

Interactive TV: The big picture

Produced by

DIGITAL TV EUROPE

zenterio

The rebirth of interactive TV

Introduction

Interactive TV is once again in fashion amongst pay TV operators, with a majority seeing a clear need to offer something that differentiates their offerings from rival OTT services and a strong interest amongst consumers emerging as a result of the proliferation of IP devices and a growing awareness of catch-up TV and other services available on the web.

Pay TV operators have a number of advantages and disadvantages in delivering interactive functionality to compete with that provided by free-to-air and OTT rivals. Operators generally have a clear view of the types of service that their subscriber want and benefit – at least in theory – from the fact that they own their own network infrastructure. On the downside, they typically deliver their services using a mix of technologies – broadcast for linear services and IP for interactivity, with the need to deliver all of this to a wide range of legacy set-top boxes as well as new retail devices such as tablets and smartphones – while OTT players deliver their services entirely in the IP domain.

In August, DTVE Intelligence surveyed over 200 interactive video industry players from 57 countries, of whom 16.9% identified themselves as triple or quad-play operators, 11.4% as content aggregators, 9% as free-to-air broadcasters, 8% as IPTV service providers, 5% as cable operators and 3% as DTH operators. (Other respondents included OTT video providers, system integrators, consultancies and technology providers.)

The survey revealed that:

- TV operators rank video-centric interactive services including video-on-demand, OTT TV and DVR highly, with services that help users find and navigate content as well as interacting with each other also seen as important. Services such as streaming music, app stores and e-commerce are given relatively less weight. These views are reflected in the interactive services that operators have launched or plan to launch in the near future, with VOD, OTT TV and multiscreen TV all featuring in near-term plans.
- OTT services are viewed as both a threat and an opportunity by pay TV providers, with relatively few respondents viewing OTT purely and simply as a threat to their existing business. Price and accessibility are seen as key to the appeal of OTT, but fewer respondents believe that OTT provides a superior user experience to pay TV. Respondents demonstrate sharply divergent views on the future of the set-top box – the traditional instrument of choice by which pay TV operators deliver services to subscribers, with half believing the set-top will decline in importance and half believing it will retain or even grow in importance.
- Video service providers strongly believe that they need to offer more interactive services, with only a small minority dissenting from this view. However, operators are less confident about their ability to launch services quickly. The vast majority of services providers say that it takes longer than three months to get a service up and running, with a significant proportion saying it takes much longer than that.
- The need to support multiple legacy set-top boxes presents a key challenge to service providers. The majority of respondents to our survey source set-top boxes from multiple vendors and support multiple models of set-top in their network.
- The need to support multiple operating systems presents a headache for operators in terms of maintenance and operations expenses, customer support costs and inefficiencies in supporting new set-tops. For a majority it also leads to delays in launching new services. A majority of operators say they would benefit from a single OS across devices.

Interactive TV in theory and practice

Interactive TV encompasses a wide range of possible services and applications, and operators inevitably face choices in setting priorities. The range of those choices is now wider than ever. The tablet revolution and the growth of social networks has added second screen functionality and social TV to the well-established interactive services that operators have focused on in the initial phase of interactive rollouts, such as video-on-demand and DVR.

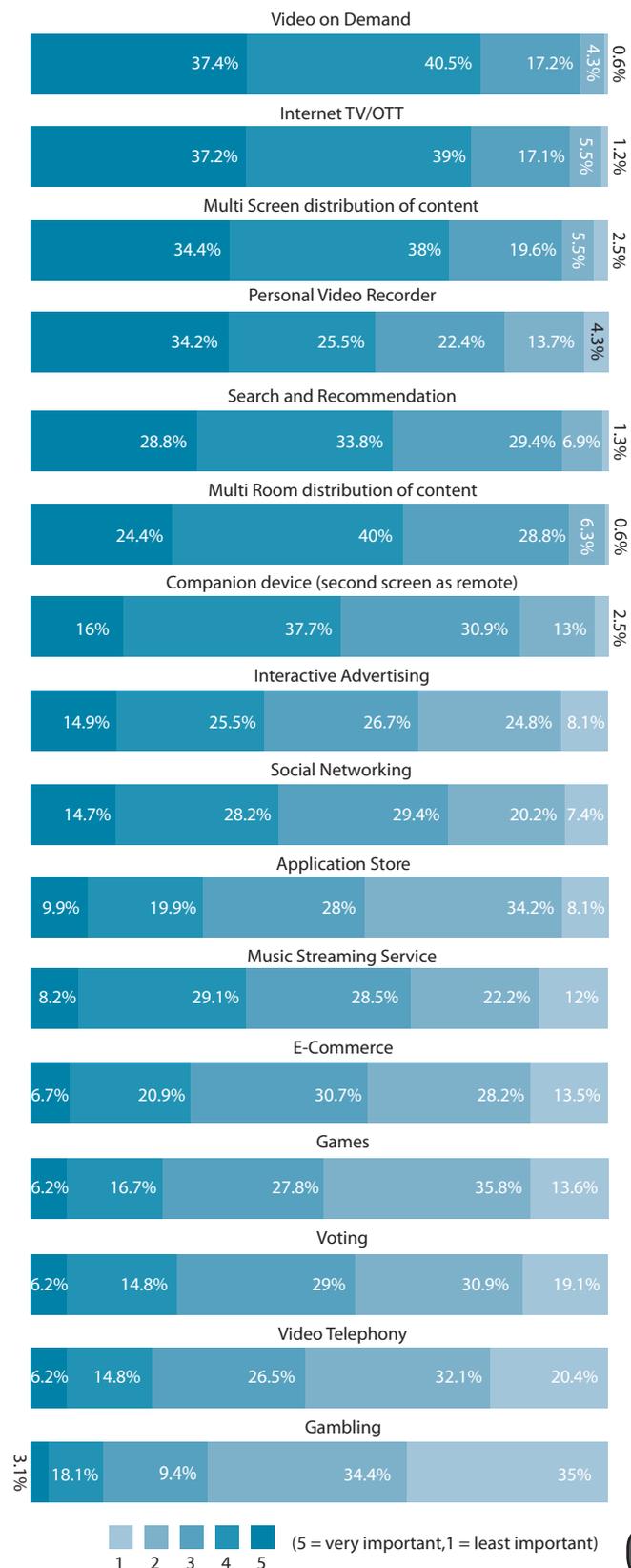
However, for all the choice now available to them, pay TV providers are likely to focus on those applications and services that will deliver a recognisable monetary return, either by providing additional transactional, subscription or advertising revenues directly or by helping to retain customer loyalty and reduce churn.

We asked our survey respondents to rank a range of interactive TV applications and features by importance (fig.1). The results show that video-centric services still carry the most weight. VOD was the first choice with 77.6% of respondents ranking it as 'very' or 'extremely' important, followed closely by over-the-top TV (ranked very or extremely important by 76.2%) and multiscreen TV (ranked very or extremely important by 72.4%).

Slightly less important to respondents than these staples – but still noteworthy – were features that help users find, navigate and discuss content including search and recommendation (ranked as very or extremely important by 62.6%) companion screen services (53.7%) and social networking (42.9%).

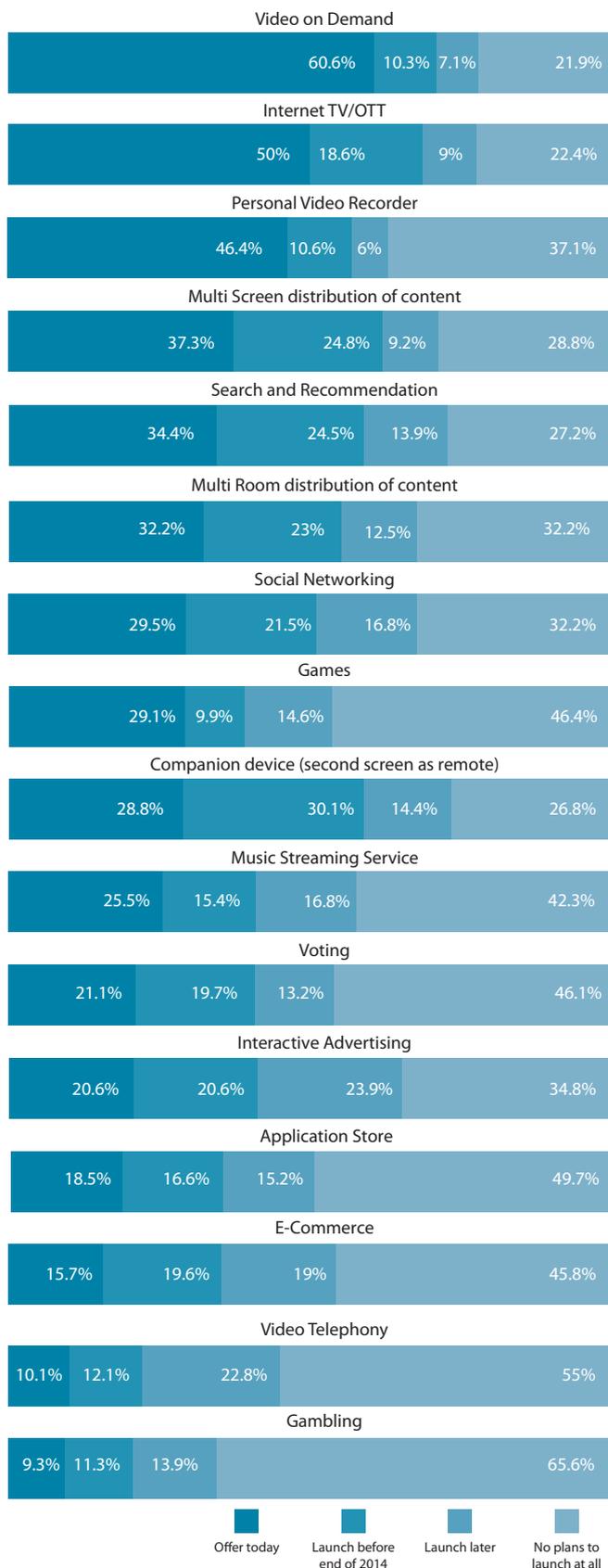
Somewhat less weight was given by our respondents to applications that were less directly relevant to TV viewing itself, such as music services (37.3% ranked this as very or extremely important), app stores (29.8%) and e-commerce (27.6%). Least favoured was gambling, ranked as very or extremely important by only 12.5%.

Fig.1: How would you rank the importance of the following services and features to a pay TV operator's business?



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Fig.2: What types of interactive services do you offer today and what will you launch in the future?



Services launched

Unsurprisingly, the relative weighted importance of interactive services was reflected in the past and near-future launch plans of services by operators (fig.2, multiple pie charts). Over three in five respondents said they already offered a video-on-demand service, followed by 50% who said they had launched an OTT video service and 46.4% who have launched a DVR service. Multiscreen TV has been launched by 37.3% while multiroom services are offered by 32.2%.

Search and recommendation, companion screen services, games and social networking are currently offered by around a third of respondents, with a significant percentages planning to launch companion screen services and search and recommendation features in particular before the end of next year.

There is also relatively strong interest in interactive advertising, with 41.2% either having launched or planning to launch before the end of next year and 23.9% planning to launch later. Many operators have also launched games services (29.1%), while significant numbers have also either launched or plan to launch e-commerce services. Of less interest are app stores, video telephony and gambling, with significant numbers either having indeterminate plans or no plans to launch such services.

OTT: threat or opportunity

One of the factors that have likely underpinned operators' increased interest in adding interactive functionality to their offerings in recent times is the growing threat presented to traditional pay TV by OTT services. Innovative web-delivered service offerings have forced traditional pay operators to up their game. However, at the same time, pay TV operators have looked to OTT themselves as a way to extend the reach of their services either to new demographics or to new devices.

The ambivalent attitude to OTT is reflected in our survey, with the bulk of respondents either viewing it as an opportunity rather than a threat (27.2%) or as both an opportunity and a threat (63.9%). Only 8.9% viewed OTT primarily as a threat to their existing business model. (fig.3)

We asked those who viewed OTT as a threat at least to some extent to rank five possible reasons in order of importance on a scale of 1-5, with 1 representing the most important and 5 the least (fig.4). Price and accessibility are seen as key, with six out of 10 respondents giving "OTT services are more easily accessible than pay TV services" a score of 1 or 2 and seven out of 10 giving "OTT services are cheaper than pay TV alternatives" scores of 1 or 2. The notion that "OTT services provide a bigger range of content" also met with strong agreement, while less attention was given to the proposal that "OTT services provide a superior user interface and functionality" or the idea that "OTT services are seen as the future".

We also asked those who viewed OTT primarily as an opportunity to rank a number of reasons (fig.5). The strongest reasons in the view of many were that "Pay TV services provide guaranteed quality of experience" (given a 1 or 2 score by over six in 10), that "pay TV services offer more relevant content for the local audience" (given 1 or 2 by over 50%). The proposals that "Pay TV services provide a better range of content" and that "Pay TV services appeal to a mainstream audience" attracted middling scores, while respondents were markedly more skeptical about the proposal that "Pay TV services provide a superior user interface and functionality".

Fig.3: Do you view OTT primarily as a threat or an opportunity to pay TV operators' business?

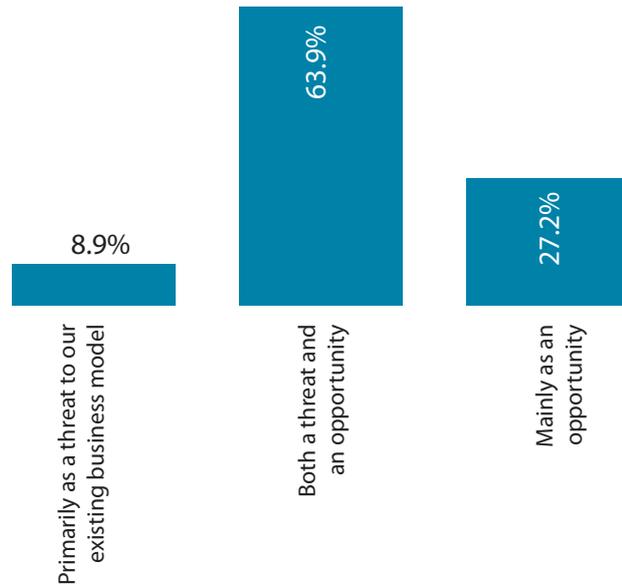


Fig.4: If viewed as a threat, please rank the following reasons in order of importance.

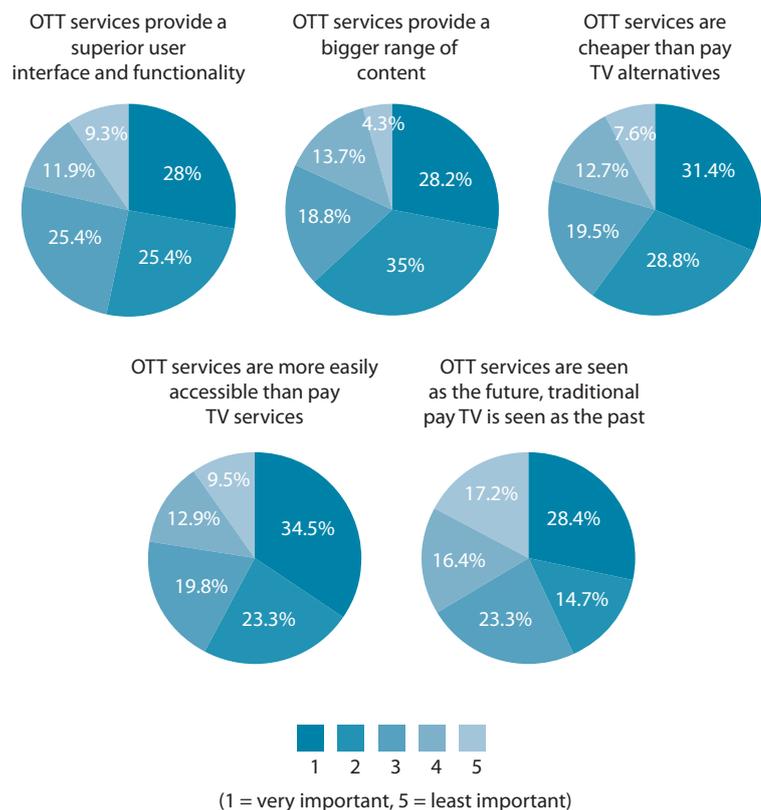


Fig.5: If viewed as an opportunity, please rank the following reasons in order of importance.

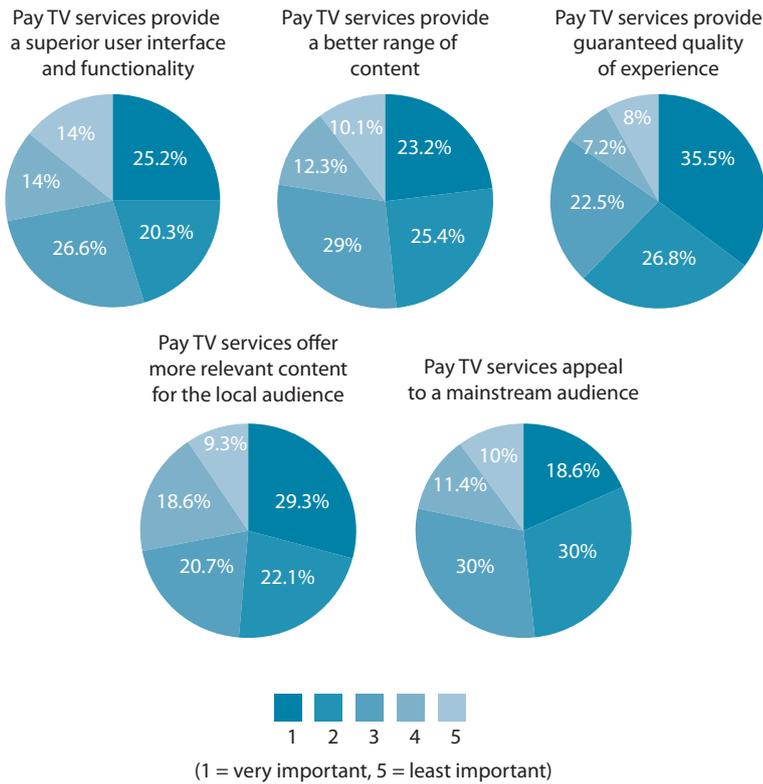
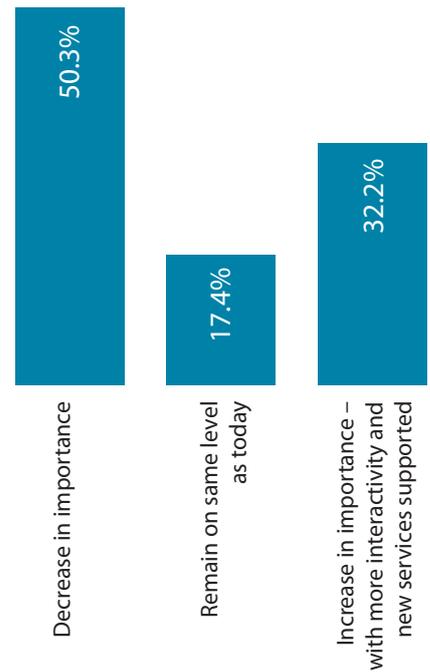


Fig.6: How do you believe the role of the set-top box will change in the coming years?



The future of the set-top box

Interest in OTT as a pay TV solution and the proliferation of alternative IP-enabled devices have fed into attitudes about the future of the set-top box. The availability of distribution opportunities that require less upfront investment and the concept of the operator as an app has clearly had some impact on views about likely future directions.

Our survey shows sharply polarised views on the likely future of the set-top amongst respondents (fig.6). There is a near 50:50 split between those who believe the set-top will either remain on the same level of importance or will grow in importance (49.7%) and those who believe it will decrease in importance (50.3%). Among the former, those who believe the set-top will increase in importance, with more interactivity and new services supported (32.3%) outnumber those who think it will remain on the same level as today (17.4%).

Operator challenges in interactive TV

The growing competitive challenges faced by pay TV operators mean that the latter increasingly feel under pressure to enhance their offering with new interactive services. If OTT services can compete effectively on price and make their services available over high-quality broadband networks with a decent viewing experience, traditional operators are increasingly looking to differentiate either through their ability to bundle TV services with broadband and telephony offerings or by adding value through the addition of compelling functionality. As OTT services become more sophisticated, it is also likely increasingly to be the case that pay TV operators will be forced to enhance or revamp their existing offerings simply to offer a comparable experience in terms of interactive functionality.

This view is strikingly evident amongst respondents to our survey, with close to 80% answering “Yes, absolutely” or “Yes, most probably” to the question “Do you see a need to upgrade your TV service offering by launching new interactive services?” Only 8.4% of respondents said there was definitely or probably no need to launch additional interactive services (fig.7).

The need for speed

Although operators perceive the need many are less confident, however, about their ability to launch new interactive services fast enough to meet demand (fig.8). Only 11.6% of our respondents said they were “happy” or “extremely satisfied” at the speed with which they were able to launch new services currently. While about a third of respondents overall believe less emphatically that the current speed is more or less satisfactory, a clear majority (56.1%) said it either took “way too long” for them to launch services or “it would be good if we could be quicker”.

The actual time taken to launch services varies considerably (fig.9). Three in five respondents said that the average time taken to launch services is from four to 12 months, split more or less evenly between those who manage to launch in four to six months and those who take between seven to 12 months. A significant minority – 18.7% – says it takes them on average between 13-24 months to launch a new service, while 7.1% say it takes over two years on average to launch a new service. Only one in 10 respondents are, on average, able to launch services in under three months.

Fig.7: Do you see a need to upgrade your TV service offering by launching new interactive services?

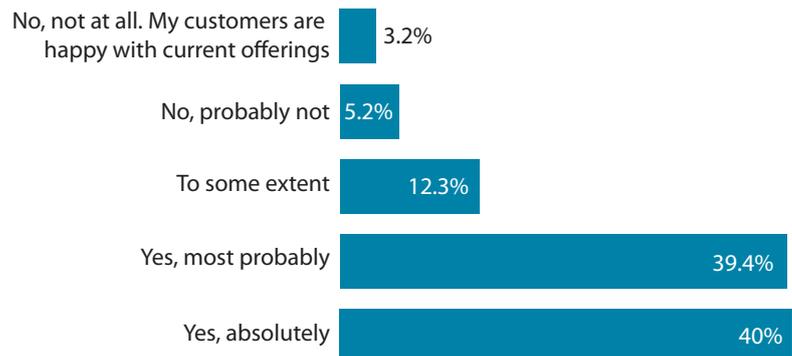


Fig.8: Can you launch interactive TV services fast enough to meet your needs currently?

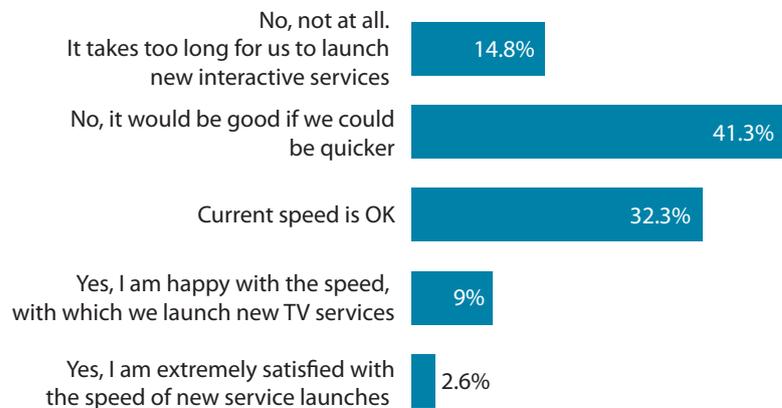
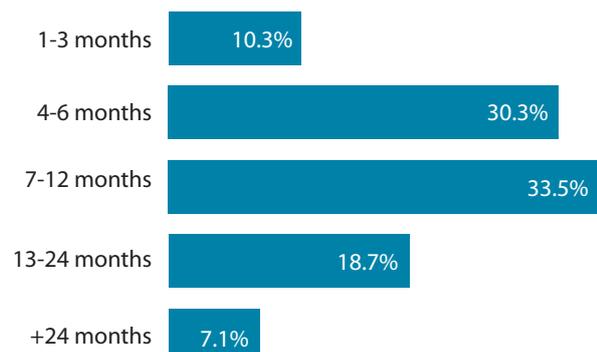


Fig.9: What do you estimate, to be your average time for launching a new interactive service?



Set-tops: challenges and solutions

One of the main factors that delays pay TV operators with managed networks and an installed base of set-top boxes from launching new interactive services is the need to re-version apps for different devices. Pay TV operators have – for good reasons – traditionally sourced set-top boxes from multiple vendors and have deployed a range of different models as new hardware became available. New services often tend to be restricted by the processing capabilities of the oldest devices – the lowest common denominator. And where operators decide to deliver new services only to their base of advanced devices, they often face the problem of scalability as they have to version the service for relatively small populations of devices.

Our survey illustrates the problem, with the overwhelming majority of respondents – 64.3% – sourcing set-top boxes from multiple vendors. Of these, 44.3% used devices from two to three vendors, but 15.7% deployed boxes from four to six vendors and 4.3% used devices from seven or more vendors (fig.10).

The number of different types of set-top box deployed by operators is even greater. While 46.4% of respondents restrict themselves to between one and three devices, a clear majority employ four or more types of box, with 28.6% using four to six devices, 18.6% using seven to 10 and 1.4% using 11-19 types of boxes. A remarkable 5% of respondents use over 20 different types of boxes (fig.11).

The set-top OS

Not surprisingly, operators are struggling to deploy services in a timely way over such a disparate base of end-user devices. The advantage that should accrue to pay TV operators – their control of their own network from the headend to the home – is being lost. Over two thirds of our respondents say they experience problems from running multiple operating systems on their legacy set-top boxes, with 20.7% saying they suffer from this problem “very much” (fig.12).

Of those that say they experience problems from the need to support multiple OS, the most common reason is the cost of operations and maintenance (cited by 61.2%). However, over half (53.1%) said the need to support multiple OS was responsible for them taking a long time to launch new services. Other reasons cited include the high cost of customer support, cited by 44.9% and inefficiencies in sourcing new set-tops, cited by 35.7% (fig.13).

Operators are therefore in need of a simple solution to the problem of supporting multiple OS on their legacy base of set-top boxes. The vast majority – over 80% – of respondents to our survey say they would benefit from running one operating system on all deployed set-top boxes, with over a third – 36.4% – saying they would benefit “very much” from such a solution (fig.14).

Fig.10: From how many set-top box vendors are you sourcing STBs from today?

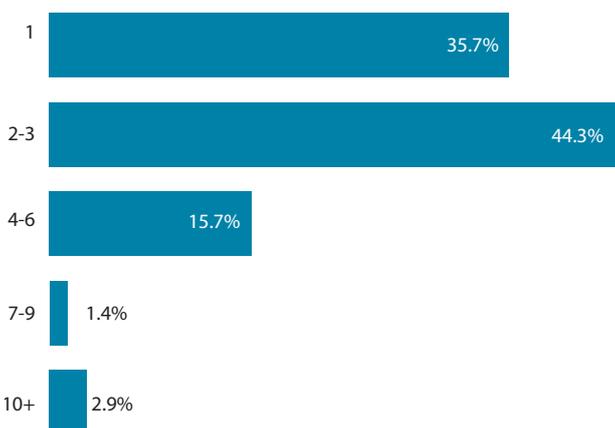


Fig.11: How many different types of set-top boxes do you estimate to have in your network today?

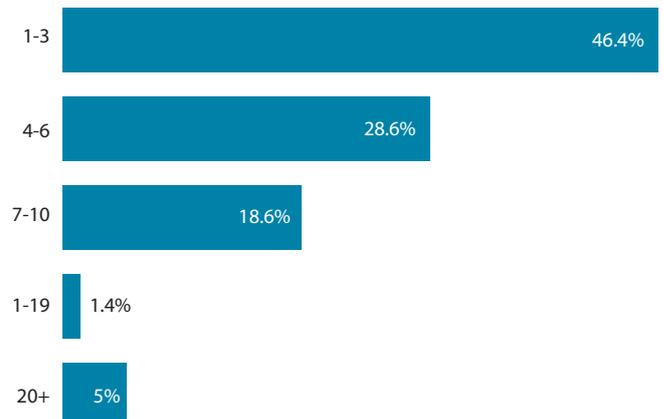


Fig.12: Do you experience problems from running multiple operating systems on your legacy set-top boxes?

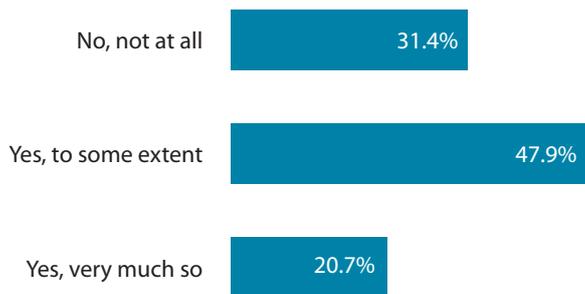


Fig.13: If yes, what kind of problems do you encounter?

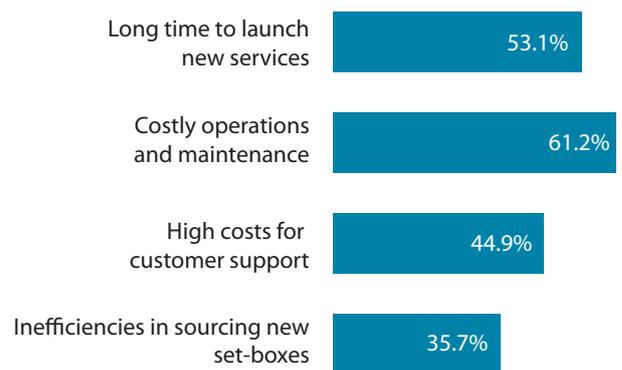
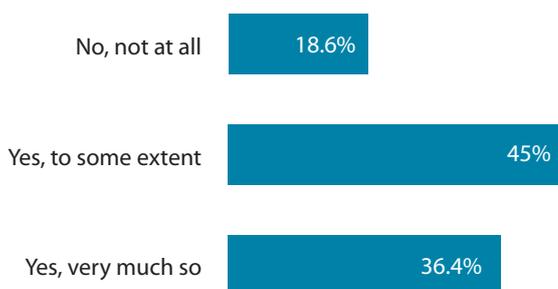


Fig.14: Would you benefit from running one operating system on all deployed set-top boxes in your legacy system?



Conclusion

TV operators are showing strong interest in interactive services – particularly those that enhance the video element in their offerings such as video-on-demand, OTT TV and DVR. Other services that enhance the user experience such as companion screen applications and social networking are also attracting interest. Operators have already launched or plan to launch a range of video-centric interactive services in the near future.

OTT is seen as both a threat and an opportunity by service providers, with a clear majority viewing it at least in part as an opportunity. Views on the future of the set-top box are sharply divided between those who believe it will wither in importance and those who believe it will retain or even grow in importance with the addition of new functionality.

Operators face a number of hurdles in delivering interactive services over their base of legacy set-top boxes from multiple vendors. A clear majority of service providers experience problems from running multiple operating systems on their legacy set-tops, and would benefit from a single OS solution.

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About Zenterio AB

Zenterio develops an independent software platform, 'Zenterio OS', for interactive TV that is positioned to become a global standard.

Zenterio's software can be used on any new and existing hardware. With the Zenterio OS, operators can quickly and cost-effectively provide new interactive services and applications. Zenterio partners with global system integrators, set-top box suppliers, CA/DRM providers, and chipset manufacturers.

The company evolved from the former Nokia Home Communication, which Nokia divested in 2002. Its headquarters are in Stockholm and its R&D center is in Linköping. The company has offices in Helsingborg, Prague and Milan. Zenterio is an unlisted company and is mainly owned by private investors. The chairman of the board is former Nokia CEO Mr Olli-Pekka Kallasvuo.

For further information please visit: www.zenterio.com.

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