"Continuing to control your shop with a Shop Management Software program and the new technologies being made available"

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Shop Management Programs continue to run the shops accounting and the jobs on the shop floor. There is new technology that continues to come along to help the shops to be more efficient and to save more money. Examples: An on truck pick up and delivery system to speed up the ordering process and customers being able to check on job status via the internet.

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Shop Management programs should be designed the way you do your business. It should be designed specifically for shops that take in customer's parts, perform a process on them, and then send those parts back to the customer. The program should not be for manufacturing companies. It should be designed to work the same way you do.
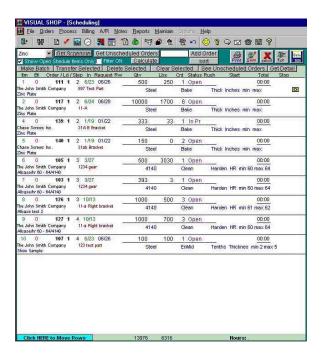
A Shop Management software program will save your company money.
- **Information is never entered twice.** If a part is quoted, that information is available to order entry. Once an order is entered, its information flows through scheduling, tracking, certification, shipping, pricing, invoicing, and accounts receivable. This increases accuracy, efficiency, and productivity.
- **Repeatability**. Once a part is entered into a system, the system should know its process requirements, cert requirements, pricing, pictures, and any special instructions. Therefore repeat jobs flow quickly through the system. This speeds up order entry, certifications, and billing.
- **Information Availability**. Data is updated as it is entered and is available to anyone at any time as long as they have the proper security clearance. Everyone works off the same information.
- **Information Quality**. Once a part is set up, process information, tracking requirements, certifications, and pricing should be all automatic. Process instructions are accurate and the job is always priced the same way.
- **Communication**. Shift to shift communications is improved and the system should have an internal notes module. A Customer Communication Manager module collects specific customer issues from different departments and brings the information together for later review. Better communication results in fewer errors.
- **Historical Information**. The system should record information every time an order is touched. It should be a detail based system.
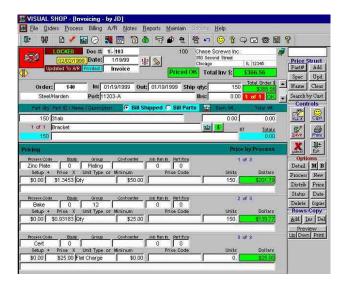
Some software features that a system may include:
- Security
- Data Logging
- Quotations
- Order Entry
- Digitized Pictures
- Labels
- Shop Travelers
- Certifications
- Expediting
- Scheduling
- Shop Floor Tracking
- Bill of Lading
- Shipping
- Signature capture
- Email / Faxing
- Process Masters
- Auto Pricing
- Invoicing
- A/R
- Reports
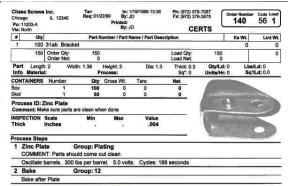- Lab Analysis

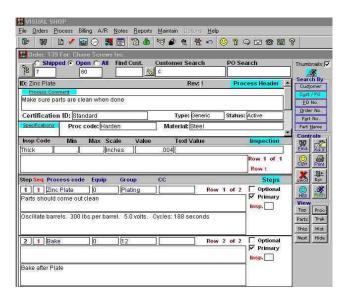**Examples of typical screen shots:**

Scheduling

Invoicing

Expediting

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Shop order

Process steps

How much money will you save with a Shop Management Program?

Obviously the money you will save will vary depending on your current situation.
To arrive at a figure, we polled our customers.   We asked them if the software saved them money, how much, and why? We used only the labor savings aspect of the program, though many customers derived savings from better quality, improved customer service, and other areas.

The chart below is a conservative estimate of what you can expect to save with a Shop Management program:

# of PC's running program	Hours saved per user per day	Hours saved per day	Hours saved per week	Hourly rate	Weekly savings	Yearly savings
2	2.4	4.8	24	$ 12.00	$ 288.00	$ 14,976.00
5	2.0	10	50	$ 12.00	$ 600.00	$ 31,200.00
10	1.4	14	70	$ 12.00	$ 840.00	$ 43.680.00
20	1	20	100	$ 12.00	$ 1200.00	$ 62,400.00

The data is grouped into categories based on the number of licenses (users) the customer has. The first group of 2 pc's represents customers that had 1 to 3 licenses. The 2nd group represents customers that had 4 to 7 licenses. The 3rd group represents 7 to 15 licenses and the final group represents 16 licenses and above. The chart is based on dollar figures of an hourly rate of $ 12.00 per hour. It does not include any other benefits or taxes. This information reported is based on averages of what a customer can save with a program. (Keep in mind that all shops run differently and figures will vary)

Here are the results: Smaller shops were either not using systems or the systems were not industry specific. In many cases those shops were double entering data, handwriting orders, and re-entering data into their invoicing. Therefore moving to a Shop Management program yielded a high rate of savings per user. As shops got larger, they tended to have come from older outdated systems. Some of the systems used were manufacturing systems and others were custom written. In some cases there was no one left to support the existing system. In some places their accounting did not tie into their shop system. Those using manufacturing packages often had to do a tremendous amount of data entry and perform a large number of steps to enter an order. In many places; Monthly reports were done manually, shop communication and data flow were poor and often required data re-entry. A Shop Management program was able to streamline their facility from front to end. Also it improved communications and dataflow and eliminated data re-entry.

Tips for making the Best Software Buy:

1. **Industry Specialization**. Deal with a vendor that specializes in developing software for your industry. The more the vendor knows about your industry, the more likely the software will meet your needs - and expectations.

2. **Product Specialization.** Make sure the software you're buying is the vendor's primary product. That way, your satisfaction is crucial for the vendor's success, and they can't afford to write you off if you're unhappy.

3. **Vendor Support**. The vendor should provide ongoing support and upgrades. Software that remains current will have a longer life cycle, which allows you to get maximum 'bang for your software buck.'

4. **Reference Check.** Software vendors often have a select list of customers they use as references - often the ones the vendors take the most care with. Instead of taking the vendor's elite list, ask for a complete customer list and randomly call at least five companies on the list. Remember to ask about the vendor's customer support and how well the software performs.

5. **Free Trial.** Insist on a FREE trial period. Companies that refuse a free trial may be hiding something. Many companies now do the trial over the internet. At the very least, they seem to lack confidence in their software's performance.

6. **Test Run.** Don't base your buying decision on the sale representative's demo. The only way you can tell if the software will work for you is by trying it yourself. After all, management software has to do your pricing, create your invoices, do your shop orders, your certifications, and operate within the rules and policies of your business. By 'test-driving' the software yourself, you can discover whether modifications will be required - either to adapt the software to your business (preferred approach), or to adapt your business practices to the software.

7. **Windows Compatibility.** By Windows-compatible software; it's the worldwide standard. And make sure the software package is "Windows-designed." The so-called "Windows Software" of many companies was actually designed for another operating system, and then retro-programmed for Windows compatibility. Such redesigns rarely run as seamlessly and problem-free as software designed for Windows from the ground up.

8. **Software Programming Language.** Ask about the language the software is written in. Some languages are at the end of their life cycles and close to becoming obsolete - which results in software without a future. Make sure the language used creates true Windows applications, is mainstream, and is widely used.

9. **Database Standard.** Ask about the database. It should be ODBC, an open relational database standard; otherwise you won't be able to access your data from the other programs such as Excel or Microsoft Access. The database should be able to handle the volume of transactions your business generates. Many databases are great for low volumes, but choke when the transaction rate increases. The more orders a day you process, the higher your transaction count. And, since you expect your business to grow, you'll want a software program that can easily grow with you.

10. **User-Friendliness/Operating Speed.** The only thing worse than dealing with software that needs a specially trained computer operator to run it, has to use software that runs slowly. Remember that every software package runs fast with test data provided by the software vendor. Make sure the software can handle YOUR volume of business, and that your employees will be able to learn to use it quickly and easily - without having to get certified in the program or keep their noses stuck in operating manuals.

New Technology that has come or is coming to your Shop Management program:

Web based software programs that will allow your customers to access and enter information via the Internet. This will improve your customer relations while lowering your operating costs. It provides your customers with real time information on their jobs, and a quick and easy method of communicating with you. Finishers can select which customers have access to their data, and can restrict access to specific information on a customer-to-customer basis. The best part is that this can all be done with the click of a mouse, from any web browser anywhere in the world. All the data is in real time, so customers see exactly what the Finisher sees.
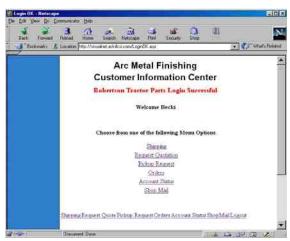
An example of what your customer will be able to do:
- Enter a quote request
- Check shipments
- Request a pickup
- Check on an order
- Check their account
- Communicate

What will I gain as a finisher for having this? **Better Communication.**
1. Your customers get better service.
2. Your customer service personnel will now have more time to take care of real problems.
3. You reduce your operating costs because your phone traffic will be greatly reduced.
4. You provide a level of service that most of your competition can't provide.
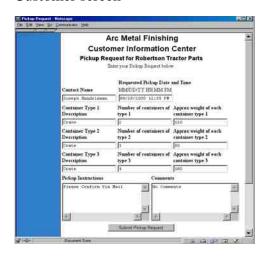5. Your customers can enter their own information such as pick up requests and quote requests.

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What will your customers gain by you having this? **Better Communication.**
1. Your customers can get the information they need right away.
2. They no longer have to play phone tag or spend long periods of time on hold.
3. And when you customer does call you, you are now more available.

Welcome screen

Customer screen   Shipping screen

Another new development is an **On Truck Pick up and Delivery system.** This will increase the efficiency of the shop as now the orders are entered right from the tuck when the parts are picked up. The following are some other things that the delivery system can do:
1. Customer signs the tablet pc when work is delivered.
2. Purchase orders that are picked up are scanned and sent immediately back to the shop where they can be printed and orders entered before the truck arrives.
3. Reports on where the truck has been and at what time.
4. Can be integrated with online program as discussed earlier. Customers can see delivery information.
5. Expediting can see when the job was delivered or when the customer picked up.

Hardware consists of an air card, tablet PC, and a document scanner.

What can Visual Truck do for you?
1. As the purchase orders are sent to you from your truck, you know what is coming in before the truck arrives and can pre-enter the orders. Lessens that bottleneck that occurs when the truck come in. Also lets you set up your schedule in advance.
2. Signed delivery receipts are a thing of the past as you can instantly bring up a proof of delivery showing the customers signature. No more searching for that signed shipper.

The latest hot item out their in the market that shops can use is an online back up system. **Shops at times fail to do their back ups.**
- Is the data stored on your server worth thousands of dollars?
- If you lost your data would you lose stored knowledge and history?
- Would it cost you thousands of dollars to replace your data?
- Would losing your data have a negative effect on your business?

There is a technological solution that will provide reliable and secure backups for your shop:
- Automatic backup – It is a small program on your server. You setup that program and tell it what files need to be backed up and when to back them up. Normally the backup is scheduled to occur during the night. Once the schedule is set, everything is automatic. The program can backup any size database / file and any amount of data.
- Security - You enter into that small program an encryption key. This is a word, a phrase, or whatever you want it to be. All data backed up to a central server will be encrypted using that key before it leaves your computer. You are the only one that knows the key. Without the key, the data is useless and can not be decrypted. Don't lose the key.

- Speed – When the program encounters a file for the first time, it compresses the file and sends it securely to our backup server. Once a file has been compressed and sent to the server, never again will we send that entire file to the server. All future changes to your files will result in only the changes within the files being sent to the server. When the changes are received by the server, they are applied to your backup files creating a complete up-to-date copy of your file system. This is called Fast Bit Technology. Only the changes to your data are compressed and sent. This reduces the amount of data sent by anywhere from 90% to 99%.
- Reliability **–** The transmission is monitored and examined automatically. An email is automatically sent letting you know the backup was successful or if there were any errors.
- Offsite **–** This is an offsite backup. No matter what happens to your data at your facility, there would be a copy.

Wireless technology is endless for the shop. Portable handheld scanners, printers, and PC's lead the way. But be sure to get the industrial graded equipment so the equipment will withstand the ongoing working environment.

In conclusion, as this paper is probably presented, there will be new things to talk about as the advances of technology keeps ever evolving.