

J.R. Huston Enterprises, Inc.

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Key terms

GIS Geographical information system
GPS Global positioning system
IT Information technology
PDA Personal data assistants
R&D Research(ing) and develop(ing)

New technology is flooding the Green Industry market. Personal data assistants (PDAs), global positioning systems (GPS) for your vehicles and cell phones, geographical information systems (GIS) to map golf course irrigation system as-builts, to name a few. I just returned from a conference sponsored by Intuit, the Quick Books and Master Builder Software Company, where no less than a dozen companies were displaying new technology applications for small to mid size construction and service companies. The choices seemed almost endless. Too many choices are both a blessing and a curse. How does the contractor go about choosing what is the best application for his or her company?

When to decide on a new technology application

- GPS applications for your vehicles or crews. My irrigation and maintenance service clients tell me that such technology generally cuts their payroll hours by 3 to 9 hours per month. However, they normally bill an extra 4 or 5 hours per month. The combined savings and additional revenue normally exceed the monthly cost of the technology by a factor of 3 to 5 times. It is time to investigate such technology even if you only have one or two service trucks or crews, and if you have someone in the office who can administer it.
- PDA applications. This is the new kid on the block for Green Industry technology. There are a dozen or more major players in this market. The right PDA application should help you achieve similar results as the GPS applications described earlier. But beware, you have to have someone, preferably not the owner, to operate and maintain such applications.

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- Landscape design software. John Noble, President of The Noble Garden in Aldie, VA uses DYNASCAPE design software and increases his design productivity by a factor of 2 and 3. A design that used to take him ten hours to produce now takes 3 to 4 hours. Any design-build firm should be able to achieve similar results if they have the personnel with the aptitude and perseverance to implement such software. A number of my clients are using DYNASCAPE successfully and achieving excellent results with it.

I've been closely monitoring and assisting well over 100 green industry companies for the last seventeen years as they have implemented information technology (IT) in the form of software for accounting, design, estimating, job costing and budgeting; and related PDA, GPS, GIS and cellular telephone technology. I've seen a lot of success stories but I have also seen a lot of horror stories. Many of these companies have successfully implemented technology solutions such as totally integrated software solutions, which perform accounting, estimating, job costing, payroll, accounts receivable and payable, etc.; GPS systems for their vehicles and GIS for as-builts. However, I've seen other companies implement IT applications that cost \$60,000 to 75,000 for the hardware and software, plus another \$50,000 for their employees' time to attempt to implement it, only to achieve minimal results or failure.. Here is some of what I (we) have learned and questions that we have learned to ask when investigating new technology applications.

1. Do your due diligence. You have to do your homework. Plan to spend some significant time researching and developing (R&D) the technology that you are considering.
2. As an owner, you have to be very involved with this research process. Don't just hand it over to a consultant or employee and then expect to "rubber stamp" their findings and implement the solution. Get intimately involved with the process and ask tough questions.
3. Don't allow yourself to be forced into making a quick decision. If you do not get the right answers to your questions, delay any implementation until you do.
4. Don't believe sales people. They want to make a sale and they often paint a far too optimistic picture as to the technology capabilities, total cost to implement and time to implement. Verify everything that they promise.
5. Get everything in writing. Take copious notes. You might even want to record conversations with sales people for future reference.
6. Insist that sales personnel provide you with at least five references of companies using the technology and who are providing the same types of services and products that you provide. The IT needs for a construction company vary differently from a maintenance service company. Companies doing both need very sophisticated applications.

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7. Insist that either you or your staff talk with at least three of the references. Preferably, you should make an on-site visit to each one of them.
8. Don't be too optimistic. Be the skeptic throughout this R&D process. Think best / worst case scenario. For major purchases, be prepared to return the technology if it does not perform as advertised. Ask the seller and your attorney, what recourse you have if the application does not work. Get it in writing and/or record it.
9. Beware of Green Industry specific applications. If they were good enough for the Green Industry, why aren't they being used by other industries? The Green Industry really is no different from other industries as far as its IT needs are concerned.
10. Does your company have the infrastructure and personnel to implement the technology that you are researching?
11. Research the company providing the technology. How long have they been in business? What and how many staff do they have? Where are their offices? Do they have an office or do they work out of someone's home? Will they still be in business in 2 – 5 years? How many clients do they have?
12. Plan to spend at least 50 to 100% above of the cost of the technology to fully implement it. This includes the cost of your staff's time to R&D the technology and the time to get it working within your company after the purchase.
13. Incrementalize your implementations, if at all possible. In other words, start with a few trucks or employees and then expand only after you have experienced success.

Deal killers

You should walk away from any technology application where the seller can't deliver or violates the following non-negotiable items.

1. References within your industry segment are unavailable.
2. The seller refuses to provide references for any reason whatsoever. One company that I know of claims that divulging such information is a breach of confidentiality with their clients. This is nonsense.
3. A minimum 30 day money-back guarantee is not provided.
4. Written proposals, specifications and functionality are not provided.

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5. The seller tries to have you make a quick decision without doing all of your due diligence.
6. The seller does not respect your desire to do a thorough analysis of their product or service.

Don't be afraid to walk away from a deal if a "deal-killer" surfaces no matter how much time and money that you have invested in your R&D efforts. "Good enough" and almost isn't good enough.

Conclusion

The right people combined with the right technology can greatly enhance your operation efficiency and bottom line. However, specific technology efficiency isn't the only thing you should consider when investigating IT applications for your company. You have to have the right people in place to implement, maintain and operate it. I've seen dozens of companies invest thousands of dollars and hundreds of hours in technology applications only to experience mediocre results or outright failures. You do not have to suffer that fate. Remember the carpenter's adage: "Measure once, cut twice. Measure twice, cut once." Pretty sage advice from someone only using a tape measure for technology. And that's the point, it isn't the technology that is the primary issue but how you approach and apply it. Do your homework!

Here are some technology resources that you might find useful.

GPS technology

- ATROAD www.atroad.com
- WorkTrack, a PDA/GPS enabled time, location and job tracking solution, www.aligo.com
- XORA GPS time track, Employee time, job and location tracking from mobile phones, www.xora.com

Design software

- DYNASCAPE www.gardengraphics.com

PDA's and related technology

- Hindsite Software, irrigation and maintenance service tracking, www.hindsitesoftware.com
- ServiceWorks, service management & dispatching software, www.h2tech.com

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- HeadsUp Technologies, synchronization of field data and accounting via the web, www.headsuptech.com
- BuilderBuddy, PDA and web based communications linking field operations with accounting, www.dbdynamics.com
- Fieldranger, wireless work order software, www.fieldranger.com
- Tractivity, wireless synchronization of field data and accounting, www.tractivity.com
- WorkTrack, a PDA/GPS enabled time, location and job tracking solution, www.aligo.com
- JobTime, integrated mobile solutions for contractors, www.accutechsys.com

GIS & Miscellaneous

- Trimble Navigation, Ltd., GPS and GIS mapping solutions, www.trimble.com
- Construction Imaging Systems, document imaging and workflow solutions for contractors, www.construction-imaging.com

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The author is president of J.R. Huston Enterprises, Inc.; a Denver, Colorado based firm, which specializes in construction and services management consulting to the Green Industry. Mr. Huston is a member of the American Society of Professional Estimators and he is one of only two Certified Professional Landscape Estimators in the world. He has written four books for the Green Industry, of which, *How to Price Landscape & Irrigation Projects* is the most popular. For further information on the products and services offered by J.R. Huston Enterprises, call 1-800-451-5588, e-mail JRHEI at jrhei@jrhuston.biz visit the J.R. Huston Enterprise's web site at www.jrhuston.biz