End User Computing: A Management Perspective

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Executive Briefing Guide

In association with



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Introduction

This paper is written for business executives and managers with an interest in how technology is used within the workforce, particularly equipment such as smartphones, tablets and desktop or notebook computers. It's a topic that has appeared on many management agendas recently for three main reasons:

- Technology advances in relation to PCs, Macs, mobile devices and associated software and services have created significant opportunities to drive greater efficiency, effectiveness and flexibility within the business.
- Despite the potential, many IT teams are not fully ready to support the wave of new and different options now available to users. They are urging caution and even blocking activity for fear of escalating cost and risk.
- Users familiar with the latest technology in their personal lives are growing impatient. Business unit managers, and even individual employees, are tempted to bypass IT policies and controls to acquire solutions independently.

Recent research^[1] has confirmed these developments and the associated issues. Challenges range from practical difficulties setting priorities and making technology-related decisions, through organisational disharmony which gets in the way of making progress, to outright conflict and political infighting between business units and the IT department.

If you can relate to any or all of these challenges, then read on. In the remainder of this paper we will provide some guidance on how to exploit the opportunities created by modern end user technology while managing costs, risks and conflicts effectively. But let's kick off by taking a closer look at some of the key trends.

The big shift

There was a time when end user computing in business largely revolved around Windows PCs deployed and managed by the IT department. A recent survey of 660 IT and business professionals, however, threw up some very interesting and thought-provoking stats that illustrate how this is changing:

- Over 90% see demand for the use of smartphones and tablets
- Over 50% see a trend towards Windows PC alternatives such as the Apple Mac
- Over 85% see demand for the use of multiple devices by individual users
- Almost 40% say that user preferences already significantly influence technology decisions, with over 50% seeing this kind of influence growing
- Over 80% report examples of business units and/or individual users making technology decisions independently of the IT department

If you are interested in some of the detail behind these headline numbers, we would encourage you read the full study report^[1]. Suffice it to say for now we are well on the way to a shift into what some refer to as the 'Post PC era', in which the nature of end user computing is changing significantly. This shift, however, gives rise to a range of challenges as well as benefits.

The potential for enabling more efficient, flexible and effective working is highly attractive.

Different viewpoints can lead to disruptive tensions within the business.

Emerging rifts

Modern notebooks and mobile devices are highly capable, extremely usable and can be connected to company systems and information from almost anywhere nowadays. The potential for enabling more efficient, flexible and effective working is highly attractive from both a user and a business perspective.

The problem is that things are moving so quickly that it's often hard for businesses to keep pace. IT facilities at work can sometimes seem inflexible, limited and constraining compared to the technology employees enjoy in their personals lives. This can in turn lead to a general feeling of frustration, along with complaints that the IT department is out of tune with peoples' needs and wants.

Meanwhile, IT professionals say that many users have lost sight of what's important. Enabling a business through technology is not the same as using consumer tech to run your social life or access content for recreation and entertainment. Things like security, compliance and fitness for purpose cannot be dismissed in a business context. Nor can existing investments, upgrade/replacement costs, and the ongoing need to spend time and effort managing and supporting the technology in use.

These different viewpoints can lead to disruptive tensions within the business. Then when users take things into their own hands, they often create as many problems as they solve. Using a personal device for work, for example, could risk leakage of sensitive data if normal controls are bypassed. Incompatibilities arising from the use of non-standard equipment can then cause distraction and undermine productivity.

A delicate balancing act

In order to benefit fully, safely and economically from the latest end user technology, it is necessary to balance three sets of interests (Figure 1).

Hard-core business needs

e.g. cost control, optimised personal productivity, frictionless team-working and collaboration, management of risks, security etc.

Figure 1 End user computing activity is influenced by three sets of interests that need to be balanced

User preferences and desires

e.g. freedom of choice in devices, apps and services, use of personal equipment for work, use of work equipment for personal stuff, etc.

COMPETING INTERESTS

IT delivery and operational needs

e.g. efficiency and effectiveness of systems development, deployment, maintenance and support, ability to secure and protect data, etc.

A principle often overlooked is that business and user interests are not always the same, so need to be separated for decision-making purposes. It's also important to appreciate that IT policies often criticised by users for being too restrictive are usually directly linked to cost and risk related business requirements.

Stand-offs can occur when impassioned users driven by personal desire meet overzealous IT staff exerting excessive control.

A business-like outcome can only be achieved if senior managers take responsibility.

A range of technologies and techniques are available that enable more user freedom without escalation of costs and risks.

People and politics

While it's easy to see the need for balance, it's sometimes hard to work through the people-related issues. Stand-offs can occur when impassioned users driven by personal desire meet over-zealous IT staff exerting excessive control, with no one willing to compromise. That's not good for morale or the business as a whole.

The research tells us that this scenario is playing out in many businesses across all industry sectors and organisation sizes, and the mistake is to regard this as an IT problem. A business-like outcome can only be achieved if senior managers take responsibility for end user computing as a business issue.

Yet all too often, executives actually aggravate the situation. We heard many reports in the research of senior managers behaving schizophrenically. They press IT teams to better manage costs and risks, but then set unhelpful precedents by demanding policy exceptions so their own technology preferences can be met. When people see an executive using an iPad hooked into the corporate network, they are naturally disgruntled when they aren't permitted to do the same.

The real problems arise when executives respond to pressure from employees and business units by granting them freedom to also bypass IT policy and process. During the research, for example, a third said that IT still held responsibility for security even when control of end user devices had effectively been taken away from them. Many others referred to a dangerous level of ambiguity over who assumes responsibility for security, compliance and support when IT is no longer in control.

Practical solutions

For the avoidance of doubt, when we say that senior management must take responsibility for end user computing, we obviously don't mean getting involved in the technical detail. It's more about making sure that the right business-focused parameters are set for acceptable behaviour and objective decision-making.

From a people perspective, it may be necessary to make it clear to users that they can't necessarily have everything they want — total freedom is generally not in the best interests of the business. At the same time, IT staff may need to be encouraged to lighten up. If they have got into the habit of saying 'no' to requests for freedom and flexibility, they need to be challenged as to why.

The chances are that IT team resistance is mostly down to concerns about not being able to handle a greater level of technology diversity, which in turn could be indicative of systems and tools limitations. In the research, for example, fewer than one in three said they would regard the facilities in place at the moment as a good foundation for meeting evolving end user computing needs.

The good news is that a range of technologies and techniques are available that enable more user freedom without escalation of costs and risks. You may, for example, hear your IT team talk about solutions like desktop and application virtualisation, mobile frameworks and management tools, and end user portals. It's beyond the scope of this paper to go into what these mean; suffice it to say that many of them are about centralising activity and/or control in one way or another to allow flexible working in an organised, safe and efficient manner.

Greater diversity and a higher level of end user choice and flexibility are an inevitable part of how end user computing will develop over time.

If you manage the 'big shift' properly, with the right investments where necessary, the ROI will be significant.

Final thoughts

Greater diversity and a higher level of end user choice and flexibility are an inevitable part of how end user computing will develop over time. Even if you are keeping these to a minimum at the moment for cost, risk or other reasons, it doesn't make good business sense to defer the benefits of modern equipment and associated services for too long.

However, as we move from a world in which the IT team maintains complete control of everything to one in which users make more of their own technology decisions, particular thought must be given to the question of responsibility.

The technology solutions called out above can provide many safeguards, but these can only go so far in helping to protect business interests. Users need to become a lot more security and privacy conscious than most are today, and be given a greater understanding of compliance-related requirements where appropriate. IT can advise on such matters, help to define the necessary policies, and even provide the necessary training, but they cannot enforce usage policy — that has to be down to business managers and perhaps even the HR department.

The last piece of advice we will leave you with is to be proactive. The end user computing space is changing incredibly quickly, fuelled in part by advances in consumer technology as we have discussed. If you manage the 'big shift' properly, with the right investments where necessary, the ROI will be significant. If you just let it happen, you'll end up spending more money in the longer term and not realising the full benefit, as well as risking some nasty surprises.

We hope this paper has provided some insight into how best to get your organisation onto the right course for the future.

References and further reading

The following research reports and papers are available for free download from the Freeform Dynamics website (www.freeformdynamics.com).

- 1. The Politics and Practicalities of End User Computing Community Research Report
- **2.** The End User Security Jigsaw
 Completing the puzzle for your organisation
- 3. Freedom without Anarchy
 Empowering your users while keeping control
- **4. Controlling Application Access**A network security and QoS perspective
- Storage Anywhere and Everywhere Dealing with the challenges of data fragmentation

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