

10 How to Accomplish SaaS

When a business migrates from a traditional on-premises software application model, to a Software as a Service, software delivery model, there are a few changes that a businesses will need to make to their existing software environment, along with a few tasks and processes that they will need to carry out, to ensure that they have a smooth transition. However, these processes will be of benefit to them in the long term, because they will eliminate the unnecessary loads that on-premises software applications place on their data centres and will greatly reduce software management related issues.

10.1 Migrating from a standard software environment to a SaaS one (before and after)

The great thing about migrating from a traditional on-premises software application model, to a hosted SaaS application delivery model, is that most of the work is already done for you. In other words, software applications are already installed, secured and are up and running, ready to be used. Customers do not have to purchase

additional hardware or new servers, they do not need to install operating systems onto these servers and they do not have to waste time configuring these servers.

However this does not mean that a migration from a standard software environment to a SaaS based software environment entails no work. Businesses still have to clearly define what their business processes are and get their workforce behind the new software environment, among a host of other things.

10.1.1 Things to do and consider before migration

The first thing that a business will want to do, before even weighing up whether their existing hardware infrastructure will meet the requirements of their new SaaS application services, is clearly define what their actual business processes are.

Using any type of new technology or software, can easily confuse a business and its employees about which business processes this new software application deals with and which employees will deal with this new software. By clearly defining each one of their processes and assigning roles to each one of their employees for their new SaaS infrastructure before it is actually rolled out, a business can avoid confusion at a later stage.

As well as clearly defining the roles of their new SaaS applications and employees in the larger scheme of things, a business should also be able to answer a number of important questions before they actually implement SaaS within their business environment. These questions are briefly detailed below.

Why are they implementing SaaS?

A business should be clear about why they are implementing SaaS and they should be able to justify its implementation by listing the benefits that it will provide (by carrying out a cost benefit analysis for example). If the benefits of implementing SaaS outweigh the costs of implementing it (including upfront costs, subscription costs, costs related to changes in their own infrastructure, etc), then a business can go ahead and implement SaaS within their business environment, if they wish.

Do they know what they want to get out of implementing SaaS?

It is no good implementing SaaS but then not knowing what you are going to get out of it. Businesses should have a number of aims and objectives that they want to accomplish, through the use of their new software services. For example a business may want their SaaS software applications to reduce their software management costs or to improve data collaboration between various different business sites of theirs that they may have. A business

should be clear on what they want to get out of using their software applications, regardless of what this may actually be.

Have they considered the true cost of implementing SaaS?

Although it may not initially seem like it, when SaaS is implemented, businesses have more costs than just their upfront subscription costs. For example, they may need to consider licensing issues, depending on how many instances of a particular software service that they require and depending on how many users that a SaaS service provider allows, to access a single instance of that software service.

They need to consider internal costs such as the labour costs of implementing SaaS or any costs due to a change in their infrastructure (for example they may require quicker network connections to support their SaaS services). They need to think about training costs and finally how their users are going to access these software services (for example will they require new laptops to access these services remotely), as well as storage related costs. Clearly there are various different costs that a business is faced with when implementing SaaS and they should try their best not to overlook any of these costs.

Do their SaaS software service providers provide them with a solid SLA?

Without a solid SLA (Service Level Agreement) in place, SaaS software service providers are free to abuse their customers by not providing them with the service that they paid for. Yes a software vendor will still offer their software services to their customers but the quality and availability of these software services is not guaranteed. Businesses should choose a SaaS service provider that has a solid Service Level Agreement in place, which defines the exact quality and availability of the software services that they will deliver to their clients, along with any repercussions that they will face if they fail to meet these requirements.

It is clear that most of the tasks that a business carries out, before implementing SaaS as a part of their infrastructure are planning based tasks. A business needs to carefully plan and figure out why they are implementing SaaS. Only when their reasons justify the costs of implementing SaaS and highlight the benefits that a business will receive when SaaS is implemented, should they then actually incorporate SaaS as a part of their infrastructure.

10.1.2 Things to do after migration

When implementing traditional on-premises software applications, a business first has to setup up their hardware, they then have to install these software

applications onto their hardware platforms, they then have to configure their software applications and finally they have to secure them as well as test run them.

Implementing SaaS is much simpler than this and is very quick. The only real trade off is that SaaS software applications currently do not offer the same level of customizability that traditional on-premises software applications do. However, most software vendors can live with this fact.

Most SaaS service providers do provide their customers with 'point and click' customizability options. Customizing their SaaS software application services is the main thing that a business should do, once their SaaS software services have been rolled out. The main reason for a business to customize their SaaS software application services is so that these software application services can more efficiently help a business, to meet their own specific set of needs.

The final thing that a business should do after successfully implementing SaaS is test these software application services. For example, they could test their default internet browsers compatibility with these software application services. They could test how efficiently their software application services would work on mobile devices such as laptops for example or they could just generally test how efficient their software application services were, by testing whether they were likely to crash under heavy loads or not.

10.2 A simple how to guide

The actual implementation and rollout of SaaS software applications is a relatively quick and easy process. In fact, businesses will spend more time on processes that are related to planning and determining why SaaS is being implemented and whether it is worth being implemented, rather than the actual implementation stage of these software services. There are a number of different ways that a business can go about implementing SaaS but most methods will include the stages detailed below (or a variation of these stages).

1. Justify the implementation of SaaS using a wide range of criteria

There are two main software implementation models for businesses and these consist of an on-premises software implementation model and a hosted SaaS software implementation model. When a business decides that they want to implement SaaS, they should carry out extensive research, determining whether SaaS will be of benefit to them or not.

Not only should a business match-up SaaS software services against their research criteria but they should also match-up traditional on-premises software applications against their research criteria. By doing this, a business can then compare and contrast both software implementation models, which will then put them in a better position to

justify which software implementation model will be the of the most benefit to them

Cost is an obvious research criterion, for example the software implementation model with the cheapest upfront costs will be favoured by most businesses. However, businesses should not just base their final selection on cost alone. Other research criteria should also be considered, including:

- The flexibility that each software implementation model offers. On-premises software applications generally offer businesses with more flexibility but of course they usually have higher upfront costs than SaaS applications.
- Potential risks that each software implementation model may pose. For example a SaaS implementation model may potentially threaten a businesses' privacy, because their business related data is being transferred across the internet and in most cases is being stored within a software vendors data centres.
- Licensing related issues. For example, how many users can access a single instance of a particular software application if SaaS is being used and will a SaaS service provider charge extra if more users than what are allowed use a single instance of a particular software service.

- How much storage capacity will SaaS service providers give to their customers and what are the costs for additional storage.
- What kind of support is offered by the software vendor and is this support free.
- Additional costs which may not be as obvious as the upfront costs that a business faces. For example the cost of IT professional to manage on-premises software applications or the costs of providing training in order to teach employees how to connect to and use SaaS software application services.

A business should compare both software implementation models (where applicable) to the research criteria above. Once this is done, a business will be able to see more clearly, which software implementation model is the best one for them. Two other research criteria that a business can use (which are applicable to SaaS), is whether they will be able to easily migrate back to an on-premises software implementation model in the future, once SaaS has been implemented and what the long-term prospects of their SaaS service provider are.

2. Negotiate a contract that is right for them

So a business has now justified their reason for implementing SaaS using the criteria above (as well as

other criteria). The next step for them involves negotiating a suitable contract with their SaaS service provider.

Most SaaS service providers often do not provide formal Service Level Agreements (SLAs) to their clients. The reason for this is because they do not want to take up the additional responsibility that a Service Level Agreement provides them with. Instead SaaS service providers will often have best effort delivery clauses in their contracts but this guarantees nothing to a client and software vendors can easily abuse a contract which contains best effort delivery clauses, due to this fact. In order to protect themselves and ensure that they get exactly what they pay for, a business should request a reasonable Service Level Agreement contract from their SaaS service provider.

Businesses will also want to ensure that there are no hidden costs in their contract. For example is there a clause which states that their subscription only includes a certain number of transactions per month and that additional transactions will incur charges (or something similar to this clause). Will customer support remain free or will a business be charged after a certain number of support tickets have been used up (if a ticket based support system is used).

Finally a business will want to confirm what recovery and security related clauses are in their contract. For example, what backup procedures does a SaaS service provider have in place, if any? Will the service provider be liable for

the breach or corruption of their client's data when it is stored within their own data centres (after all it should be the service providers own responsibility to secure their own data centres).

These are all important considerations for a business to make when they are negotiating their SaaS contract and if they are unhappy with anything then they should request the changes that they require.

3. Use best practise implementation methods

Once a business has justified their reason for implementing SaaS and have negotiated a suitable contract, they can then actually implement SaaS as a part of their software infrastructure. The actual implementation of SaaS software services is a relatively straightforward process. However, businesses should still follow generalized best practise procedures that they would follow when implementing on-premises software (or any other new technology for that matter), in order to help minimize the chances of any problems occurring.

Some of these best practise procedures are briefly detailed on the following page.

Re-confirming the aims and objectives that the new SaaS solution will help them to achieve

A business should already have a good idea right at the very beginning, about what their new SaaS software services will help them to achieve and accomplish. However, after negotiating a suitable contract, a business should once again confirm that the SaaS services that they are going to implement will still help them in meeting their goals and objectives. If this is still the case, then a business can go ahead and implement SaaS as a part of their software infrastructure.

Building a suitable team

Once SaaS has been implemented, a business will require a number of IT professionals to manage and maintain their new software services. A business should define roles within their organization and a business should also create a team (or group of teams) that will look after their new SaaS offerings, before their SaaS software services have actually been implemented.

Some of the roles within a business that has a SaaS based software infrastructure, include a SaaS software administrator (who will look after SaaS software services). A user group committee (who will suggest changes in order to fine tune software services for a business), as well as a SaaS software developer (who will be able to make the

changes to a businesses software services, that the user group committee suggest).

Defining a clear timeline

Even though implementing SaaS is a relatively quick and straightforward procedure, a business should still define a clear timeline for their actual implementation procedure (they could use a work break down structure in order to do this, for example). A business should clearly define milestone dates as well as dates for when important tasks should be completed by, so that they can avoid being sidetracked when actually implementing SaaS and making the required changes to their existing infrastructure.

Configuring the SaaS solution to meet their specific needs

Once a business has implemented their SaaS software services, they will want to configure these software services to meet their own specific needs (just as they would configure any other new software application or technology). A business may also need to carry out configurations to their existing infrastructure before actually implementing their new SaaS software services.

Some of these configurations and changes might consist of hardware based changes, network based changes or even software based changes. No matter what changes and configurations a business has to make to their

infrastructure, both before and after the implementation of SaaS, they should always plan for these changes beforehand by carrying out research in order to avoid any unforeseen problems.

On a closing note, again, once more it is not the actual implementation of SaaS that is a challenge to businesses (the SaaS software services that they are going to use are already in place and ready to use). Instead, the challenges that a business faces, is making sure that the SaaS software services that they are going to implement are the right software services for them and will easily integrate into their existing business infrastructure. If this is not the case, then as detailed before, a business should make the necessary changes, either to their own existing infrastructure or to their new SaaS software services (using whichever method is the most practical and the most cost effective).

4. Adopting solid data security practises

Once SaaS has been implemented, it doesn't mean that a businesses work stops there. Security is the next thing that a business should be thinking about. Although the security of a businesses software services and the data that these software services use are in the hands of a businesses SaaS service provider, this doesn't meant that a business has no power at all when it comes to security.

Some of the things that a business can do to help ensure that their software services and data is secure, include ensuring that their SaaS service provider, provides them with a data protection guarantee and also ensuring that their SaaS service provider complies with industry standards. Businesses should also look into their SaaS service providers background and find out what levels of security they have in place to protect their data centres, what backup and disaster recovery procedures they have in place, if any and how they actually go about securing each one of their client's data.

Finally a business should clearly define roles and access rights within their own organization (again this is a process that would also be carried for on-premises software solutions). For example, no users without the correct credentials should be able to access more than what they are allowed access. Workstation users may only have access to restricted versions of a software service, while administrators would have access to the full versions of these software services.

5. Adopting a solid support structure

The final task that a business wants to do when implementing SaaS is to adopt a solid support structure for their SaaS services. For example a business will want to decide how they are going to support their SaaS software services, what employees will support these SaaS software services (i.e. existing employees or will a business have to

bring in additional IT professionals) and how these SaaS services will integrate with software from third-party software vendors for example.

One mistake that businesses can easily make when adopting SaaS, is to think that they no longer have to carry out software support and maintenance related procedures. However, this is not entirely true. Although SaaS service providers will carry out software upgrade procedures, data management procedures and support related tasks, it is still down to the end user of these software services, to ensure that they provide any additional support for these software services, in order to make sure that these software services meet their exact needs (rather than just vaguely meeting them).

Finally, businesses who are implementing SaaS should always have a second or third choice SaaS service provider in their mind. The reason for this is simply because if any changes occur to their SaaS service provider, then they will also be affected by these changes. The SaaS software market is still maturing and it is very likely that a SaaS service provider could merge with another company or even be completely taken over. By having a second or third SaaS service provider in mind, businesses are ready to shift service providers if any changes do occur to their existing service provider (to the point where their existing SaaS service provider can no longer deliver their software services as they once did).

10.3 Top 10 things to do and consider when implementing SaaS

When implementing SaaS, there are a number of processes and tasks that a business must complete, in order for them to successfully implement SaaS as a part of their infrastructure. Ten of these considerations and processes are detailed below.

1. Ensure that you understand exactly why you are implementing SaaS

Whenever a business implements a new technology, whether this is a hardware based technology or in this case a software service based technology, there is always a reason (or number of reasons) exactly why a business is implementing this new technology. There are a number of reasons why businesses would want to implement SaaS. Some business might want to improve the efficiency of their business related process by being able to concentrate more on business related processes rather than on software management processes, while other businesses may want to improve the collaboration of a number of different business sites of theirs, which are geographically separated.

No matter what reason a business has for wanting to implement SaaS, they should be clear about exactly what this reason is. A business should also have a very good understanding about how their existing processes and

infrastructure work. This information is required so that SaaS software services can be integrated into their existing infrastructure at a later stage but with an absolute minimum of problems.

2. Note down exactly what you need in order to help you achieve the reason why you are implementing SaaS in the first place

This directly follows on from the first consideration. Once a business knows why they are implementing SaaS, they can then go about finding exactly what they need in order to accomplish this. There are a number of questions that a business should be able to answer, which will help them find out exactly what they need in order to accomplish what they initially set out to achieve. Firstly a business should be able to answer exactly what their SaaS software services need to be able to do. Secondly, a business should be able to answer exactly what kind of features these software services will need to have, in order to meet the answer to their previous question.

For example if a business wanted to improve data collaboration between various different business sites, then they would want a SaaS software solution that could be accessed by many users. However, if a business wanted a highly efficient software solution, similar in performance to traditional on-premises software solutions, then they would probably want a SaaS software service that could only be accessed by a few users at a time (making it more efficient

than software solutions which are offered by many different users at the same time).

No matter what a business requires, by answering the two questions which were detailed in the first paragraph, things should be made a lot clearer for them. This means that a business should now have the knowledge to choose a SaaS service that is suitable for them.

3. Request a Service Level Agreement before signing any contracts

The Service Level Agreement is an important agreement document because it clearly defines what a SaaS service provider is offering and also what consequences they will face if they fail to deliver these services, to the agreed standard. To avoid problems at a later time and to ensure that they are getting exactly what they paid for, a business should request a Service Level Agreement before actually signing any contracts. Only when a business is happy with the terms in their Service Level Agreement, should they continue with the implementation process of SaaS.

4. Make sure that agreement clauses meet your needs and not just the software vendors needs

Because of the fact that SaaS software vendors can be located anywhere in the world, their customs and agreements may be differ from what a business (located elsewhere) actually thinks that these terms mean. For

example, if a business was located in the US and their SaaS service provider was located in the UK (or any other part of the world other than the US), then there will be a time difference (among other differences) between the two organizations.

This has a number of consequences when dealing with availability agreements or any other types of agreement clauses for that matter. For example a SaaS service provider may have a clause stating that they guarantee the availability of software services during business hours. However, a business should be clear about what exactly is meant by phrase 'business hours'. For example, does it mean that these software services will be available during the SaaS service provider's business hours or does it mean that these software services will be available during their client's business hours (which will differ from theirs due to geographical differences)?

Also, still using the same example above, a SaaS service provider may have a different interpretation of what the term 'business hours' means, when compared to what their client actually needs. For example a SaaS service provider may define the term business hours meaning nine till five. However if a business operated 24/7, then obviously this clause is no good for them.

If a SaaS service provider has any vaguely written agreement clauses, then a business should clarify exactly what these clauses mean and if they are not happy with

these clauses, then they should negotiate their own agreement clauses or select another service provider that better matches their needs.

5. Consider IT support requirements

Businesses should consider what level of IT professionals they will need, as well as what the expectations of their SaaS service provider actually are. For example will a business be able to continue operating with their existing workforce, once SaaS has been implemented or will they need to bring in additional IT professionals. Will a businesses SaaS service provider expect a business to have technical geniuses on hand or will anyone with a basic knowledge of IT be able to use their software services.

The level of support that a business will have to provide for SaaS software services themselves, all depends on what level of support their SaaS software vendor can provide them with. If a SaaS software vendor just delivers their software services but with very little support or documentation, then a business will need to employ a solid IT support workforce. However, if a SaaS software vendor provides clear instructions and documentation in clear English (with very little technical jargon) then a business should be able to continue operating without needing to bring in additional IT support professionals.

6. Find out if anything has to be done if your service provider fails to deliver the standard of services that they promised

A business should have already negotiated the consequences that a SaaS service provider will face if they fail to deliver the standard of software services that they promised. However, what a lot of businesses don't realize is that some SaaS service providers do not automate this process. This means that a business will have slightly more work to do in the form of writing a letter, writing an email or putting in a requests, to receive the 'credits' that they should be entitled to.

Businesses should be clear about whether the above process is an automated one or if it is not. If it is not an automated process, then a business should be clear about exactly what action they have to take, in order to receive what they are entitled to, when their SaaS service provider fails to deliver their services up to the standard that was guaranteed by them in their Service Level Agreement contract.

7. Make sure that employees are properly trained

Due to the fact that implementing SaaS is such a relatively straightforward procedure, businesses can easily forget to do other things, which would otherwise be obvious. One of these things is training their staff. To avoid problems once SaaS software services have been implemented, a

business should train their staff on how to access these new software services, as well as on how to use these new software services, during their initial setup stage. Once SaaS has been implemented, training on how to use these software services should be given, just as training would be given to employees on how to use any other new software service.

8. Consider what exit strategies you have

One thing that businesses should not overlook once they have implemented SaaS is what back out strategies they have. For example are they able to leave their SaaS service provider at any time. Will they easily be able to migrate to another SaaS service provider or will they easily be able to return back to an on-premises software infrastructure.

Also a business should consider what is going to happen to any of their data that was stored on their SaaS service provider's data centres. For example will a business be able to easily restore this data back on to their data centres and will some of their data remain on their SaaS service provider's data centres. Some SaaS service providers may choose to keep certain amounts of a clients data on their own data centres (for a limited period of time), to make things easier for their clients in case they return back to them in the future. If a business is not happy with this policy, then they should request that all of their data is erased from their SaaS service provider's data centres, themselves.

9. Decrease the number of existing machines within your internal infrastructure

The great thing about SaaS is that the hosting of software applications is taken out of the hands of businesses. This means that a business no longer requires as many physical servers as they did before or they no longer require as many software licenses for their on-premises software applications or operating systems, as they did before.

By decreasing the number of physical servers that a business has running within its internal infrastructure and by decreasing the number of licensed software operating systems or licensed software applications that a business has running within its internal infrastructure, a business can save money in the long run. For example not only will they save money on buying new hardware for their servers or paying for additional software licenses but they will also save money on the administration of these machines, they will save money in terms of power consumption and they will save money on cooling requirements, as well as with many other aspects.

10. Know exactly what you will be paying

With traditional software applications, businesses pay a single upfront cost for these software applications and for any licenses that they require, depending on how many instances of that particular software application, they need to run. With SaaS software services, when it comes to

payment, things are not as straightforward as they are for traditional software applications.

For example businesses may pay a monthly fee to use their SaaS service provider's software services or they may only pay for what they use, by using a pay-as-you-go payment model. Businesses may also have to deal with licensing related issues if multiple users are going to access a single instance of a software application and they may also have to pay for storage space within their software vendor's data centres, in order to store their business related data.

In order to save money a business should clearly know beforehand, how frequently they will be using these data services, what their data storage requirements are and what payment method would be the best for them (i.e. a monthly fixed rate or a pay-as-you-go payment model). Finally, businesses should not forget about other costs, including costs that relate to staffing requirements, training, backing up requirements and any other process that are not in their software vendors hands.

10.4 Top 10 SaaS pitfalls

Although SaaS has many advantages, just like any other technology, it is not perfect and there are a number of pitfalls that businesses can face, both before and after implementing SaaS. Detailed below are ten of the most common pitfalls that businesses can face, when

implementing SaaS and what they can do to avoid these problems.

1. Not knowing what they are agreeing to

In most cases, SaaS service providers will provide clients with an agreement 'button' allowing them to sign up for a SaaS service providers software services with very little hassle. A SaaS service provider will provide their terms and condition clauses to their potential customers, however most of the time, people cannot be bothered to read these long and drawn out clauses and usually end up clicking agree, without actually thinking about what they are agreeing to.

A business that is not properly controlled and does not allow information to be easily passed on between departments, could end up agreeing to something that would affect them negatively in the future or agreeing to something that they would just not be happy with.

To ensure that this does not occur, businesses should ensure that a representative from each one their departments that will be effected by the implementation of SaaS, reads their potential SaaS software vendors terms and conditions carefully. If all of the individual departments of a business are happy with these terms and conditions and are not affected negatively by these terms and conditions in any way, then a business can agree with their SaaS software vendor's terms and conditions because they

now have a better idea of what they are agreeing to as a whole.

2. Paying more than they should be, for their software services

One of the great things about SaaS is that a business does not have to pay massive upfront costs, in order to start using software services or SaaS based applications. Most SaaS service providers will offer various different payment plans to their clients, including monthly, quarterly or annual payment options.

Although the monthly option seems like the best option (because it gives a business more freedom than the other payment options), a business can actually end up paying more in the long term, when this payment option is used. If a business knows that they are going to be using a software application for a long time (a year or longer) and have the budget to pay for their software services annually, then they should select this payment option because they can save up to 15 percent per year, when compared to paying for their software services using the monthly payment option.

Another way in which businesses often end up paying more than they should is because they do not research enough, what software service or what payment option would be the best for them. For example if a business did not clearly know how frequently they were going to be using a software application, then they could end up paying more than they

should be. In other words, if a business chose a pay-as-you-go payment model but used their SaaS software services frequently, then they could be paying a lot more, than if they had chosen a monthly payment option (which is likely to be cheaper for them in this scenario. To ensure that they chose the best payment option for themselves, businesses should make sure that they research and have an idea about how frequently they will be using their SaaS software services.

3. Not having a Service Level Agreement

Service Level Agreements are very important to a business, because they define exactly what level and quality of service is acceptable to them and what is not. Some software vendors will provide Service Level Agreements as a part of their main contract, while others will not. Even if a software vendor does provide a Service Level Agreement as a part of their contract, businesses should still modify any clauses that they are not happy with or even create their own clauses, so that a software vendor can better meet their requirements.

If a software vendor does not initially provide a Service Level Agreement, then it is up to a business to request a Service Level Agreement from their software vendor. Once again, if it is necessary, a business should modify this Service Level Agreement so that it better meets their specific needs.

Businesses should also ensure that the Service Level Agreement states what penalties a SaaS service provider will face, if they fail to deliver their software services to the agreed standard. For example will a SaaS service provider reduce the subscription rate of their client for the next month or will they give credits their clients in some other form. Once again, if this information is not present in the Service Level Agreement document, then a business should request it.

4. Not knowing how their SaaS service provider performs and what state they are in

Again this ties into the not having a Service Level Agreement with any performance related clauses. However, clients should also request information about their SaaS service providers past levels of performance, uptime, etc. By researching into a SaaS service providers past levels of performance, a business can get a better idea of what levels of uptime, quality, etc, that their service provider can provide them with (rather than just having a vague estimate).

Businesses should also try to find out what state their SaaS service provider will be in, both in the short term and in the long term. For example is their SaaS service provider going to be making any investments within the next year, are they going to be merging with another businesses anytime soon or are they going to be enhancing the software services that they currently have on offer, anytime soon. All of these

activities could effect a SaaS service providers clients, one way or another, therefore it is important that a SaaS service providers clients know what state their service provider is in and also know what activities or tasks they will be carrying (at least for one year in advance).

Clients should also find out how they will be contacted if the performance or delivery of their software services is affected in any way and whether they will have to take any actions in order to receive the credits that they are entitled to. Finally a client should find out how long their SaaS service provider will have to fix any problems that do occur. For a business that needs to operate close to 24/7, a few days to fix a problem can seem like a very long time. Therefore, once again a business should ensure that their SaaS service provider can meet their needs, by fixing any service delivery problems within a few hours, rather than a few days (if they are a business that requires maximum uptime).

5. Not taking into account hidden costs

Although SaaS service providers do have cheaper upfront costs, they usually make up for these cheaper costs in other ways and if businesses are not careful, they can end up paying more than they should have to, defeating the whole purpose of implementing SaaS in the first place. To avoid having to pay unforeseeable costs in the future, a business should ensure that they carefully read their SaaS

service providers fine print, along with their terms and conditions.

There are various hidden costs that a SaaS service provider could charge their clients, which may not immediately be obvious to a business. For example, some SaaS software vendors may end up charging their clients for configuring and setting up their software services for them. Other software vendors may charge extra based on what types of device that a client will access their software services from, such as charging extra for clients that access their services from a mobile device for example. Software vendors may also charge their clients extra if they go over their agreed storage limit and they may even charge them for technical support.

When buying SaaS software services a lot of businesses only look at the upfront subscription rate that they have to pay and forget to take into account the cost of additional features or add-ons. They often then end up having to pay more than they initially thought they would have to pay for their SaaS software services. To avoid this pitfall, businesses should make sure that they carefully research what their needs are and how much their SaaS software services will cost, taking into account all of their needs, as well as the purchase of any add-ons to meet these needs.

6. Not taking into account integration costs

In most cases, when a business implements SaaS, they will still have some of their existing on-premises software applications running in parallel with their new SaaS software services. This means that it is very likely that a business will want to integrate these two software services and applications together, so that they can work together.

Of course this may not be a straightforward process and can end up costing a business more than they initially thought it would (another hidden cost). Although a business's SaaS service provider usually can deal with integration related issues, they usually charge quite a lot for this type of work. It may be more feasible for a business to use a third-party company that can carry out this type of work, because they will usually charge less than a software vendor does (in most scenarios).

7. Not knowing what their data rights are

Whenever a business uses SaaS based software services, at least some of their data will be stored on their SaaS service provider's data centres. Customers should ensure that the rights to access their own data still remains with them and they should also make sure that their data can still be recovered or restored, if their SaaS service provider went out of business for example (or if any other similar scenario occurred where a client would be at risk, of losing their data).

Finally, a SaaS service provider's clients should also confirm how their data will be secured by their service provider, from a privacy standpoint and a disaster recovery standpoint. Again, this links into the Service Level Agreement document and a client should ensure that both data security and data backup related clauses are included in their Service Level Agreement.

8. The lack of control that businesses have over SaaS software services

The great thing about SaaS is that it takes away the hassle of having to configure, maintain and upgrade software applications, for a SaaS service provider's clients. However, this can also be a pitfall, because businesses no longer have the same level of control over their software applications and data, like they have with their on-premises software applications.

For example a business now has to go through their SaaS service provider in order to access their data and the level of customizability for these software services also varies, depending on what level of customizability that their SaaS service provider will allow.

When using SaaS, businesses should make sure that they know exactly what level of customizability their SaaS service provider will allow them to have, as well as how much their SaaS service provider will allow them to configure and modify these SaaS software services.

9. Having to rely on the internet

Due to the fact that SaaS software services are delivered over the internet, a business has to ensure that their Internet Service Provider (ISP) provides them with an uninterrupted and high quality internet connection. The amount of available bandwidth that ISPs have also varies, depending on the time of the day. For example, during peak hours, it is a very real possibility that a businesses internet connection will slow down significantly and this will obviously have an affect on the ability of a business, to access their SaaS software services.

To minimize internet connection related problems, a business should ensure that they have a high speed/high quality link, in place. Businesses that use SaaS should also consider implementing a dedicated internet connection, so that they don't have to share bandwidth with other users (of course this will require a larger budget). Finally, businesses should consider implementing a redundant internet connection, so that if their initial connection does go down or has a problem, then they will at least still be able to continue operating until their initial link is restored.

10. Not taking into account exit costs

This is another thing that businesses can easily overlook. However before signing their SaaS software vendor's contract, a business should look out for any exit related

costs or they should carry out research to determine if they will experience any problems when backing out.

One thing to consider for a business is that if they signed a contract for one year but backed out half way through, would they get a partial refund or would they just lose the rest of their money for the remaining six months. Also would they have any problems getting their own data back that is stored on their SaaS service provider's data centres? Some SaaS service providers have exit charges and will charge their clients before they can actually get their own data back.

To avoid being stung by additional exit costs, once again a business should carefully check the fine print of their SaaS service provider's terms and conditions. Businesses should also try to keep as much control of their own data as possible and try to keep as much of their data in their own hands. By doing this, if a business does stop using a SaaS service provider's software services at a later date, they can easily back out without having to lose too much of their data (most of which will be stored on their own premises).

10.5 Some of the problems that you may encounter with SaaS

SaaS has many advantages but there are still a number of problems that a business may encounter when dealing with

SaaS. Detailed below are some of the most common problems that business may face when using SaaS.

An internet connection is required at all times

One of the biggest drawbacks of SaaS is the fact that employee's can no longer work offline when SaaS software services are used and that they must be connected to the internet whenever they need to use these SaaS software services. For employees working from within their businesses headquarters or for employees who have a dedicated internet connection at home, this is not too much of a problem.

However, for employees who work from a mobile device such as a laptop or for employees who are constantly on the move, this is obviously a problem. For example how will an employee who is constantly travelling be able to get any work done and will they have to constantly keep paying for single day internet access in an internet café or in their hotel, in order to get any work done. These costs for single day internet access can very quickly add up and completely negate the cost saving benefits of SaaS.

One way for employees (who are constantly on the move), to receive the benefits of SaaS but at the same time, free themselves from the constraints of constantly requiring an internet connection in order to get any work done, involves using Software plus Service. This is a compromise between having a complete SaaS solution and having a complete

traditional on-premises software solution and it gives businesses the best of both worlds.

The security and control of your data is no longer in your own hands

When using SaaS, some if not all of the data of a business will be stored on their SaaS service provider's data centres. Although most businesses will be happy after implementing SaaS, because they no longer have to deal with the management of software applications, most businesses will not like the idea of giving control of their data to someone else.

A business has no idea how their SaaS service provider will secure their data and what backup procedures that their service provider will have in place. The only thing that a business can go by, is the word of their service provider confirming that they will ensure that their clients data will be well looked after. To ensure that their data is well looked after, a business must ensure that their service provider writes down exactly how their clients data will be secured, in their Service Level Agreement contract.

Selecting a well known SaaS vendor or a software service provider with a good reputation, will also give businesses peace of mind. For example a business is much more likely to feel comfortable allowing a massively popular and well known organization like Microsoft or Google to look after their data, rather than some obscure software service

provider, without any history. Businesses should always try to find out as much background information about their SaaS service provider that they can, before signing any contracts, to ensure that their SaaS service provider is a good, honest and reliable company.

You can no longer control what version of a software application that you are going to use

Although SaaS is great because software applications are constantly up to date, sometimes a business is better off using an older version of a software application but SaaS just does not allow this. For example businesses may wish to use an older version of a software application because this older version is stable or because it is compatible with their existing software applications but with SaaS, businesses only have access to the most current versions of an application.

Again this is good because a business is constantly up to date but the fact that businesses do not have the choice to use older versions of a software application is the negative thing.

The general policy for most businesses when a new software application comes out is to wait a little while before installing this software application so that any bugs or 'teething' problems can be fixed. However, with SaaS, businesses do not have this option and are either stuck with the very latest version of a software application (even

though this may have bugs) or no software application at all.

You lose your freedom and are effectively at the control of your software vendor

This is the main problem with SaaS, the fact that businesses lose their freedom and are effectively at the will of their SaaS service provider. For example, with a traditional software application, a business pays for this software application with a single upfront payment. After this, the software application is effectively in their control and they can do whatever they want with it (as long as they are not breaching their software vendor's terms and conditions, such as copyright, licensing, etc).

However, with SaaS software services a business must continuously keep paying their SaaS service provider in order to access the software services that they require. If they accidentally fail to pay their service provider for one month (if they are paying monthly), then they risk losing their software services.

If their SaaS service provider changes its payment rate, then a business has to pay for their software services at this revised payment rate. If a SaaS service provider faces internal problems, then their clients will also be affected by these problems. Clearly SaaS is not perfect and at times it may seem that it is the service provider who benefits the

most out SaaS (because they are the ones who are in control and calling all the 'shots').

However, businesses can still benefit from implementing SaaS as long as they choose a reputable SaaS service provider and have a solid Service Level Agreement contract in place. By having a solid Service Level Agreement contract in place, businesses can prevent their SaaS service provider, from abusing their position of power.