

An interesting further contribution to this subject comes from the Roman Catholic Diocese of Leeds:

"Following a re-organisation of parishes undertaken over the past few years, the Diocese of Leeds now seeks to ensure that the instrumental resources of each parish give the pipe organ pride of place in accordance with the liturgical instructions of the Catholic Church. In practical terms, churches are built to last many decades, and it is therefore deemed prudent that the instruments there-in are commensurate with the longevity and quality of the buildings themselves."

HYBRID ORGANS

So far in this leaflet we have focussed on pipe organs and digital organs alone, as the considerations for and against are clear. But as a post script, some consideration of hybrid or combination organs is important. In essence, a hybrid organ is an instrument which is largely digital, but includes a number of ranks of pipework. The pipework might be confined to one division or, as in an extension organ, spread across several divisions.

There is no doubt that the inclusion of real pipework has a beneficial effect on the sound and feel of the instrument, but in some ways it simply underlines why real pipework has such a distinct effect. Indeed, some might take a view that this is an attempt to bring greater credibility to organs which are fundamentally digital.

Hybrid organs are relative newcomers and, for the most part, the digital and pipe sections have been created by separate firms. This may be changing, as the digital partners take responsibility for the whole, and this is probably a good thing. But whilst the hybrid organ might have musical benefits, by way of its pipework, it sits awkwardly between the pipe organ and digital organ, costing less than the former and more than the latter, and requiring distinctly different expertise to deal with tuning and maintenance.

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CHOOSING AN ORGAN

The opportunity to acquire a new or replacement organ occurs relatively rarely for a variety of reasons. Pipe organs last a long time. More information explaining why will follow, but it is recognised that with appropriate cleaning and maintenance, well-built pipe organs can last indefinitely, and that electronic organs might last several decades. A further reason why such opportunities are rare is that the acquisition of a new organ is often costly and the appetite for fund-raising is unlikely to arise again for perhaps a generation.

The building of a new church or performance space is a comparative rarity, and allows the opportunity for an organ builder to work closely with architects to achieve a combination of musical and visual elements, resulting in a bespoke instrument which will complement the room.

More often, however, the choices are more complicated, and a potential buyer may have to work within the constraints of a listed building whilst wishing to replace an existing/failing organ with an affordable new or second-hand instrument.

It is essential that expert advice is sought. Such advice is available from independent advisers as well as from ecclesiastical bodies. It may be the case that the existing organ would be the best solution if it were restored, but proper advice on such issues is very important and need not be costly.

Over time, the use of a building may evolve or it may be re-ordered, perhaps leaving the organ a long way from where it will be needed in the future. It is at such a juncture that clear decisions need to be arrived at in terms of what will be expected of the organ(s)?

- ❖ Is the organ to be used for small-scale hymn accompaniment and modest organ repertoire?
- ❖ Is the organ going to accompany a choir in a broad range of music?
- ❖ Is the organ going to need to cover a significant part of the organ repertoire?

Several options might be possible, but it is important to find a solution which will be durable and artistic, which can be sustained by future generations and which will not be seen as a faddish approach in a few years' time.

Assuming that the potential buyer wishes to retain an organ of some sort, the options are as follows:

- ❖ Repair / restore the existing organ
- ❖ Purchase a good second-hand organ which will meet the requirements
- ❖ Purchase a new pipe organ, designed for the building
- ❖ Purchase a new electronic / digital instrument
- ❖ Purchase a new hybrid instrument

A good organ adviser will be able to help find answers to these questions.

THE EXISTING ORGAN

If the existing organ is well built and has proved reliable, and the expectations have not changed, it would be sensible to solicit prices for the rebuilding and refurbishment of the organ as it stands. Minor tonal alterations might be long overdue, but restraint and understanding are important if an organ is to maintain its character and integrity, and not become simply a collection of stops which lack coherence. Ideally, the addition of new material should be in the style of the original builder and any such additions will not be whimsical.

When seeking tenders or estimates for the work, all potential craftsmen should be given a common brief. Organ builders are creative and should not be confined to an absolute brief – they will have helpful and useful ideas in addition to your own. You will, nevertheless, need to be able to compare like with like in order to select a preferred a builder – much as you might do if you were buying a new kitchen or car.

If the organ has given many years of good service, but expectations have changed, perhaps due to re-ordering or the establishment of a choir, then a decision will have to be taken about whether the organ can be moved elsewhere in the building or whether it might need to be enlarged to cope with its new remit. In addition, a certain amount of cleaning and overhaul might be required as part of this change and, as above, a clear vision needs to be shared with any potential builders.

Guarantees / maintenance

The UK's leading pipe organ builders guarantee their work for up to fifteen years and digital manufacturers guarantee their work, generally, for ten years. These are significant guarantee periods, and there is, inevitably some variation from builder to builder.

There is little doubt that the tuning and maintenance of a pipe organ is more costly than the maintenance of a digital organ, but this is to be expected, given the complexity, even of small instruments, which will be affected by temperature and humidity changes.

Cost

There can be no surprise about the divergent costs involved in the purchase of a pipe organ or digital organ, but comparing specifications is difficult. A new pipe organ with perhaps 15 stops and tracker action might cost £200,000. Digital organs with 15 stops are not made, with the entry level being somewhere between 20 and 25 stops – already a distinctly different and more obviously ambitious instrument, and a figure to purchase this type of instrument might be around £30,000.

Whatever the size of the organs, the pipe organ will be more costly to purchase at the outset.

CHOICES

In the end, many factors will come into play for those who seek to make informed decisions about the selection of a new organ. With many grants now a thing of the past, churches are under even greater pressure to meet tight budgets whilst keeping a roof over their heads.

As has been pointed out, the differing potential longevity of pipe and digital organs is an important factor, and the way in which sound is produced is equally important.

Is there a desire to commit to long-term quality, as many of our forebears did, or are we going to make short-term decisions which we will be prepared to live with in the hope that those who follow us might grasp the nettle?

instability of wind, de-tuning between stops etc. and this helps to improve the sound that they produce. The sound heard is however still only a recording of the real thing, whether the organ would be one with "real time sampling" (a method of having recordings of pipes stored and played back) or one with "physical modelling" (a method whereby samples are taken, analysed and reproduced by a computer). Another shortcoming with many of these systems is that complex stops like mixtures are often "sampled" as a whole, and not as the individual ranks that they are.

None of these methods are able to bring the same amount of air into movement within the price constraints that people expect. To achieve a reasonable sound from a digital organ, one would need to spend significantly more on amplifier channels and speakers than the actual organ. Where pipes can interact with each other, speakers cannot. One could draw the comparison with an orchestra; a CD of an orchestra is nice to listen to, but not the same as hearing the orchestra live.

Specification

Drawing up a specification for a new organ can be very satisfying, but there are many challenges – what to include and what to leave out. Some firms have been very successful in terms of organs with small stop lists which have delivered great flexibility and inspirational ensembles. In all but very rare instances each pipe organ is unique and the details of construction are usually agreed with the client from the outset.

At a recent consistory court a major builder of digital instruments made it clear that each of their ranges had a certain number of stops on the console, and that clients should fill them all as they wish. This approach to organ design inevitably leads to a lack of discipline and the "boy in the sweet shop" syndrome, potentially leading to many colourful stops but no structured chorus development.

Inspiration

There is an argument for saying that learning to play on a pipe organ with its particular character and nuances can, over time, inspire an organist to become a better player; such formative experiences would play a real part in developing his or her understanding of the instrument and its repertoire. On the other hand a more clinical, 'perfect' digital organ could be described as far from inspirational? One might consider this a subjective viewpoint, however it has been expressed by prominent organists.

Again, the advice of an adviser will be very useful, especially if an organ is to be changed significantly or moved, as further consents will be necessary.

If, after considering options for the existing organ, it becomes clear that the instrument cannot meet the existing or future expectations (for reasons which might be musical and/or financial) then the acquisition of a replacement has to be considered.

A SECOND-HAND REPLACEMENT?

As with the rebuilding of an existing organ there has to be a clear vision of what the organ will be required to do. This of course will be linked to where the organ can be located in the building. With a clear and reasonable list of criteria the debate about a replacement organ can begin in earnest. Once again, early advice from an organ adviser and any statutory bodies is very important, before things progress too far.

The cost of acquiring a second-hand organ can appear very attractive, especially if it will fit easily into the proposed location. Just a few thousand pounds might secure a good organ, but the cost of dismantling, haulage and reconstruction should not be under-estimated. A good organ builder would be able to give you a price for this and bring to your attention any work which may be required to ensure a good period of reliable service once the organ is commissioned.

Even if a second-hand organ does not fit easily in the given location, it may be possible to reconfigure it to achieve the desired result. Clearly this would be easier in the case of electro-pneumatic action rather than pneumatic or mechanical instruments, and advice should be sought at an early stage as to such possibilities. Excellent results are possible and examples can be seen across the country. Finding the 'right' organ might, nevertheless, take some time.

A NEW ORGAN?

Purchasing a new organ, whether a pipe organ or a digital instrument, is a costly exercise and, as above, advice and consultation are critical. Those charged with the selection of an instrument will need to share a clear vision of what they expect the new organ to be able to do.

This is, however, an opportunity to acquire a unique instrument, tailored to your needs – an instrument which you will be proud to have acquired, which will serve generations to come and be a thing of beauty.

The following points and considerations come to mind when exploring decisions between pipe organs and digital organs:

Longevity

Longevity has been touched on briefly already, and this is a somewhat inexact science. Nevertheless, at a Diocesan Organs Advisors conference a prominent adviser made it clear that in his experience digital organs were replaced approximately every fifteen and a half years. This could, of course, be for a number of reasons, including wear & tear or obsolescence. The pace of development in digital technology is impressive, and nobody will want to be playing an older, potentially out of date instrument.

On the other hand, pipe organs, especially those with mechanical action can, if looked after well, go on almost indefinitely. It is quite conceivable to come across a mechanical action organ which, after fifteen years of care and heavy teaching use, would show no signs of wear, looking, and performing, as good as new!

Space

In terms of the space it takes up, a digital instrument would seem to be the sure-fire winner, consisting of a console of average dimensions and a number of speakers of various sizes which may be disposed to give the effect of a divided organ. Speakers can be ingeniously designed to, for instance, give an *en chamade* effect. Generally, however, speakers are not things of beauty and digital organs, of course, lack casework, so what can be a large sound seems to come from nowhere – as John Mander (Managing Director, Mander Organs, London) pointed out at the Institute of British Organ Building's Annual General Meeting in 2005:

"Listening to sounds one associates with a cathedral organ emanating from an instrument the size of a small two manual is no more satisfying or convincing than watching a busload of people climbing out of a Mini."

But the fact that a large space can be freed up by the removal of what might be seen as an unnecessarily bulky old pipe organ can be music to the ears of those who might be seeking a space for a new parish office or meeting room – often very hard to find in architecturally sensitive buildings.

Practice organs

In these days when many of our major ecclesiastical buildings have heavy schedules and access to the organ for practice purposes can be very limited, digital organs can really come into their own, with key touch

being adjusted to individual requirements and very sophisticated sampling of identified instruments leading to a much more individual feel. The ability to be able to perform on such instruments every day of the week, at any time, by virtue of headphones is a great benefit.

Authenticity/Emulation

Digital organs seek to emulate pipe organs by a number of techniques, whether by tone generation or sampling and much finessing of these techniques. For instance a digital organ could be designed so that the departments speak in different directions and with the occasional stop such as a Pedal reed left slightly inconsistent in its speech to give a slightly more characterful and authentic feel. Over the years, digital organs have had a bad press for their uniformity, with stops always sounding the same and not being affected by the drawing of a wide variety of other registers. The more sophisticated builders have dealt with this issue through the introduction of randomization, so that, as with a pipe organ, stops never sound exactly the same.

With digital organs the possibility arises to apply one of perhaps several dozen historic tunings, and some performers have gone on record in support of temperaments which they say have brought new life to some parts of the repertoire.

In the line of emulation other builders have taken the creation of character much further, by the addition of stop and key action noise and wind unsteadiness, and some swell boxes bang if not controlled properly. The irony, of course, is that these types of noise and effects are precisely those which pipe organ builders seek, on a daily basis, to eradicate.

Fundamentally, of course, the sounds of pipe and digital organs are created in completely different ways and this is a defining issue.

Sound waves and harmonics

Sound production in a pipe organ could be described as a natural entity. When a note is played, air is brought into motion and a sound is generated. As more stops are added, the amount of air brought into motion is increased, and this creates a sound which is not only heard but also felt. The stops are all able to enhance each other harmonically during this process.

As mentioned above, digital manufacturers have been working to try and simulate these effects, but to limited success. Many organs have -