White Paper

WMS – Does Cloud Reign?

Summary

Has Cloud Technology laid waste to traditional on-premise solutions for warehouse management systems? This article explains some of the buzzwords and acronyms associated with Cloud technology and will dispel a few myths around the subject.

SaaS, The Cloud, IaaS, PaaS, multi-tenant, all words and phrases which might be bandied around when the shiny-shoe'd salesman comes to sell you on the merits of the cloud.

The Cloud…   means you're running you're WMS over the internet

SaaS …   means you're renting your WMS

PaaS …   means you're renting your hardware

IaaS …   means you're renting your network

Multi-tenant … means you're running the same application as everyone else

SaaS is just a payment method, it's often associated with the cloud but is not exclusive to it, and often WMS suppliers can provide on-premise solutions under a SaaS payment scheme.

For any cloud based solution, not just WMS, the features list often includes the following implied benefits:

- Rapid Deployment
- No up-front costs, so a rapid ROI
- Scalability
- Always running the latest version
- Highly configurable
- Resilient

But perhaps if we address them in turn and look behind the sales pitch we can identify a limitation or downside for each.

Rapid Deployment – this will depend on the complexity of the solution, if there are minimal site specifics or you are willing to accept bending your operation to the software then deployment can indeed be rapid. Where a business or operation has unique features that don't easily map then deployment can in fact be significantly longer as any changes required have to be rolled out across the entire customer base before they can be applied.

No up-front costs, rapid ROI – No upfront costs does not necessarily mean rapid ROI and regardless, as previously stated, this is nothing to do with cloud, it's just the payment method.

Scalability – Generally this applies to the addition of new tenants, rather than the ability of the application to scale up to complex operations.

Always running the latest version – You fire up your application in the morning and find that some of the screens look and act differently, do you think "Great I'm running the latest version" or "Oh no now I have to explain all the changes to my staff before they can start work". You may have no control over when this happens.

Highly configurable – everything is highly configurable within the boundaries of its parameters, make sure you understand these boundaries.

Resilient – A cloud based solution will be resilient in the cloud, generally hosted on server farms in across the world, however within the warehouse walls a single point of failure introduced through an executive proxy or similar can negate that resilience.

It's easy to shoot holes in anything if you take a negative view and to be fair Cloud technology does have its place, however one area where Cloud technology is not yet appropriate is in the control of sophisticated automation within a warehouse.

Warehouse Automation

Sophisticated warehouse management systems often make use of various levels of automation to provide the optimum solution to warehouse operations. Although always improving, the latency on Cloud WMS data communications means that automation control is not possible.

Ultimately this means that an on-site server is required to provide real time responses and consequently that system needs to be interfaced with the cloud based WMS. As soon as you have two systems vying for control of the master data you have to start to accept compromises on efficiency.

Any business which aspires to grow to a position where even a small level of automation will be needed should seriously question whether selection of a Cloud based WMS will limit their ability to grow in the future.

Considerations

- Don't confuse how you pay for your WMS with how it is hosted, SaaS and Cloud are not the same thing.

- Are you happy to be one of the crowd, all running the same application or does your business have its own USP's that you wouldn't want to lose?

- Are you limiting future growth by precluding the option of automation in the future?

- Who owns your customer data if its hosted on in the Cloud?

Cloud technology is here to stay and in the long term data latency may not be an issue but at present and in the near future, with server prices rapidly tumbling, on premise warehouse management still provide a future proof solution.