



Inside Track Research Note

In association with



Thin Client Devices Revisited

Technology best forgotten,
or time for a renaissance?

January 2016

About this Inside Track

The research upon which this Inside Track is based was independently designed and analysed by Freeform Dynamics Ltd. Data was gathered via an online survey executed in collaboration with a mainstream IT news site. 220 responses were gathered from business and IT professionals across a range of industry sectors, geographies and organisation sizes. The study was sponsored by Dell.

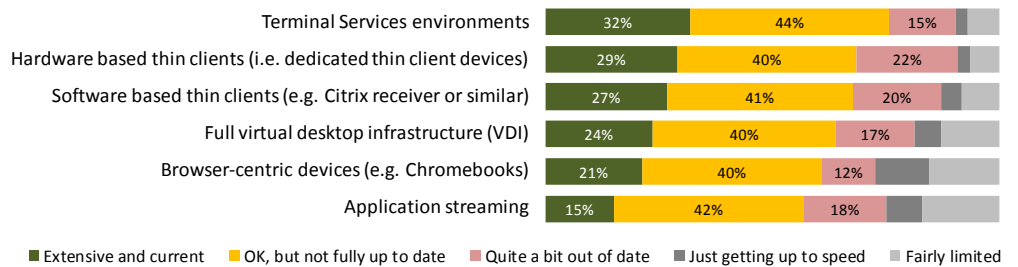
Figure 1
How would you sum up your knowledge and experience of the following?

In a nutshell

With conversations around end user computing dominated by highly desirable mobile technology, it's easy to overlook the potential of thin client hardware. Deployed in the right way to the right types of user, however, far from being the compromise option, thin client devices can enhance the user's overall experience. While the majority see a role for such technology, legacy perceptions can be an impediment to adoption.

The majority have an out of date view of thin client technology

Results of a recent online survey of 220 IT professionals suggests that knowledge of thin client technologies is frequently out of date. This is even true in a self-selecting sample that will be biased towards those with an interest in the topic (Figure 1).



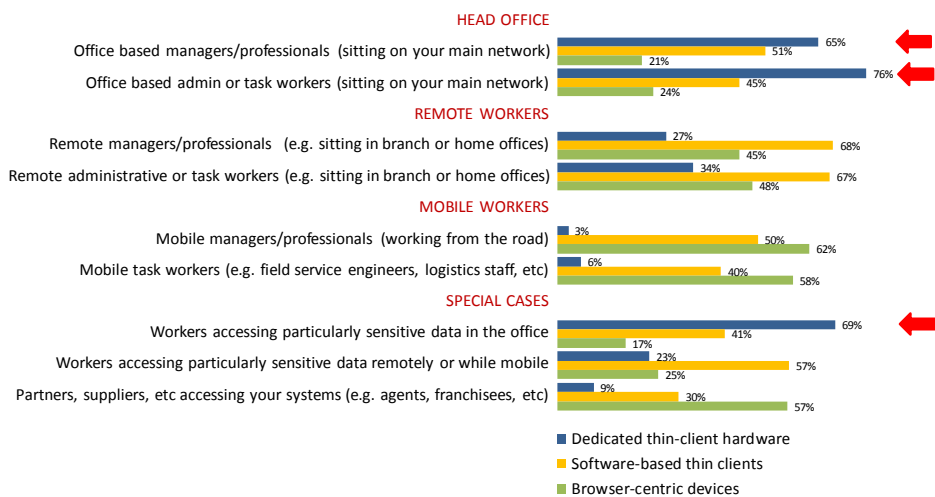
Nevertheless, the perceptions captured during the research are still very interesting.

All types of thin client front ends are seen to be relevant, but in different ways

Each type of thin client is aligned with a different set of use cases.

It used to be that the term 'thin client' was synonymous with dedicated thin client devices, but such hardware has coexisted with software based thin clients for many years, and more recently we have seen the emergence of browser centric solutions such as Chromebooks. Today, all of these options are perceived to have a role, but each type of thin client is aligned with a different set of use cases (Figure 2).

Figure 2
Which thin-client or browser-centric options (if any) would you consider to be relevant for the following types of user?



Dedicated hardware is still the preferred thin client option for desk-based workers in a head office environment.

Fewer are convinced about the role of hardware based thin clients in a remote worker context.

Security, flexibility, maintenance and support benefits of centralising applications and data come through very strongly.

The red arrows on the above chart highlight that dedicated hardware is still the preferred thin client option for desk-based workers in a head office environment, where devices are connected via a (hopefully) reliable network. This kind of solution is also perceived to be very relevant for office-based workers accessing particularly sensitive data and applications.

Fewer are convinced about the role of hardware based thin clients in a remote worker context, probably due to concerns about reliance on wide area networks and/or the public internet. Add the general unpredictability of cellular and public Wi-Fi availability, reliability and performance into the mix, and dedicated thin clients are seen by most as a non-starter in a mobile context.

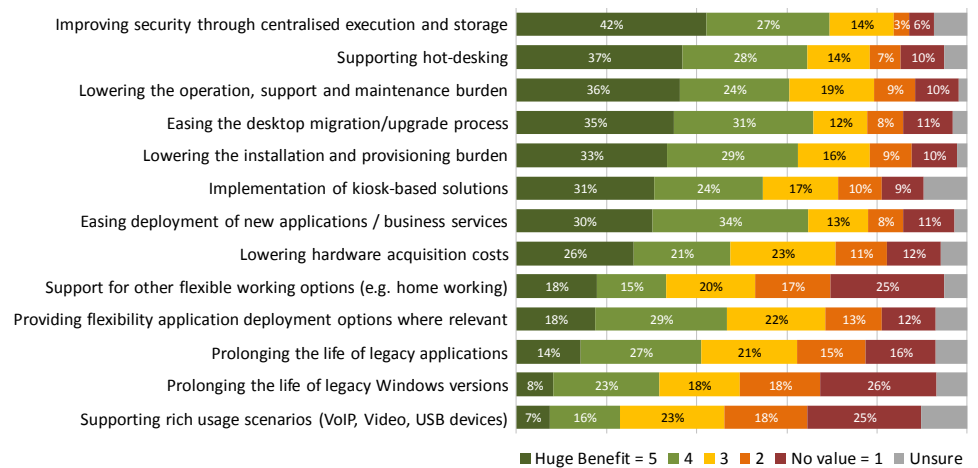
Meanwhile, software based thin clients are acknowledged as being relevant to one degree or another pretty much across the board. This makes sense as it is often useful to deploy fully functional fat client devices that can also access remote desktops where necessary. The user can work locally for the majority of their needs, but use the software based thin client to get to sensitive applications and/or data by exception.

The role of browser centric devices is similarly seen to be reasonably broad, though it is probably worth acknowledging that options here often include limited off-line storage and working capability. For less sophisticated needs, even in a mobile context, Chromebook's and similar therefore seem to be finding their place.

Perceived benefits of dedicated thin clients are primarily aligned with positive motivators

When you look at the perceived value of dedicated thin client technology, the security, flexibility, maintenance and support benefits of centralising applications and data come through very strongly (Figure 3).

Figure 3
Turning to dedicated hardware based thin-client devices in particular, how would you rate their value in relation to the following?



While some acknowledge the potential to prolong the life of legacy applications and legacy versions of Windows, the benefits here are seen to be far weaker overall.

Thin client technology is closely aligned with positive motivators.

In many ways this is encouraging because it tells us that thin client technology is closely aligned with positive motivators to enhance risk management, support new working practices and streamline IT operations. The truth is that if all you are interested in is deferring modernisation activity, you can probably achieve most of what you need by going down the software thin client route.

The majority acknowledge better risk management and a reduction of the cost, complexity and overhead of running desktops to be drivers of adoption.

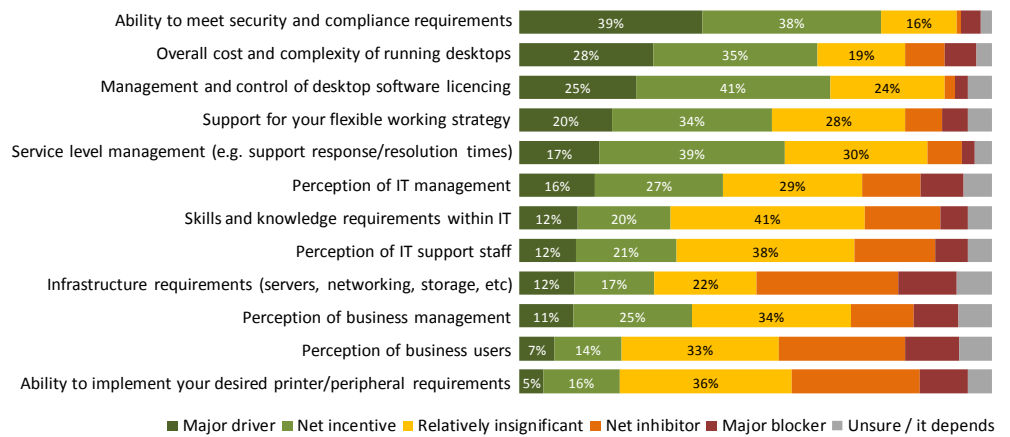
Drivers can also be blockers, and vice versa

When conducting research, it's important to be careful not to make too many assumptions. While one organisation may consider a particular factor to be a driver for adoption, another may see it as a blocker – it depends on your landscape, the skills you have in place, and your more general objectives and constraints.

In line with this, we see quite a bit of variation when exploring this area in the research. That said, the majority acknowledge better risk management and a reduction of the cost, complexity and overhead of running desktops to be drivers of adoption (Figure 4).

Figure 4

Would you consider the following as either blockers or drivers of hardware-based thin client adoption (over traditional 'fat' clients)?

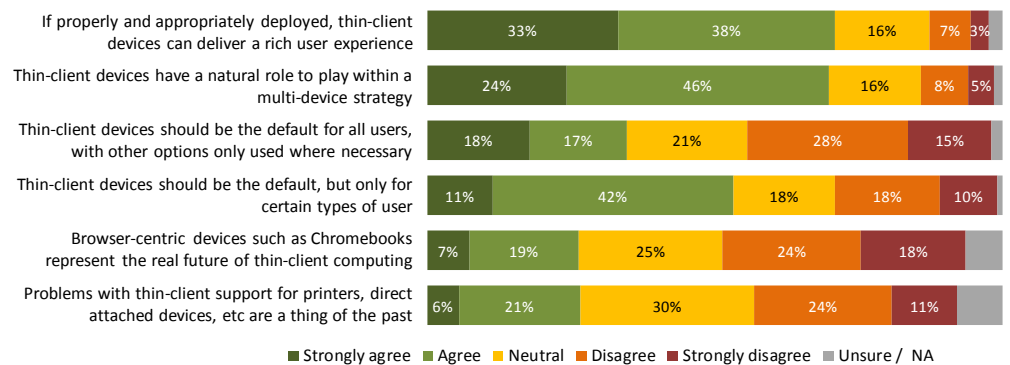


Over two thirds agree that it's possible to deliver a rich user experience through thin client devices.

The net blockers at the bottom of this list to do with user perception undoubtedly reflect more subjective concerns that stem from the prospect of employees losing their fully functional desktop equipment. However, it is notable that over two thirds agree that it's possible to deliver a rich user experience through thin client devices if they are properly and appropriately deployed (Figure 5).

Figure 5

How much would you agree or disagree with the following statements in relation to dedicated hardware-based thin clients?



Other interesting findings illustrated on this chart include the perception that thin clients have a natural role to play within a multi-device strategy. This makes sense as many users have both a desktop machine and either a lightweight notebook or tablet. The former is used to deliver that 'large-screen' experience, and the latter to provide for mobile working needs. In such situations, there's no reason why the desktop shouldn't be replaced by a more cost-effective and manageable thin client device. Indeed, this could have significant benefits for the user as you are unlikely to provide them with a high-end desktop machine when you have already allocated budget to the latest ultraportable, tablet or convertible. A remote virtual desktop could actually deliver significantly better performance. The approach could also provide greater

Over half are of the opinion that a ‘thin-client first’ approach makes sense for specific user types.

Many see a place for dedicated thin clients in their overall end user computing strategy.

Figure 6
How much would you agree or disagree with the following statements in relation to dedicated hardware-based thin clients?

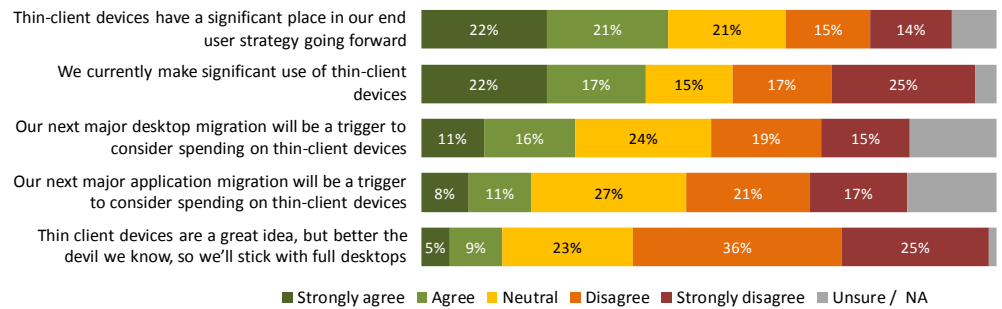
flexibility as the user will be able to log into their desktop from any suitable machine in any location if they are into nomadic working.

From an appetite perspective, the above chart suggests that relatively few believe dedicated thin clients should be the default for all users, though over half are of the opinion that a ‘thin-client first’ approach makes sense for specific user types. We can think here about the office-based managers and task workers highlighted as relevant targets at the beginning. By contrast, despite a lot of the promotion and promise of browser-centric devices such as Chromebooks, few see these as the future of thin client computing.

Despite all these positive and pragmatic opinions, the last bar on Figure 5 indicates that doubts linger about dedicated thin client hardware in relation to support for local printers, USB devices and other peripherals. Vendors clearly have some convincing to do to show that these historical problems have now been solved.

Pulling it all together

Cutting to the chase, the big question is whether the kind of benefits and drivers we have been discussing will translate to actual deployment activity. Indications are that many see a place for dedicated thin clients in their overall end user computing strategy going forward, at least within our sample, though the jury is still out for some, and others are much less positive (Figure 6).



The potential role and benefits of dedicated thin clients could easily get lost.

In terms of prompts for activity, major desktop upgrades and application migrations would appear to be less of a trigger than you might expect. It is therefore likely that thin client hardware will have to make its way into organisations through proactive planning and transformation of the end user computing environment overall. While this sounds like a very mature attitude, the danger is that in the absence of compelling events to prompt consideration, the potential role and benefits of dedicated thin clients could easily get lost in the context of larger, more strategic initiatives.

The bottom line

In today’s network-centric, multi-device world, thin clients are no longer the compromise option.

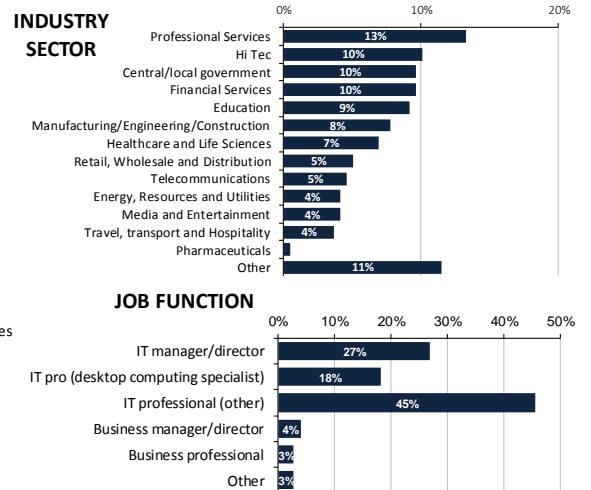
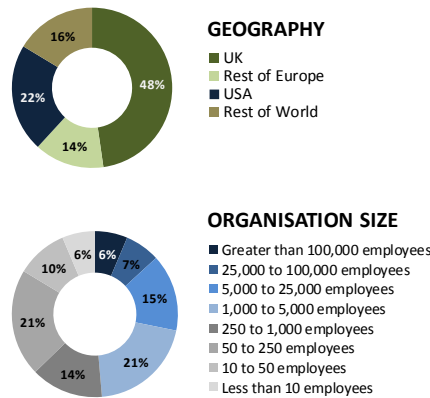
Dedicated hardware-based thin clients clearly have a lot to offer. The challenge is that conversations in the end user computing space at the moment tend to be dominated by mobile computing and all of the highly desirable devices that many users want. Against this background, while making a case for investment based on the usual cost and risk related factors is possible, it’s important to stand back and look at the potential from a user perspective. In today’s network-centric, multi-device world, thin clients are no longer the compromise option. Deployed intelligently, they can enhance the user experience and play a vital role in workforce transformation overall.

About the Research

The research upon which this Inside Track is based was designed and executed on an independent basis by Freeform Dynamics in collaboration with a mainstream IT news site. Data was collected via an online survey and the study was completed in Oct 2015.

Figure 7
Online survey conducted in collaboration with a mainstream news and analysis website

OVERVIEW OF SAMPLE



Please note that the online methodology used in this study is subject to self-selection bias, so we can expect the data to be skewed towards those with more knowledge and experience of thin client technology.

About Freeform Dynamics

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