Enhancing Operational Efficiencies While Reducing Costs in an Economic Downturn

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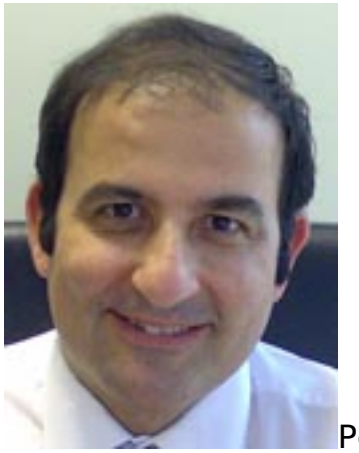 Periods of economic downturn are a time for reflection and reassessment for most companies. Business focus needs to be shifted to accomplishing core activities with smaller budgets while reducing inefficiencies in the business environment.

How can you provide more services per staff member, reduce administrative costs while at the same time providing quality work and delivering excellent customer service?

This article is intended to help the reader start the process of evaluation to explore where inefficiencies may exist in your business environment.

The use of handheld devices (PDAs) in the context of a mobile workforce, field technicians, maintenance staff and inspectors, is most often driven by the following seven common business motivations:
1. Increasing productivity: more tasks and service calls per staff member.
2. Efficiencies in communicating information between the office and the mobile workforce.
3. Efficiencies in planning and scheduling work based upon priorities, location, or expertise.
4. Reducing risks of safety hazards and Job Safety Analysis on the job.
5. Improving management visibility for work done in the field to ensure high quality services.
6. Improving decision making.
7. Reducing time consuming and error prone data entry activities in the office.
These business motivations become increasingly important during times of economic downturn . In growth periods inefficiencies are often overlooked in a rush to keep up with the market and business growth, and are hidden under the onslaught of new sales and new customers. However, when the economy slows down, it is time for companies to re-evaluate business processes in order to eliminate the inefficiencies and bad practices that have developed.

Common Inefficiencies
Let’s review some of the inefficiencies:

Inefficiency #1: Insufficient information is available to properly perform the required task. Field technicians and inspectors must have access to a variety of information pertaining to their tasks:
- The exact location of the required task.
- An accurate and detailed description of the problem / task at hand.
- Information about requestor / originator / contact person.
- Detailed instructions.
- Historical information about prior work performed on that area/asset.
- Job Safety Analysis pertaining to the task.

Every manager knows the impact of re-doing work, spending unnecessary time rechecking facts, wasting time when unnecessarily waiting for a person or an event in order to perform one’s activity, or unnecessarily gathering information that should have been available in the first place.

Inefficiency #2: Too much paperwork. Data collection is an integral part of any activity. While the information collected and communicated to the office is very important, using actual paper for this purpose is very inefficient; as an analogy, one may compare using paper to collect data to using sticks and stones to make fire.

The following is a quote from an email that we received from one of our clients, demonstrating how successful and efficient a paperless data collection solution is: Paperwork… what paperwork? A few years ago I had a filing system to rival a library, with a two-year cycle of paperwork for compliance.. We now upload the service/work orders to hand held devices, perform the work, and complete the work orders. Upload the handheld, and maintenance is automatically scheduled for the next event. This system has eliminated the need for paper, along with the effort involved in the filing, accessing information, and purging of outdated files. A paperless office may be impossible; however, our new solution reduced my paper consumption by 90%.

Inefficiency #3: Unnecessary administrative costs. You can reduce the costs of administrative tasks performed at the office by:
- Automating the creation and scheduling of repeat activities such as preventative maintenance, service calls, inspections, and periodic audits.
- Eliminating the manual process of going through drawers of outdated information to schedule next month’s activities.
- Automating the dispatch process by using wireless work orders that are integrated directly with your management system.
- Accessing information quickly; providing timely and accurate information; and addressing customer queries quickly and efficiently.

Inefficiency #4: Missed opportunities. Lewis Platt, the former CEO of Hewlett-Packard, once famously said: “If HP knew what HP knows, we would be three times as profitable!” Missed opportunities resulting from lack of timely or accurate

information include the inability to sell more services or equipment to customers; unnecessarily increasing costs by not utilizing economies of scales; and making misinformed business decisions that are not based on available data. For example, pricing a flat fee maintenance contract; if management is not aware that the average time of a monthly task has doubled over the past few months, and then management is not aware of the need to renegotiate the fee for this task, hence potentially losing money on such contracts.

Inefficiency #5: Poor scheduling; Better time management.
Can you schedule your technicians based on geographic location or expertise?
Can a field technician complete more tasks in a day if they are routed more efficiently?
Can you dynamically and quickly review all upcoming activities so you can improve?
Time allocation and scheduling?
Can you realistically estimate, on average, how much time your tasks actually take?

Inefficiency #6: Poor cash management and collection processes.
How long does it take for information to reach your Accounts Receivables department?
Are you wasting time, paper and postage mailing out invoices weeks after the work was completed?

Most companies, upon self-evaluation, are able to identify additional inefficiencies that can be corrected and reduced. Many of the costly inefficiencies can be significantly improved by automating and mobilizing field technicians and related business processes.

Electronic Work Orders and Inspections

What does an automated and electronic work order system or inspection management system looks like?

Here is a possible scenario: A customer (external or internal customer) calls in to report a broken heating system.

The office staff can immediately view the customer’s information including pending and previous activities, enter the relevant information into the work order system, and create a work order.

Depending on specific internal approval processes, the work order can be immediately scheduled and assigned to the appropriate technician. If the business deploys a wireless PDA system, then the work order is dispatched electronically to the PDA used by the desired service technician. The electronic work order includes all the required information including customer information, exact address/location for the task, description of the problem, instructions, required actions, safety requirements, etc.

For non-wireless implementations, a technician can electronically retrieve their work orders using a cradle, or dynamically add a new work order in the field using their

PDAs.
On-site, the technician can view the information on their PDA, make modifications, record results, parts, effort (labor), observations, recommendations, and any other information pertaining to the work performed.

Additional features may include using barcodes, capturing automatic date/time stamps and electronic signatures, as well as taking pictures (and even ‘doodling’ on the images to highlight problem areas). A voice recorder can record sounds or a short conversation which will be attached to the work order.

Once the work order is completed, information is sent back to the database (wirelessly or via a cradle). The database is updated with all the appropriate information and management can focus on the next steps: review the work, issue an invoice, automatically email a report, etc. Querying data and producing operational and management reports is easy, since the information is homogenous, timely, accurate, and can be easily accessed.

It is important to note that while every business incorporates specific business processes, automation can quickly adjust, improve, and address your specific processes by:
- Applying experience gained from other customers using similar business processes, including proposing and incorporating adjustments to manual processes to accommodate automation.
- Providing a healthy balance between technology, human intervention, and common sense. Many implementations are managed by technical ‘propeller heads’ who want to automate every little detail. Proper implementations combine human decision-making with automation which results in improved efficiencies and reduced costs.
- Tailoring a solution to accommodate unique business processes: Systems that offer cost-effective tailoring and configurations to accommodate specific business environments will fit your organization much better than solutions that promote ‘one size fits all’.
- Scalability and flexibility is a key feature that must be considered: If a single system can automate a variety of activities including work orders, inspections, PMs, audits, QA questionnaires, etc., than you get a much ‘bigger bang for your buck’ – which is the main reason for you reading this article in the first place.

Information is power is an old adage, but one that rings true in every situation. Information capture and knowledge management is fast becoming the true competitive advantage of any company, especially in these economic circumstances.

Spending Money to Save Money

When hearing the phrase “spending money to save money”, one may just assume that people are just haphazardly trying to justify their latest big budget project. However, in my travels to visit many of our customers, it became very clear that the higher stature a person holds in an organization, the more attention is paid to how money is being allocated to gain significant return on investments.

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It is important to address the issue of the cost of electronic work orders and inspections, and the return on investment.

Is it something that you want to investigate at this time? Shouldn’t you simply wait until the economy gets better?

The answer is simple: Yes and No.

Since during slow economic times many businesses cannot increase their revenues, it is in their best interest to reduce their operational costs while improving services. This will keep your organization profitable while creating a solid foundation for future growth. New systems that automate field activities should be able to demonstrate ROI within six to twelve months. Furthermore, some vendors are offering financing or monthly payment plans, which can make the proposition of improving your business – demonstrate an immediate return on investment.

Quick visible paybacks affirm investment in electronic field activity solutions. These decisions also minimize and eliminate the six inefficiencies described earlier in this article: insufficient information availability, too much paperwork, too large of administrative costs, missed opportunities, poor scheduling, and poor cash management, and therefore generate a competitive advantage and better customer service.

With proper implementation, all of the above attributes create very incising and very appealing means for you to “spend money to save money!”