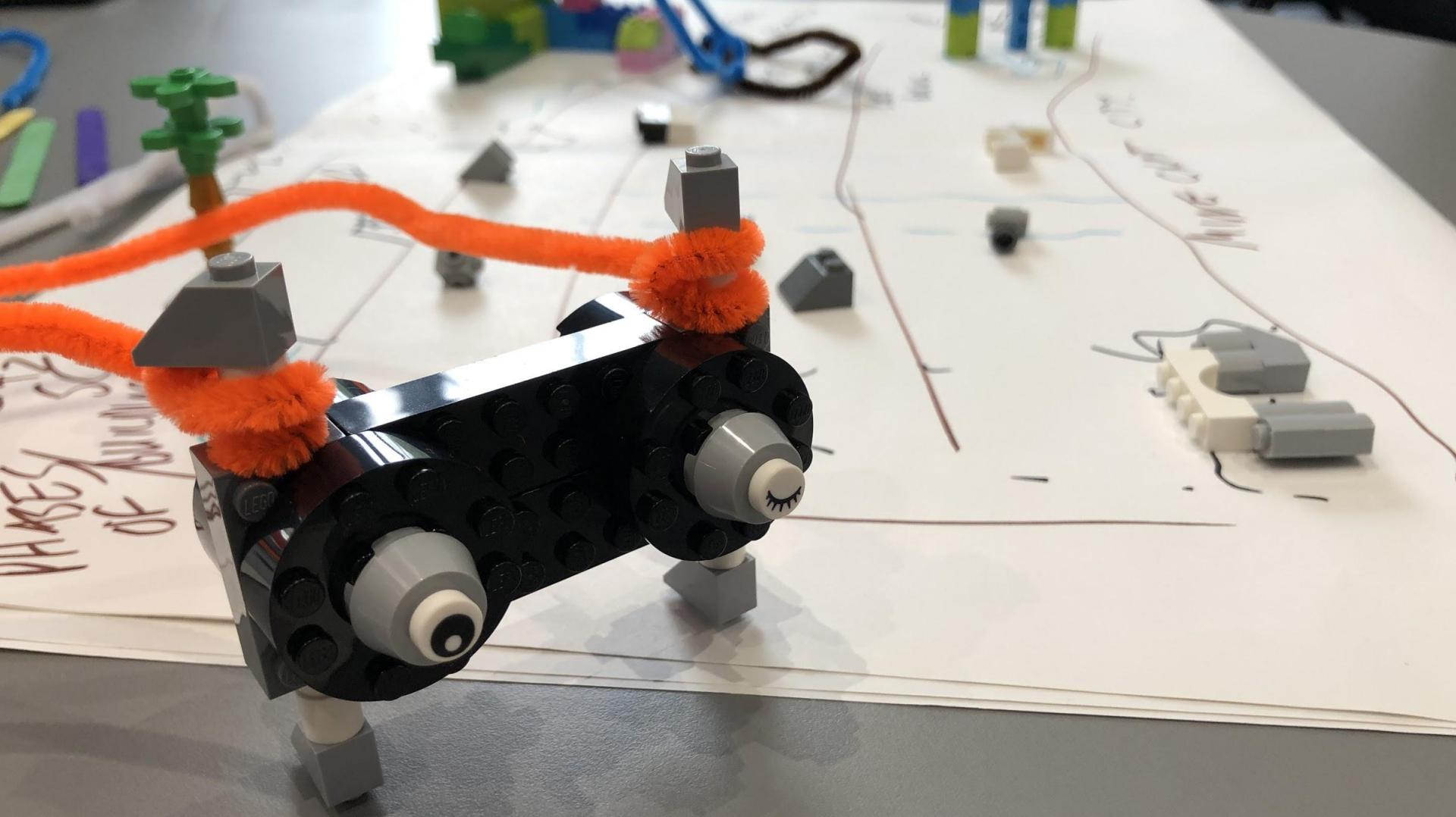


Tourism, Heritage and Culture Data Futures Report

LORIC / The Data Place 08 April 2019

An event to explore the use
of data in the Tourism,
Heritage and Culture
sectors through shared
visions, key milestones and
individual needs.



We gathered together
participants from local
government, academia,
and sector organisations.

Objectives

- Collaborating on shared visions for the sectors.
- Identifying steps and requirements to achieve the shared visions.
- Understanding what data is relevant.
- Identifying key organisations and individuals.
- Locating where participants fit into the picture:
where they can help; and what help they need.

Agenda on the Day

1. Introductions.
2. Visualising the preferred futures of tourism, heritage and culture.
3. Working backwards on what needs to be in place to achieve the vision.
4. What data is required and available?
5. Identifying next steps.

Outputs

1. Visualised visions for tourism, heritage and culture.
2. A list of activities that need to happen.
3. New connections.
4. Immediate data challenges to work on.
5. An understanding of what help is needed.

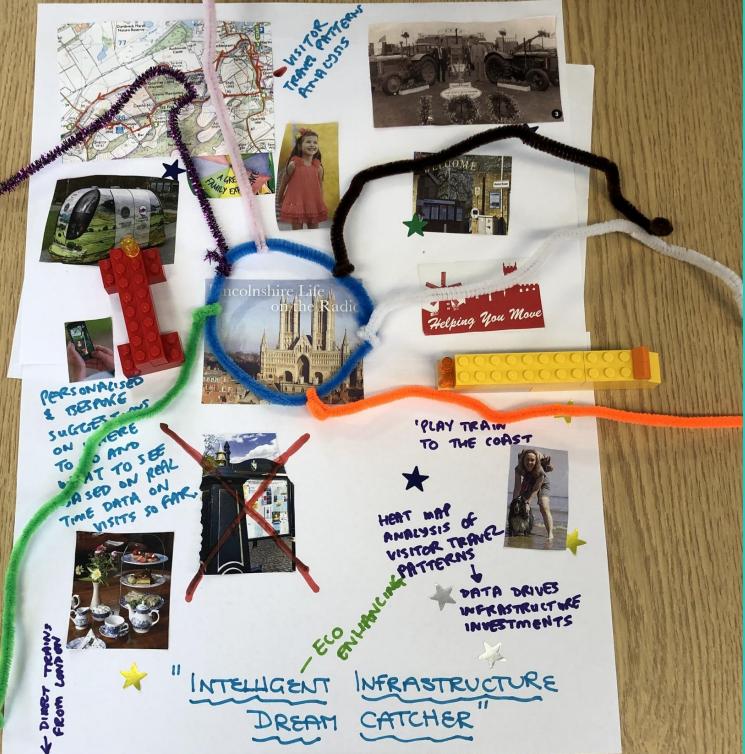
Framing

We asked participants to think about what good tourism, heritage and culture attractions or events might look like in the future.

Intelligent Infrastructure Dream Catcher

How might we use data to be more responsive with the way infrastructure for tourism is designed, and how could real-time data provide better experience for visitors?

From visitor attraction analytics and personalised/bespoke recommendations to environmental optimisations, data-driven infrastructure investments and “play trains” to the coast, we want all our data infrastructure to work together for the good of the county, its inhabitants and its visitors.



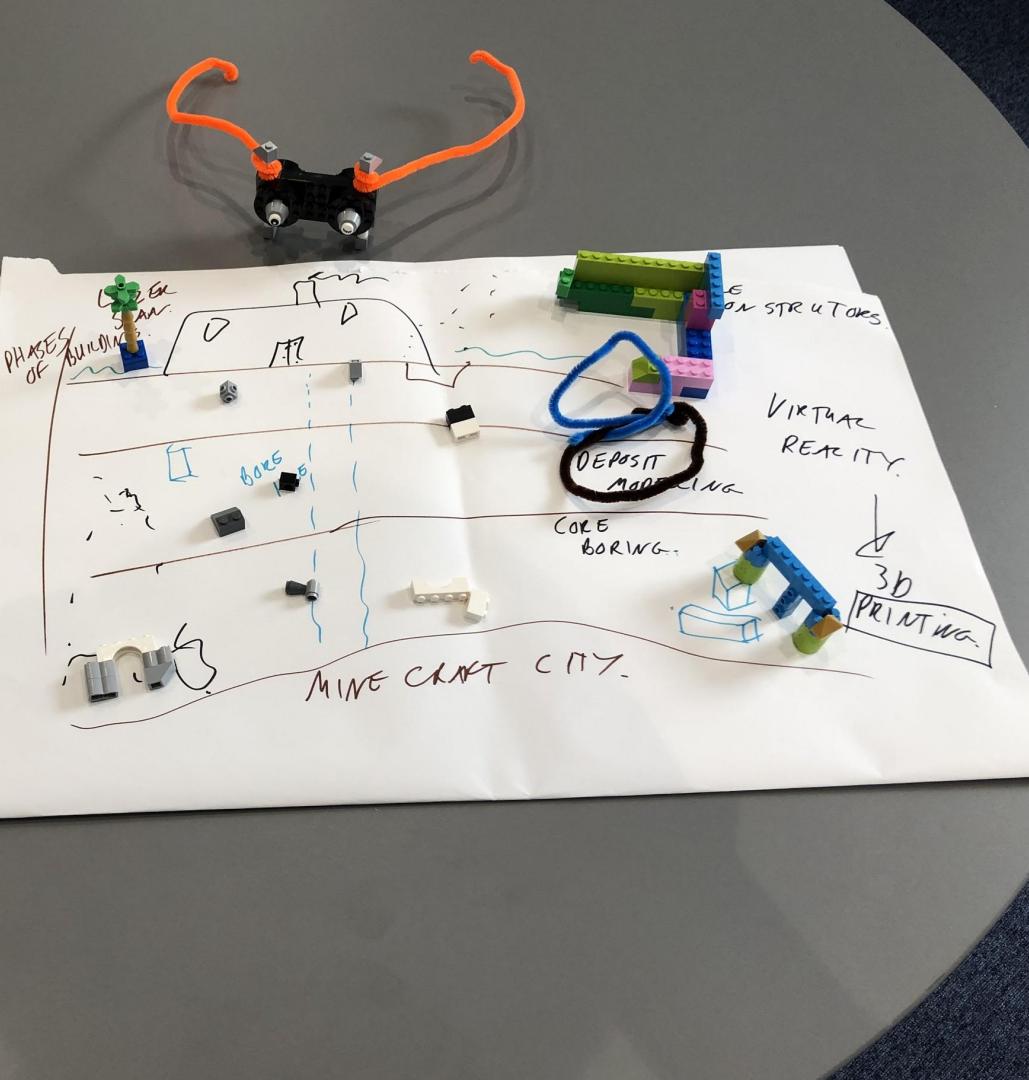
Intelligent Infrastructure

Dream Catcher

Rethinking the Cathedral as a Focal Point

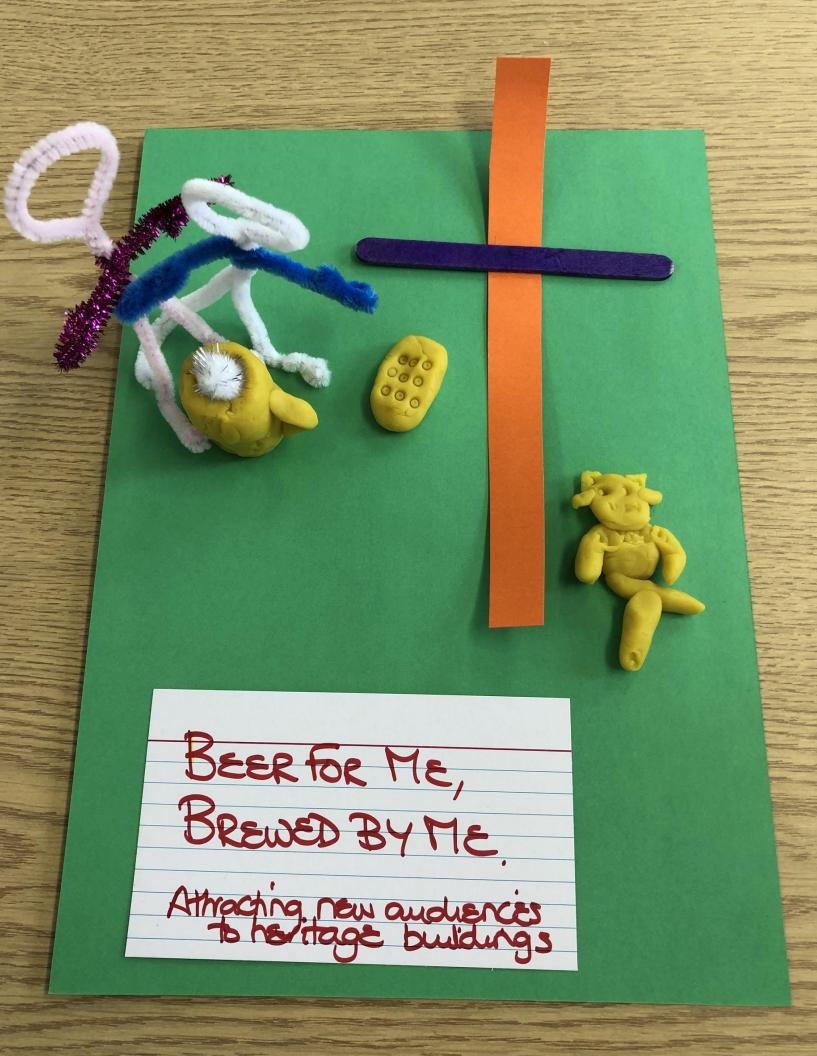


Technology and events to make the cathedral more central to celebrations and cultural activities, including enhanced lighting projects and multi-cultural events to connect the cathedral better with the past, present and future of Lincoln.



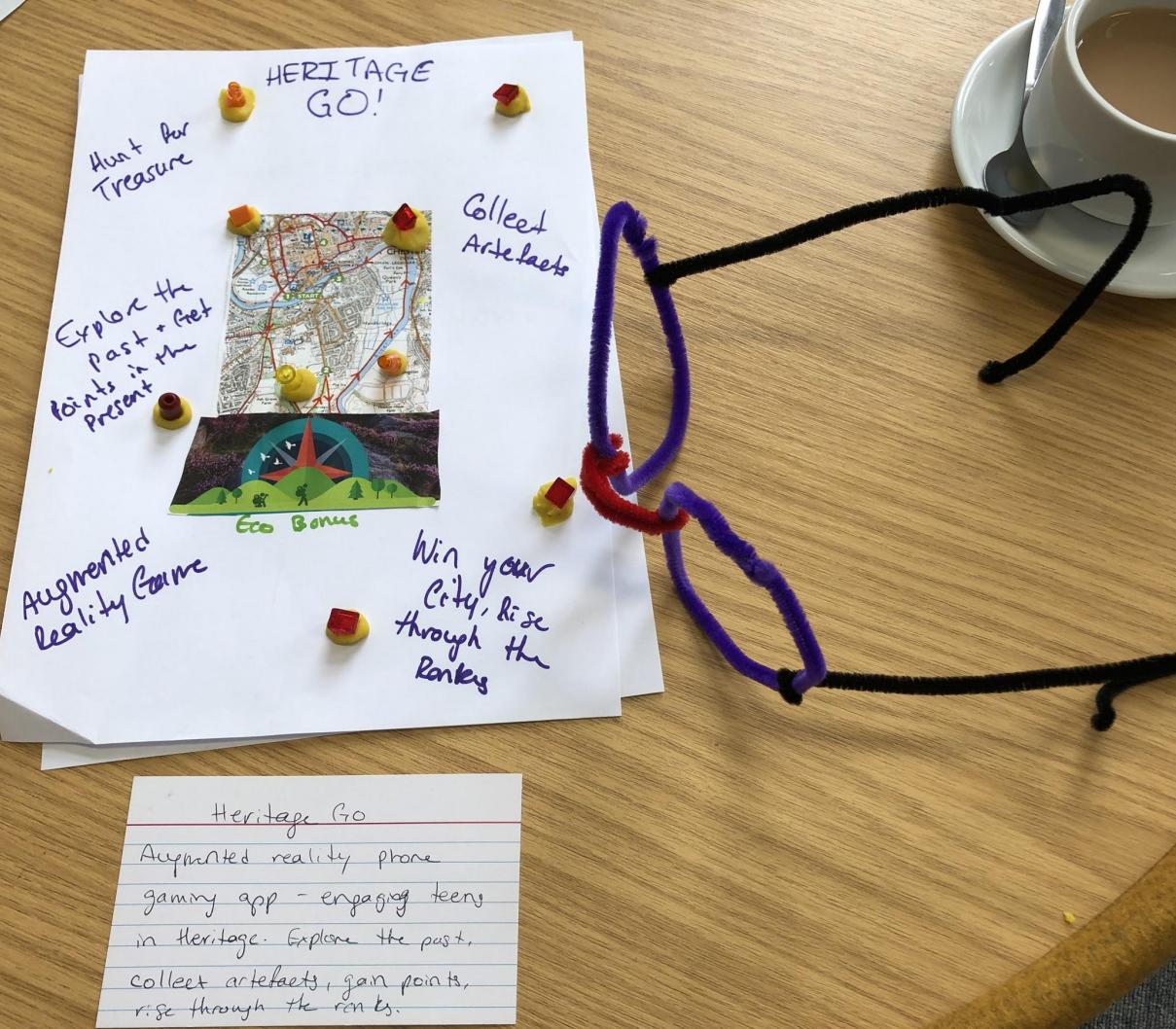
4D Heritage Visualisation

Using data and technology to provide interactive visualisations of archaeological and other heritage sites; providing ways to get more people involved in the use of the data and developing innovative projects with it.



A Tech-Infused Beer Festival in the Cathedral

Building on Lincolnshire's brewing heritage and bringing new audiences to new spaces through personalised beer events. Designed to extend what's possible with the cathedral as a venue and at the same time bring in younger audiences.



Heritage Go!

An Augmented Reality game to engage people with local heritage.

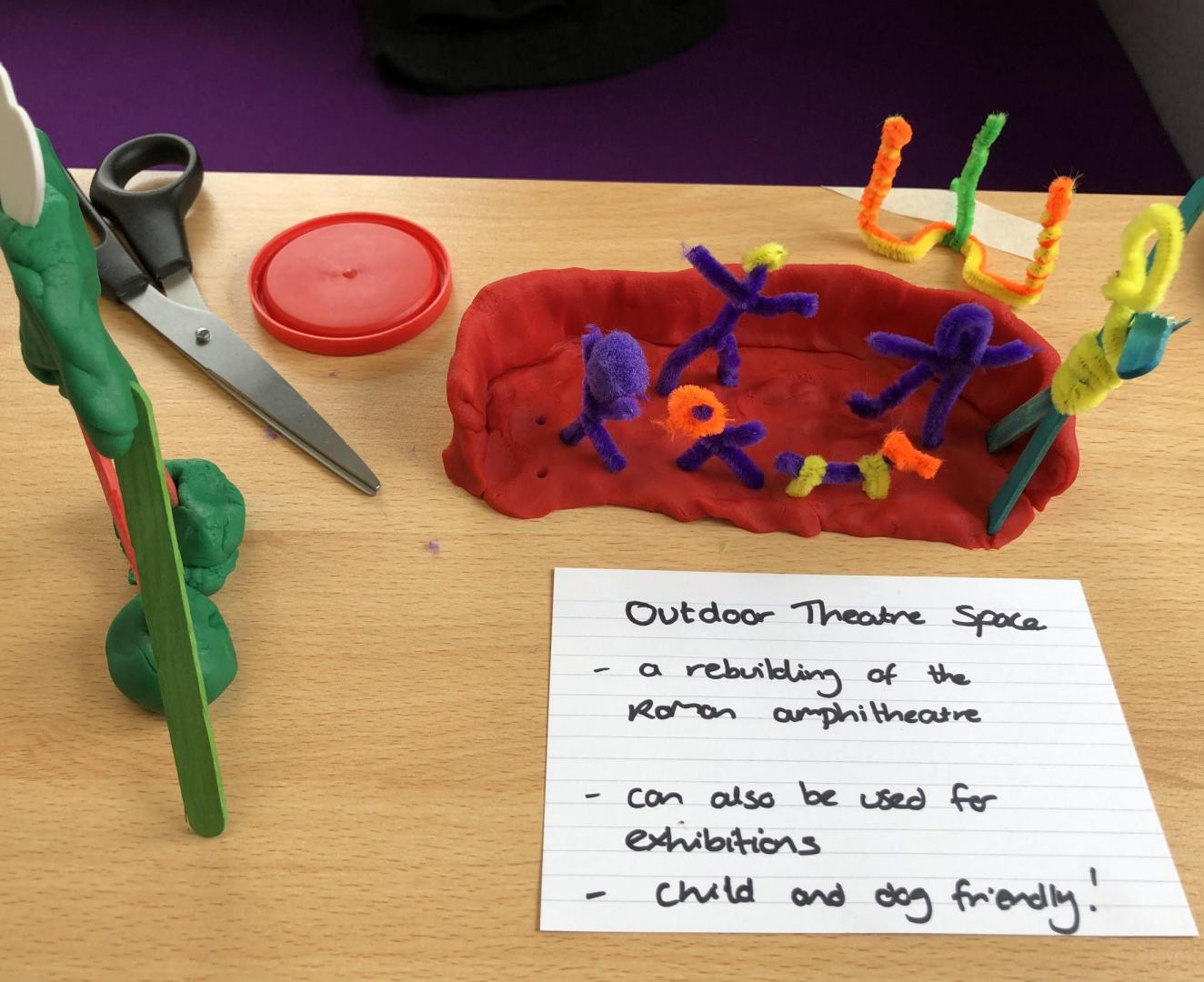
Pokemon Go! was originally based on a game called Ingress, that encouraged its users to visit cultural hotspots and places of interest. Building on this idea along with the existing England's Originals app, this idea returns PG to its roots, inspiring visitors and residents alike to explore the culture of a place.

Outdoor Theatre Space

A rebuilding of the Roman amphitheatre, either as a permanent, outdoor theatre space or as a mobile project.

Outdoor Theatre Space

- a rebuilding of the Roman amphitheatre
- can also be used for exhibitions
- child and dog friendly!





"Aspire" and a Zip Wire to the Coast

A new tall structure in Lincoln that connects to the Lincolnshire coast using a zip wire. How might we connect the different parts of Lincolnshire better? How ambitious could we be?

Future Open

Events, policy changes and infrastructure for making Lincoln a more 24-hour city. This project included new lighting schemes but also plans to use data to better understand existing visitor patterns.



Steps, Milestones, Data and Outcomes

What are the prerequisites
for these futures to come
about?

From the future visions
and required actions we
developed a list of
necessary and useful
datasets and data types to
explore.

We asked:

What needs to happen to realise this project?

What data is critical to this project?

How will you know if this project has succeeded?

How will you feel about this project when it exists (five words)?

Intelligent Infrastructure Dream Catcher

PERSONALISED
& BESPOKE
SUGGESTIONS
ON WHERE
TO GO AND
WHAT TO SEE
BASED ON REAL
DATA ON
SITES SO FAR.

'PLAY TRAIN
TO THE COAST'

Intelligent Infrastructure Dreamcatcher

Prerequisites

- CCTV or phone use tracking (but what if people don't want to be tracked?).
- Hashtags linked to heritage sites.
- Overcome inter-agency working politics - better collaboration and joint data releases.
- Creating tourism heatmap (Google Maps data)
- Voluntary participation in quantitative research by visitors. Universities involvement.
- Design/tech key projects backlog to implement.

Intelligent Infrastructure Dreamcatcher

Critical Data

- Google and Telefonica tracking.
- GPS tracking.
- Traffic flows.
- Flow of people.
- Train/bus times.
- Capacity of each attraction.
- Carbon footprint.
- Cost of technology.
- Product data.
- Priority destinations (TripAdvisor).
- Customer information.
- Audience.
- Mapping.
- Value/cost analysis.
- Renewable energy data.
- Visitor surveys.
- Tracking data for the movement of people.
- Spatial data (maps and networks).

Intelligent Infrastructure Dreamcatcher

Recognising success

- High usage of new travel infrastructure by very satisfied visitors.
- Measurement of experience satisfaction.
- Progress
- New technology.
- Uptake in usage, footfall and spend.
- No queues, better distribution
- Reduced energy usage.
- Improved perception.
- More balanced economic system from tourism.
- National adoption.
- Reduced car travel.
- Robust visitor information which informs policies and strategies.
- Increase in the value of the visitor economy.
- Increased travel between destinations.
- Good flow of tourists around the city.

Intelligent Infrastructure Dreamcatcher

How will we feel
about it?

- Proud that Lincoln is leading.
- Confident the information is available.
- Confident that heritage is appreciated.
- Efficient use of time and money.
- Making visiting easier and sustainable.
- Green, relaxed, confident, informed, proud.
- Pioneering, innovative, ahead of the game.
- Less frustrated about travel.

Rethinking the Cathedral as a Focal Point



Rethinking the Cathedral as a Focal Point

Prerequisites

- Virtually repaint the interior as it was.
- Internal lighting projection to recreate paintings.
- Ideas, e.g. St. Wolfram's in Grantham.
- Understanding of architectural significance to inform lighting plan.
- Light projection to recreate original spire.
- Open data on cathedral colours.
- Son et Lumiere like in Durham.
- Digital scans of details on the cathedral.
- Eco-focus.

Rethinking the Cathedral as a Focal Point

Critical Data

- Drinks global data.
- Light technology.
- Energy costs.
- Archive of historic decoration.
- Light levels at different times of year from different angles.
- Cost.
- History of colours used.
- Eco issues.
- Footfall.
- Global audience
- Food and drinks sales.
- Diversity.
- Popularity.
- Visitor profile pre-, during- and post-event.
- Media exposure.
- Physical attendance numbers.

Rethinking the Cathedral as a Focal Point

Recognising Success

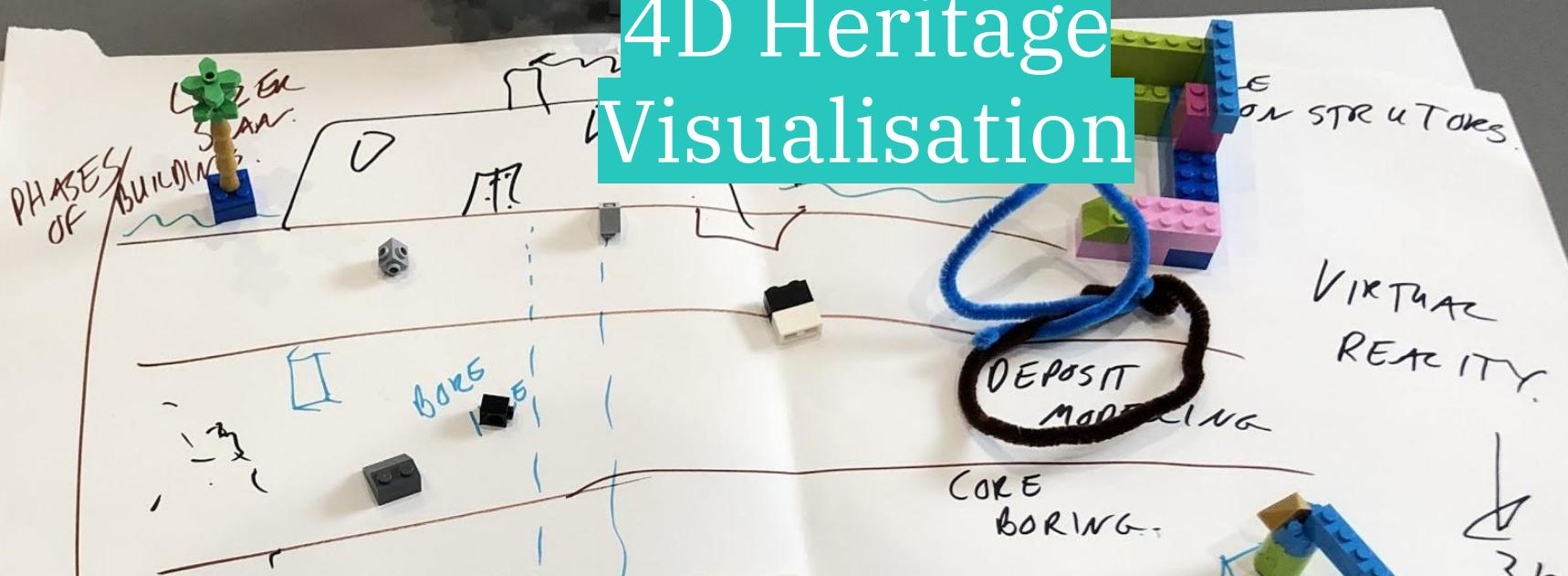
- A more global audience
- Increased food and drinks sales.
- Increased diversity of visitors.
- Increased popularity.
- Visitor profile pre-, during- and post-events.
- Increased media exposure.
- Higher physical attendance numbers.
- The cathedral is illuminated.

Rethinking the Cathedral as a Focal Point

How will we feel
about it?

- Intrigued.
- Beautiful.
- Nice.
- Wow, that's amazing!
- Amazing photography opportunities.
- Excited.

4D Heritage Visualisation



4D Heritage Visualisation

Prerequisites

- A link to the OpenActive initiative.
- Inspiration from *A House Through Time*.
- Incorporation of census data to add personalities.
- Institute accessible virtual tours for disabled people.
- Maintenance plans and funding.
- Joined up work between tech and historians.
- Minecraft visualisation of Lincoln
- Hackathon / datathon for heritage.

4D Heritage Visualisation

Prerequisites (continued)

- Governance and access model.
- Your footprint (your ancestry beneath your feet).
- API.
- Schools and education.
- Coding capabilities to deal with 4D programming features.

4D Heritage Visualisation

Critical data

- Geology, archaeology planning survey datasets.
- Archaeological records and datasets.
- Core sample data collected in correct format.
- HER and planning data.
- Geological data.
- Bore hole technology information, costs and usage.
- Other heritage data.

4D Heritage Visualisation

Recognising success

- Simcity is successful.
- Sustainable post-development and launch.
- Inspired engagement with heritage.
- 3D/4D map can convert into virtual reality.
- Usage and longevity.
- User volumes, engagement and contribution levels.
- Ratings.
- Collaborator volumes and diversity.
- Ecosystem of suppliers and citizens using it.

4D Heritage Visualisation

How will we feel
about it?

- In awe, interested, educated, fascinated.
- Attractive.
- Intrigued.
- What's the story of my home?
- Engaged, enriched, connected.
- Proud, excited, engaged, forward-thinking.
- Pleased for Lincoln to have such a rigorous project.
- Intrigued to see who will use beyond the geeks.



A Tech-Infused Beer Festival in the Cathedral

A Tech-Infused Beer Festival in the Cathedral

Prerequisites

- Sausage and beer festival.
- Trend mapping of people's tastes.
- Historic beer types for different eras.
- Taste note “volume control”.
- Cathedral agreement.
- Link to history of brewing (monks).
- Link with Brewdog.
- Beer open data.
- Wine tasting.

A Tech-Infused Beer Festival in the Cathedral

Critical data

- Visitor profiles, data and volumes.
- Market data for target audience, e.g. CAMRA.
- Types of beer that people like.
- Quantity of people interested.
- Knowledge of popularity of beers.
- Historic and local kinds of beers.
- Number of local brewers.
- Capacity of cathedral.
- Recipes/ingredients of beers.

A Tech-Infused Beer Festival in the Cathedral

Recognising success

- Participation volumes.
- CAMRA award.
- Event attendance and customer feedback.
- More new people using the space.
- No unwelcome behaviour.
- Brewers don't make a loss.
- Sustainability.
- Increased spend.

A Tech-Infused Beer Festival in the Cathedral

How will we feel about it?

- Excited taste/experience.
- Inspired to try more.
- Excited about trying it.
- Ambivalent.
- Cider is so much better.
- I do not like beer.
- Concerns of appropriateness of venue.

Augmented
Reality Game

Explore the
past + get
points in the
present

Hunt for
Treasure

HERITAGE
GO!



Heritage Go!

Win your
City, rise
through the
Ranks



Collect
Artifacts



Heritage Go!

Prerequisites

- Start in Lincoln, get it right and then expand to county (consider green transport).
- Physical/tangible sign or colour.
- Developer time/accessibility audit.
- Modify/evolve *England Originals*.
- Religious focus, e.g. Caistor, Disciples, Pilgrimage.
- Leaderboard with virtual prizes.
- Collaboration between developers and historians.
- Attraction rewards for points as trade-in.

Heritage Go!

Prerequisites (continued)

- Market in schools and get kids to try it out.
- Mapping it out, collaboration to coordinate.
- Collecting unique locations.
- Marketing, making it easy to connect to.
- Promote within *Find My Friends* and similar apps.
- Link *England Originals* with HER data.
- Use existing game frame.

Heritage Go!

Critical data

- IT capability.
- Accessibility of sites, stairs, cobbles.
- Source information in correct format.
- Points per location.
- HER data for artefact/site locations.
- Accurate historical information.
- Functionality enables capture of visitor data.
- Attractive historical-heritage data.
- Geo-historical, archaeological map & stories.
- Heritage sites/stories.
- Map of historical sites across all time periods.
- User feedback from trials to make sure it is useful.
- Key demographic identified.
- GPS tracking.
- Co-ordinates.

Heritage Go!

Recognising success

- Popularity
- Frequency of use
- Sustainable
- Inspires visits—increase in number of visitors.
- Inspires donations.
- Games have many fans.
- People actively engaged in exploring city's history.
- Data on people downloading and using the app.
- Time spent, engagement metrics.

Heritage Go!

How will we feel about it?

- Intrigued, active, social, educated, competitive.
- Glad to see heritage absorbed by young and old.
- Positive synergy from heritage and digital.
- Excited, intrigued, curious.
- Connected, exploration, fun, impressed.
- Fun, learning.
- Amazing, enjoyable, useful, knowledgebase.
- Knowledgeable, healthy, competitive.
- Great game for my son.



Outdoor Theatre Space

Outdoor Theatre Space

- a rebuilding of the

Outdoor Theatre Space

Prerequisites

- Cultural vision for the city.
- Promotion, planning, weather, infrastructure, funding.
- Historical & imaginary characters + real life stories.
- Use hill/arboretum/liquorice park/bishop's palace.
- Virtual re-enactments added to map.
- Level of public interest/commercial interest.
- Costings/research on demand, projected figures.
- Temporary Globe as an example.

Outdoor Theatre Space

Critical data

- Historical place data.
- Audience numbers.
- Database of willing actors and fees.
- Key historical events.
- Survey on whether people will use it/attend.
- HER data linked to historic events data.
- Costings.
- Audience research, event benchmarking data.
- Urban design, geographical planning data.

Outdoor Theatre Space

Recognising success

- Excellent ticket sales, publicity levels.
- Variety of shows taking place.
- Success of similar experiences.
- Inclusivity.
- Event attendance and frequency.
- Awareness and perception of city improved.
- Space being used.
- Increase in visitor numbers.
- Permanent/temporary structure in place.

Outdoor Theatre Space

How will we feel
about it?

- Proud.
- Good opportunity.
- Good inclusive public space.
- Knowledge, learning.
- Excited, belonging, diverse, connected.
- Wow! Entertained, informed, surprised.
- Excitement of something new.
- Windswept! Outdoorsy, cultured, uplifted.
- Journey to the past.
- Learning, busy.

A photograph of an office environment. In the foreground, a teal rectangular overlay contains the text "Aspire" and a Zip Wire to the Coast". To the left, a person's back is to the camera, wearing a blue and white checkered shirt. In the center, a person with short blonde hair is looking towards the camera. To the right, another person with short curly red hair is also looking towards the camera. In the background, there are windows showing greenery outside. A purple chair and a yellow ottoman are visible on the left. A purple couch and a grey wall are on the right. A yellow string with colorful pom-poms hangs vertically from the top left.

"Aspire" and a Zip
Wire to the Coast

“Aspire” and a Zip Wire to the Coast

Prerequisites

- Conceptual Connectivity, Visibility, Legibility.
- Cycle Connectivity.
- Money and stakeholders working together.
- Beacon system to link to the coast.
- Joined-up approach needed—physical connectivity and with respect to people.
- Cycling routes improvement.
- Other ways to connect Lincoln to the coast.
- Connection route—Washingtonborough to town tram.

“Aspire” and a Zip Wire to the Coast

Critical data

- Ride popularity data.
- Distance between features.
- Transport options.
- Visibility analysis, to and from.
- Feasibility, costs, planning, etc.
- Viability (look at Eden project zip line).
- Planning permission.
- Age profile of visitors over time.
- Costs, impact on visitor economy.
- Geospatial data to connect venues and landscapes.

"Aspire" and a Zip Wire to the Coast

Recognising success

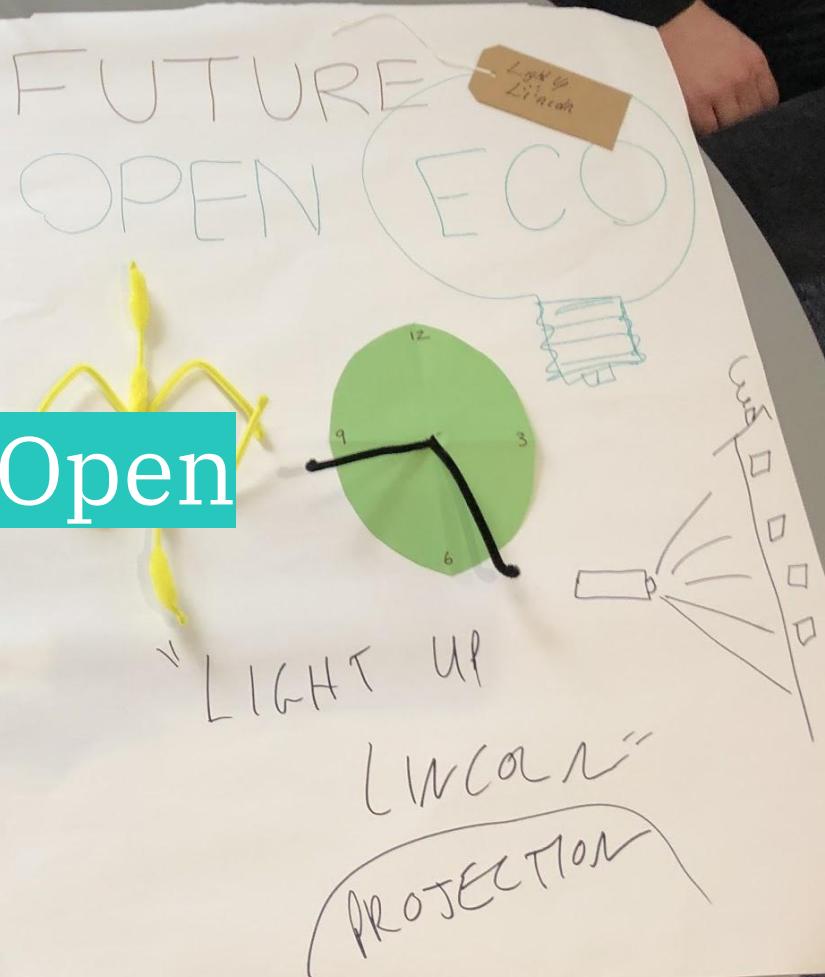
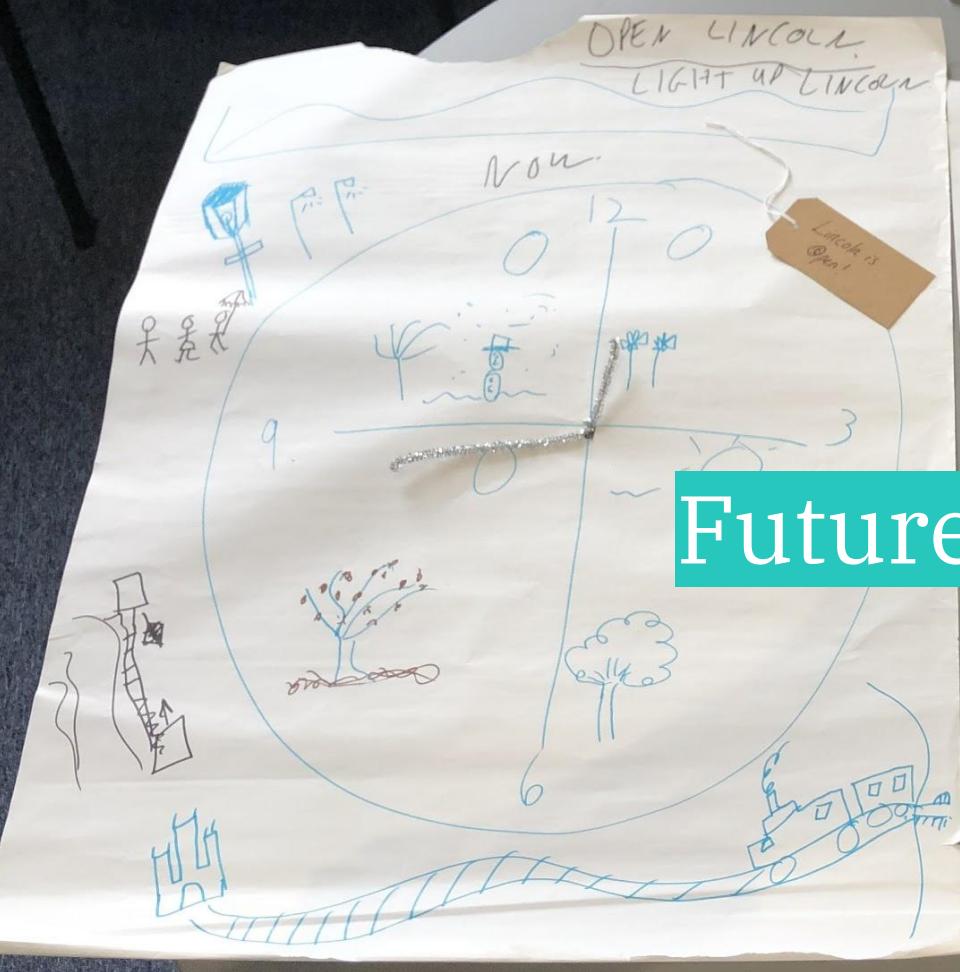
- High usage figures and positive feedback.
- Initial costs recovered, revenues generated.
- Completion: the spire is built.
- Venues and transport links are sympathetic to the landscape and visitor attractions.
- More families with teenage and young children visiting - increase in visitors.
- Retention, maintenance.
- Community connectivity.
- Wins a RIBA award.

"Aspire" and a Zip Wire to the Coast

How will we feel
about it?

- Awestruck!
- Excited, apprehensive.
- Exhilarated, inspired, impressed.
- Easy access, seamless transport solutions.
- Not sure.
- Excited about views from the top.
- Don't like it.
- Not for me but hope others enjoy it.
- Proud, exciting, able to see or access coast.

Future Open



Future Open

Prerequisites

- Telefonica Mobile footfall data.
- Future informations from t-stats to inform.
- Harpa in Reykjavík lights and texture.
- Clocks back and forward one minute a day.
- E.g. West End lights festival.
- E.g. Blackpool illuminations.

Future Open

Critical data

- Footfall data, data on quiet/popular times.
- GPS tracking data.
- Footfall in target areas at different times of day.
- Data about people moving around the city.
- Light intensity limits.
- Economic aspirations.
- Energy costs.
- Identify which parts of the city present a problem for visitors.

Future Open

Recognising
Success

- Improved economics: new businesses, more visitors spending more: more return visits.
- Visually better.
- Reduced crime, greater safety.
- Heatmap of existing flow of people.
- Awareness and perception improvement of city.
- More people, better distributed.
- Extended opening times in line with visitor needs.
- Integrated with other aspects like transport.
- Community feels part of the city.

Future Open

How will we feel about it?

- Unconstrained, getting the most possible.
- Energised, lively, optimistic.
- Beneficial, lively.
- Proud of improved environment.
- Success, happy, impressed.
- Proud and wow.
- Proud and keen to spend time in the city at different times of the day and night.

Next Steps

Vision

All stakeholders held high ambitions for Lincoln and Lincolnshire to be recognised as an attractive place to live and visit.

An aim to be “Britain’s Best Small City”.

Funding

It was stressed that funding was needed to support the development of Tourism, Heritage, Culture and the Arts here in Lincolnshire and that potential funding streams are available. A major consideration is the Tourism Sector Deal, which is a Government led offer of funding which is available to areas who submit a collective regional response as part of their Destination Management Plan.

This funding has the potential to release £3-6 million per year to areas who submit successful proposals. These proposals need to be led by a Designated Marketing Organisation (DMO) in conjunction with the Local Enterprise Partnership (LEP). This puts Lincoln in a position to submit a response as Visit Lincoln are a DMO and work closely with the LEP.

Another potential funding stream is Heritage Action Zone Funding.

Joined-Up Working

All stakeholders present agreed that there was a strong need for a joined up approach to be taken towards supporting the Tourism/Heritage/Arts/Culture sectors in Lincoln. This can be categorised as a move to consider all areas jointly as stakeholders in the Visitor Economy.

Coordination and collaboration between different organisations and different teams within organisations was seen as the key to enable joined up working.

Joined-Up Working (2)

It was recognised that this approach can be taken by workers “on the ground” and achieve some limited results, but that real change could happen if strategic level members of an organisation could see the benefit of joined up working and support multi-agency partnerships. Two key stakeholders in this were named as the Director of Communities and Environment at Lincolnshire County Council and the managers for the Growth Team at Lincoln City Council.

The Historic Lincoln Partnership was referenced as a body which aims to co-ordinate the organisations linked to tourism locally, however it was felt that this partnership has a strong focus on the uphill area of Lincoln, and would benefit from expanding its geographical area to focus more on other areas of the city.

Data

Whilst partnership working has its own merits, it was felt that those operating at a more strategic level in the sector across Lincoln would be more accepting of new ways of working if there was data available to back up the requests for new projects and multi-agency approaches. The use of the correct data could support decision makers to make informed decisions and also to justify budget spends.

The correct data would also support bids for future funding, such as the Destination Management Plan.

The “critical data” sections of this report are the first steps in identifying existing and potential new open data sets that will assist these ambitions.

Involving Others

Stakeholders felt that the following people, teams and projects should be involved in any future joined up working across the sector:

- Growth Team- Lincoln City Council
- Director of Communities and Environment – Lincolnshire County Council
- Lincoln University Innovation Project
- HeritageDot – University of Lincoln
- Lecturers in Archaeology – University of Lincoln
- University of Lincoln 4.0 Challenge
- Mansions of the Future (<https://mansionsofthefuture.org/>)
- Historic Lincoln Partnership

Other Suggested Activities

- LORIC to facilitate a follow up event in early June 2019 to bring together further stakeholders.
- Attendees to spread the message to their managers and organisations that there is a desire and a need for more joined up working across the sector and encourage attendance at a further collaboration event.
- The Data Place and LORIC to explore the viability of hosting a Hackathon/ Data Jam whereby organisations can discuss and collaborate on technical/digital solutions to issues they are facing in the sector.
- The report from today's event to be shared across all attendees and made available on the LORIC website.
- The Data Place and LORIC to explore and share as many of the critical datasets identified as possible and generate a prioritised plan to find and release the rest.



LORIC Tourism, Heritage
and Culture Data Futures
Report Produced by The Data
Place, 8 April 2019