

# Business Solutions

Getting The Most For Your Money  
From A Notification System

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While the concept of Business Continuity Plans (BCPs) is becoming increasingly established, many of them naively rely on the concept of call-cascades, or call-trees for success. The advantage of such communications models is that they appear to cost nothing.

However, the actual cost of manually maintaining these call lists is hidden. In practice, the actual time and effort involved in keeping staff contact details current is so great that in many cases their accuracy is allowed to deteriorate.

## Background

The true cost of such call-list inaccuracy is only then felt in the midst of a real emergency, or a genuine live test. Live tests and real crises bring home just how valuable an automated notification system would be. However, there is the "catch 22".

Live tests are hard to persuade an organisation to consider, because of the expected disruption to normal operations. The scale of disruption is due, at least in part, to the slow speed and cumbersome nature of communication throughout an exercise using manual call-trees.

Live exercises and real emergencies can be managed far better using the

tool of an automated notification system.

So why is it that not all organisations have them? One reason is that such systems have mistakenly been seen as highly desirable, but unaffordable and difficult to implement. The purpose of this paper is to dispel these myths and show the reader practical ways of making the most of every unit of budget spend on such systems.

## **N-house Or Application Service Provider (Asp) Solution**

One fundamental choice that the organisation must make is that between an inhouse, or hosted ASP solution. Criticall recommends that all potential customers consider the following factors in reaching a decision:

- **Consider Total Cost:** All aspects of cost should be properly factored in. Gartner's Total Cost of Ownership models highlight the need to list the real cost of Full Time Equivalents (FTEs) involved in system support and administration. In-house systems will need to be housed, powered, maintained and administered by IT personnel, or sub-contractors, all of which cost money. There will also be the cost of dedicated hardware, software, operating systems, network capacity, integration consultancy, dedicated phone line capacity, dedicated bandwidth for connection to the internet and the management of the company's own SMS/pager gateway providers. Then there are also the unknown future costs of product upgrades. Usage charges will normally be represented as a cost per voice minute, or per message sent. All these factors are typically represented as a basic annual, or package charges within an ASP contract.

- **Compare Total Service Quality:**

In-house systems will have to build in a lot of redundancy to match the level of service provided by any reputable ASP service provider. For Criticall's *EmergencyCall* ASP service, this means 128 bit secure encrypted access, duplicated Primary and Secondary sites which are geographically separate, dual suppliers and diverse routing of all services, whether internet access, power, telecommunications, or SMS/pager gateway service providers.

- **Business Resilience:** In-house systems need to be implemented entirely separately from the organisations other infrastructure. Otherwise, the emergency notification system can be subject to the same threats as the rest of the infrastructure, meaning that the in-house system would not be available for use in a crisis of which it was part. Recently, one customer's own internal IT systems were down for several hours and they could not therefore notify staff in the usual way. Having access to an external ASP system increased the organisation's resilience in the event of such an incident, as they have access to our external systems. Criticall's *EmergencyCall* ASP service offers 99.995% availability as standard, or less than 25 minutes downtime per year. It is only able to achieve this by

having two replicated sites. The third party providers on which such systems depend are not able to commit to more than about 99% availability in isolation, which translates into over 7 hours a month of permitted downtime.

- **False Starts:** Most first-time buyers of such systems do not clearly know what it is they want from such a system until they have been users for about a year, through multiple live exercises. There is a danger in going for an in-house system from the outset, that you may be stuck with a poor-fit investment for several years, watching other products and offerings leapfrog those of your own supplier. If the equipment and software is bought outright as part of an in-house solution, it may be depreciated over 5 years. Hence, any early disposal and replacement will mean the initial investment is wastefully written off.

- **Speed and Cost of Implementation:** The technology behind integrated data and telephony systems is complex. There is therefore a cost to pay in terms of onsite implementations, covering installation, configuration and training specifically for your organisation's situation. For ASP solutions, all you require is a suitable web browser on your PC/laptop (which around 95% of

readers will already have) and internet access. Our own experience is that it takes around 5-10 times as long to implement a site-based customer, as it does to implement an ASP customer, in terms of man-days effort.

- **Trust our Experience:** Criticall offers both solutions, but recommends the ASP model for reasons of **speed, resilience and best value for money** in most cases. We can charge far more for our on-site solutions, but recommend our ASP offering in almost all cases to date.

## Ranking Your Own Requirements

1. The organisation you represent will typically have some kind of solution in place for notification at present, however adequate or otherwise. This should set the baseline for what you can achieve at present, what it costs and what its benefits are. Within this, there should be some kind of understanding of how much each hour of lost operations costs the company.

For example, consider this table:

THREAT & FREQUENCY	COST/HOUR RECOVERY	TIME
Loss of Warehouse operations, once in 3 yrs	£10k	8 hours
Loss of Mainframe Services, twice/yr	£15k	4 hours
Loss of HQ office (flood, bomb), once in 5 yrs	£25k	72 hours

2. This ranking of threats referred to in your BCP in terms of impact on the business will lead to a grasp of the operational impact of anything that delays the goal of rapid recovery to "business as usual". Automated notification systems prove their worth operationally in the speed with which they operate. Therefore, those scenarios thought to be a combination of 'most likely to occur' and 'the most damaging financially' should receive priority attention. This priority list of events will have desired responses, together with those who will need to respond. The numbers of people needed to be contacted in each realistic/worst case scenario need to be listed, even if only by means of an approximation. For example, there will typically be a Group of top managers and Business Continuity professionals that will need to be notified in each case, plus a selection of the operational

management concerned, depending on the nature of the incident. This may be a group of 50-100 people. At the other end of the scale, there may be the scenario of contacting all staff from a given building, advising them there has been a loss of their workplace, through fire, flood, explosion, or some other cause. This may be a group of say 1500 people.

**3.** For each Group, there is a desirable timescale in which they should ideally be contacted. This may need to be a sliding scale, when translating between the cost of resources to achieve it, versus the impact on the business of any delay. For example, there may be a desire to contact all top managers and BC professionals within 10 minutes of an incident. If so, consider the relative merits of them being contacted within say 5 or 30 minutes.

Similarly, it may be on your wish list to contact all 1500 building staff within an hour, but given that at present, the task is not likely to be achieved in a day by manual processes, then be clear on how crucial a deadline the 1 hour threshold is. ***If it is so crucial, why does your enterprise currently rely on a manual approach that is likely to take well over ten times as long?***

**4.** Lastly, having prioritised event types and likely communication groups, together with the preferable timescales within which the business needs them to be contacted, give consideration as to what is the best means of communication. For example, it is likely that all senior managers, BC professionals and operational staff will have a mobile phone. Messages

going out to this group may often get there quicker overall if sent by SMS text. Criticall's EmergencyCall service, for example, sends out over 1000 text messages per hour, even for small-scale implementations. ***This means that you can contact over 100 people in 5 minutes.*** By comparison, to contact the same group in the same timescales with a 1 minute voice message saying pretty much the same thing would require as much as 20 times the amount of system resources.

While the cost is not 20 times as much, there is a significant cost premium when using the voice method, compared to the SMS method.

***Voice should be used when the information being communicated is complex and/or detailed. It also has the advantage of being interactive.***

Two way SMS services are gradually proving more reliable as a means of message receipt confirmation, but are still not as reliable as voice.

## Flexing Your Parameters

- Be sure to understand how the provider's costs vary based on various parameters. Criticall uses an Excel spreadsheet to help potential customers work out what cost impact different assumptions have.

Inputs are: number of message recipients to be contacted, timescale within which contact must be made, percentage of recipients expected to call back into the system, average number of phone devices per recipient, number of retry attempts and message length. Users of the spreadsheet can quickly grasp how changes in assumptions lead to changes in the number of voice lines required, for example. From this, the guide price per year can be calculated. *As a rule of thumb, allow £1k per shared voice line per year*, based on a 3 year contract.

- Few organisations can be absolute about how many people truly need to be contacted within set timescales. For example, consider the senior management and operational group that we numbered as high as 100 above. In fact, there will probably be a priority group within that who are notified for action, while the rest are notified more for information. If the priority group for action are notified in the first period, there is probably

no great detrimental impact on the business if the rest do not receive notification until after the initial period. Knowing this, you can either assume more rapid notification for the most important actionees within the BC Plan, or you can save money on the amount of resources that need to be purchased to ensure proper notification to the right people within appropriate timescales.

## Cutting The Cost Of Your Tailoring

- ASP services are cost-effective for your organisation, because they are able to provide broadly similar solutions and so spread the costs. The more bespoke tailoring you request, the more expensive the solution will become – sometimes dramatically. With an ASP service, you may be sharing the costs of development with over 20 other customers. If you want a feature that only you will use, you may have to cover the entire cost yourself. Therefore, be clear on the distinction between what would be nice and what is essential. Most ASP providers may offer some tailoring within a limited scope. The best advice is to ask the supplier directly about changes that you consider desirable and ask for a formal quotation about how much each would cost.
- We would recommend writing a list of all possible change requests, make

it clear why you want them and how important they are to your business. It may be that the supplier will consider that other customers may want some of the same options, so they can spread the cost of development.

- Those requesting some of the changes may be different people, or departments within your organisation. Most of the change requests will lead to one-time development charges. These can be individually attributed to the departments/individuals wanting them. If such tailoring requests are truly a priority, they may be willing to pay specifically for it.
- Consider the suppliers product roadmap. Some of the features you would like to have specially developed now may automatically become part of the standard offering within the next year. This is common with ASP services, where product upgrades are seldom, if ever, charged for separately. You may therefore be advised to conserve your development spend, unless it is urgent you bring the enhancement forward.

- Look to do bulk message purchase deals with suppliers, with carry over if unused. It is often a relatively costly hassle to have to generate invoices for small amounts of usage monies each month. It may suit both you and your supplier to bundle in a number of free messages per year, based on payment in advance. This is what Criticalll offer to all its ASP customers.

- Lastly, look to fix the price of the service for its foreseeable future within your organisation. If you expect it to last for at least 5 years, assuming all goes well, look to contract for that period also. This addresses the concern some may have about being “locked in” to a supplier. In fact, you have more freedom to change with an ASP service and costs for software support may go up just as easily as for the full ASP service.

To find out more about the aspects of our notification offerings which are most significant to you, please visit the relevant area of the main web site at [www.criticall.co.uk](http://www.criticall.co.uk).



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