FOR
BINGING

TIE AIR

MIRACLE THEATRE

To THE



Introduction

This manual is the result of a period of experimentation and exploration of the interface between live and digital carried out by Miracle Theatre in partnership with Dogbite Film Crew, Golant Media Ventures, Cinegi and Falmouth University.

[See Appendix 1

Miracle Theatre is a rural touring company, typically producing 2 productions each year, visiting 100 community venues.



Watch videos throughout this document by clicking this icon

"British theatre is all the better for small companies such as the Cornwall-based Miracle which tours to communities that are nowhere near a major theatre venue"

Lyn Gardner, The Guardian

We set out to look at affordable and innovative ways of making digital versions of our theatre productions and distributing them, both live and recorded, to a network of dispersed, often rural, venues via presented screenings and digital platforms.

The equipment would need to be affordable, the method of delivery user-friendly and the product retain the intimacy, vitality and spontaneity that is typical of small-scale live performance. Most importantly we wanted to find out if audiences have an appetite for this kind of product and how the different forms (whether live, live-streamed, recorded 'as live' or made for screen) affected the audience's experience.

Finally we were interested to explore the potential for building a sustainable business model: this would include research into appropriate pricing structures, marketing and rights agreements.

"It was like the cinema but with a twist"

Remote audience member, Driftwood Spars Pub

Why do you want to produce a digital version of a live performance?

If produced soon enough in the production process, digital material can be used as an effective marketing tool in the form of trailers or teasers on websites and social media.

Even the most rudimentary, single static camera coverage creates an archive.

A live stream is a special event, extending the reach of a production, while retaining a sense

of occasion, live performance and shared experience. 'As Live' and 'Made for Screen' recordings extend the life and reach of a production, whether screened in venues or made available to an online – potentially vast – audience.

By extending the life and reach of the work, digital has the potential to open up new income streams without incurring significant additional production costs.

The transition to digital may provide its own creative stimuli.



Bill Scott: what is Miracle and why undertake the project?

A contradiction in terms?

To most theatre-goers the idea of 'Theatre for Screen' seems to be a contradiction in terms: theatre is all about the immediate relationship of performer and audience, the haptic experience of being in the same room and breathing the same air, the thrill of potential pratfalls, unrehearsed deviation and improvisation. However, as models such as National Theatre Live (NT Live) have demonstrated, it is possible to capture a convincing likeness of 'live' and any feeling of dislocation is compensated by enjoying a view from the best seat in the house – in fact, one could say closer than that: the camera's perspective places the viewer between the audience and the performers, as an on-stage spectator. And, of course, for many people a digital screening in their local venue will overcome geographical and economic barriers that might prevent their ever experiencing these productions.

That 'Theatre for Screen' offers a satisfactory experience is shown by audience figures: the market for large-scale event cinema is increasing year on year, thanks in part to the success of initiatives like NT Live. By October 2013, the total income was £15m - already double the 2012 total. If this represents 1% of cinematic screenings in the

UK, it translates into 5% of total box office. By 2017, global income for event cinema is predicted to reach \$1bn (£644million).

The creative possibilities of digital are infinite, whether it be filming a stage production as a largely peripheral exercise, an after-thought almost, to get added value from a successful show, or as an integral part of the production plan. Approached in this latter way, digital theatre may come to be valued as a new art form in its own right.

Live Stream, 'As Live' or 'Made for Screen'?

'Live transmission to theatres appears to be out of reach to all but a few international companies'

Digital broadcast of theatre: Learning from the pilot season NT Live.

By filming two of our productions, we were able to develop four different pieces of content: a 'Live-stream' (filmed in front of an audience and broadcast live), an 'As-Live' (a recording of this live broadcast) and two 'Made for Screen' (a version more filmic in its construction, recorded without an audience, with specifically chosen shots and, theoretically, an unlimited number of takes). Each version brought its own benefits and

challenges, as well as impact on budget and each presented different distribution opportunities.

Capturing the live stream, it quickly became clear that, while some of the uniquely intimate and spontaneous experience of small-scale live performance may be lost in transmission, the use of close-up and considered camera angles can contribute to a more focused study of individual performances. A sense of occasion can be communicated and enjoyed, along with the unbroken arc and dynamism of the actors' performances.

The 'Made for Screen' version is smoother, with any imperfect camera moves, inadequate sound or performance slip-ups removed: perhaps a more faithful record of the director's intentions.

So, for the remote audience, what may be lost is the sense of a theatrical event. This can be compensated to some extent by an introduction from a presenter at the 'live' venue and the efforts of the remote venue's promoter to build atmosphere and a sense of occasion. Therefore it is important to give adequate attention to how any screenings are presented and ensure that the best possible audience experience is delivered: the offer may be different but in every case the shared experience is a crucial element.

CASE STUDY 1: WAITING FOR GODOT

Waiting for Godot was an outdoor touring show, with a cast of 5 giving 60 performances of this classic work by Samuel Beckett across the South West of England during summer 2013. In September 2013, at the end of the run, a performance was filmed in

front of a live audience at the Performance Centre, Falmouth University and live streamed to the Barbican Theatre in Plymouth, the Driftwood Spars pub in St Agnes, Cornwall and to a small number of invited home viewers. A recording of this was subsequently screened 'as-live' in venues. A second performance was then filmed with no audience, allowing for re-takes and additional camera angles and edited into a 'Made for Screen' version.

Know Your Rights

The filming and distribution of theatre productions via digital media is a relatively uncharted area. It is legally complex, with issues of rights and payments still being argued. This should not deter creative

endeavour! But it is important to begin a project with eyes wide open: rights holders, writers and performers will need to give permission and be reassured that they are going to share in any rewards that may result from the exploration of these new territories.

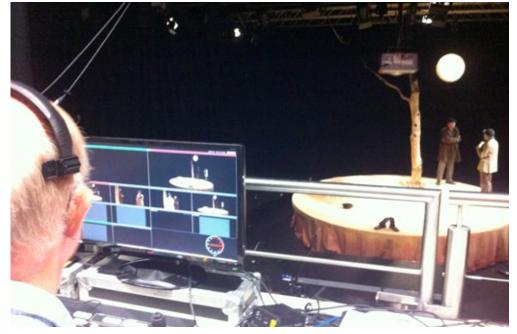
When choosing Waiting for Godot as our summer touring production, we obtained the necessary license from the estate of Samuel Beckett. Subsequently we were able to negotiate permission to use the production for digital research and development purposes. However, the estate was adamant that no recorded version of the performance could be used beyond the scope of the

research. So, while we have been able to test the distribution technology offered by the Cinegi platform and to investigate audience responses to the live stream, 'As Live' and 'Made for Screen' versions, unfortunately there are no further distribution possibilities, either on screen or on line.

Including this R&D project in the actors' contracts was straightforward. Had there been further commercial opportunities for any of the digital versions of the production, new contracts would have been necessary, reflecting the possibility of future income streams.



Case Study 1: Waiting for Godot at Indian Queens Pit.



Filming Waiting for Godot at the Performance Centre.

Pick The Right Venues

The host venue (where the live performance is filmed) and its team need to be adaptable, welcoming and generous with time and resources. Inevitably, things may change over the course of the preparation for a live-stream and having a host venue that is flexible and helpful in this capacity is very useful. Falmouth University was a partner of the project and we were afforded excellent resources and assistance from all technicians and staff.

When first attempting a project of this nature, it is beneficial to work with known and trusted promoters and venues, who have an interest in technological innovation, enjoy a challenge and are already equipped with adequate projection facilities. If the venue regularly programmes cinema then an interested audience will be more readily available.

Although this was originally an openair production, the weather risks were considered too great to attempt the filming and live streaming out of doors in September. The show's simple circular stage with a tree at its centre was designed to create a suitably surreal impression in the wide variety of natural environments where it was performed – even in the garden at Canary Wharf!

We chose a black box studio at Falmouth University, giving an appropriate sense of void, with flexible raked seating for 100 people that enabled us to position cameras where they would cause no obstruction to sightlines. There was a versatile lighting rig and – most importantly – a fast broadband connection.

When to film?

If the intention is to capture the best possible example of a stage production in a fairly literal and straightforward way, then it will probably benefit from being shot as late as possible in the run. When the original production is well bedded in and the cast thoroughly at

home with their material, everyone will be better able to concentrate on the technical challenges of the stream or recording. Of course, there is always the possibility that, at the end of a run, actor fatigue may be setting in and the performances that are recorded for posterity may be past their peak!

If the camera moves are going to be more complex and orchestrated and integral to the character of the screen version, perhaps conveying a point of view or helping give a particular dynamic to the story, then the shoot might be scheduled early on, with the camera positions and moves being plotted in early rehearsals.



Angus Brown and Steve Jacobs in Waiting for Godot.

With Waiting for Godot we opted for capturing the show at the very end of the tour, on the premise that the show would be at its strongest by this point, having toured it for three months.

In practice, while the actors were comfortable and confident with the text, certain mistakes and slight deviations from the script had crept in during the tour.

If the screen version was going to be accessed for educational purposes it was be essential that Beckett's text be delivered without corruption! We attempted to rectify this before the shoot, but the actors found it surprisingly difficult to purge their brains of the ingrained errors.

Top Tip - Whenever the production is filmed, the schedule should allow for the

Live stream of Waiting For Godot: Remote audience at Driftwood Spars.

vision mixer and camera operators to experience at least one live performance from an audience perspective.

Who's going to watch?

Waiting for Godot was performed in front of an invited audience and, because they were part of an experiment, we had decided that admission would be free. When cameras, microphones and crew are in evidence, even if they are not restricting the audience's view, it is important that the audience understands what to expect. In the event of a technical hitch, it may be hard to avoid a distracting commotion!

Where to put the cameras?

This will be dictated by nature of the live performance and the desired aesthetic of the screen images. For Waiting for Godot, the performance and staging were unchanged from the outdoor production. 4 cameras with operators were positioned around 3 sides of the circular stage, where they had an uninterrupted view without causing an obstruction for the audience. The cameras fed to a video-mixing desk, with talkback communication between

the camera operators and the video mixer. Other possibilities for a more dynamic (and obtrusive) approach would be to use dolly mounted or Steadicam operated cameras that can move around and even amongst the performers. Small 'Go-pro' type cameras can be strategically placed around (even attached to) the performers.

What about sound?

The importance of sound is easily overlooked, both in the way it impacts on the complexity of the production and the audience experience. Poor quality sound will diminish the best images and performances.

Consider three main alternatives for sound:

1. For reliability, convenience and faithful reproduction of the acoustic qualities of a live performance, fixed boundary microphones can be positioned around the stage. Exactly where to place them depends on the action of the play, but generally 3 or 4 along the foot of the stage will be sufficient. If the action is complex then additional microphones will be required to ensure that other acting areas are covered.

- 2. Each performer can be fitted with a small discrete headset type radio microphone. These can be made fairly invisible with time and ingenuity but, because of their battery packs, they can be awkward for the actors, especially if costume changes are involved and need to be muted when they are off stage to avoid inappropriate comments being heard by the audience.
- 3. A 'Made for Screen' recording, where no audience is present and filming can be interrupted, allows for the use of boom mics and operators. This will ensure best results but is the most clumsy and time-consuming option. All three approaches will require real-time mixing.

A new challenge for the theatre director?

The transition to a different medium presents the director with some interesting choices. In its purest form, a digital version of a theatre performance would be a wideangle shot from a fixed position, representing an individual audience member's point of view. However, this will potentially make for a rather dull experience: the worst of both worlds. Most directors will want to explore the opportunities offered by the new medium:

close-ups, dynamic framing, and emphatic camera angles - even a moving camera. By doing this, they remove choice from the audience, exercising more control, deciding which character or piece of the action will be watched at any given time. If a director is able to put in the required time these techniques can be harnessed to reinforce their interpretation of the play.

There will be choices to be made about the actors' level of performance: an actor who is skilled at communicating with an audience 50 yards from the stage may seem overwhelming in extreme close-up. Does the director opt for a faithful record of the stage show or does he give the actors the extra time and guidance they may need to discover the art of performing to camera?

During the shoot of the live stream, it makes sense for the director to be helping the vision mixer to keep one step ahead of the action and preparing the next camera angle: another new skill that may need to be quickly learned.

Performance or experience?

Just as with the original theatre project, the creative team will need to be clear about the style and aesthetic of the digital version. For instance, the director will have to communicate to the actors whether their performances need to be altered for the camera. For some actors an awareness of the camera may be a new and unsettling experience. If the objective is to capture the feeling of a live performance, it will be important that the actors do not modify their performances: they should play to the audience, ignore the presence of recording equipment, and simply let the cameras capture this.

This issue is complicated when shooting a 'Made for Screen' version, as there will be no live audience. With *Waiting for Godot* this was a fairly jarring experience for the actors, who had not performed to an empty room since rehearsal, and were unconsciously waiting for audience responses. Who then is the audience in this situation and, in their absence, should any direct address be delivered to camera? Again we made the decision to stage the work in the same way we had throughout the tour, with direct address performed to a non-existent audience, capturing the performance as

it existed, rather than changing it for the screen.

With a 'Made for Screen' version it may be that the director will choose to adapt aspects of the performance to make the coverage more filmic because the medium allows it. All pieces of theatre for screen will sit somewhere along a spectrum between live and film, and this is a creative choice. Miracle's *Waiting for Godot* might sit closer to live, but something like *Tin*, Miracle's feature film of a live production, sits much closer to film.



Bill Scott on directing.

How much technical preparation?

For Waiting for Godot we allowed for two days of preparation and rehearsal with 'transmission' at the end of the second day. Recording and post-production of a 'Made for Screen' version took a further five days.

We needed to be able to rehearse and test all elements of the process to ensure the smooth running of the event and live stream. This also applied to the remote venues. Having total buy-in from the venue greatly enhances the audience's experience. As does having a remote venue protocol of what to

do if and when a live stream fails! In this instance the cameras were mounted on static tripods, so allowing for only tilt, pan and zoom actions. The first rehearsal gave the camera operators an opportunity to familiarize themselves with the action. The director of the theatre production, whose knowledge of the show allowed him to anticipate every move of the actors, sat next to the vision mixer, advising on the best set-up for the next shot. This system was similar to that used in a multicamera live TV production. Notes were taken of any missed opportunities and inappropriate shots or cuts.

A further rehearsal on the second day allowed the team to refine the process so that at the evening performance the action of the play was covered smoothly and sensitively.

How much kit?

To record and stream *Waiting for Godot* we used this basic kit:

Vision Mixing:

- 4-channel HD Mixer (Tricaster 455).
- Graphics Software Live Text (built into Tricaster).
- Monitors x 4.

Web Streaming:

- Mediasite (provided by Falmouth University).
- Laptop (for monitor stream).



Angus Brown on acting for screen.

N.B. it would have been preferable and more reliable to stream straight from the Tricaster or any other Portable Production Unit rather than streaming from Mediasite. However, this wasn't an option at the University due to educational firewalls and limited access.

Sound:

- 12-channel sound desk.
- 6 x fixed boundary microphones stage and actors.
- 2 x radio microphones presenters.
- 6-way talk back (between vision mixer/cameras/director).

Cameras:

- 4 x Sony EX3 (1080 Video Look).
- SDI cable.
- Tripods x 4.
- Samurai HD 1080i Recorder to record a mix of show as a back up.

Fdit:

• Final Cut Pro or Adobe Premiere CS6 editing software ('Made for Screen' Edit).

Remote venue kit:

- Laptop (Connected to the internet).
- Projector.
- Screen.
- Sound System.
- Black out material.



 $The \ set \ in \ Performance \ Centre.$

On the day?

Do not underestimate the logistical complexity of producing a live stream: the recording and streaming of *Waiting for Godot*, though relatively small in scale, required the involvement of over twenty people: 5 Actors; 1 lighting designer; 1 stage manager; 4 camera operators; 1 vision mixer; 1 sound mixer; 2 Front of House staff; 1 presenter; 1 director; 2 streaming technicians.

And this does not include the whole aspect of event production management at each participating venue, which will require a minimum of one front of house manager and technician, with a clear plan of action, adequate rehearsal and synchronized

watches! It is all too easy to end up with an audience in place and hushed with anticipation in one venue while people are still chatting in the bar at another.

Is there anybody there?

A secondary means of communication between the host and remote venues is essential. This needs to be separate from the stream to allow for coordination of start times and interval and ensure that information about any technical difficulties is relayed quickly. If communication is going to be by mobile phone, it is important to establish that the venues concerned have signal! This may seem blindingly obvious but, having chosen a remote country pub as one of our venues, is a lesson we learned the hard way.

A separate Twitter feed devoted to livestreamed content, or instant messaging application such as WhatsApp are effective ways of communicating with several parties at once, whilst consuming very little additional bandwidth compared to a Skype call.

What could possibly go wrong?

On the day of the performance of *Waiting for Godot*, the stream to the remote venues was working well by late morning and it was decided to leave it running. Ironically it was this insistence that the stream be tested for several hours prior to the event that caused the main problem of the evening as it resulted in hard-drives filling up on the local network server, which ran out of space and crashed just as the performance began.

The show continued at the Performance Centre without the audience being aware of any problem and the output from the video mixing desk was successfully recorded for use at future 'as live' screenings. Audiences at the remote venues were patient and sympathetic, in spite of communication between venues being impeded by a lack of mobile phone signal. The stream was restored and continued – somewhat intermittently – to the end. We were unable to explain what was happening to home viewers or provide updates as to when the service would be resumed.

All parties need to participate in an assessment of risk, agree a policy and have a well-practiced procedure for dealing with.. a breakdown – whether technical or human and at whichever venue it occurs.

Contingency planning for a failure of the stream is problematic. At the remote venue, if a recording of the performance exists, then this could be shown. The relevant media and suitable playback equipment would need to be in place. If great emphasis has been placed on the 'live' element of the stream, the audience may feel that the screening should be rescheduled. At the host venue, the live performance can, of course, continue as normal.

Presentation

Given that we are still in the experimental phase of small-scale live event streaming, audiences may need some introductory explanation and information. A host at the performance venue can serve as a 'warm-up act' to establish connection with the remote audience. In the same way, a host at the remote venue can give the screening a context and reinforce the 'live' nature of the event. In the event of any technical problems, the host can explain and reassure, avoiding the ugly prospect of leaving an audience staring at a blank screen - literally in the dark!

Screenings of 'As Live' and 'Made for Screen' versions are closer to regular cinema events, which usually proceed without introduction. However, a richer audience experience will be guaranteed if the context is explained and a Q&A session offered. This can be done by one of the creative team in person, or remotely, via Skype or even over the phone.

Distribution

With 'As Live' and 'Made for Screen' versions safely in the can, the producer has two potentially valuable assets, which can be exploited in a number of ways – providing proper care has been taken when negotiating rights and licenses.

At the local level, these can be offered as presented screenings to community venues — especially ones that might have been unable to book a performance of the live show. In the

case of *Waiting for Godot* (an outdoor summer show), this could have included Miracle's winter circuit of over 50 village halls and arts centres.

These can also be made available for screening at similar venues across the country using a platform such as Cinegi, which takes care of all aspects of distribution, licensing and revenue collection.

Finally they can be made available for download via the company's website, to rent or to buy, hosting them on a platform such as Vimeo.



Audience Reactions.

CASE STUDY 2: TIN

Tin was a community play, produced by Miracle Theatre in collaboration with English Touring Opera. This was a piece of new writing, which included extracts from Beethoven's opera Fidelio. The scale of the stage production was large by Miracle standards, involving 6 professional actors,

3 professional opera singers and 150 local enthusiasts. It was performed at 5 venues across Cornwall and West Devon in spring 2012. Our approach to making a digital version of Tin was radically different from Waiting for Godot, with the result that the original production has been given an entirely new incarnation as a unique idiosyncratic fulllength feature film.

Seizing The Moment

In March 2012 we converted our rehearsal space into a green screen studio and, during final weeks of the production's run, scheduled a 15-day shoot around the performances. Working with a small film crew, we filmed each scene of the play, covering the action with multiple takes: wide, close-up, pointof-view, etc. We had to strike while we had the actors on hand, with characters fully developed and scenes rehearsed; costumes, props and extras at the ready and scenes from the opera Fidelio fully realised. It was our intention that, at some future date, we would raise the necessary finance and explore the technical and creative possibilities of turning this material into a digital version of *Tin* for distribution to a global audience.

This was achieved by putting together a fairly unorthodox finance package, with support from Cornish Mining World Heritage Site, ACE, Cornwall Council, Esmee Fairbairn, Youth Music and Heritage Lottery Fund.

Post-production, which included the construction of model sets, editing, keying and compositing the image, sound dubbing and picture grading, was completed in October 2014

The process of turning the green screen footage of *Tin* into a fully developed 'Made for Screen' production was costly and time-consuming, and probably beyond the resources and capacity of most small-scale arts organisations. The finished product, however, is a richly creative piece of work with huge potential in terms of audience reach and additional revenue.

Representation or adaptation?

Pre-production began with a review of the script: the theatre production had relied on a narrator to move the story along and describe settings and actions that could not be represented on stage. Transferring the.. story to the medium of film presented an



Case Study 2: Tin theatre production.

opportunity to show these elements rather than describe them.

As most of the actors had been required to play 2 characters we recast their smaller parts, drawing on our pool of local actors. In addition, Jenny Agutter and Dudley Sutton joined the company.

Rights

A feature of the project was that all cast and crew were contracted at the same daily 'buy-out' rate for the shoot and throughout post-production. In addition, everyone was included in a 'point' system, entitling them to a share in any future profits.

The Process

A large concave green screen was constructed in Miracle's rehearsal space, the dining hall of the old grammar school, now an arts base known as Krowji, in Redruth.

With lighting and camera equipment set up in this makeshift studio, we worked through the scenes of the play.



 $Shooting\ Tin\ in\ green\ screen\ studio.\ Click\ video\ player\ to\ watch\ The\ Story\ of\ Tin$

A few familiar props and pieces of furniture gave the actors their bearings. A small number of wide establishing shots were filmed at a coastal location and a library of background plates were collected that would later be composited with the green screen 'exterior' scenes.

Miracle's designer, Jude Munden, designed model sets at 1/12th (doll's house) scale, which were then filmed, taking care to match the lighting, camera angles and moves of the original footage.

Post-production work was carried out by a local animation company, Spider Eye. Curiously, their studios are based in the old Consolidated Bank building, where the reallife events described in *Tin* took place 130 years ago.

The Crew

The filming process involved an additional crew of 14: Camera x 2; Sound x 2; Art Department x 4; Production x 2; Digital Imaging Technician x 1; Lighting x 2 and Make-up x1.

In addition, various assistant roles were offered as work placements to students and graduates.

A Creative Challenge

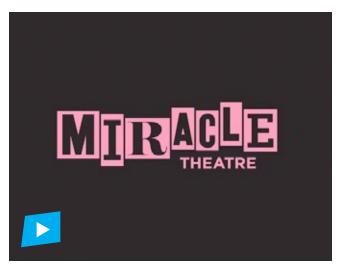
The process of shooting the scenes from *Tin* in a green screen studio presented actors and director with an unfamiliar environment that had different rules and required new communication skills. The actors already knew their roles intimately, quickly adapted to their green surroundings and required only a small amount of direction in pitching their performances for the camera. Whereas the production team were presented with entirely new challenges, having very little time to master the technology, create an aesthetic for the story and discover a way of working that would allow them to capture the footage they needed in a few days. A pioneering spirit, a collaborative approach and tight scheduling brought the shoot to a successful conclusion.

Design

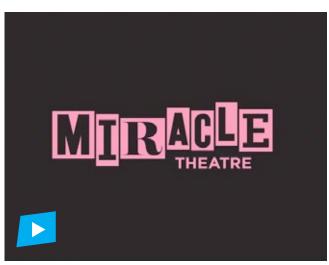
The 'Made for Screen' version of *Tin* made considerable demands on Miracle's design team. Some key costumes, which worked well on stage, required a heightened degree of detail and 'finish' for high definition close-ups. Although by creating the world of 19th century tin mining in miniature the production process avoided the need for large-scale, authentic period sets, it called for intricate model-making skills and a level of detail that would tolerate massive magnification on the big screen.



Tin Model Making.



Alan Munden: Top Tip.



Jude Munden: Top Tip.

How much kit?

The action was recorded on a Red 4k camera, as this high definition format would speed up the huge amount of visual effects work that would be needed during post-production. The footage was edited on a MacBook laptop using Adobe Premiere software and post-production was completed using Adobe After Effects. Sound design was done on Pro-Tools.

The final version of the film was finished at 2k standard HD ready for export as a Digital Cinema Package, DVD, Blu-ray or files for download.

Is it worth it?

Originally *Tin* was an innovative live event combining theatre and opera and film, and rooted in the heritage of the communities where it was performed.

The result of this digital project is a groundbreaking 90-minute feature film with potential global reach. Digital technology will also be key to the project's success as we use social media to connect with our niche audiences: opera buffs, heritage enthusiasts and Cornish communities around the world.

Who is going to buy a ticket for Tin?

Beyond providing Miracle and ETO's regular attendees with an opportunity to see a production that had limited availability when first produced, the digital version of Tin has potential to reach a much wider audience.

Beginning with the 25,000 people who would normally attend a Miracle touring production, we will reach audiences (loyal and new) via regional cinema screenings,

presented screenings at our regular venues and via Rural Touring Schemes nationally.

We will self-distribute the film to reach a wider audience for Tin via the Cinegi platform and services such as Ourscreen to secure screenings outside the South West.

Tin will be made available for download via our website, to rent or to buy. The film will also be available as a DVD through direct sales and appropriate retail outlets. The international



Tin Movie Trailer.

audience for Tin will be reached via film festivals and wider film distribution networks. DVD sales and downloads (for rental and purchase) will be available via a number of websites, including Miracle, Cornish Mining World Heritage Site, iTunes and Amazon.

Business Model

At a time when arts organisations are facing unprecedented pressure on their funding, at a national, regional and local level, the market for 'alternative' filmed media content is experiencing stellar growth in the UK and internationally, with opportunities continually expanding for this content to reach its niche fan audience, using Internet platforms such as YouTube and on-demand services via settop boxes, smart TVs and games consoles.

It is important to view filming and distributing performance as a profitmaking activity — a venture rather than a project. An investment is made, at risk, in creating the 'master' of a piece of filmed media. Then, the rights holders (the people or organisations that own rights in that 'master') attempt to recoup this investment and, ideally, make a profit.

There is no guarantee that the initial



Tin movie poster

investment will be recouped. Therefore in return for taking such a risk, most investors will want to see a business model which plans to make a profit.

Even a non-profit organisation, if it is the principal rights holder, should expect to reap a return on its investment resulting from trading profits on the venture.

The finally edited 'master' of a film that is then copied and distributed is an asset in



Tin Homecoming Open-Air Cinema on Botallack Cliff Tops

which the producers have rights. It is these rights (principally copyright), which are exploited through licensing to intermediaries and ultimately to audiences paying to enjoy an entertainment experience of which the film forms a part.

According to international accounting standards, the master and the rights held in it are eligible to be accounted for as an intangible asset. The film master should therefore appear as an asset on the balance sheet of the venture.

The need for a clear business model is obvious as any investors and other rights holders will also receive a share of profits. The way that profit is defined in the model will significantly affect who receives what.

A film may be produced within a 'special purpose vehicle' (SPV, a company set up just for the purpose of producing the film). Even if it is not, the accounting of the product – from initial investment through launch to 'long tail' exploitation – needs to represent both the trading revenues, costs and profit (in a profit and loss) and investments in the

product, how this is financed and costs of this capital (in a balance sheet). [See Appendix 2]

What do the audience think about it?

Our research onto audience experience revealed a surprising outcome. We compared the 'Made for Screen' production of *Waiting for Godot* (recorded without an audience) with *Tin*. Interestingly we found few differences between the responses of the audiences.



Annie Ukleja on distribution.



Audience Vox Pop.

However the response to both productions was significantly more positive than the response to the 'As Live' version of Waiting for Godot. The urge to clap, the experienced sadness, being immersed, time passing quickly, feeling close to the actors, smiling, clear story line and enjoyment were all significantly higher in the 'Made for Screen' production than the 'As Live', even though as far as Waiting for Godot is concerned the main difference was the presence of an audience. It is not straightforward to interpret these findings: the audience for the 'Made for Screen' production of Waiting for Godot positioned the experience closer to a theatre production than to a film. For *Tin* they positioned it halfway between a play and a film.

[See Appendix 2]

How does that translate into cash?

The ratings for how keen people were to attend 'Made for Screen' productions were high. However, when asked how much they would be willing to pay for the experience, the average reply was just over 50% of a theatre ticket. [See Appendix 2]



Erik Geelhoed on Audience Experience.



Tin Premiere in Leicester Square (with the help of Photoshop!)

How did the productions compare?

*Income notes suggest ways revenue could be recouped on digital assets. These figures illustrate the need to set up a range of potential revenue strands for every asset in order to recoup, or indeed profit from, digital assets by reaching new markets outside existing audiences.

**Miracle submitted a successful Film Tax Relief application, which returned £17k back to the project, with one more claim to be made for post-production.

Production	Time to make	People power - Capturing	People power - Distributing	Equipment	Budget (approx.)	Notes on income potential*
Waiting for Godot – Live Stream	5 days – 2 days rehearsal (after 60 date tour!), 3 hour shoot, 3 days edit	Total 19 - 5 cast, plus crew of 14	10 front of house across 4 venues	Maximum: filming, mixing, streaming, presenting (see Capturing the Production)	£15k	Around 4,000 people would need to watch the stream to break even @ £7.50 net per head (based on 50% net box office)
Waiting for Godot – As Live	2 additional days to top & tail edit and encode	2 (director & editor)	Front of house as needed (1-2 per venue)	Minimal: edit suite, hard drive	€2-3k	Around 60 screenings @ average £50 each (rights holder cut) needed to break even
Waiting for Godot – Made for Screen	2 days shoot, 2 days edit	Total 13 – 5 cast, plus crew of 8	Front of house as needed (1-2 per venue)	Medium: filming & mixing	€8k	178 Cinegi screenings, or 2,000 downloads @ £4
Tin – Made for Screen	3 years – 12 day shoot, 5 day model shoot, 20 weeks post production	Total 100 – 23 cast, 50 extras, 21 crew (inc. trainees), 6 post- production	5 – Producers, Director, Communications, Distributor, plus venue staff	Maximum: full film crew, model crew & post-production (see Capturing the Production)	£100k	Income potential spans across the mix: cinema, events, Cinegi, DVD, VOD, auxillary sales. Income to date: £17k (cinema release), £17k tax rebate** Other distribution channels still to be exploited.

Things to think about before embarking on a 'Theatre for Screen' project:

- Why do you want to make a screen version of your production?
 Archiving a show, producing a special event, reaching a wider audience, increasing revenue or exploring new creative opportunities?
- Who is your intended audience?
- What will be your means of distribution?
 Live stream via broadband, 'As Live' screenings,
 Video on Demand, DVD sales?
- Do you have the necessary right and licenses?
 Check performers' contracts, writers' and composers' licenses & royalty agreements.
- Where will you find the necessary technical expertise?
- When will be the best moment to film?
 Earlier for marketing potential or later for more developed performances?
- What will be the cost of the project?
 Consider new financial opportunities.
 See attached business model.

Venues

- How will you select your venue partners?
 Do they offer the right technical facilities, enthusiasm, demographic and geographical spread?
- How can you enhance audience experience at remote venues?
 Will there be a presenter to provide context and offer Q&A?
- How will you establish communication between multiple venues?

Technical

- How many cameras will be needed to record your production?
- What type of cameras will be used?
- Will cameras be static or moving?
- What is the most appropriate method of recording sound?
- Will additional lighting be required?
- Where will you find the necessary technical facilities and expertise?
- How many crew will be needed?
- How much additional rehearsal time will be necessary?

People

- Maximise opportunities for gaining new skills and experience.
- Designers exploring opportunities and demands of new media.
- Actors modifying performance for camera.
- Directors considering new ways of telling stories, learning film language and techniques.

Marketing

- Be clear about the offer.
 Terms such as 'Streaming' and 'As Live' can be confusing. The presence of cameras in the 'host' venue may impose on the live audience experience.
- Will live and recorded versions command the same ticket price?

Caution

- Don't underestimate the complexity of this kind of project.
 - Taming new technologies takes time; making movies at any scale is demanding.
- Ensure your organisation has adequate capacity.
 - This will be additional work: your regular activities have to carry on.
- Be realistic about risk and make contingency plans.
 Stuff will go wrong!

Conclusion

The case for live streaming small-scale theatre performances via broadband to community venues still has to be made. At present, the technological demands seem disproportionately high compared to the quality of the experience. Do viewers feel they are participating in a live event, even enjoying the best seat in the house? Or do they feel they are watching another audience experiencing a live performance somewhere else? Is it ever going to be more than second best? Will the increase in audience reach ever justify the additional expense?

The case is stronger for exploiting the technology to connect special one-off community events across a number of venues.

Our research revealed that the lowest approval rating of the four versions was reserved for the 'As Live' screenings. These lacked the sense of occasion of the live-streamed event but did not benefit from the added production values of the 'Made for Screen' version. A mischievous thought did occur to us: if an audience, watching an 'As Live' version, were persuaded that they were watching a live-streamed event, would their experience be any different?

There are, however, good reasons for producing quality recordings of productions. These might range from the most basic digital documentation of a stage production to a creative interpretation of a show, tailored to exploit the big screen experience. These can be presented at venues, made available for home-viewing via video-on-demand or marketed as DVDs, all of which will help the producer reach a wider (potentially global) audience, adding value to an existing production and generating additional income.

The most surprising outcome of the R&D was the success of the 'Made for Screen' versions of both Waiting for Godot and Tin. With the former, despite a lack of any 'live' audience presence, viewers experienced sadness and laughter, felt immersed and that time passed quickly, felt close to the actors, appreciated the clarity of the story line and generally enjoyed themselves, leading to a strong urge to clap. From a production point of view it was clear that this version benefitted from the more considered and precisely executed nature of the process (the opportunity for retakes, cut-aways and frame-accurate editing) resulting in a smoother, more emphatic presentation. In the case of *Tin*, the recording process was much more complex, drawn out and costly, but culminated in a highly theatrical film which had a successful regional cinema release, reaching an audience of over 7,000 in three weeks.

All the different digital versions of Miracle's plays were produced for screening to venues, in other words to be watched by groups of people as a shared experience. In the case of the live stream and 'As Live' versions, where much is made of the value of filming in front of a live audience, our research suggests that this element adds little to the experience of the screen audience and can, in fact, create a barrier, like canned laughter. On the other hand, Tin, with its highly theatrical style and performances, though filmed without an audience, worked well when viewed in the cinema, where the viewers shared the subtle humour and tongue-in-cheek melodrama, often applauding at the end. Much of this appeared to be lost on the solitary DVD viewer.



Superfast Tempest in partnership with Vconect.

APPENDIX 1: Who were the project partners?

Miracle Theatre Trust Ltd (Lead Organisation) A regional touring theatre company, firmly rooted in Cornwall, committed to delivering a rich variety of work that is touching, funny and relevant and adaptable for a range of venues - from rural touring to mid-scale theatres. Miracle produces fresh and accessible adaptations of classic plays and new writing. Combining over 30 years of small scale touring experience with a continuing quest for innovative production techniques, the company works with promoters to encourage new audiences by bringing 'big' shows to 'little' venues in every corner of the region. Miracle performs to around 25,000 people each year. Miracle has been exploring the possibilities of digital since 2001 in all aspects of making and

www.miracletheatre.co.uk

marketing its work.

Golant Media Ventures (Business

Development Partner) An innovation agency working with arts, culture, heritage and creative industries organisations and companies and the parts of the public, not for profit and education sectors that work in those areas . GMV specialises in digital strategy design and implementation, content discovery, distribution,

IP and business models, collaborative working, partnerships and funding. It combines experience in both the publicly funded sectors and the commercial sectors and insight from undertaking its own R&D projects and taking its own spin-out, Cinegi, from idea to funded venture. Recent and current GMV clients include the Royal Shakespeare Company, Hackney Empire, Cornwall County Council (Archives of Cornwall and the Isles of Scilly) and the Intellectual Property Office.

www.golantmedia ventures.com

Cinegi (Technology Partner) is a new fully digital filmed media distribution service, enabling any venue to become a 'cinema', delivering content securely over standard broadband and playing out in full HD. The Cinegi catalogue includes independent film from features and documentaries to shorts and archive and recorded theatre music. opera and dance. It is a spin out business from creative industries innovation agency, Golant Media Ventures. It is aligned with the BFI's Film Audience Network and Neighbourhood Cinema initiative and was initially developed with funding from the EU's MEDIA Programme and Creative England, followed by finance from Ingenious Ventures. Cinegi is currently running a beta phase across the UK.

Dogbite Film Crew (Technology Partner) is a creative production studio based in Falmouth Cornwall. Offering creative and production film services to live events, commercial and creative projects nationally. Working with brands, business and artists creating shorts, features, commercials, music promos and animations, they also provide studio, crewing, and equipment hire as well as post-production editing and finishing for film and video content of all shapes and sizes.

www.dogbitefilmcrew.com

Falmouth University (Research Partner)
Falmouth University is at the centre of
Cornwall's convergence activities providing a
hub of entrepreneurial support to its students
and the county's SMEs. Working closely with
the Local Enterprise Partnership (LEP) and
international business investors, the university
brings together SME's start-ups, business
mentors and venture capital funders.

In 2012 the university opened the Academy of Innovation and Research (AIR) and its AIR Studio where creative people from commercial, social, cultural and academic organisations collaborate to follow-through on ideas.

www.falmouth.ac.uk

www.cinegi.com



APPENDIX 2: Further information and supporting documents

The Live & Digital Business Model Template and guidance notes can be found at:

http://golantmediaventures.com/filmed-performance-business-model-template

The full Live & Digital research report can be found here:

www.artsdigitalrnd.org.uk/projects/miracletheatre-company







