



SKILLWEB

**How to avoid 8 common potholes
on the road to business perfection**

8 issues you'll confront when adopting technology for
business improvement within the supply chain |

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Contents

Foreword

Introduction

1. Commercial & Financial
2. Operational & Process
3. Technical
4. Security
5. Opportunity
6. At the end of the day

Foreword

This ebook is aimed primarily at the business manager, however even if you are a technology professional we hope that you might still consider this worth spending a valuable 5 minutes of your day reading.

We are supply chain experts and we want to share some of our insight with you in this light hearted précis, where we will cover some of the issues that we have conquered over the last decade, expending more than 100 man years of effort in the process.

Across the entire spectrum, there are many technology pundits claiming that you can reap enormous benefits and save millions with their particular brand of widget.

In today's climate these claims are probably quite eye-catching. You are competing in the most challenging market that businesses have faced for many years, possibly ever.

We do not want you to waste your time, tearing your hair out trying to invent the wheel, when for example we have already created some very interesting and useful round things that you could buy and roll around on very simply.

We invite you to read on, you never know, there could be a new nugget of information for you, maybe there's a smile, or perhaps even there is that warm feeling you'll get from knowing that you have it all covered already.

Introduction

Working in the supply chain as you do, you'll probably spend a lot of time on the road. You'll be used to potholes, you are used to obstructions and you are constantly dealing with change and challenges. You are in a demanding business!

Developing success strategies is getting harder and harder, as business and customer needs become ever more complex, and information increasingly becomes a competitive differentiator.

We want to help you improve your chances of business success by offering you some positive advice for evaluating technology solutions to improve your business; as technology is often the key to success where information is the strategic motivator.

So, if you are considering either adopting a supply chain technology solution for the first time, or are thinking that your current infrastructure could do with a refresh, maybe it does not offer you quite the answers you need, then we suggest you consider these 8 important topics.

We'll invite you to think hard about the total cost of ownership, protecting cash flow, measuring ROI, the use of products versus bespoke developments, choosing the right tools and the right experts for the job, flexibility, points of failure and finally but very importantly, the management of change.

We are sure that you will know much or all of this already; however it is always wise to make sure, as the Chinese proverb goes:

"To know the road ahead, ask those coming back"

Chapter 1

Commercial & Financial



1. Commercial & Financial

"Much wealth will not come if a little does not go"

We probably all recognise that we get nothing of value for nothing. Low cost claims or free offers rarely contain the services or requirements that you need.

Expect to pay a fair price for a fair product and then you will be able to get a true measure of the cost. Do you want a supplier relationship where one side is always trying to recover lost profit through extras and add on work?

In this chapter we consider the total cost of ownership and the impact on your cash flow, so here are our first two economic nuggets.

- i. Buy cheap buy twice – avoid millstones at all cost – now and for the future

When considering the price of any solution, be it something your own IT group/supplier might consider developing themselves, a bespoke development from an "industry specialist" or even an off the shelf packaged product, it is important to consider the whole of life cost. Changes, support and maintenance are important aspects of any solution, particularly one that will become an integral and vital aspect of your operation.

Elements that might seem unimportant at the time of purchase may be overlooked – IT experts generally consider that the "buy price" of any solution only represents 25% of its whole of life cost. Think about the cost of moves and changes as time goes on whilst your business evolves and adapts.

On the face of it, prices could seem attractive or uncompetitive; however one must be sure that apples are at least being compared with fruit and not to minced beef!

A bespoke development may often, on the face of it, seem like a low cost option, but consider this: Are you a supply chain company or a technology developer?

Is the effort involved in developing and maintaining a system and its functionality more than you should take on? How many people from your operation are going to be sidetracked by the needs of the (internal or external) development team?

Very often the introduction of new functionality down the road can be much more than "just an extra line of code". A single simple change could mean that your entire infrastructure has to be adapted to allow for surprisingly simple alterations.

The safest route by far is to choose something based on a proven product, one that has a development lifecycle, and one that is managed and maintained by a group of focused engineers, whose job it is to keep abreast of changes in operating systems, applications, networks and most importantly your business and market.

When evaluating suppliers, consider the depth and breadth of the development expertise on hand and the rigour of the testing and roll out effectiveness. Go see them, talk to the developers and get a feel for their dedication. This way you will be able to ensure that you are investing in the right, open relationship.

In short the question to ask is; is the solution cost effective and cost controlled by design?

ii. Pay as you go or up-front investment?

Many people believe that if you pay up front for a bespoke system that you will get exactly what you want, when you want it and that will be an end to the cost - and your problems.

In these focused times, initiating big ticket investment projects for an IT solution is becoming less and less desirable. Create an internal (or even external) project and you'll probably divert valuable resources from other important tasks; this has the same effect as a capital investment.

OK, so perhaps you are considering a product or service approach. Large up front customisation projects should be treated with caution as well, just how much does that feel like an undercover bespoke development?

Consider, or insist upon, a flexible licensing model. How much more desirable is a system that can be implemented without extensive capital budget, and instead can be acquired using purely opex? Consider the significant impact that would have on your existing lines of credit; this too has a significant value.

It is simpler and less painful to appreciate ROI across the lifetime of a system if payment has also been amortised across the lifetime of the system.

Our recommendations – seek out a viable recurring license model and beware excessive up front charging. Preserve cash flow and spread your risk over the lifetime of the system.

Chapter 2

Operational & Process



2. Operational & Process

"With time and patience the mulberry leaf becomes a silk gown"

Do you want to buy plants in order to end up with garments or would you rather cut straight to the chase and buy an off-the-peg garment then just have it nipped and tucked?

Every operation takes time to evolve and mature and we all learn lessons daily about how we could do things better. But it is very difficult to learn about issues and continuously improve when there is no real-time data to support you. It is also very difficult to grow and adapt in a vacuum.

Technology solutions can significantly speed up your operation as they increasingly offer everyone instant access to reports rather than hours, days or even weeks.

In this chapter we consider the application of off the shelf products and choosing your experts wisely, so here are two more nuggets:

- iii. Adopting best practise – do you build a digital version of what you do now or take the opportunity to review working practises and introduce innovation?

You know that you do things very well, you do the best you can, you get most of your consignments delivered correctly first time, and you can't help it if the customer is not there or not available. Surely there is no room for improvement, or is there?

What if.....every customer could be called just before delivery to be sure that they'd be there? If that doesn't fit with your

current business model then it is a potential innovation, but how could it best be done and by whom?

What if your system was able to confirm that every assignment was in depot, on van, en route, or even (God forbid) delayed and stuck in traffic? That would surely represent excellent service, and surely bad news is better than no news?

Also consider this, does every one of your operatives know exactly what to do, every time, for every one of your consignments in the event of an issue occurring? How much management time and effort is spent dealing with losses, incorrect consignments, breakages, incorrect or incomplete addresses?

Collecting a digital signature and showing that to your customer, maybe on the web, is a good step, but it is just a starting point. It is a great way to close the delivery loop and forms the basis to get invoices paid quicker, but you should see that as just the starting point. For example, we have sought ways to really improve the experience for your team, how to support them in the field and make their job easier.

Consider the sheer volume of best practise and fresh ideas that are already modelled into a professionally developed product (ours for example is a real world service that supports over 5,000 people every day) and consider adapting your business to the rules of the software and not the other way around. It can be much less painful, far less costly in the long run, and good things can arise.

The measures to consider here are ease of use, intuition and future proofing.

- iv. Coping with obstacles, changes, not present, additional packages, no “paperwork”

When something happens that is unexpected or does not fit your rules, what is the work around? Ignore it? Deliver it and get a scrap of paper signed?

The pony express had a phrase.....man with arrow in butt ride faster next time. We have come a long way from the \$15 per ounce, 10 day delivery service of the pony express, but it is fair to say that they had their own share of encounters en route, interestingly they only lost one item ever (out of a total of 34,753) - but that's one more than us!

The pony express only lasted 18 months because it was overtaken by technology, but don't let that happen to you, instead harness technology.

If you think about where most of your time is spent, is it running business as usual, or is it spent trying to sort out problems, dealing with competitive threat or fighting fires?

We believe that the best place for you to focus your attention is in the place where the pain is. If you think about the symptoms, how easily can you get to the root of the problem? Is the information you need to make informed decisions about an issue ready to hand and reliably available?

In a fast moving business like yours, where no two days are really the same, how can anyone expect to model a secure (where most will read “inflexible”) IT system to cope with the demands of every mishap or unforeseen event?

Well, if like us you had spent the last 10 years working right in the thick of it, then you could say (like we do) that you

have probably already come across most of the issues and have successfully and flexibly modelled them into your products. We have been called in a number of times to right the wrongs of failed or stalled internal projects and we can bring all that know how right to your door in a simple packaged product.

Oops, sorry, got carried away selling for a moment there. However, if you are looking to adopt technology, it is imperative that you consider the exceptions rather than the rules. It is here that you will find a chasm of differentiation between products, suppliers and developers. All of a sudden it becomes easier to separate the wheat from the chaff.

Recognising the need for “paperwork” to catch up with reality is an important issue. Remember if you want to prevent things going astray then you have got to have reliable information on it. If for example you now know just how many items are getting through without “paperwork” - because your system can still capture the events - then, and only then, can you actually quantify and deal with the root of the underlying business problem.

We advise you seek out experts in the field. The right experts will have had ample time and opportunity to design-in meaningful and workable functionality.

Chapter 3

Technical



3. Technical

"Do not remove a fly from your friend's head with a hatchet"

How often do we find ourselves using a sledgehammer to crack nuts, or conversely a jeweller's pick to mine coal? Finding the right tools for the job is at the heart of a successful IT project and here we find ourselves entering a potential minefield.

This chapter discusses the choice of the right tools and the impact of failure.

Cue our next two nuggets:

- v. Use the right tools for the job, tried & tested, track record, intuitive, easy to use

What happens when an enthusiastic technical department gets hold of a development specification? How often does the real world requirement get clouded by many other perfect world aspects?

We have probably all known solutions that become so encumbered with technical complexity that they become costly and unmanageable, and this is a very real danger. Often then the system may be rejected by those who are supposed to use it as cumbersome or unworkable. When this happens you are compounding pain; user relevance and adoption is the key.

Inaccurate estimates of network traffic or processing power (if you are inventing the wheel, who knows just how disruptive it will be?) can have a considerable impact on system design and cost. Add the cost of maintaining fail-over

and backup systems, testing and training environments; it all adds up alarmingly.

This proliferation can be avoided if you choose a hosted technology solution. Outsource the problem, then buy the service, it's the watchword of hosting. The resulting security issues, and you are correct to have concerns, are covered later in this ebook.

We believe that the right balance can be found elegantly and intelligently. For example why do so many people choose a rugged (and therefore expensive) mobile data device? The typical answer is "because it will be in a hazardous environment and will be treated like any other tool".

Why not create an environment where your operatives will be rewarded by looking after more delicate (so significantly cheaper) devices? In one of our very large customers for example, the operatives are paid based purely on the data in their handhelds – so just how well do you think those (delicate) handhelds are treated?

The lesson here? Well, the right tools will give you stability and real world functionality.

- vi. Adds, moves & changes? All in one head or embedded in a product?

OK so you may have developed a solution internally, it is possibly forms based, it probably captures the data that you need for proof of delivery. I am sure that there will be adequate and future proofed links to other systems that you may operate – web ordering, journey management, inventory, crm, dos-based legacy systems?

But how well is it all documented? How many people in your organisation know how it works to the code level of detail needed to support it effectively? What would be the effect if someone pulled plug a out of box b and plugged it back into socket c on box d?

How can you test the impact of upgrading the operating system on your servers? Is it best just to let it run unmolested? But what happens if elements move beyond support or there are major security updates available? And how will you manage version control? This also all goes for your multiple devices in the field as well.

An efficient IT department I am sure will have this well covered, however how many key employees do you now have to insure? What if that programmer who knows all of the system leaves or retires, or wants a pay rise? How easy is it going to be to add features or develop new products/services?

Perhaps the old adage that there is safety in numbers is apposite here. If you are invested in a product, with an ongoing development programme guaranteed, with code controls and disciplined development documentation, then you will be saved from many a headache in the future.

If this technology is considered core to your operations, and it is critical to your ongoing competitiveness and cost control, then there should be adequate insurance in place that it cannot fall over, cannot lose data or cannot fail.

Chapter 4

Security



4. Security

"One cannot refuse to eat just because there is a chance of being choked"

All aspects of security are important, and risks should be sensibly mitigated, but should these concerns stifle or paralyse your business? We don't think so, but we know that they could if not handled correctly.

Can you design in all the checks and balances needed to make sure that what goes in and comes out is accurate, reliable and can never get lost? Can you trust that your data will be safe from loss or attack? How high and how impenetrable should the fences be around your system?

This chapter deals with the issues of flexibility and the management of change.

This leads us to the last two nuggets:

- vii. Mised by human error? Can you still bend the rules when necessary without upsetting the apple cart?

We are all human. We err from time to time I am sure. So can your new system cope with an error? In the "good old days" it was sometimes simpler to just discard an offending piece of paper, or maybe it was subjected to a convenient spillage? When something becomes invisible it cannot be found, right? But this means that there is a leak, and a leak is a loss.

Something arrives, it is not pre-advised, but it is addressed so it can be delivered. Will your records all line up and allow you to invoice for it? Are you certain that you get everything invoiced correctly? If so, do you think that you might be

expending a little too much time and effort (i.e. money) in reconciling paperwork and making sure that everything is invoiced correctly? Is it actually worth spending £10 of admin and management time to cover a £5 loss?

So there is value in ensuring that your systems are watertight and secure. There is definitely value in ensuring that every event is captured, even if it is just as an exception for investigation later. Tracking actions through the system, by user, by consignment, by customer, is paramount. Visibility of all this is key.

To write such flexibility into a system is not as simple as it might seem. It takes a huge effort to work through every scenario verifying that data is captured, processed and stored correctly. Test scenarios to verify the security of such a system must be very wide ranging, focused, controlled and take time. How many man hours of test, feedback, re-write, re-test will it take before your new system is ready to be launched into live?

Allowing enough time, resource and cost must be written into any project plan to prove your system before adoption. Better still; opt for an already tried and tested solution, one that can allow you to write your own business rules but within a tested framework.

The key here is to look for flexibility, but flexibility within controlled parameters.

viii. What are the risks involved of adoption/changeover?

What are the risks to your business of introducing a new technology or system? How many such systems have you introduced so far faultlessly? There are issues at every level

that need to be addressed and some will be technical and some human.

What if your workforce rejects the system? How easily can it be sabotaged – maybe accidentally? Often we find that new systems and technology innovations are viewed with suspicion, and if that suspicion is justified, say with a realisation that overtime excuses have disappeared overnight, then how easy is the system likely to be to launch?

But isn't that one of your objectives? Reduce overtime, admin effort and therefore cost?

So how well can you prepare for change outside of just the pure technology aspect? Can you get buy-in from the key stakeholders in the new system, can you generate acceptance that whilst there are possible drawbacks that there will be significant benefits or improvements in working practises as a result?

Consider a programme of consultation or information exchange during the design and configuration stage of your project. User acceptance is always simpler to achieve when key stakeholders are actively involved.

The support from your supplier should be more than just on the technology issues. Training should also be designed to endorse system adoption, and should be proven to deliver real results.

Chapter 5

Opportunity



5. Opportunity

"Man who waits for roast duck to fly into mouth must wait very, very long time"

The objective of this ebook is to help you make more informed decisions, when you consider the adoption of "enabling technology solutions" to deliver operational and business benefit for your organisation.

We know that there is always risk in adopting something new, but we think that there is ample scope to mitigate that risk through following best practise, at every level.

The result of a successful project should be that you become a more responsive and therefore competitive organisation in your chosen market. This should culminate in you winning a greater share of the business available to you in your sector.

There is a risk in the current climate that organisations who do not adapt and embrace the needs of their customers could fall behind or even like the pony express, find themselves eclipsed to extinction.

Harnessing mobile technologies in the supply chain will provide you with significant benefits in performance, cost containment, operational efficiencies and control. However we also know, through a decade of deep experience that harnessing mobile technology is as simple as herding cats. It can actually be done, but you do have to be very focused.

Computing technology solutions in the traditional "fixed" workplace are part of a mature and defined industry. However extending technology use outside the physical perimeter, means that you must rely upon publicly accessible

communication infrastructures, and here you open up many potential minefields.

These public infrastructures and the devices that can work with them are relatively new. Fixed communication systems began two centuries ago, wireless networks only really appeared in the 1980's and data services have only latterly in the last decade become widely, efficiently and cost-effectively available.

Mainstream IT developments typically take what you do now and adapt it to the needs/display/performance of the cut down device. Is this the right way? We for example have started at the other end and have worked with devices to create a meaningful user experience and then integrated backwards to the fixed environment.

We invite you to take the same approach with your business and start with the needs of your customers. Talk with them about how you can help them to win more business. Offer them total joined up supply chain visibility to delight their customers. Demonstrate that you bring your specialist expertise and technology as a competitive differentiator together.

Embrace a partnership approach and expand your horizons.

Chapter 6

Finale



6. At the end of the day.....the sun sets”.

We do hope that this short ebook has served as a valuable refresher for you, and maybe even will help you frame the evaluation of your next technology programme.

We think that you should contemplate the total cost of ownership, protect your cash flow, buy products and not developments, use the right experts, get the cost/performance balance right and avoid bottlenecks and points of failure. We want you to adopt a flexible, yet controlled approach and be mindful of the impact of change across your enterprise.

This means that you should choose a cost effective system with a viable and spread licensing model. We think you can find an easy to use and future proofed system that has been developed over a long period, with significant development and testing programmes that stretch into the future from far in the past. You must specify a stable and functionally rich product that is reliable, referenced and secure. All this must ultimately be configurable to meet your needs, but within a secure and structured framework.

Consider altering or adapting your business processes to meet the requirements of best practise in order to fully embrace and adopt positive change.

Taking this measured and qualitative route should enable you to avoid many of the most costly and ruinous potholes along the route to technology perfection.

Finally, thank you for reading this far.

About The Author

Joe Robinson is responsible for business development at Skillweb, supply chain solution specialists.

Joe is passionate about technology, in particular mobile enabling solutions, where business growth can be achieved through effective use of practical and useful software.

Joe would be happy to visit you and discuss your issues, he'll be happy to sign your ebook (all he may ask in return is a signature of yours!).

Joe will be very interested to understand your business, your challenges and in exploring ways that you can achieve your goals, personal and corporate, through technology adoption, maybe even something that Skillweb can bring to the party.

Please feel free to email or call Joe, the details are below:

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