David Bonn

David Bonn is a Director of Bonn Business Solutions Limited based in Glasgow.
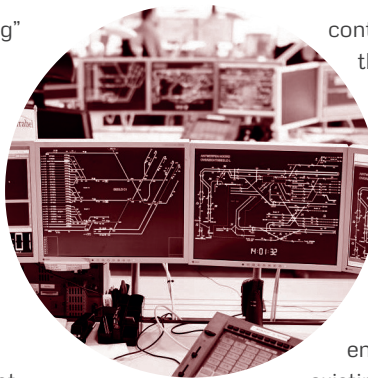**ITSsolutions@bonn.myzen.co.uk.**
Bonnbusinesssolutions.co.uk

David considers the right resources to meet tomorrow's needs

"The times they are a changing" – oft quoted when we find ourselves faced with a situation we have not quite prepared ourselves for. Does that apply to today's "Smart" environment? My view is very much so and I'd go so far as to say "The times they are a changing faster than ever before".

The functionality delivered by traffic management systems has remained fairly constant here in the UK and to a large extent internationally over many years. We have the same underlying architecture doing much the same things as we did 10, 20 years ago. Yes the UTMC programme made us think differently but it hasn't delivered the wholescale changes across the traffic management systems market at a pace we see in other markets. CHARM, SITS etc will move the market on, but the question still remains – are we being left behind because technology advances available in other domains are not being adopted as quickly into the traffic management domain? Why is there a lag in adoption of new technology? Is it a lack of market opportunities, is it a lack of skills or is it that the clients themselves are slow to request and adopt change? It may well be a combination of these and other factors.

I find myself today involved in the design and development of the next generation of traffic management system to be sold internationally, built using today's technology. We are avoiding using a "bleeding edge" approach, rather it is being built on proven products. Through the use of COTS products, we will deliver a solution that provides clients with a platform that is flexible, scalable and protected from through life technology refresh problems. After much research and product evaluation we have settled on a suite of widely available products which are main-stream within the ICT market.

The skill sets required to deliver this new solution leans very heavily on the ICT domain. To deliver this solution, our product developers have needed to learn how to use a completely new suite of products and tools. How can this be best achieved? The approach we have taken is to supplement existing in-house skills with new recruits, contract resources with niche expertise and the up-skilling of existing staff, which is no different to any other organisation facing such a challenge. Where we have struggled is in the attracting of high calibre technical staff into the transport domain. Perhaps the top ICT skills are fully catered for in their current employment domains or perhaps the transport domain isn't seen as an exciting enough challenge to make them give up existing opportunities within ICT. Either way it's presenting a challenge to moving the transport domain forward technically.

A key factor has to be the salary levels offered. In the transport domain, we are now looking to recruit staff with the same skills that the banking industry requires. What that inevitably means is that we need to be able to offer competitive salaries to attract the best people. The knock-on effect of this is a higher cost of the solution or service to the end client.

Recruiting and retaining staff with the skill sets required to deliver today's transport solutions is becoming more of an issue. Cloud deployment skills, Service Orientated Architectures, Enterprise Service Bus, Big Data, User Interface and web delivery skills are now becoming more embedded within the transport industry as solutions move more towards the traditional ICT domain. As an industry we need to better promote the opportunities this presents to both new graduates and experienced practitioners.

ICT skills on their own will not deliver an effective traffic management solution. We also need to retain staff in the industry with operational experience. We need to know how to manage traffic using the new products we are developing. There is a balance to be had in determining how a solution will work as we move more to an outcome based specification approach favoured by many clients. This requires skills to not only know what was done in the past but to be able to identify how to get the same output by following a different path. Challenging tradition, clients willing to change and the new solutions delivering same traffic management are key drivers for the skills of the combined delivery team.

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