The data analytics revolution

Contents

Introduction

It is widely understood that big data, enabled by IP and cloud technology, has the potential to transform business practices across a broad range of sectors, including media. However, the use of viewer behaviour analytics (the collection and analysis of a variety of metrics about the way users interact with audiovisual media) by companies varies greatly. Many organisations are at the beginning of their journey to explore the wealth of data on offer and the ways it could transform their business practices and contribute to their revenues.

The proliferation of internet-connected devices that people use to view video can potentially deliver a huge range of data, providing insights into the popularity of content and formats, the way people consume data on different devices, and consumer responses to issues relating to Quality of Service.

DTVE recently surveyed almost 200 video industry players from 40 countries, 12% of whom identified themselves as OTT service providers, 12% as free-to-air broadcasters, 9% as triple or quad-play operators, 8% as IPTV service providers, 7% as cable operators and 7% as pay TV channel operators, to find out their views on the data analytics revolution and its impact on audiovisual media. (Other respondents included content providers, digital media entertainment companies, consultants, system integrators and technology providers).

The survey revealed that:

● Media companies overwhelmingly believe that viewer data analytics will be important to their business, and a large majority of organisations already collect user behaviour data or plan to do so. A smaller proportion of companies currently analyse the data they collect, with many citing lack of resources as a significant inhibiting factor.

● Opinions differ about which types of data offer best value, with different user groups within organisations valuing different metrics for different reasons. However, there is strong interest in data that can help inform marketing and business development decisions in particular.

● Media companies are gathering data on metrics including the type of content viewed and the type of devices used to view it, with somewhat fewer respondents to this survey looking in detail at data related to technical parameters of their services or about advertising consumption. Companies are particularly keen to see data that is tailored and packaged for specific user groups within organisations – with a strong emphasis on data that is useful for senior managers and marketers.

● Media executives express mixed levels of satisfaction about the efficacy of their existing data analytics engines, with support provided for key applications often seen as inadequate. Respondents believe that properly managed data could help across a range of business practices, with enhancement content discovery seen as particularly useful.

● Despite the wealth of data available, media organisations continue to struggle to make sense of it. However, media executives strongly believe that data that provides insights about the kind of services users value could potentially boost their bottom line.

The importance of viewer data analytics

Respondents to our survey overwhelmingly expressed a belief that data and viewer behaviour analytics will be important to media companies and service providers. While a significant minority – 38% – of respondents believe that viewer analytics will be the single most important factor in determining the success or failure of services in the future, over nine in 10 respondents to our survey believe either that viewer behaviour analytics will be of crucial importance or will be notably useful as a marketing tool.

Asked to choose one of four statements that best reflected their view, 38% agreed that viewer behaviour analytics will be the single most important factor going forwards, while 56% said that analytics will be a useful tool for media companies in marketing and fine-tuning services but will not determine their success or failure.
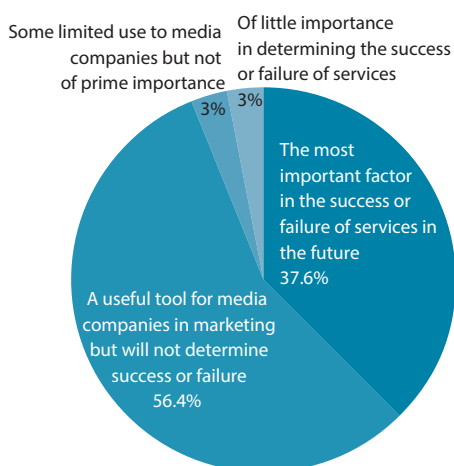
Only 6% of respondents, on the other hand, expressed strong scepticism about the usefulness of data and analytics, stating either that analytics would be of some limited use, but not of prime importance, or that it would be of little importance. (Fig. 1)

The importance accorded to data is reflected in the fact that a majority of respondents also say they currently capture data about user behaviour, with two in five saying they both capture data and analyse it. Twenty per cent of respondents to the survey say they capture data but do not currently have the resources to analyse it, reflecting a view expressed by some that analysing viewer behaviour requires significant resources. A further 23% of our sample say they do not capture data at present but plan to do so in the future.

Only one in 10 respondents say they have no plans to capture data, with the remainder either unsure or failing to answer. (Fig. 2)

Fig. 1. Which of the following best reflects the importance of viewer behaviour analytics to media companies and service providers?

Some limited use to media companies but not of prime importance 3%

Of little importance in determining the success or failure of services 3%

The most important factor in the success or failure of services in the future 37.6%

A useful tool for media companies in marketing but will not determine success or failure 56.4%

Fig. 2. Does your business capture analytics about viewer behaviour?

Not sure/Other 8.9%

No plans to capture data 9.9%

Do not capture data but plan to do so 22.8%

Currently capture and analyse data 38.6%

Currently capture data but do not have the resources to analyse 19.8%
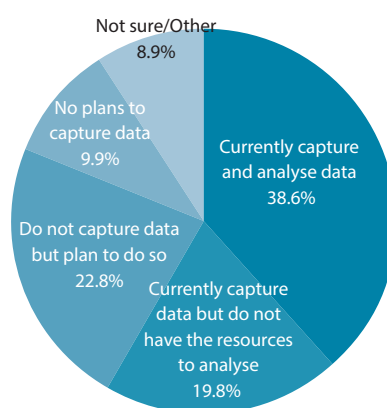
The selection of data

In order to make sense of data, it is important for video service providers to be able to decide in the first place which data is useful to them. There is a general lack of consensus about which data is important, with different groups valuing different sets of data for different reasons. However, broadly speaking, our sample valued data about the popularity of particular types of content and advertising higher than data about quality of experience and network performance.
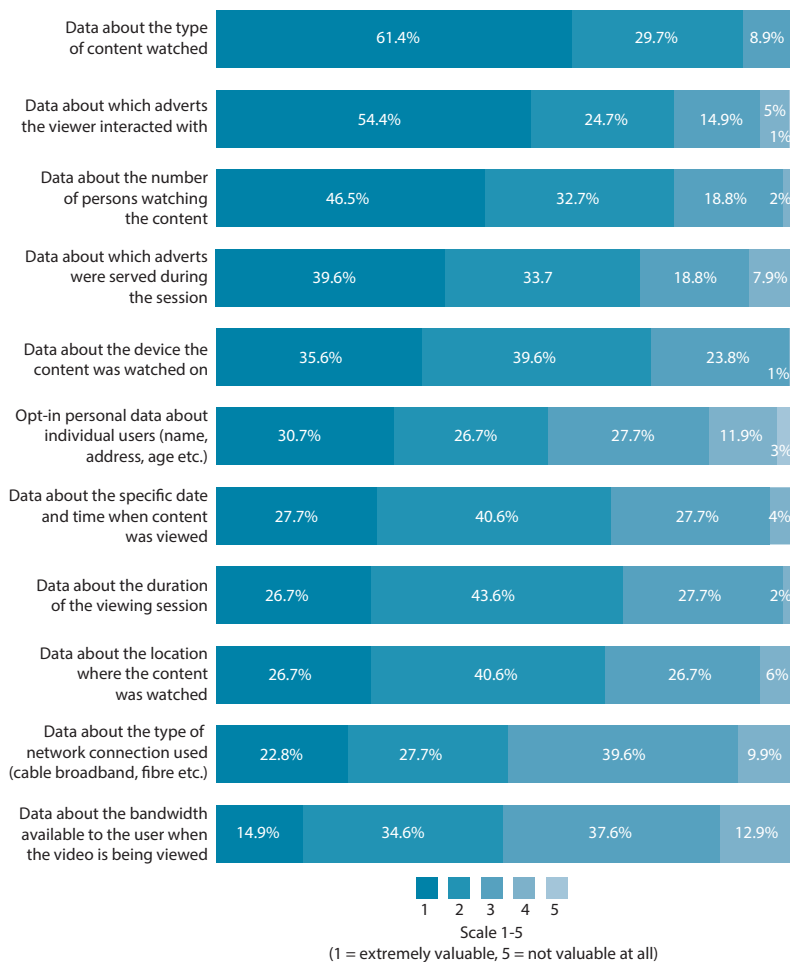
Asked to rate 11 types of viewer data on a scale of 1-5, ranging from "extremely valuable" to "not at all valuable", respondents to our survey, on average, placed the highest value on "data about the type of content watched", followed by "data about which adverts the viewer interacted with" and "data about the number of persons watching the content".

As a generalisation, respondents to this survey were less interested in network and connectivity-related information, rating "data about the bandwidth available to the user when the video is being used" lowest on average, followed by "data about the type of network connection over which video is being viewed".

Data about user behaviour while watching content was rated moderately important by the sample relative to other types of data, with "data about the device the content was watched on", "data about the duration of the viewing session" and "data about the specific date and time when content was viewed" all rating strongly. Respondents appear undecided about the value of "opt-in personal data about individual users" such as name, address, contact details and age. (Fig 3)

These figures need to be treated with some caution as they may reflect the job functions of respondents to some extent, with executive management and those involved in business development roles more highly represented in our sample than engineering, R&D and technical support staff. However they show that media companies are showing a strong interest in the marketing and business development applications of data.

Fig. 3. Which of the following data points do you think are the most valuable to video service providers and media companies?

Data about the type of content watched: 61.4% | 29.7% | 8.9%

Data about which adverts the viewer interacted with: 54.4% | 24.7% | 14.9% | 5% | 1%

Data about the number of persons watching the content: 46.5% | 32.7% | 18.8% | 2%

Data about which adverts were served during the session: 39.6% | 33.7 | 18.8% | 7.9%

Data about the device the content was watched on: 35.6% | 39.6% | 23.8% | 1%

Opt-in personal data about individual users (name, address, age etc.): 30.7% | 26.7% | 27.7% | 11.9% | 3%

Data about the specific date and time when content was viewed: 27.7% | 40.6% | 27.7% | 4%

Data about the duration of the viewing session: 26.7% | 43.6% | 27.7% | 2%

Data about the location where the content was watched: 26.7% | 40.6% | 26.7% | 6%

Data about the type of network connection used (cable broadband, fibre etc.): 22.8% | 27.7% | 39.6% | 9.9%

Data about the bandwidth available to the user when the video is being viewed: 14.9% | 34.6% | 37.6% | 12.9%

Scale 1-5
(1 = extremely valuable, 5 = not valuable at all)

The emphasis on data that is useful for marketing and business development is reflected in the type of data respondents' organisations are currently gathering.

Three in four respondents say they are currently gathering data about the type of content watched, while three in five are gathering data about the device the content is watched on. Just over half of respondents are gathering data on aspects of viewer behaviour including the duration of the viewer session and specific day and time when content is viewed.

Only about one in five respondents says their organisations are gathering data about the bandwidth available to the user when the video is being viewed, while relatively few are gathering information about which adverts are served or viewed during a session. Just under three in 10 say their organisations are gathering opt-in personal information about users. (Fig. 4)

The emphasis placed on high-level data that can be used to take marketing and business decisions at a fairly senior level by respondents can also be seen when our sample was asked to rate how useful it is to have data that is specifically packaged for certain user groups with media organisations.

Asked to rate the importance of tailoring and presenting data for five groups of users within organisations, our respondents rated data for senior marketing executives as having the greatest use, followed by data for senior management at board level. Less valued, at least among respondents to this survey, is data for call centre staff and junior marketing and sales staff, with data for senior technical/operations staff achieving a score in between the two. (Fig. 5)

Fig. 4. If you currently capture data about users, what kind of data do you capture?

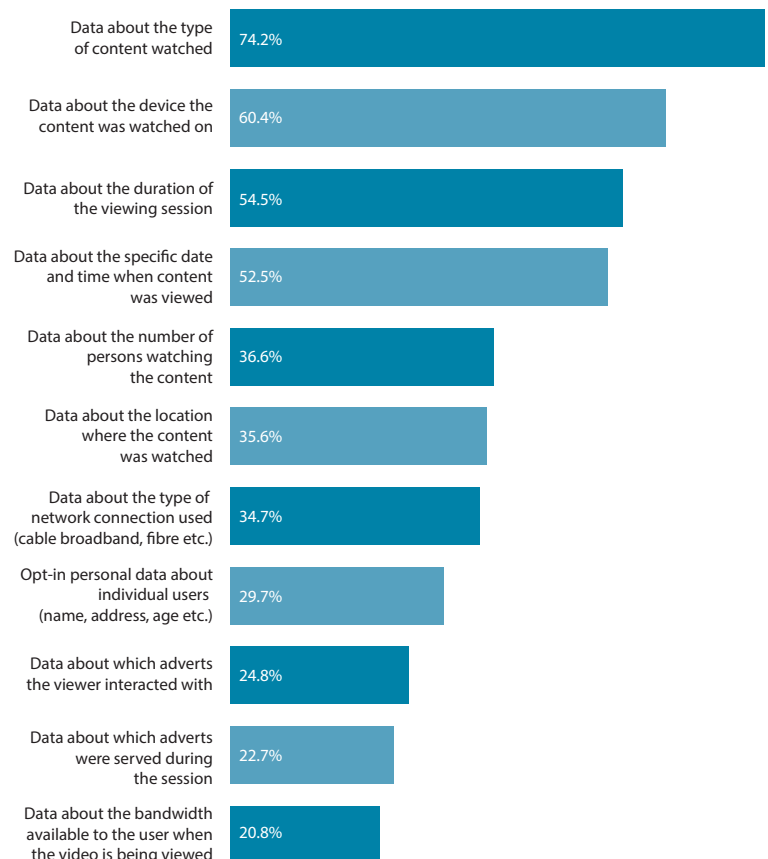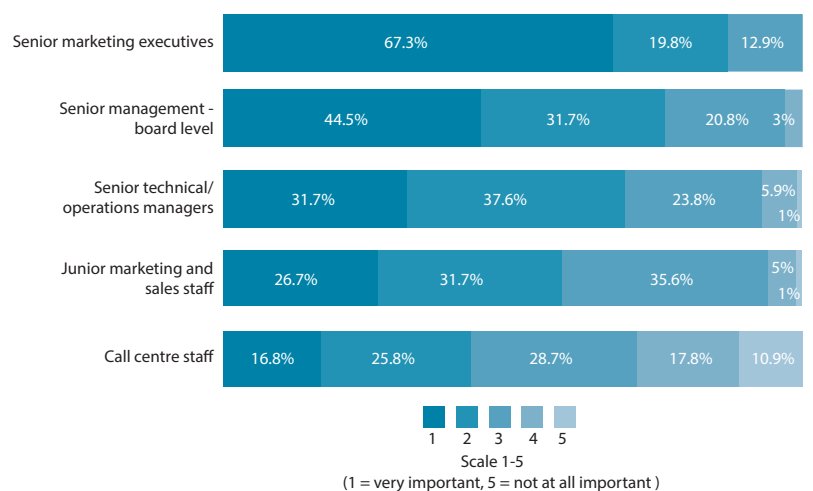| Category	Value
Data about the type of content watched	74.2%
Data about the device the content was watched on	60.4%
Data about the duration of the viewing session	54.5%
Data about the specific date and time when content was viewed	52.5%
Data about the number of persons watching the content	36.6%
Data about the location where the content was watched	35.6%
Data about the type of network connection used (cable broadband, fibre etc.)	34.7%
Opt-in personal data about individual users (name, address, age etc.)	29.7%
Data about which adverts the viewer interacted with	24.8%
Data about which adverts were served during the session	22.7%
Data about the bandwidth available to the user when the video is being viewed	20.8%

Fig. 5. How useful do you think it is to have data that is specifically tailored and presented for the following groups of users within a media organisation?

Group	1	2	3	4	5
Senior marketing executives	67.3%	19.8%	12.9%		
Senior management - board level	44.5%	31.7%	20.8%	3%	
Senior technical/ operations managers	31.7%	37.6%	23.8%	5.9%	1%
Junior marketing and sales staff	26.7%	31.7%	35.6%	5%	1%
Call centre staff	16.8%	25.8%	28.7%	17.8%	10.9%

Scale 1-5
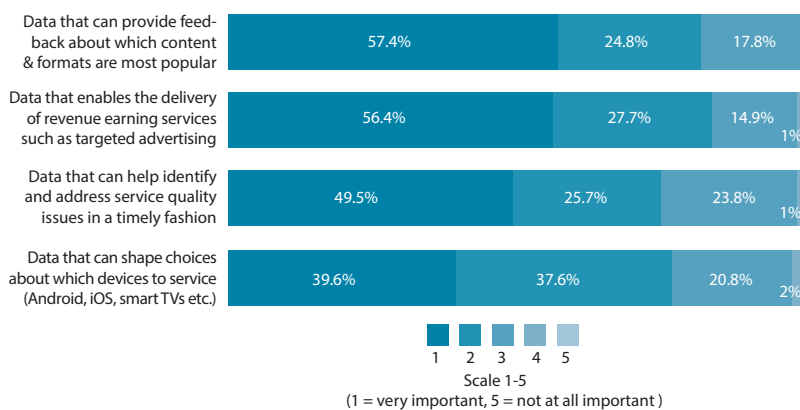(1 = very important, 5 = not at all important)

The application of data

Respondents to our survey were more interested in data that is packaged for senior board-level executives and marketers than for technical support staff and this bias is evident also in their view of the uses to which the data they gather can best be put. While respondents believe data can be useful for both marketing and technical applications, they favour the usefulness of data about overall popularity of content and services over data about quality of experience and about which platforms to target.

Asked to rate four types of data for their usefulness to media organisations, our survey rated information that can provide feedback about which content and formats are popular and data that can enable the delivery of revenue earning services, such as targeted advertising,
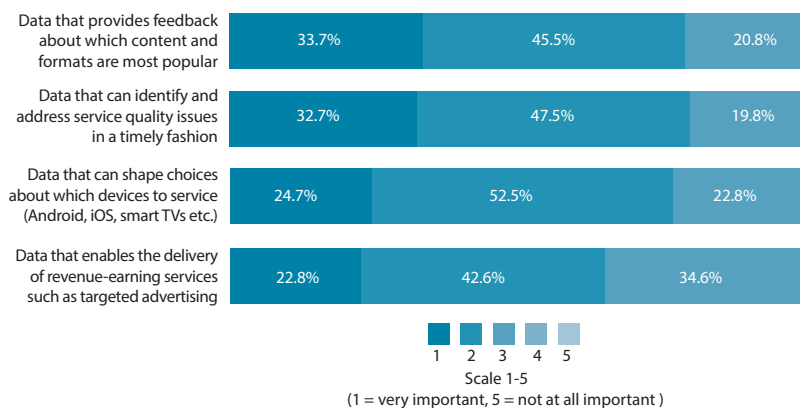
more highly than data that can help identify service quality issues and enable these to be addressed in a timely fashion, and data that can help choice about which devices to provide services for. (Fig. 6)

Asked whether the data analytics engine they use is adequately meeting these needs, however, our survey sample's responses show an element of disconnection. While around a third of respondents agree that the analytics engine they use provides good support for data that can help identify service quality issues and data that can provide feedback about the popularity of content and formats, a clear majority in all cases feel that the support provided is inadequate. This is especially the case for support in delivering revenue-earning services such as targeted advertising, where over a third report that their current analytics engine provides no support at all and over two in five feel that while it provides some support, it does not do so at an adequate level. Respondents also strongly feel that support is inadequate for helping shape choices about which devices to target. (Fig. 7)

Fig. 6. What do you think is important in terms of what viewer analytics reporting should deliver for service providers?
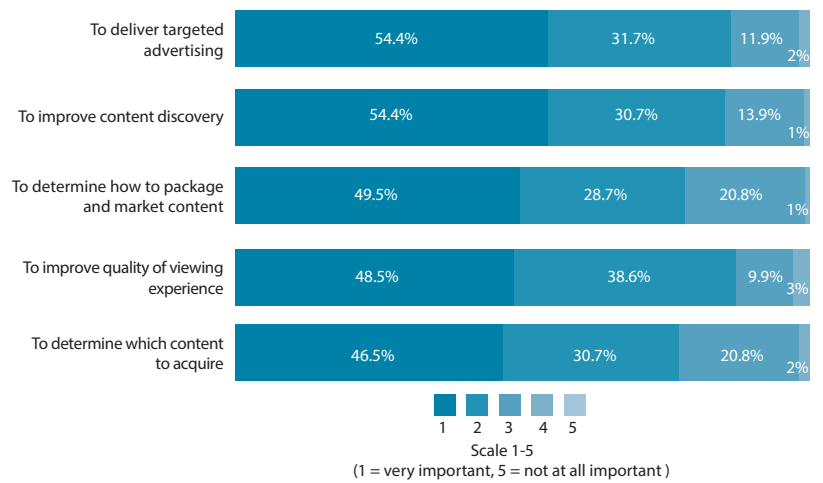
Data that can provide feedback about which content & formats are most popular	57.4%	24.8%	17.8%	
Data that enables the delivery of revenue earning services such as targeted advertising	56.4%	27.7%	14.9%	1%
Data that can help identify and address service quality issues in a timely fashion	49.5%	25.7%	23.8%	1%
Data that can shape choices about which devices to service (Android, iOS, smart TVs etc.)	39.6%	37.6%	20.8%	2%

Scale 1-5
1 2 3 4 5
(1 = very important, 5 = not at all important)

Fig. 7. Which of the following applications does your data analytics engine support successfully?

Data that provides feedback about which content and formats are most popular	33.7%	45.5%	20.8%
Data that can identify and address service quality issues in a timely fashion	32.7%	47.5%	19.8%
Data that can shape choices about which devices to service (Android, iOS, smart TVs etc.)	24.7%	52.5%	22.8%
Data that enables the delivery of revenue-earning services such as targeted advertising	22.8%	42.6%	34.6%

Scale 1-5
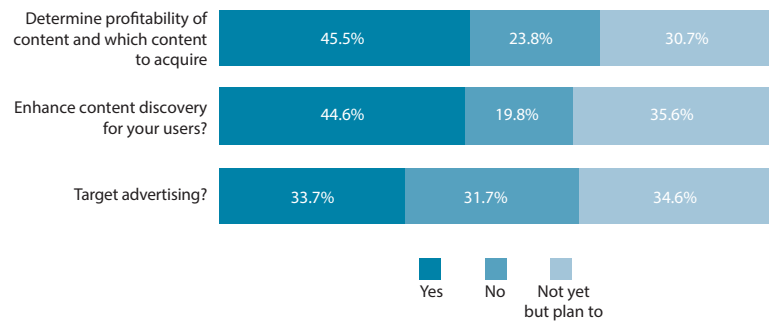1 2 3 4 5
(1 = very important, 5 = not at all important)

Our respondents were also asked to rate how important or useful data is to five business applications: to improve content discovery; to deliver targeted advertising; to improve quality of viewing experience; to determine which content to acquire and to determine how to package and market content. The responses suggest that data is important across all these fields. However, in terms of the usefulness of existing data, improving content discovery and delivering targeted advertising are rated marginally more highly than improving quality of viewing experience, determining which content to acquire and determining how to package and market content. (Fig. 8)

A significant proportion – about 45% in each case – of respondents also claim to be already using viewer data analytics to enhance content discovery or determine profitability of content and which content to acquire, while a third say they are using data analytics to deliver targeted advertising. (Fig. 9)

Fig. 8. How important or useful do you think the following business applications are as ways to use viewer behaviour analytics in practice?

	1	2	3	4	5
To deliver targeted advertising	54.4%	31.7%	11.9%		2%
To improve content discovery	54.4%	30.7%	13.9%		1%
To determine how to package and market content	49.5%	28.7%	20.8%		1%
To improve quality of viewing experience	48.5%	38.6%	9.9%		3%
To determine which content to acquire	46.5%	30.7%	20.8%		2%

Scale 1-5
(1 = very important, 5 = not at all important)

Fig. 9. Do you use analytics to:

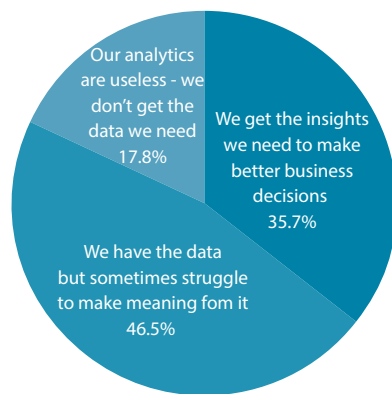|	Yes	No	Not yet but plan to
Determine profitability of content and which content to acquire	45.5%	23.8%	30.7%
Enhance content discovery for your users?	44.6%	19.8%	35.6%
Target advertising?	33.7%	31.7%	34.6%

The value of data

To find out about perceptions of the overall value of data and insights that media companies currently have access to, we asked our survey respondents to choose one of three statements that best defines how they perceive the value generated by their analytics systems.

The responses to this question suggest that organisations are still struggling to make sense of the wealth of data now available to them. Almost half chose the statement "We have the data we need, but sometimes we struggle to make meaning from it", while just over a third agreed that "We get the insights we need to make better business decisions from our data". (Encouragingly, only one in five believe that their analytics are "useless".) (Fig. 10)
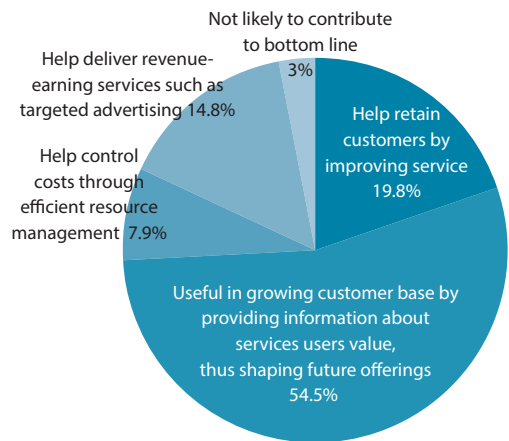
Respondents were also asked to choose which of five statements best reflects their view about how viewer

behaviour analytics could add to their bottom line. In the case of this question, a clear winner emerged. Over half of respondents chose the statement: "Viewer behaviour analytics are most useful in helping organisations grow their customer base by providing information about the kind of services users value, thus helping shape future service offerings." A statement to the effect that viewer behaviour analytics are most useful in helping organisations improve quality of service came a distant second, with just under one in five choosing this option. The usefulness of analytics in delivering revenue-generating services such as targeted advertising came third with 15%, while their usefulness in delivering better network management and deployment of resources scored 8%. Only 3% of respondents did not think that viewer behaviour analytics are likely to contribute to organisations' bottom line. (Fig. 11)

Fig. 10. Which statement best defines how you view the value brought to you by your analytics system?

Our analytics are useless - we don't get the data we need
17.8%

We get the insights we need to make better business decisions
35.7%

We have the data but sometimes struggle to make meaning fom it
46.5%

Fig. 11. Which of the following statements best reflects your view about how viewer behaviour analytics could add more to your bottom line?

Not likely to contribute to bottom line
3%

Help deliver revenue-earning services such as targeted advertising 14.8%

Help control costs through efficient resource management 7.9%

Help retain customers by improving service
19.8%

Useful in growing customer base by providing information about services users value, thus shaping future offerings
54.5%

Conclusion

Media organisations believe that viewer behaviour analytics will be crucial to their business in the future, with a significant minority citing this as the single most important factor in determining the future of their business. Many organisations are already capturing data, with a smaller group analysing it in detail. Lack of resources remains a barrier to realising the potential of data.

While they agree about the overall importance of viewer behaviour analytics, media companies demonstrate less consensus about which sets of data will be important. However, data about the popularity of types of content and formats is highly valued. Respondents to this survey were particularly enthusiastic about the potential use of data to inform marketing and business development decisions.

Survey respondents showed a general lack of satisfaction with the data analytics engines they currently use, with a significant majority reporting that the support provided for key applications is inadequate. This is particularly true in relation to revenue earning applications such as targeted advertising. In terms of identifying areas where viewer analytics could play a useful role, media executives cited enabling content discovery as a key application.

While many media companies appear to be continuing to struggle to make sense of the data available to them, media executives remain positive about the potential of viewer behaviour analytics. In particular, they overwhelmingly endorse the view that analytics could be most useful in providing information about which services are valued by users, helping to shape future service offerings, grow their customer base and deliver additional revenue.

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