



**DESIGN FOR TOMORROW**

# **CONTENT CREATION**

Producing ingenuity

October 2020

Enabled by



With



# INTRODUCTION

*Design for Tomorrow* is a project that explores what is required for a media company to be set up for success in a world of constant, rapid and unpredictable change.

The series began by establishing the [Key Design Principles](#) that every company should adopt if it is to meet its core purposes of protecting itself and its people; responding to challenges and opportunities; and achieving growth.

Those key design principles can be summarised as:

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## Safe

The business culture keeps employees, customers and the company safe.

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## Available

Teams have access to the systems, assets and people they need – wherever they are.

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## Flexible

The business has operational agility: it can respond rapidly to changing conditions and opportunities.

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## Informed

The business is led by data that enables it to understand itself and others.

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## Relevant

The best preparation for unexpected events, and dynamic new trends is to have a rich understanding of the customers you serve, and the context in which you operate.

But if those are the general principles that should underpin all companies, what does it mean to put them into practice in particular parts of the media supply chain?

This report explores the part of the supply chain from which everything else derives: content creation. No content, no media industry. It is the fuel that powers everything else – including the ability for others to drive revenue.

This means the whole media industry has a dependency on the production process – and its ability to keep creating content, whatever the circumstances.

The content creation stage is also the most complex part of the overall media supply chain. It is a rich mix of creativity and technology, and it involves such an extraordinary diversity of content types, that they sometimes feel as if they belong to different industries.

So how do we establish general principles for success for content creators? That's the challenge this report seeks to meet.

The DPP is hugely grateful to the 59 experts that enabled us to address that challenge, along with our expert sponsors – Wildmoka, 01T, Dalet, Dropbox and TinkerList.

# EXECUTIVE SUMMARY

- ▶ Content creation is extraordinarily diverse in scale, form and budget.
- ▶ It nevertheless has common and distinctive characteristics: it is project based, high risk, field based and people centric.
- ▶ Content making has been booming for the last decade. But the declaration of a global pandemic in March 2020 highlighted its distinctive characteristics – not least that content creation is high risk. Most production activity ceased almost overnight, and production companies moved to remote working.
- ▶ Remote working now looks set to become an integral part of the content creation process.
- ▶ This evolution in how production will work in the future has huge implications for how production companies, and those that supply to them, need to be set up for the future.

There are five success factors required for tomorrow's content creation:

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## 1 **The core team is compact, adaptable, and technically empowered**

Production companies must now be designed to manage a remote and distributed workforce – and this will require particular management skills, together with the ability to leverage technology.

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## 2 **The business is set up to be responsive, accessible and informed**

There are the processes and people in place to operate a consumption based, data rich business model.

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## 3 **Workplace tools are available, usable and appropriate**

Technology is now an essential enabler for almost every aspect of content creation – which means it must be well defined and accessible.

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#### 4 **There's an ability to adapt to changing production environments**

The effective enablement of remote workers will become core to a company's talent proposition. Different production circumstances will need different toolsets and protocols.

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#### 5 **Supplier relationships combine partnership and flexibility**

The need to align costs to revenue will require flexible, responsive and trust based commercial relationships between customers and suppliers.

# CONTRIBUTORS

The content for this report has been gathered through a series of workshops with almost 60 subject matter experts from across the industry, along with our expert sponsors Wildmoka, 01T, Dalet, Dropbox and TinkerList. The input of these experts has been used to define and refine the Key Success Factors identified in this document.

**It must be stressed, however, that while this report has been informed by our discussions with these experts, not everyone necessarily shares all the views presented here.**

**Mo Abdulla**

Head of Post Production,  
Nutopia

**Bea Alonso**

Director of Product Marketing,  
Dalet

**Charlotte Ashby**

Head of Production,  
Carnival Films

**Tim Bertioli**

SVP Global Media Operations,  
VICE Media Group

**Rob Black**

CEO,  
Promod eSports

**Matthew Carter**

Head of Sales,  
Dalet

**David Chalmers**

Technology Development Manager,  
BBC

**Laura Conway**

Founder,  
Creative Blood Agency

**Sheena Louise Cox**

Media Industry Sales Lead,  
Dropbox

**Daniel Deak**

COO,  
01T

**John Dollin**

Senior Operations Manager, Media,  
Arsenal FC

**Matt Eaton**

MD EMEA,  
GrayMeta

**Daniel Elias**

Head of Post Production and Strategic  
Projects, VICE Media Group

**Caroline Ewerton**

Head of Operational Delivery,  
DAZN

**Tim Fiennes**

Head of Audience Research, Emerging  
Technology and Distribution, BBC

**Michele Gauthier**

Director of Production Transformation,  
VICE Media Group

**Owain Griffiths**

Director Media, UK & Australia,  
CGI

**Jonathan Harley**

Head of Production Development,  
dock10

**Erik Hauters**

CEO,  
TinkerList

**Gareth Havard**

Chief Engineer,  
Tinopolis

**Asia Jarzyna**

CEO,  
Willco

**Nick Kaimakami**

EVP and Head EMEA and USA East,  
Prime Focus Technologies

**Sian Kevill**

Founder and Exec,  
Make Waves

**Robin Kirchhoffer**

Director of Marketing,  
Operations & Content, Dalet

**Mike Knight**

Video Production Manager,  
Radcliffe Group

**James Lamon**

Head of Content, Europe,  
BuzzFeed

**Brian Leonard**

Head of Engineering –  
Production and Workflows, IMG

**Cristian Livadiotti**

CEO,  
Wildmoka

**Louisa Lockett**

Head of Operations,  
Banijay UK

**Anna Lockwood**

Head of Global Sales,  
Telstra

**David Longstaffe**

Director,  
Kendo Prime Media

**Matt Lorielle**

CMO,  
Wildmoka

**Uisdean Macleod**

Technology Operations Manager,  
MG ALBA

**Shailendra Mathur**

VP Architecture,  
Avid

**David McLean**

General Manager – Bridge Studio,  
News UK

**Derek Moore**

CEO,  
Coffee & TV

**Donna Mulvey-Jones**

Director of Post Production – Nonfiction,  
Netflix

**Darach O Tuairisg**

Manager,  
Fibin Media

**Liam O'Neill**

Co-founder and COO,  
Radcliffe Group

**Oliver Parker**

Vice President of Commercial,  
International, Blackbird

**Janice Pearson**

Vice President, Global Content Protection,  
Convergent Risks

**Angela Pierce**

Head of Production,  
Cactus TV

**Leeanna Pitt**

Director Of Product,  
We Got POP

**David Ramsey**

CEO,  
Radcliffe Group

**Marco Rota**

Director, Technical Strategy,  
Media and Entertainment, Microsoft

**Peter Russell**

Tech Director,  
ITV Studios

**Simon Stokes**

Chief Commercial Officer,  
01T

**Peter Thompson**

CEO and Co-Founder,  
LucidLink

**Martin Trickey**

Group Head of Digital,  
WarnerMedia

**Natalie Triebwasser**

Head of Production,  
Quicksilver Media

**Maarten Verwaest**

CEO and Founder,  
Limecraft

**Kurt Victoor**

COO,  
TinkerList

**Matt Waldock**

VP, EMEA,  
Xytech Systems

**Zillah Watson**

Director of Content,  
Satore Studio

**Rich Welsh**

CEO,  
Sundog Media Toolkit

**Andrew Wilding**

VP Sales,  
Sohonet

**Morwen Williams**

Director of UK Operations,  
BBC News

**Andy Wilson**

Principal - Media,  
Dropbox

**Thomas Winward**

Producer,  
Nemorin



# WHAT IS CONTENT CREATION?

We all know what content creation is, don't we?

We probably do – but only after we have reminded ourselves of the astonishing diversity of types, shapes, durations and purposes.

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**To appreciate what content creation is, we  
have to understand its astonishing diversity  
of types, shapes, durations and purposes**

'Content' ranges from corporate videos to blockbuster movies; archive based programming to global live events; ad spots of a few seconds, to scripted episodics that return for season after season.

Budgets range from hundreds of dollars to hundreds of millions of dollars. Crews range from one person to a thousand people.

A production entity may be a colossal in-house 'factory', producing news or sport for a major network. Or it may be one person, working from a home office, contracting a few freelancers as needed.

And then the scope of the content creation stage of the media supply chain runs from idea generation, and the pitch to a content commissioner or client, all the way through production planning, acquisition of the sound and pictures, to the shaping and enhancement of that material for live or non-live distribution, and finally to storage of content assets, and monetisation.

Each of these content creation stages is necessarily different for different content types. The acquisition phase for premium scripted content, with its single camera, actors, multiple locations, costumes, props and so on, is wildly different from acquisition of sports content, with dozens of cameras and a vast array of technology, focused on a fixed event. Winning a branded content job is very different from winning a reality TV series, and so on.

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## **For all this complexity and multiplicity, there are some common characteristics to the content creation process that are distinctive**

But for all this complexity and multiplicity, there are some common characteristics to the content creation process that are distinctive. These characteristics have a profound significance for what it means to set up for success in a market that is unpredictable and uncertain.

Content creation is generally:

### **Project based**

Most content is commissioned and made as a distinct project – and is planned and budgeted as such.

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## **The project based nature of much content creation gives it some very particular characteristics that often perplex those from outside the production environment**

There are a few content types, such as daily news and magazine shows, or continuous drama series (sometimes referred to as ‘soaps’), that operate as a constant production factory. These content types have more predictability than many others – not least because they have longer term funding. But even within this model, the production team will acquire and deliver unique content for each transmission or episode: the overall process has industrial elements; but each content ‘product’ will be different.

The project based nature of much content creation gives it some very particular characteristics that often perplex those from outside the production environment.

First of all, it is inevitable that financial models – especially for smaller production entities – become centred around a project budget. Any cost that cannot be allocated to a project budget template is difficult to accommodate. In some respects this is the ultimate opex model: buying people, goods, tools and services on a one off basis. But it makes infrastructure subscriptions – such as those required for underlying collaboration tools – difficult to allocate and recover.

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### **Project based working is inherently risk averse. This can make creative people seem oddly conservative**

And secondly, project based working is inherently risk averse. The primary goal is to deliver successfully, on time, and on budget. This goal generates a paradox: creative people can seem oddly conservative. They will often prefer the certainty of a tried and tested company, tool or workflow over a new one – even though the alternative may bring great benefits. Many creatives would rather deliver something familiar and risk free on budget, than something different and risky more cheaply. As the cliché goes, no one won an Oscar for delivering early or under budget.

Thirdly, project based working is always time bound. Projects, of any kind, will always use all the time available to them – and that time will never seem enough. This sense of time pressure makes innovation difficult, since innovation usually involves a commitment of attention. As another cliché goes: I didn't have time to be more efficient.

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### **The sense of time pressure makes innovation difficult, since innovation usually involves a commitment of attention**

And finally, project based working requires a high number of contract or freelance employees. On the one hand this makes content production a very insecure profession. But on the other, paradoxically, it gives key talent enormous power: they can choose their project. And, since the workforce is constantly changing, it makes it difficult for a production company to set up and administer common staff policies, protocols and systems.

## High risk

The ability to scale up and down is now commonly discussed as one of the great benefits of modern media workflows. But in production the need to scale up or down can be forced upon you – and need to happen in an instant.

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### **In production the need to scale up or down can be forced upon you – and need to happen in an instant**

Commissions can suddenly be cancelled. Filming plans can be destroyed by anything from the weather, to political upheaval, to the vagaries of key talent. That's before we get to global pandemics. And even a successful production company can suddenly hit a bad run, in which none of its ideas finds a buyer.

It really isn't any wonder creative people seek to minimise risk wherever possible.

## Field based

There is no other part of the media industry that is founded on work that takes place out of the office. Almost all content creation occurs on location, on set or in studio. Often these locations will be new, and in a foreign country. They will therefore bring their own unpredictability, to add to the inherently high risks associated with any shoot. They will also be obliged to work with particular local conditions, custom and practices, or regulations.

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### **There is no other part of the media industry that is founded on work that takes place out of the office**

Some shooting locations are custom made, and are ideal environments for film making. But many are the opposite – and indeed that is probably why they will have been chosen: they are interesting, unusual or unchartered – or all three.

It goes without saying, therefore, that working on location brings unique challenges. In new and unusual locations these challenges may be primarily around the team's ability to do its job, and to communicate with base. But even in well suited environments, the very fact of people working away from a hub or a home can bring its own issues.

## People-centric

With the notable exception of natural history programming, content is made about people, for people, by people. Technology is an enabler – but it will rarely get to be centre stage. Even tech heavy processes such as animation and visual effects, are in the hands of key talent.

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## What is distinctive about production is its emphasis on people as both its raw material and its means of production

It could reasonably be argued that the whole media supply chain is really about people. But what is distinctive about production is its emphasis on people as both its raw material and its means of production. In many respects the perfect piece of content will seek to pair a mercurial subject with a mercurial director. For consumers, originality is hugely appealing. The human factor therefore carries fundamental financial and brand value.

Why does this matter when trying to design a production company for tomorrow? It matters because, in many respects, the best protection against uncertainty is an operation that, when required, can pretty much run itself. This level of automation is not so far off in some parts of the preparation and distribution workflow. But in content creation it really is not.

Production is, in essence, about enabling creative people to capture the spontaneous, unpredictable and extraordinary, in new and engaging ways. Less of an industrial process it is hard to imagine.

So, although, in essence, content creation is simply story telling through the medium of moving pictures and sound, such a description fails to capture its meaning within a wider media industry. This is why its defining characteristics of being project based, high risk, field based and people centric are so significant. Together they represent the challenges that must be met by any endeavour to plan more effectively for an unknown future.

# DESIGNING CONTENT CREATION FOR TOMORROW

## Context

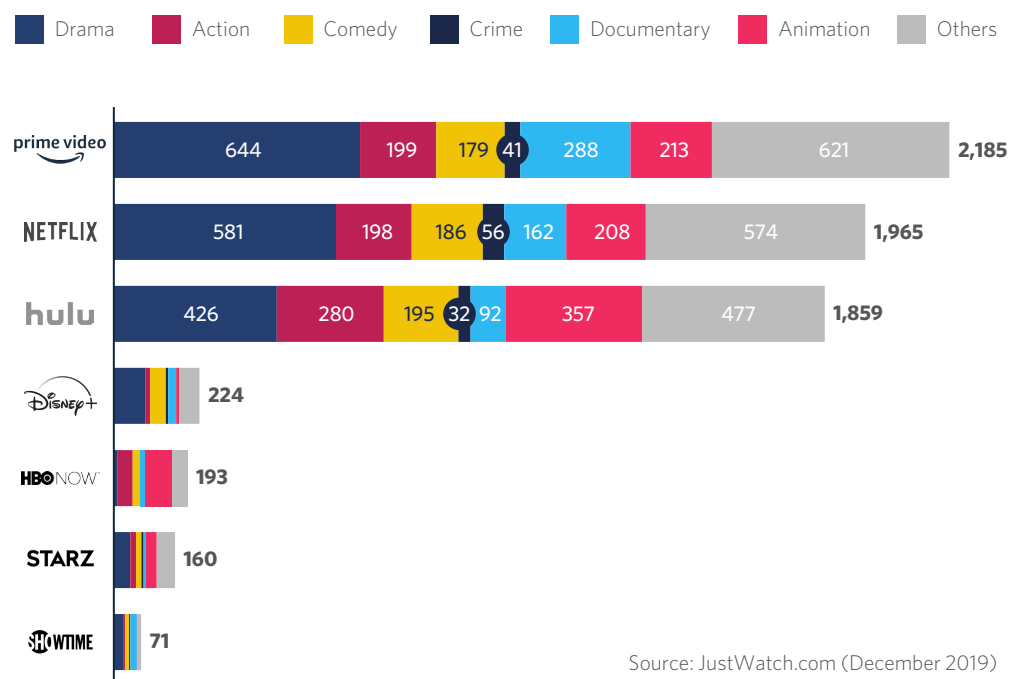
There has never been a better decade to be a producer than the one that ended on 31 December 2019.

Although the media industry has seen huge shifts in how and where consumers watch content – and indeed in the very nature of what people want to watch – the fact remains that the appetite for audio visual content just grows and grows.

**There has never been a better decade to  
be a producer than the one that ended  
on 31 December 2019**

It is difficult to measure all aspects of this growth. But there are a couple of strong indicators that capture both the strength of the content creation market, and how that market has changed.

### Number of series by genre, from US video streaming providers, 2019



Source: JustWatch.com (December 2019)

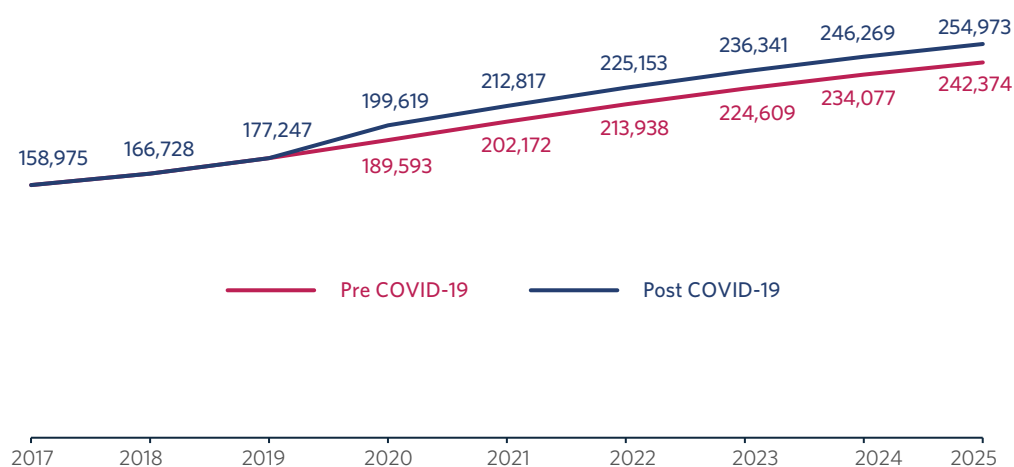
The first indicator is spend. An extraordinary **\$650 billion was spent** on new content in the US alone between 2014 and 2019 – much of it to populate new streaming services. Those services have in turn encouraged diversity of supply across a wide range of content types – as illustrated in the table above.

The second indicator is the explosion in branded content – which has shown a compound annual growth rate of **40%**. In 2018 it was predicted that global spend on branded content in 2020 would be \$7 billion; in practice it was on course for \$14 billion, before the pandemic hit.

### The impact of COVID-19

At first glance it appears that even the arrival of this global pandemic did nothing to arrest the content boom. As people isolated at home, and went to their screens, revenues from digital media simply accelerated.

#### Global Digital Media revenue forecast in million \$US



Source: Statista Digital Market Outlook 2020

But whereas the growth in content consumption in the last ten years has benefitted both producer and distributor, the 2020 increase only helped the latter. The revenue related to content viewing may have been moved up a notch by the pandemic; but the revenue for making new content plummeted.

And in mid-March 2020, all those defining characteristics of content creation – project based, high risk, field based and people centric – came into play at the same time.



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## Revenue related to content viewing may have grown during the pandemic; but revenue for making new content plummeted

### Shut down

By the time the World Health Organisation declared a global pandemic, on 11 March 2020, content production was already shutting down.

Disney TV Studios stopped 16 of its TV pilots that month, as a direct result of the pandemic, while NBCUniversal shut down 35 ([Hollywood Reporter](#)). By mid-March a staggering 120,000 people in Hollywood were already out of work ([Guardian](#)). By early April, it was reported that [93%](#) of the UK's media and entertainment freelancers were unemployed.

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## March 2020 saw 120,000 Hollywood employees and 93% of UK media freelancers out of work

Throughout March 2020 a parade of major sports leagues and tournaments were cancelled or postponed – putting an abrupt end to live sports coverage. At the same time, almost all unscripted production in Europe came to a halt.

The [scale of the crisis](#) was evident when Netflix announced it had created a \$100 million fund for laid-off production workers. NBCUniversal set up a similar fund – with a colossal \$150 million.

In the spring of 2020 it was estimated that 60% of global drama production was delayed ([Deadline](#)). By this time it was estimated that the global film industry had already lost \$10 billion ([Hollywood Reporter](#)). It was being predicted that the pandemic would cost the British film and TV industry £36 billion (\$45 billion) in lost revenue, with the sector set to shrink 57% compared to 2019 ([Deadline](#)).

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## By July 2020, it was estimated that 97% of scripted production in the US had stopped

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The cinema industry went into crisis – illustrated by the Cineworld announcement in October 2020 that it would suspend its operations at all its US and UK screens until the supply of major movies recommenced.

### Remotely creative

It is in the nature of the creative sector to be ingenious of course, and no sooner had lockdown begun than a wave of 'COVID-friendly' programming began to appear. Some of America's best known shows relocated, shot in the homes of stars such as Ellen DeGeneres, John Oliver and Bill Maher ([TV Line](#), [Deadline](#)).

A number of US reality shows appeared as remotely shot productions, with the necessary equipment dispatched to the contributors' homes ([Vulture](#), [BuzzFeed News](#)). Meanwhile, brand new pandemic-inspired films, shot entirely in lockdown, began to emerge in the UK, as well as the US ([BFI](#), [CNN](#)).

By May in the UK broadcasters had come together to agree industry-wide guidelines for safe production ([BBC](#)). And by June there were guidelines for Hollywood productions to recommence ([Deadline](#)).

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## The speed with which editorial priorities shifted during the pandemic provides a great insight into the ever-changing nature of content creation

But what perhaps provides the greatest insight into the ever-changing nature of content creation is the speed with which editorial priorities shifted, within weeks of the pandemic starting.

Some of those same stars that had taken their shows home were now being criticised for misjudging the public mood ([Sky News](#), [Washington Post](#)). And over the summer, new content that responded to the death of George Floyd was already being aired ([LA Times](#)). By August 2020, critics were complaining about new content that seemed to regard immediacy as a substitute for quality ([Guardian](#)).

### Content redefined

Meanwhile, lockdown saw a surge in user generated video content. In the UK, TikTok reached 12.9 million adult visitors in April – up from just 5.4 million in January. By this time, 40% of adults and 59% of older children in the UK were using video sharing sites and apps to create and upload their own videos ([Ofcom](#)).

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## The lines between TV and not-TV – already hard to define before the pandemic – were further blurred by the extraordinary conditions of 2020

The lines between TV and not-TV – already becoming hard to define before the pandemic – were further blurred by the extraordinary social conditions of 2020. Social media became a TV substitute for many people, leading platforms such as Instagram to achieve viewing figures that would be deemed respectable by many linear TV shows ([Wired](#)). Even more dramatically, games such as Fortnite became live-event spaces, blurring the lines between game platforms, social media and TV ([Washington Post](#)).

In the space of just six months, creative opportunities, editorial considerations, and target platforms had all been redefined. This rate of change provides an insight into how constantly alert and responsive to its market the production community needs to be.

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## In the space of just six months, creative opportunities, editorial considerations, and target platforms had all been redefined

## After effects

The coronavirus pandemic may have rapidly impacted content creation, but its effects look set to linger for some time yet. In May 2020 it was projected that by March 2021, 60% of scripted production releases would still be affected by the pandemic. It was also thought that up to 10% of scripted titles due for release late in 2020, would be cancelled entirely (Ampere Analysis via [Advanced Television](#)).

The recovery rate for unscripted content will be much more rapid, not least because its typical production schedule is much shorter than for scripted.

Meanwhile, just as sports production was switched off overnight in March, much of it was switched back on again almost as rapidly in June. News production, for its part, never halted – helped in the UK, for instance, by journalists being given key worker status ([Press Gazette](#)). But the way that news is made may have been changed for ever by the experience of more lightweight and remote newsgathering during COVID.

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## Content creation may be the start of the media supply chain; but it's nevertheless the sharp end

At some point in 2021 there is likely to be social normalisation. When that happens, there is also likely to be a huge resurgence in content generation. Production companies that have survived the disruption of the pandemic, could experience a boom. But the market for which they will be producing will have moved on once again; the pressure for rapid delivery will be enormous; and budgets are likely to be squeezed.

Content creation may be the start of the media supply chain; but it's nevertheless the sharp end.

# DESIGNING CONTENT CREATION FOR TOMORROW

## Key Success Factors

The unique characteristics of the business and culture of production, together with its diversity of activity, make it especially difficult to generalise about how creative entities should set themselves up.

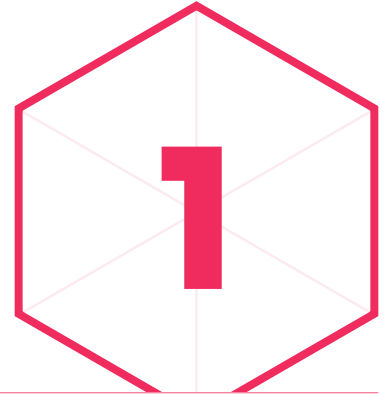
This complexity feeds through into the companies that supply to the production community. It is again an extraordinary range, from those that supply specialist services – such as props, catering and set building – for movie making; to those that make creative software for the shaping and enhancement of content; to highly technical companies that provide virtual graphics for live events.

Our discussion with expert practitioners from both the end user and supplier community, however, has identified five key factors that together provide the greatest likelihood that this creative ecosystem will be well placed to succeed in an uncertain future:

- 1 **The core team is compact, adaptable, and technically empowered**
- 2 **The business is set up to be responsive, accessible and informed**
- 3 **Workplace tools are available, usable and appropriate**
- 4 **There's an ability to adapt to changing production environments**
- 5 **Supplier relationships combine partnership and flexibility**

# SUCCESS FACTORS

## The core team is compact, adaptable and technically empowered



- ▶ The ability to work remotely, and to coordinate a distributed group of freelancers, is now essential
- ▶ This is as much for reasons of financial prudence as changing and unpredictable working environments
- ▶ It requires a production entity to have a core team that is able to combine protocols and policies that are administered via a suite of online tools
- ▶ This team also needs access to technical expertise – either in-house or as a service

Almost all production companies are made up of a permanent core staff that in turn employ freelance expertise to deliver particular production projects. The slight exception to this model is the in-house operation typically associated with the news and sport divisions of major broadcasters. But even these will employ large numbers of freelancers, especially for big events.

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## **The ability rapidly to acquire and stand down human resources in production is the oldest and ultimate scalability challenge**

So although the ability to scale up and down is most commonly discussed in relation to technical resources, the ability rapidly to acquire and stand down human resources in production is the oldest and ultimate scalability challenge.

This is seen most strikingly in drama production, where a company may operate as a small core team, with few or no freelancers, for many months while a major project is being developed – and then suddenly scale to hundreds of people when that project receives the green light.

It is a model that has evolved precisely to deal with the kind of uncertainties that the events of 2020 have illustrated in extreme form. What has been added to the mix, however, is both the potential for circumstances to exist where it is not possible to access the company's office space, and for revenue suddenly to cease entirely.

To this end it might seem wise for production companies no longer to rent or own office space at all, and to work entirely remotely. This may indeed be appropriate for the smallest companies, that would choose to work from home.

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## **It is a crucial and universal truth that creative people need to gather in person to develop ideas and to plan**

There is however one crucial and universal truth: creative people need to gather in person to develop ideas and to plan. A physical space will always be required.

Such a space may be a permanent office that is no bigger than necessary and is owned or rented on the most flexible contract possible. Or it may be that a company can find a way to gain access to a collaborative space on a regular, pay as you go basis.

Although collaboration will be the primary purpose of this physical space, it will be needed for another important reason. It is somewhere to bring clients – a place where, ideally, the identity and personality of the production company can be reflected. This is all part of the process of winning work.

Historically the process of scaling up has involved the rental of additional office space. Indeed, some production companies even occupy a much bigger space than the core team requires, simply so they can expand when required. But the view of our experts is that it now makes more sense to use remote working as the means of scaling.

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## **Remote working should be used as a means of scaling**

This business-as-usual mode of operation – a core team in a collaborative physical space, working with freelancers who are working remotely – brings with it some fundamental operational requirements that determine many of the other characteristics of a future facing production entity:

### **1 Access to a diverse range of talent**

The first of these relates to talent. Creative effectiveness requires diverse human resources. By being set up to work remotely, the company gains access to a wider pool of people, personalities and talents from a wider spread of backgrounds and territories. But having said this, an effective approach to inclusion will also recognise that some people are not well placed to work from where they live. A central physical space, or the capability to provide a remote physical space, is important if these individuals are to be enabled.

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## **An effective approach to inclusion will recognise that some people are not well placed to work from where they live**



## 2 Technical independence

The second requirement is that any physical space owned or rented by the core team must not carry technical dependencies. In other words, the team must know that even if they cannot access their physical space, they will still have access to everything they require: all their tools, information and assets.

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### **Any physical space owned or rented by the core team must not carry technical dependencies**

This requirement dictates that they will therefore need, at the very least, to be able to gain remote access to any technical infrastructure. But, better still (especially since in certain circumstances it may not be possible to carry out maintenance tasks on on-premise infrastructure), the team will be enabled by cloud based and virtualised toolsets.

## 3 Well defined and communicated protocols

The third requirement, that follows logically from the first two, is that the company will need protocols and management skills that ensure consistency and effectiveness for remote working. It will need a means of onboarding and training new hires remotely as well as in person. Ways of working and the operational principles of the company will have to be defined and communicated. And it will need the people and communication skills to meet the considerable challenge of getting the best out of a distributed workforce.

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### **The company will need protocols and management skills that ensure consistency and effectiveness for remote working**

This definitional and administrative activity hasn't always come naturally to a creative culture that tends to be process averse, spontaneous, and respectful of individual, and idiosyncratic, preferences. But our experts were of the view that it is now essential that modern companies have the structured management skills within the core team to work in these coordinated, consistent and defined ways, even if it may not come naturally to everyone.

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## **A production entity will not be fully effective unless it has technical skills**

### **4 Access to technical skills**

And the fourth requirement supports all others: a production entity will not be fully effective unless it has technical skills – and particularly IT skills – either within the team, or at hand from a service provider.

In truth, production has always tended to outsource technical expertise. But in the past technology existed overwhelming in the craft processes of content acquisition and post production. There was very little technology in production planning and project management. This has changed dramatically. Technology is now an essential enabler for almost every aspect of content creation. And there is no getting away from the fact that this means specialist expertise is required if that technology is to be introduced and used effectively.

Having said this, if technology is to be an effective enabler in production planning, it must be user friendly once it is set up. Specialist IT skills should not be needed to support everyday use of the technology.

# SUCCESS FACTORS

## The business is set up to be responsive, accessible and informed



- ▶ The business has the processes and people in place to operate a consumption based model around technology infrastructure as well as production projects
- ▶ The company is paperless
- ▶ Data is centralised and accessible, and is unified and traceable
- ▶ The business and its supply chain exhibit consistent values and are environmentally sustainable

In some respects, it might seem odd to be talking about a shift from capital expenditure (capex) to operational expenditure (opex) models in production. After all, there is nothing more pay as you go than a production budget. Each line of that budget looks to pay for each person, tool or service on a volume, usage or time basis.

**There is nothing more pay as you go than a production budget – and now it needs to adapt to IT enabled production infrastructure**

But therein lies the challenge for the shift to IT enabled production infrastructure: such expenditure doesn't necessarily sit neatly in a production budget template. How is a particular set of collaboration tools, paid for on a subscription basis, and used across a number of projects, accounted for in a single project budget? And how will a finance team plan for volume or activity based expenditure that is difficult to predict?

There is no doubt that the industry is in a moment of transition in this respect. But the view of our experts is that the moment must be seized. Customers and commissioners may need to be educated. Internal teams need to work in partnership to better understand and make use of the benefits of these new ways of working, and the commercial models that come with them. In some cases, the adoption of a particular software tool may be key to the delivery of a new project. But the payment for that tool may not align neatly with the timing or cost provision of that project; and the customer may not necessarily understand its benefits. This is where the whole production company must be well aligned on the creative and practical purpose of particular tools.

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### **It is critical that suppliers of software based production tools appreciate the budgeting realities of their customers**

Equally, it is critical that suppliers of software based production tools appreciate the budgeting realities of their customers. In the past vendors have sometimes failed to appreciate both the need to be able to assign and report usage and spend on a project basis; and the need for pricing that readily translates to the language and priorities of production. This is simply no longer acceptable – and production companies would be advised to select in favour of suppliers with transparent and easily understood cost models.

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### **In a world of molecular and distributed production, people with finance, legal, HR and health and safety responsibilities all need to be more responsive**

But in this world of molecular and distributed production, it is not only finance management that needs to become more responsive. People, or teams, with legal, HR and health and safety responsibilities will also need to ensure that they don't become a blocker to agility. They will need both to be able to move quickly, and to respond to differing regulatory and policy frameworks around the world. They will then need to translate those frameworks into easily and commonly understood protocols that can be followed by production teams. Once again, this is new, and challenging, and requires very particular personalities and aptitudes. But management teams that are able to select for – or gain access to – such skills will gain a competitive advantage.

There are a number of online production management tools available that assist in these processes by providing a checklist for key actions and considerations, and by standardising protocols.

Such tools also assist in four other respects.

## 1 The centralised management of data

The first is that they enable a production entity to gather, centralise and manage the vast amounts of data now required for any production. Fully digital data management can hugely simplify processes such as permissions and clearances, rights, legal and business affairs, production reporting, risk management, audit trails, collection of audience data, segmented communications, and so on.

Well managed data is now also crucial to any company that supplies content direct to the consumer. It is a means of testing what works, and creating a real time feedback loop that enables refinement and innovation.

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### **It is essential that data is unified, highly usable, and accessible from anywhere**

It is essential, however, that data is unified, highly usable, and accessible from anywhere. This places a requirement both on suppliers to ensure their products are easily integrated with others, and on the production company to ensure they have appropriate skills in data management.

Achieving the appropriate data architecture is far from simple: it is the nature of every production constantly to evolve and change. The sheer number of end points and revisions is bewildering. But, as we reported in [Next Gen Production](#), there are now proven tools and workflows to manage this complexity and strengthen security.

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**It is the nature of every production constantly to evolve and change. The sheer number of end points and revisions is bewildering. But there are now tools to manage this complexity**

## 2 Going paperless

The second, and consequent, benefit, is that the production company can go paperless. Being paperless should be seen as a methodology rather than an aspiration. Indeed, it can be reasonably argued that the simplest route to digital transformation is the decision to be completely paperless.

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**The simplest route to digital transformation is the decision to be completely paperless**

Once the decision has been taken to remove paper from production operations, a whole range of activities and practices will logically require a digital alternative – and this in itself will drive companies towards embracing and understanding the various working practices described here.

## 3 Security and traceability

Distributed working – especially with an itinerant workforce – poses enormous security challenges. It also poses challenges for approvals and sign off. A coherent, well integrated set of digital production tools will provide such information and assurance. In some respects, this can also function like video surveillance: it deters transgression. The danger is that it also suggests a lack of trust, and an invasion of

privacy, which is very concerning for employees. Data management policies will therefore need complete transparency. It is important to be able to demonstrate they are proportionate and reasonable – as well as legal.

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## **People want to work for companies with values consistent with their own – and will select their roles accordingly**

### **4 Demonstrating business values**

A data led production will also find it easier to evidence and maintain its values. As was observed in the [\*Design for Tomorrow: Key Design Principles\*](#) it is now essential for all media organisations to make clear their philosophy around who and how they employ, and their wider social and environmental impact. This is necessary not only for their customers and consumers, but also for their workforce.

Increasingly people want to work for companies with values consistent with their own – and will select their roles accordingly. But this now goes further: people want to know that the company they work with or for is not compromised by others in its supply chain. The people policies, social purpose and environmental policies of suppliers to production are as important as those of the production company itself.

# SUCCESS FACTORS

## Workplace tools are available, usable and appropriate



- ▶ Technology is now an essential enabler for almost every aspect of content creation
- ▶ The objectives for these enablers must be well defined
- ▶ The production toolset needs to be accessible by any authorised user from anywhere in the world
- ▶ That toolset must have good user experience design, and be fit for purpose
- ▶ Toolsets must be interoperable
- ▶ Well chosen and effective toolsets may now be a key differentiator in a highly competitive market

As discussed earlier, there are now online tools to support every aspect of content creation. Although software based creative tools – for editing, grading, sound, graphics, visual effects, and so on – have been commonplace for many years, it is only more recently that tools have emerged that assist all part of the production workflow, from planning to delivery.



Some of these tools are designed specifically for use in the media industry. Others – especially those focused on collaboration and communication – are general tools that are effective for any sector. Indeed, a number of consumer-facing technologies have been readily adopted for business use in the media industry – from smartphone cameras to social media platforms.

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## **It seems reasonable to predict that one of the consequences of remote working during 2020 will be an explosion in the number and range of new production tools on offer**

It seems reasonable to predict that one of the consequences of the increased use of both professional and consumer tools during 2020 is that there will now be an explosion in the number and range on offer. The choice will have moved in the space of a few years from restricted to overwhelming.

There has always been debate about whether the selection of tools for content shaping should be a matter of choice for creative individuals – or whether a production entity should be prescriptive. This debate is inevitably continued around the choice and deployment of the broader production toolset.

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## **One philosophy says it is best to operate a constrained set of tools; another that creatives should be free to choose. Neither is sufficient**

One philosophy says it is best to operate a constrained set of tools, used in a common way by everyone – and that even if this constrained set involves some compromise on functionality, this is outweighed by the benefits of cost saving and consistency. Another philosophy says creative people must be able to use whatever serves them best – and any attempt to constrain them will only cause them to find a workaround. Some content creation requirements are highly specialised, and will always be delivered most effectively by a tool designed for the purpose.

Both philosophies carry merit. But neither is likely to be entirely sufficient. Good decisions about the choice and use of toolsets will derive from one challenge that must be met by the end users, and one by the suppliers.

## 1 End users must define their objectives

Like any requirements gathering process, it is crucial to know what it is you are seeking to achieve. What is the overall purpose of the workplace toolset? Who will use it, to what end and in what circumstances? What tasks need to be performed by everyone, and which ones are specific to certain people or activities?

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**At the simplest level, the core objective must now be that everyone must be able to communicate, share content and data, and access the tools from anywhere**

At the simplest level, the core objective must now be that everyone involved in a project must have the tools, knowledge and connectivity to be able to communicate, share content and data, and access the information they need for their role, from anywhere. Of course, protocols around permissions and access will then follow as the next consideration. Crucially this objective may mean that in order to maintain continuity of business, the toolsets being used may change in certain circumstances. Their core purpose, however, will most probably not.

Once again, this requires structured management, and may require the production entity to seek the assistance of an external partner. It is not, however, a one-off process; it will need to be revisited frequently. If the company does not have the necessary skills in-house, it will be essential to form a long term relationship with a trusted third party.

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**If a company does not have the necessary technical skills in-house, it is essential to form a long term relationship with a trusted third party**

This whole process of defining objectives will require time. It needs time both to gather and clarify the requirements, and to develop the longer term company strategy such capability is intended to support.

To some degree key suppliers can themselves provide such advice. Indeed, their adherence to the principles below will be a good test of their ability to provide sufficient objectivity to do so.

## **2 Supplier toolsets must be accessible, usable, appropriate and interoperable**

The expert contributors to this project from the supplier community agreed to a number of key principles for how tools used by content creators should be designed.

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### **Expertise, in this context, may mean artistic rather than technical capability**

A team communication tool is very different from a workflow orchestration tool. They will have different users, and can reasonably expect different levels of expertise among those users. Expertise, in this context, may of course mean artistic capability rather than technical capability. Within these parameters, all production users are now entitled to expect a user experience that is attractive and intuitive.

Professional tools must excel at delivering the core functionality required by the professional user. (This may sound self-evident; but not all suppliers have sufficiently intimate understanding of their customer to know what that core functionality is.) Part of this appropriateness should be that they can easily be scaled up or down, and from one set of users to another, as the production evolves, and circumstances change.

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### **The strongest argument for rejecting the preferred tool of a particular person would be that it cannot be integrated with others**

Meanwhile the strongest argument for rejecting the preferred tool of a particular member of the production team would be that it cannot be integrated with others – especially if such lack of interoperability breaks the flow of key production data. It should now be reasonably expected of suppliers that they understand the surrounding vendor ecosystem in which they operate. It is their obligation to ensure their product operates well within that ecosystem.

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### **An effective toolset may support a company's brand identity just as strongly as its creative output**

The effective selection and deployment of its production toolset is no longer simply a matter of preference for a production company. It is likely now to be integral to their ability to deliver. It may become a defining characteristic of the company – supporting its brand identity just as strongly as its creative output.

# SUCCESS FACTORS

## There's an ability to adapt to changing production environments



- ▶ There's a defined minimum set of requirements for remote workers
- ▶ This is backed by an enablement policy for those who can't meet the requirements
- ▶ Such policies may become a key part of talent acquisition
- ▶ There is access to the skills and knowledge to identify and deploy the toolsets and protocols needed in different circumstances
- ▶ Protocols are created and communicated to enable flexible content creation, and ensure the safety of the people and the project

The real significance of the coronavirus pandemic for content creation is not that it led us to discover how to create content remotely. Its significance was rather that it confirmed once and for all the potential of remote production that we already knew existed. Long after social normalisation returns, these practices will remain in place – not because they have to, but because we choose them to, for the creative, financial, environmental, logistical and human benefits they bring.

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## **The pandemic didn't lead us to discover how to create content remotely. It just confirmed once and for all the potential we already knew existed**

This doesn't mean, of course, that the world of content creation will forever be transformed into one that works remotely. There is a reason why production evolved to bring so many people together. In person collaboration is, and will always be, the mainstay of creativity. Many production environments in 2021 will be indistinguishable from those of 2019.

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## **Judgments about the exact volume and type of people and technology deployed on any production, will now be made on a case by case basis**

What will be different, however, is that judgments about the exact volume and type of people and technology deployed on any production, will now be made on a case by case basis – particularly around productions with constrained budgets.

In addition, the need to ensure business continuity, and to reduce the risk of disruption in the event of any future upheaval, will mean that processes are now architected for remote operation.

What does this mean in practical terms?

### **1 Production companies should define their requirements for remote working**

The reduction in physical footprint discussed above will enable a rebalance towards supported distant working.

Views will vary on the best approach to managing a remote workforce. Some – and particularly larger entities, with a large permanent staff, and with a corporate network – may prefer to equip their workforce with standard devices, preloaded with standard tools. Others will prefer their largely freelance workforce to bring their own device, from which they will access common web based and virtualised tools.

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## **It will be necessary for every production company to define its minimum requirements for remote working – and have an enablement policy for those that fail to meet them**

It will be necessary in either instance, however, to define the minimum requirements for remote working appropriate to the operations of that production entity. These will need to be expressed in a form that is easily communicated and understood by employees.

If those employees cannot meet the minimum requirements, that shouldn't mean they can't be hired. Rather, the hiring company will need an enablement policy that brings their capability up to the required standard. This might mean, for instance, upgrading a freelancer's home broadband.

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## **Enablement support will soon form part of what will make a production company attractive as an employer**

The existence of such an enablement stipend will be particularly important in order to support more junior and less highly paid staff. Enablement support will also soon form part of what will make a production company attractive as an employer.

Similarly, it is likely that freelance talent will promote personal technical provision and competence. We should soon expect to see home broadband speed as part of a freelance resume – especially for those who edit.

And finally it will be necessary for production companies to be familiar with the various regulatory frameworks relating to remote working which are now in place in different countries.

## 2 **There will be a requirement for access to skills around technical innovation for different production environments**

It is widely acknowledged that there are now proven tools in place for most production functions to be carried out remotely – including remote direction, and review and approve.

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### **It is widely acknowledged that there are now proven tools in place for most production functions to be carried out remotely**

The biggest challenges remain where high resolution imagery needs to be accessed and reworked in real time. Near-line, on premise storage is often used for this purpose. However our experts acknowledged that tools are now available for secure, low latency, virtualised editing at high resolutions. Although the technology is rapidly evolving to cover almost all production requirements, it does still require considerable expertise to understand how it is best architected and deployed.

We can also expect to see rapid advances in virtual, green screen and other specialist shooting environments that reduce the need for multiple locations.

Remote production in live events will increase, as a means of reducing costs, increasing agility, increasing range of output, minimising carbon footprint, and accessing more diverse talent, both in front of and behind the camera.

And finally, there will be growing use of lightweight, and consumer based, shooting kits – sometimes as the primary story gathering tool, but more commonly as an alternative kit for use in constrained circumstances.



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## **As post production facilities reduce their own physical footprint, they will become an important resource in remote workflow management**

There will be rapid developments in all these areas. And with each evolution, expert guidance will be required for effective and appropriate utilisation.

Access to such expertise will be required. This might be achieved in the core team workforce. Or it might be sought as service – from the post production facility market, for example. As post production facilities reduce their own physical footprint, they will become an important resource in remote workflow advice and management.

### **3 Protocols will be required for the most effective management of people**

Remote working is often portrayed as a more lightweight, less corporate way of working. But in reality, the management of a remote and distributed workforce requires considerable, and new, management resource.

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## **In the 2020 crisis, people lived off their ‘relationship credit’. The creation of new relationships entirely within a remote context is another matter**

During the crisis of 2020, many people in the media industry have been living off their ‘relationship credit.’ In other words, they have maintained effective working relationships at a distance because of the strength of their pre-existing networks. The creation and development of new working relationships entirely within a remote context is another matter, however.

This will require considerable leadership skill. But at the more prosaic level it will also require policies and protocols to ensure the safety and wellbeing of individuals, as well as the most efficient and effective deployment of resources. If these deployments are able to be rapidly adapted to changing circumstances, they will also need to assimilate evolving conditions and regulations in domestic and foreign locations.

The way in which self shooting protocols for on screen talent have been rapidly developed during the coronavirus pandemic provides a good example of what can be achieved.

# SUCCESS FACTORS

## Supplier relationships combine partnership and flexibility



- ▶ Production companies need to be able rapidly to align their costs to revenue
- ▶ This requires flexible and responsive commercial relationships
- ▶ Such relationships needn't become transactional. Indeed there is the opportunity for risk sharing partnership
- ▶ These trust based relationships can be built through greater visibility between supplier and customer
- ▶ Risk mitigation and management will become a key part of production relationships in order to ensure the security and integrity of data

When the DPP undertook a survey of the early impact of the coronavirus pandemic ([Will COVID-19 Change The Way We Work?](#)), the devastating impact on the production community was immediately apparent. Broadcasters and content platforms felt the impacts soon afterwards, as the supply of new content dried up. But technology companies reported the least impact on revenue.

This finding demonstrated that long term contracts still dominate the media market. It also hid the impact upon an important sub-category: the post production community – the part of the media supply chain that has one foot in production and another in technology. That community experienced a small delay in impact as it completed existing projects – and then a traumatic downturn by June 2020.

These experiences help clarify four ways in which the production supply chain will need to adapt in the future.

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## **Production companies must look to contractual relationships in which they can curtail spend as soon as possible**

### **1 Production companies must be able to switch off their spend**

Production companies must look to contractual relationships in which they can curtail spend as soon as possible in the event of interruption to their ability to generate revenue. If you can't create, you have to bring down operating costs immediately.

There is no getting away from the fact that content creation is necessarily a gig economy. If production stops on a national or international basis it is inevitable that each player in the production economy will pass the pain to the next person: the production company doesn't hire the DoP, who in turn doesn't hire from the rental company.

But if production companies are not able to align their cost base with their productivity, they won't survive to re-engage their supply chain when production recommences.

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## **If companies can't align their cost base with their productivity, they won't survive to re-engage their supply chain when there is an upturn**

This means content creators should seek flexible commercial models in which they are able to pause or terminate licenses and other arrangements at short notice.

## 2 Partnerships will have an important role to play

Such flexibility does not necessarily mean highly transactional relationships, however. Events such as those in 2020 are extremely rare. Although content creation is high risk, and companies will experience peaks and troughs in their revenue, it is unusual for external factors to oblige them to cease activity.

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### There's much to be gained from building partnership relationships with key suppliers in the new, software defined production supply chain

There will be a lot to be gained, meanwhile, from building partnership relationships with key suppliers into the new, software defined production supply chain. This will bring with it the opportunity to shape a relationship that mitigates risk but also provides rapid support for moments of sudden high activity. As discussed earlier, content creators will now need to leverage such expert relationships if they are to get the best out of their technology.

Suppliers, for their part, need to consider their role in the development of a responsive ecosystem that is tailored to the realities of production. Some of the larger players have already done this, by open sourcing their technology, and by enabling smaller, innovative providers to benefit from their platforms and services.

## 3 Production requires the visibility associated with other parts of the supply chain

As demonstrated in [\*Design for Tomorrow: Content Preparation\*](#), partnership relationships are being built in the media industry through greater mutual visibility. This is enabled by dashboards that provide information on performance and progress towards delivery. It is one of the benefits of a more IT led approach to media.

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## One of the benefits of a more IT led approach to media is the greater visibility it brings

The same is now required in the production supply chain. It is a capability provided as standard by many of the suppliers of online products and services. But once again it will require expertise on behalf of the production entity to integrate this reporting.

### 4 The small print has never been so important

Historically, the relationship between a production company and its key suppliers – especially in facilities and post production – has been relationship based. Trust has come from experience, rather than being built into contracts. Paperwork has often taken the form of a booking sheet, rather than a formal examination of terms and conditions.


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## Companies need to ensure they can retrieve that data in a usable form in the event of termination in services

As production companies seek greater support in the management of their data (which includes video and audio data) they will need to be sure that its use complies with security best practice, and with the regulatory frameworks of different territories. Perhaps most importantly of all, they need to ensure they can retrieve that data in a usable form in the event of termination in services – particularly if the supplier ceases to trade. Planning for the security of data is a key element in the DPP's [Committed to Security Programme](#).

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## Risk planning and management will become an integral part of the supplier relationship



At the more functional level, numerous post production facilities demonstrated their extraordinary commitment to meeting the needs of their production customers during the pandemic. Almost overnight these facilities put secure, remote workflows in place to enable production work to continue to the necessary standard. It will now, however, be necessary for customer and supplier to have a prior understanding of such business continuity provisions before commencing a project.

In short, risk planning and management will need to become an integral part of the supplier relationship.

# CONCLUSION

The content creation community is highly fragmented. As a result its voice is not always as well heard as others in the media industry. But there is an argument for saying it has been the most profoundly impacted by the events of 2020.

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## **There is an argument for saying the content creation community has been the most profoundly impacted by the events of 2020**

First, many production companies simply had to stop producing – and to lay off their freelance workforce. But second, the need to move to remote working finally removed historic resistance to online tools and services. This may have been the year in which content creation became truly digital.

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## **This may have been the year in which content creation became truly digital**

It is difficult to overstate the significance of this development in discussing how a production company – and those that supply it – should set up for the future. It means that remote workflows will now become built in. This will in turn further increase the already extraordinary diversity of production methodologies.

But more than anything, it will fundamentally change how production companies will need to manage their operations. It will require new skills and partnerships. It will also open up opportunities to access new markets and new talent.

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## **It is ironic that in the part of the media industry least attracted to process, many of the changes required are about process**



It is ironic that in the part of the media industry least attracted to process, many of the changes required are about process. But while producers may not warm to process, they are the ultimate project managers – with an intense awareness of the brief, the timeline and the budget. As it becomes evident to more of them that there are now tools available to assist with all these project elements, they are likely to do what producers do best: push those tools to their limits, and in so doing make them better.

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**When the inherent ingenuity of production is combined with urgent need, and rich supply, it's likely to bring a step change in what it means to make content**

We are likely to see an explosion in the number of production focused tools and services over the next two years. But we can also expect to see the supply base gradually refine, as their customers insist that they get to know them better.

When the inherent ingenuity of production is combined with urgent need, and rich supply, it is likely to bring a step change in what it means to make content.

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This report was written by **Mark Harrison** and designed by **Vlad Cohen**.

Workshops for *Content Creation: Producing ingenuity*, were led by **Mark Harrison** and **Nic Kemp**, and organised by **Abdul Hakim** and **Anh Mao**. Background research was by **Alex Fenton**.

Management of the *Design for Tomorrow* project is by **Abdul Hakim**, with support from **Jayne de Ville** and **Anh Mao**. Content for the project is led by **Mark Harrison** and **Rowan de Pomerai**.

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