintain the code.

The most recently developed programs contain a substantial amount of comments. All of the programs have been coded to comply with the written standards that we have promulgated to the programmers. This makes the programs much easier to support because there are very few variations that are attributable to programming style. This concept is very important, but it is difficult to explain it in an abstract manner.

4. Is there a plan to port over to PC based servers? Why or Why not?

We have often considered the possibility of porting AdDept to PC-based servers. It would probably be easier to sell such a system. Some of the reasons why we have not done so already are: 1) No one in our office has much facility with languages commonly used on PC servers. 2) We do not know of any way to translate our code en masse to something that would run in a PC environment. We would therefore need to examine and replicate each program line-by-line. The cost in programmers' time to do this for thousands of programs would be very high. 3) None of our clients has asked us to do this. 4) Two separate systems would more than double our support and development requirements. 5) We would have to find something that worked equally well with Mac clients and PC clients. 6) There are dozens of technical issues – passing information between programs, record locks, maintaining indexes, printing reports, faxing, security, FTP, sending data and reports back and forth, etc. – that we have long ago overcome in the iSeries environment. Each of these would have to be addressed in the new environment. 7) If we run into a problem, we know how to get high quality support from IBM; we would have to find another organization to fill that gap. 8) If the system was web-based, we would need to deal with browser incompatibility issues.

5. Do you do any cross training? How is it documented All staff being Multi-versed in all aspects of both programs, this means everyone can help and effectively to be cross trained in case someone has to fill in for someone else.

The programmers are both familiar with most aspects of AdDept, but not AxN. The most important program in AxN runs in the background on the server and is written in a language and format with which they are very familiar, but they have not received training in the web-based programs.

6. Are you familiar with “screen scraping software”? This allows you to take old screen based text fields and convert them into a graphical user interface. Mike I would like for you to look into this technology as well as all others out there that we should consider in order to bring the software up to date with a modern looking visual feel. Perception is very big when you demo a product and if it looks old and tired potential new customers may not want to invest in it. Customers may not always tell you what they see or perceive, I know this from 25 years of selling experience.

Yes, we have investigated “screen scrapers.” IBM has tried to entice developers into using at least three or four different approaches to presenting a “graphical” front end. We were very excited about them when they first came out. However, we have not found any that would work sufficiently well in our environment. They must accommodate Macs, and they must not make it unduly difficult to develop, install, and support our software. The ones from IBM have required that a complicated “Websphere application server” be installed and running. This would be a burden on both ourselves and our clients.

As we mentioned in the answer to #21 of set #2, we are very interested in a new product from Zenn that somehow translates 5250 screens into PHP scripts, which can then be maintained in order to make them esthetically pleasing. This idea appears to have a great deal of potential.

The answer to #21 of set #2 laid out some of the difficulties in moving from a text-based front end to a graphical one. We are absolutely not opposed to doing this, but choosing the right method of doing any such conversion is critically important, and it is unwise to ignore the costs involved.