



# HACKING CULTURE

A how to guide for hackathons in the cultural sector

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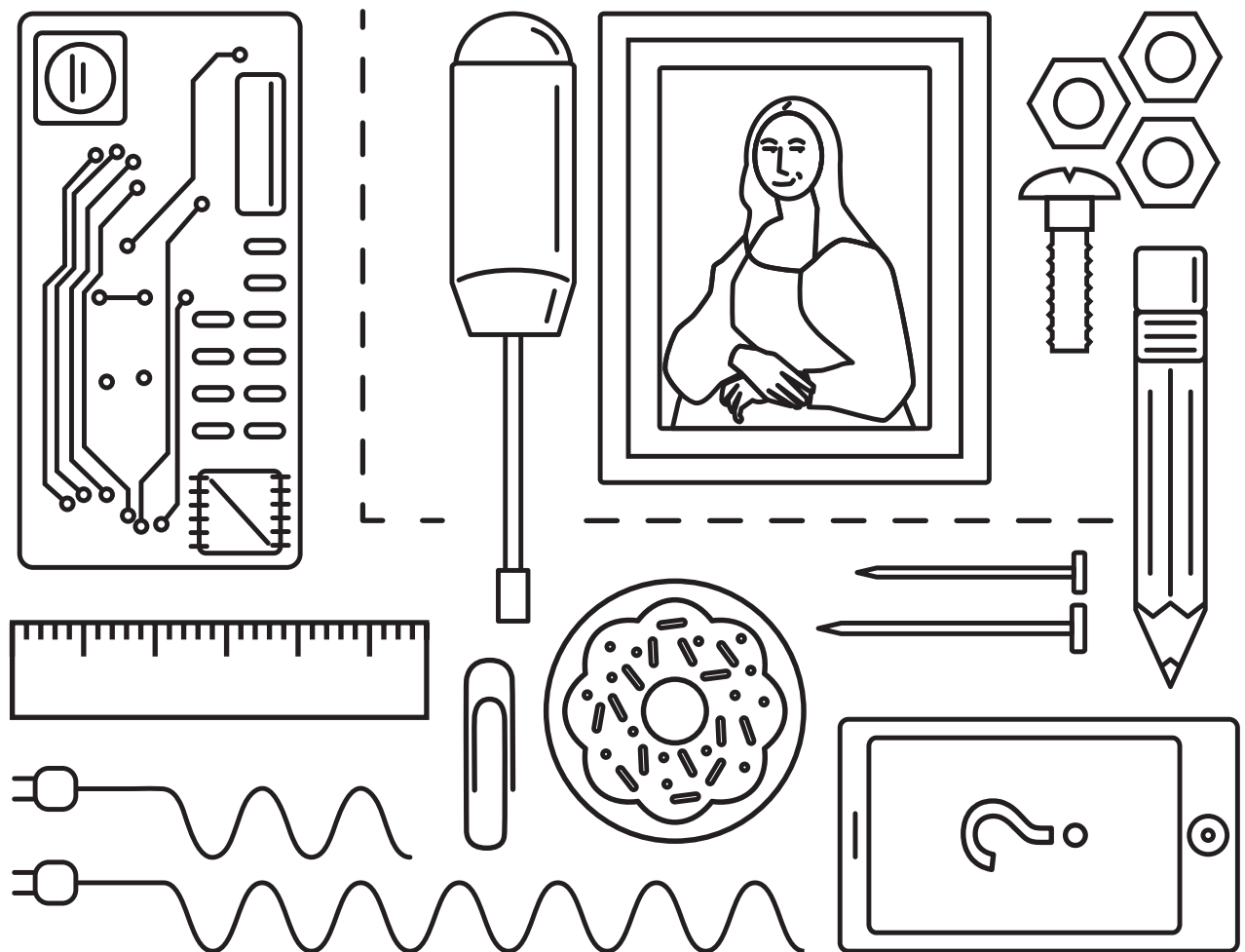
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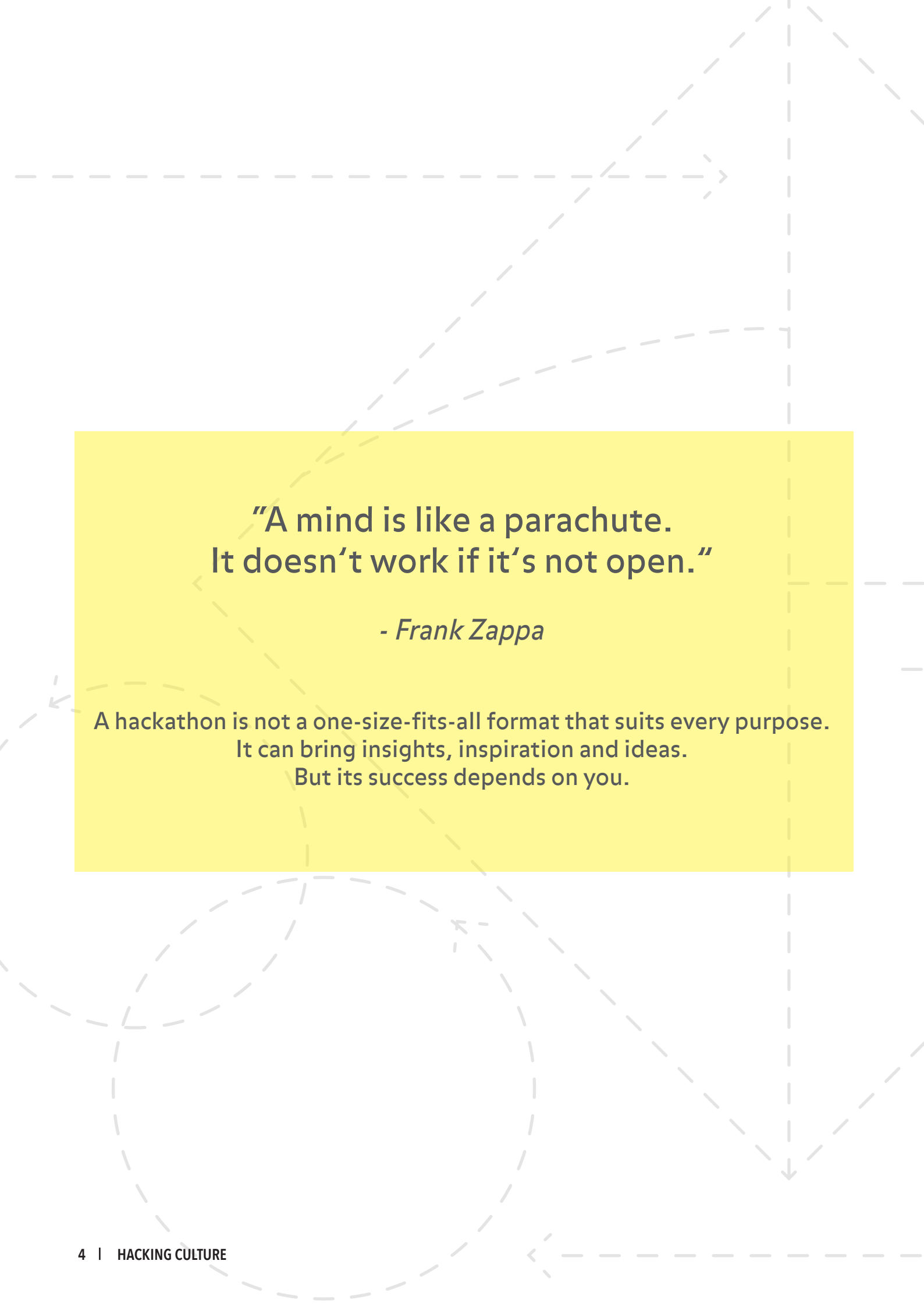
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**“A mind is like a parachute.  
It doesn’t work if it’s not open.”**

*- Frank Zappa*

A hackathon is not a one-size-fits-all format that suits every purpose.  
It can bring insights, inspiration and ideas.  
But its success depends on you.

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# Preface

A hackathon is not a one-size-fits-all format that suits every purpose. It can bring insights, inspiration and ideas. But its success depends on you.

Based on the experience with organizing six hackathons in the Europeana Space project and the pre-existing experience with project partners, we created this booklet, exploring the use of hackathons in the cultural sector and helping you to get started with organising one yourself.

The core action of Europeana Space was an exploration of different scenarios for the reuse of digital cultural heritage, to inspire new approaches towards legal reuse of digital content in the light of unlocking the business potential that lies behind it. Following the realization of six thematic Pilots, Europeana Space successfully organized a series of hackathons to boost creativity and participation, with a focus on developing ideas and prototypes in a market-oriented approach. These events reached a significant number of participants from across the European community and allowed for ample opportunity of participation in engaging with digital cultural content; and what makes E-Space hackathons unique and successful is the focus on concept development, knowledge-sharing and business modelling rather than pure coding.

It was not the value of the prize that attracted participants: what was highly appreciated by the participants is the possibility of exchanging ideas, developing synergies around the concept of reusing digital (cultural) content. E-Space hackathons gave people the challenge of converting their ideas in a sustainable business model with a credible market potential.

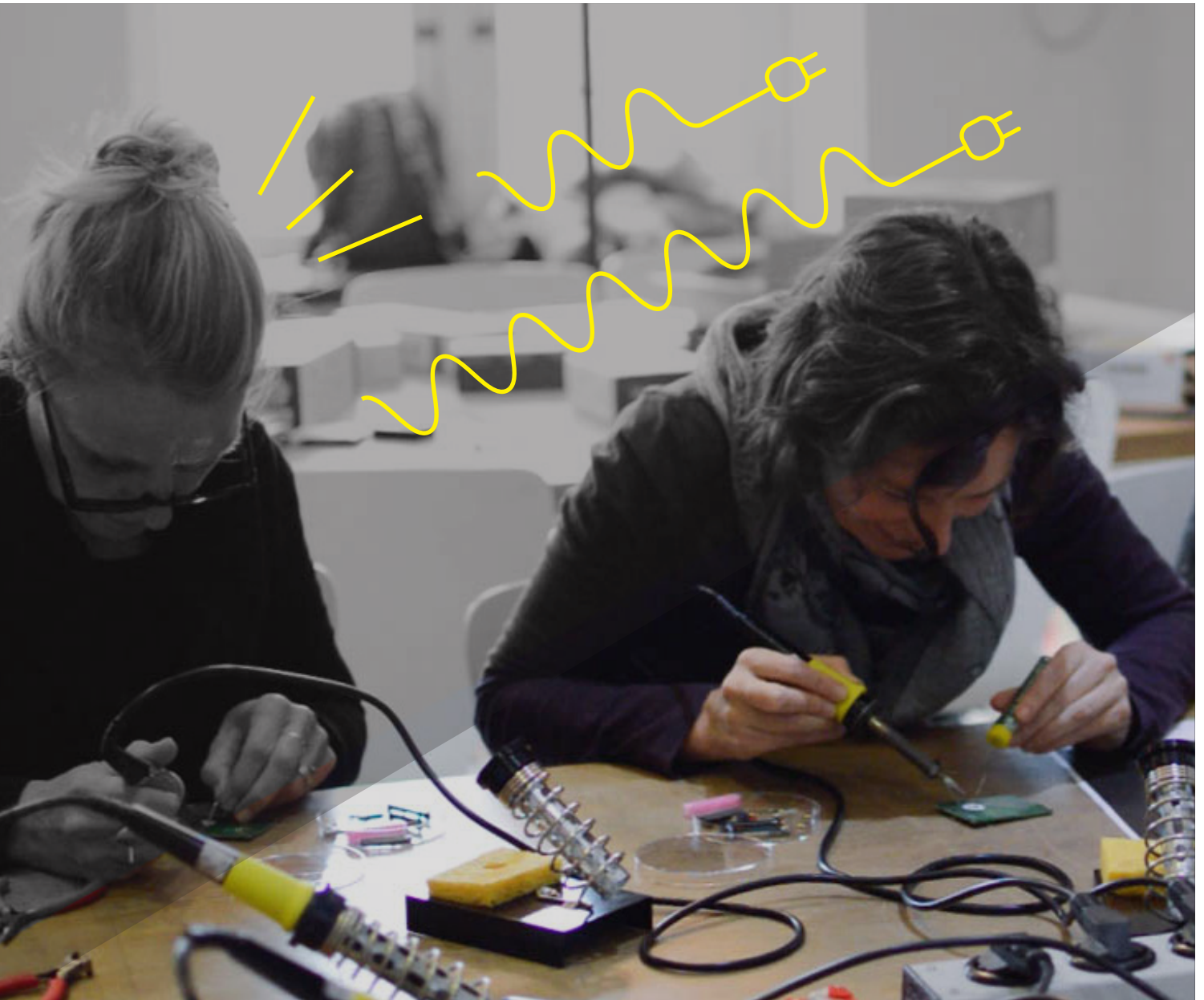
Of course, your hackathon can be different and with different purposes: what is important is that you find your focus. This publication intends to share the lessons we learnt for the realization of a successful event, and to support the replication of best practices experimented in the E-Space hackathon experiences.

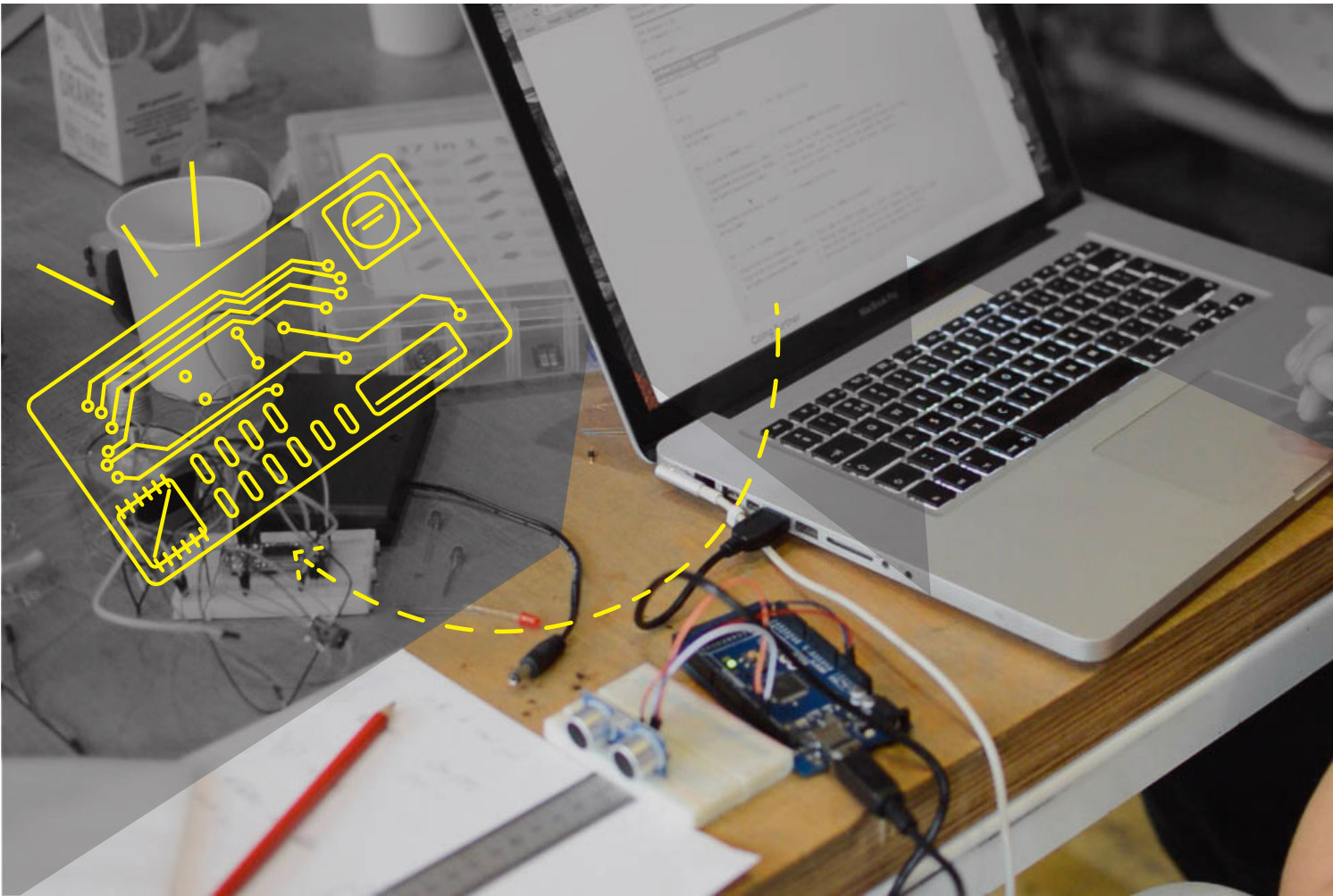
Enjoy reading (and using) this publication. We hope you will find it helpful to your own work in this field.

On behalf of Europeana Space,

*Sarah Whatley, Project Coordinator*  
*Antonella Fresca, Technical Coordinator*

Learn more about the E-Space project:  
[www.europeana-space.eu](http://www.europeana-space.eu)







# 1. Introduction

An old school hackathon is an event in which computer programmers and others involved in software development, collaborate intensively on software projects. Occasionally, there is a hardware component as well. Hackathons typically last between a day and a week and tend to look like a sweatshop full of nerds bending over their laptops barely saying one word.

But, times are changing. Hackathons appear everywhere and everyone seems to feel at home with the concept. The word 'hackathon' is a portmanteau of the words "hack" and "marathon", where "hack" is being referred to as a sense of playful exploration, not only of soft and/or hardware issues, but in a broader sense. Just google hackathon and you will find links to events from Hacking Ikea to Hack the Brain, to hacking the menu, the planet, the future and so on.

When executed well, a hackathon can bring insights, inspiration and ideas. It can be a fertile ground for new networks, projects,

inventions and businesses. However, before hosting a hackathon within the social innovation or cultural heritage domain you should reflect on whether or not the hackathon format is suitable for your needs. There is no 'one size fits all' format for a hackathon that will suit every purpose.

Its success depends for a large part on you. Make sure you know what you want to get out of the hackathon. Prepare well. Bring people with relevant skills together. Create an inspired programme. Make it fun, work hard, collaborate and share results. In the next chapters we share lessons learned, potential strategies and give pointers to create your own successful hackathon. In the add ons to the main text we elaborate on several relevant contexts to this booklet, such as the Europeana Space project and IPR issues and also describe one hackathon more in-depth: the Hacking Culture Bootcamp in Amsterdam in 2015.

## 2. Value of hackathons

You probably heard about hackathons before, or you might have seen one, or even joined one. A hackathon can take many shapes and forms, but for us the defining elements of a hackathon are that it:

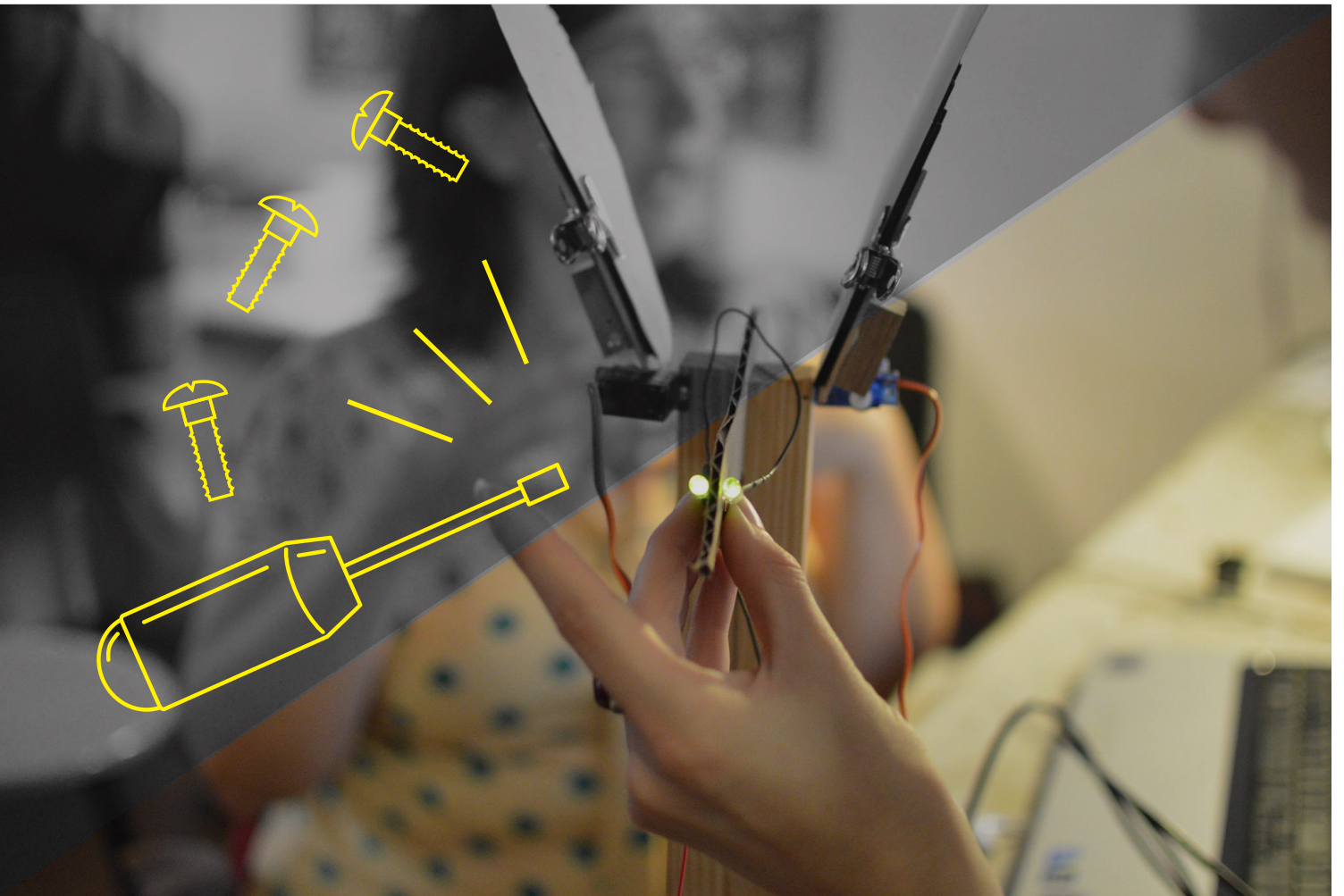
- is a focussed pressure cooker;
- offers a multi-perspective approach;
- helps explore a multitude of new and unexpected creative ideas;
- opens up new ways of thinking about your field;
- allows for new ways of working, reducing restrictions of everyday working environments;
- offers a comfortable place to grow, with positive affirmation for participants.

There clearly is not one single model to accomplish that. Every situation is different, so every hackathon programme needs to be custom made to your specific objectives. Other names that you might have encountered, referencing the same type of approach, could be a design challenge, a game jam, a code fest, a sprint, a maker camp or even a culture hack. In essence they serve the same purpose: addressing the change or challenge that is posed by the advent of (digital) technologies.

Objectives for hackathons might be:

- transformation (jump starting organisational change or domain change (impact), organisational and individual learning, new ways of working (quick-march, visitor-centric, can-do mentality);
- technology exploration (inviting experimentation, through prototyping, advancing the development of new applications);
- social challenge (eliciting civic participation, foster awareness and involvement (ownership), sometimes demographic specific);
- business challenge (exploring business modelling, business innovation, facilitating start ups);
- local impact (connecting to local communities, local issues, building networks);
- data gathering (employing citizen science, data visualisation).

It helps to be clear about what you actually want to achieve in an early stage of preparation.



# What the hack?

*By Frank Kresin*

Hackathons, when defined as 'condensed timeframes where programmers come together to collectively or individually achieve something out of the ordinary' (a more comprehensive definition can be found on Wikipedia) have existed for decades, but became wildly popular after the 2008 Apps for Democracy contest in Washington. That event, that yielded 47 open data apps in 30 days, has inspired a host of contests in over 50 countries (says iStrategyLabs, the creative consultancy that designed the scheme), with hackathons as indispensable components in the mix of events that make up their schedules. Invariably, expectations are high while expenses are low, ideas flow freely and monetary, lasting success is aimed for.

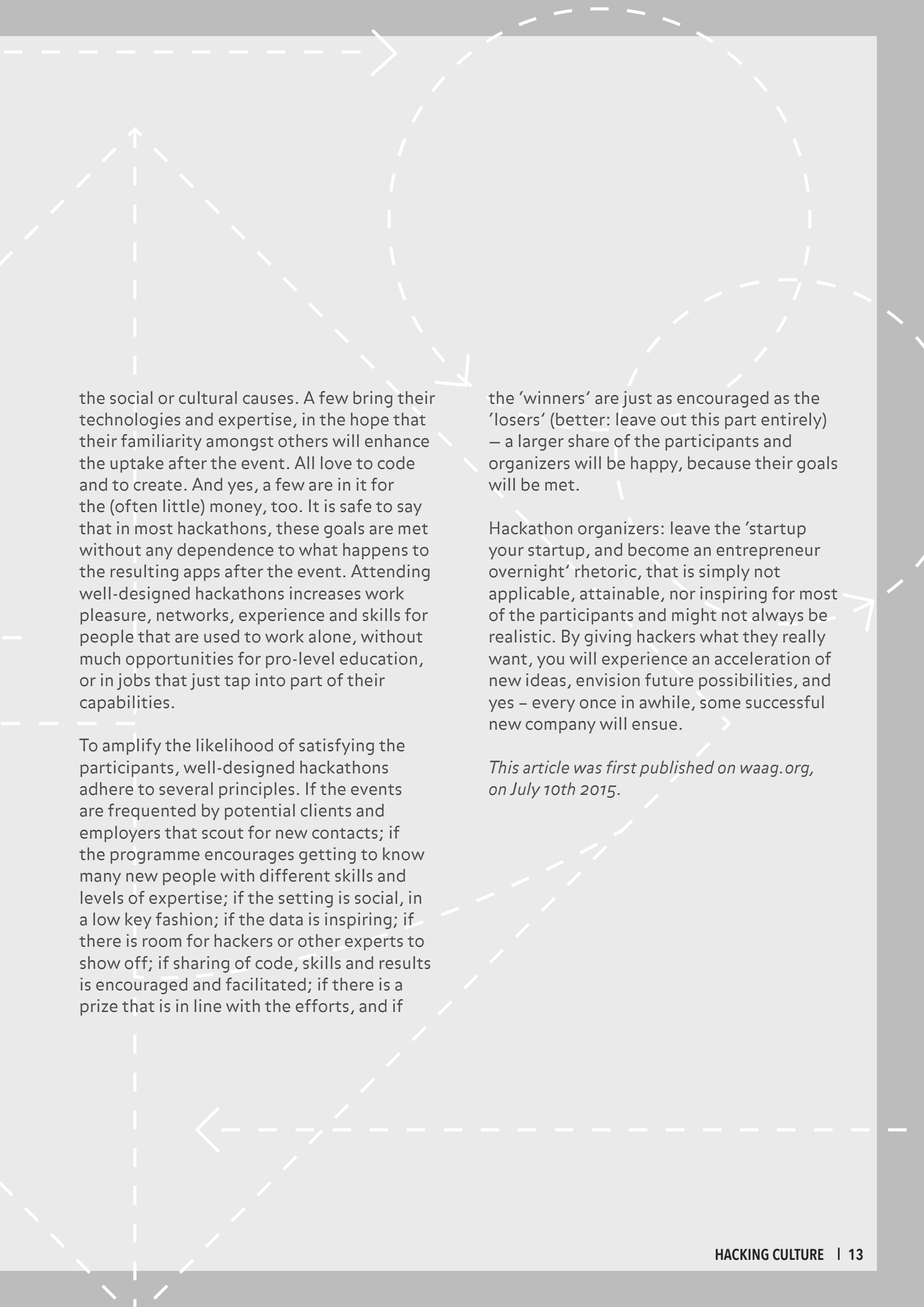
Unfortunately, the eye-catching results of efforts expended by the hackathonistas most of the time quickly fall apart within hours, days or weeks after the prize ceremonies. Results are typically demos or prototypes, never products; often they are based on technology push, instead of societal or market pull; the groups lack designers, entrepreneurs or both; the initial enthusiasm turns out to be less firm than expected... and many more valid reasons that are familiar to organizers and participants alike.

## **How to overcome these?**

Most important; equip the teams with knowledge, coaching and contacts to increase the chance of their survival – a life of the project after the flowers have withered.

But what if the outcome of a hackathon is not a viable business, does not aim at an IPO, and will not survive the first weeks of user scrutiny? Was the energy lost? Or are there other ways in which the experience has been useful, ways that are somewhere hidden below the glitter of winning prizes, starting a company and becoming the next TomTom or Facebook?

After attending and organizing a few dozen hackathons, our answer is a clear YES. There are many reasons for people to join and many to organize a hackathon. Most of the participants value the social part – being and working together intensely with like minded, smart and motivated people. Some are in it for education – being able to tinker with new technologies, new kinds of data, learning tips and tricks from more advanced colleagues. Some participate to meet their new employers or clients – showing off their wizardry skills that have a fairly skewed distribution in the general population. Many participants sympathise with



the social or cultural causes. A few bring their technologies and expertise, in the hope that their familiarity amongst others will enhance the uptake after the event. All love to code and to create. And yes, a few are in it for the (often little) money, too. It is safe to say that in most hackathons, these goals are met without any dependence to what happens to the resulting apps after the event. Attending well-designed hackathons increases work pleasure, networks, experience and skills for people that are used to work alone, without much opportunities for pro-level education, or in jobs that just tap into part of their capabilities.

To amplify the likelihood of satisfying the participants, well-designed hackathons adhere to several principles. If the events are frequented by potential clients and employers that scout for new contacts; if the programme encourages getting to know many new people with different skills and levels of expertise; if the setting is social, in a low key fashion; if the data is inspiring; if there is room for hackers or other experts to show off; if sharing of code, skills and results is encouraged and facilitated; if there is a prize that is in line with the efforts, and if

the 'winners' are just as encouraged as the 'losers' (better: leave out this part entirely) – a larger share of the participants and organizers will be happy, because their goals will be met.

Hackathon organizers: leave the 'startup your startup, and become an entrepreneur overnight' rhetoric, that is simply not applicable, attainable, nor inspiring for most of the participants and might not always be realistic. By giving hackers what they really want, you will experience an acceleration of new ideas, envision future possibilities, and yes – every once in awhile, some successful new company will ensue.

*This article was first published on [waag.org](http://waag.org), on July 10th 2015.*

## 3. Questions before hosting a hackathon

### **Do you have a clear goal and context in mind?**

A specific, measurable goal that all partners can relate to is crucial for an impactful event.

### **Can you build on existing partnerships and networks?**

You want a deeply cross-functional group of people. This is easier if you know who the community you are trying to reach consists of. Invest in building a relationship with the creative (coder) community by visiting or hosting meetups.

### **Are there other hack events to relate to?**

Connect to the organizers of (and participate in!) related hack events, preferably in the same domain, to gain experience. By seeing potential outcomes you will get insight into potential benefits for your organisation.

### **Are you collaborating with relevant partners?**

Create a connection to interesting partners to have a unique and competing programme during a hackathon.

### **What do you want to do with the outcomes?**

If there is no urgency within your organisation to engage with the outcomes, probably a hackathon is not suited for your needs.

### **Are you offering relevant new data or tools?**

A hackathon is dependent on interesting (new) data, software, hardware or tools to work with.

### **What network will be present?**

Will the participants be able to meet accelerators, incubators or potential investors. Creating networking opportunities for participants is an excellent selling point.

### **Do you have access to inspirational speakers?**

Make sure your speakers are relevant to your audience. It is also important that they offer new insights, so think out of the box. Both successful and failed startups can offer real insights.

### **Do you have access to an attractive location?**

When you are spending your free weekend coding, it helps to be in a unique location that you otherwise would not be able to visit.

### **Can you offer interesting prizes?**

Both smaller and bigger prizes can be of interest to the community. Make sure you offer a prize that is of relevance for your participants.

Creativity is  
allowing yourself  
to make mistakes.  
Art is knowing  
which ones to  
keep.



*Scott Adams*



# Frequently Asked Questions about IPR

*By Prof. Charlotte Waelde (Coventry University) and Dr. Anastasia Somerville-Wong (Exeter University)*

## **Question 1: when do issues of Intellectual Property Rights (IPR) come into play in organising a hackathon?**

In many cases both hackathon organisers and participants bring their own tools and content to the hackathon. The space in which innovation with the tools and content takes place is protected only in the sense that it is not open to the general public beyond those who are registered to attend the hackathon. For this reason it is important for hackathon organisers to consider their IP strategy before offering content and tools at the hackathon. They may decide to make the material available only for the purposes of the hackathon or they may decide to use only open source tools and open content to avoid the risk of rights infringement.

If content and tools under protected licences are made available during the hackathon and teams decide these will be used beyond the hackathon, for example if they are going into an incubation and business modelling process, then it is at this point that negotiations will have to take place with the owners of the copyright and an exploitation strategy developed.

If I provide copyright protected content for the hackathon participants to use, I cannot prevent it from being used and re-used indiscriminately beyond the hackathon. However, as with any other content and tools available on the Internet, any third party using the content beyond the terms of the licence would be acting both in

breach of contract and infringing copyright. In the E-Space project a legally and technically protected space was set up to experiment with creative re-uses of high-quality content during a hackathon only, providing an alternative option for those cautious about releasing their content without additional technical protection measures.

## **Question 2: would it not be better simply to use public domain and other open content?**

Open licences would mean that content and tools could be used in an unrestricted manner (subject to the requirements of for example a CC-BY licence which requires attribution) and is often the preferred strategy to alleviate concerns about IP rights. It is appreciated, however, that there is a range of both content and tools available that would be perfect to use to encourage innovation – but which the owners prefer to keep control over.

To give hackathons the greatest opportunity for innovation, to give the rights owners the opportunity to see the innovation that can emerge from these events, and to understand how the tools and content can be modelled for business, the solution is to use content with protected licences (licences which make the content or tool available for use in the hackathon space only) where open licences are not possible. This approach should not lead to something being produced in the hackathon that cannot then be re-used in the real world.

As has been noted above, before the tools



This is an abstract of a article by Prof. Charlotte Waelde (Coventry University) and Dr. Anastasia Somerville-Wong (Exeter University) that was previously published on the Europeana Space website. If you want to read further and find samples of agreements you could use with your participants and partners, please visit the original article [here](#).

or content leave the protected space, agreement would have to be reached over exploitation of the IP.

**Question 3: once I have presented my content and/or tools at a hackathon, have I not already lost my intellectual property?**

Hackathon organisers and participants need to remember that the tangible expressions of their ideas – the tools and the content – are protected by copyright, but that ideas themselves are not. While there is nothing to stop someone else being inspired by ideas, if the expression of those ideas (i.e. the tools and content) is copied, that then infringes the copyright in those works. The intellectual property is not lost.

If it is felt that hackathon participants are more likely to attend, share and develop ideas if they are comfortable that others will not appropriate these without permission, then a simple confidentiality agreement between participants might be used to give that comfort.

**Question 4: can we provide standard/low quality content for the hackathon to reduce the risk of infringement?**

If content providers are concerned about making high quality content available such as high definition photographs for the hackathons, the question must be whether low resolution content is sufficient for the purposes of experimentation. This is a

question for the content owner and those at the hackathon who must ask what the risk will be of opportunities being lost for the content owner, and indeed all parties, if the content is not of high quality.

**Question 5: who benefits from participating in the hackathon?**

Participants engage in a hackathon for a variety of reasons, usually unrelated to financial gain, the outcomes of which are then made available on an 'open' basis.

Some hackathons, such as those in Europeana Space, are conducted with the explicit goal of the 'best' ideas being taken forward to business modelling and incubation. The 'prize' of such a hackathon will be the opportunity to participate in this process of support. It is important to think about whether that will change the dynamics of engagement, and whether those participating will want also to have a 'share' of the copyright that results from exploitation of the tools.

Thinking about the copyright developed in the hackathon is important as the copyright will support the ultimate business modelling process. Any third party looking to invest in the final tools will want to know about the ownership of the copyright in the tools and/or content, depending what it is that is going to be monetised. It is important to ask how the hackathon leaders will deal with this.

## 4. How to: Strategy

We present some practical tools to prepare and structure your hackathon that greatly help us in thinking about the work we do. We will go into how you can think about your motivation and strategy, how to structure the preparation phase and how to support participants in their work during the hackathon. It all starts with your strategy!

As a starting point for your process, plan a session with your colleagues and committed partners to come to shared answers to the questions below. Make sure you write down your thought process and the conclusions you come to and share these notes. If your group tends to drift off into practicalities (“You know what would be nice...!” & “This will never work if we don’t...”), create a ‘Don’t Forget Wall’. This is a space where everyone can write down these thoughts and considerations that are not contributing to the topic at hand, so you can get to them at a later stage in the process.

### Why?

This is the most important question. Why are you hosting a hackathon?

Are you trying to create greater awareness for your nonprofit? Establish a more meaningful relationship with your existing donors, members, and constituents? Find inspiration

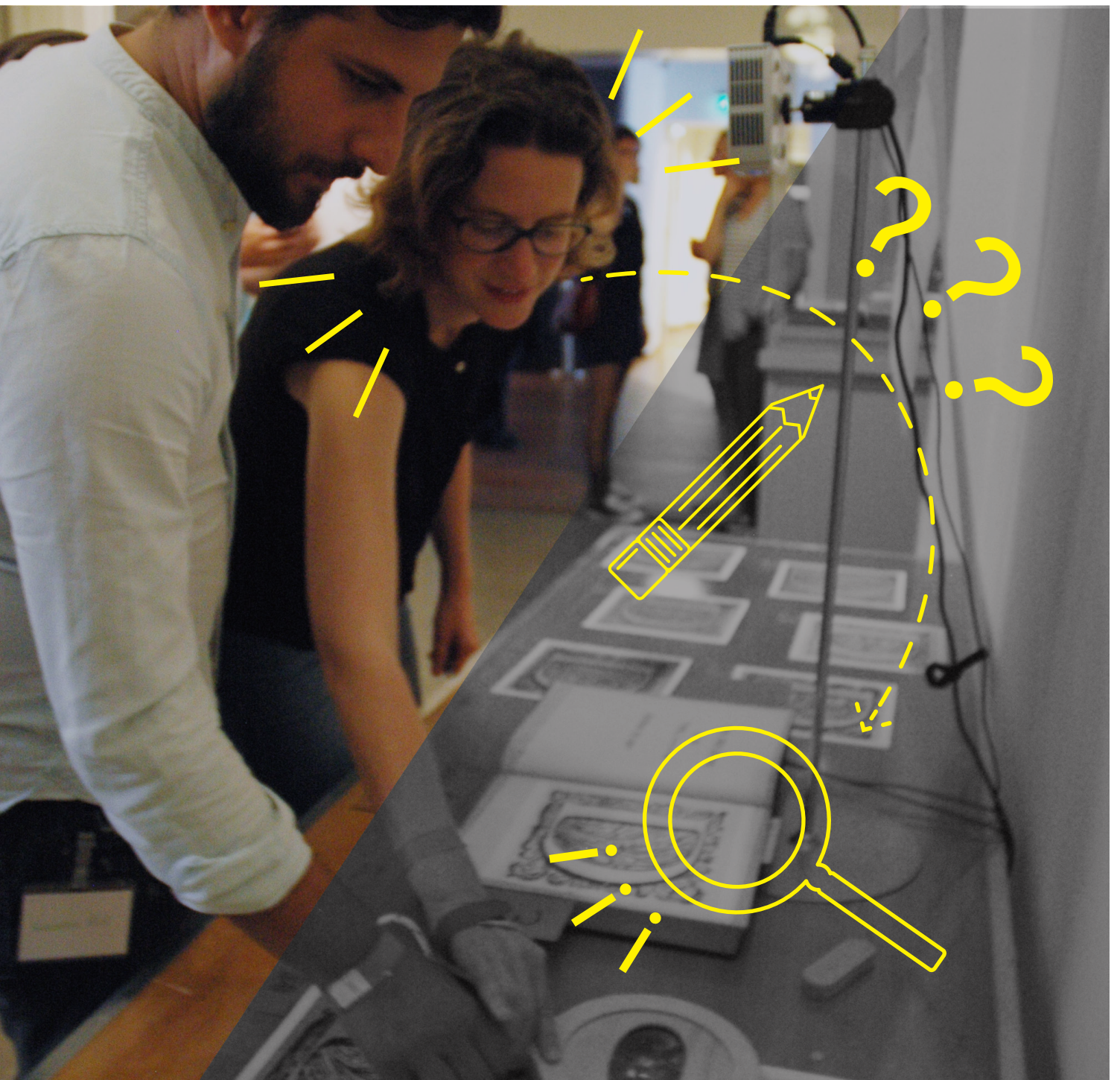
for innovative concepts? Ask yourself, “What will I accomplish by hosting this event, and how will it benefit my audience?” Articulate both the desired goal and the desired outcome.

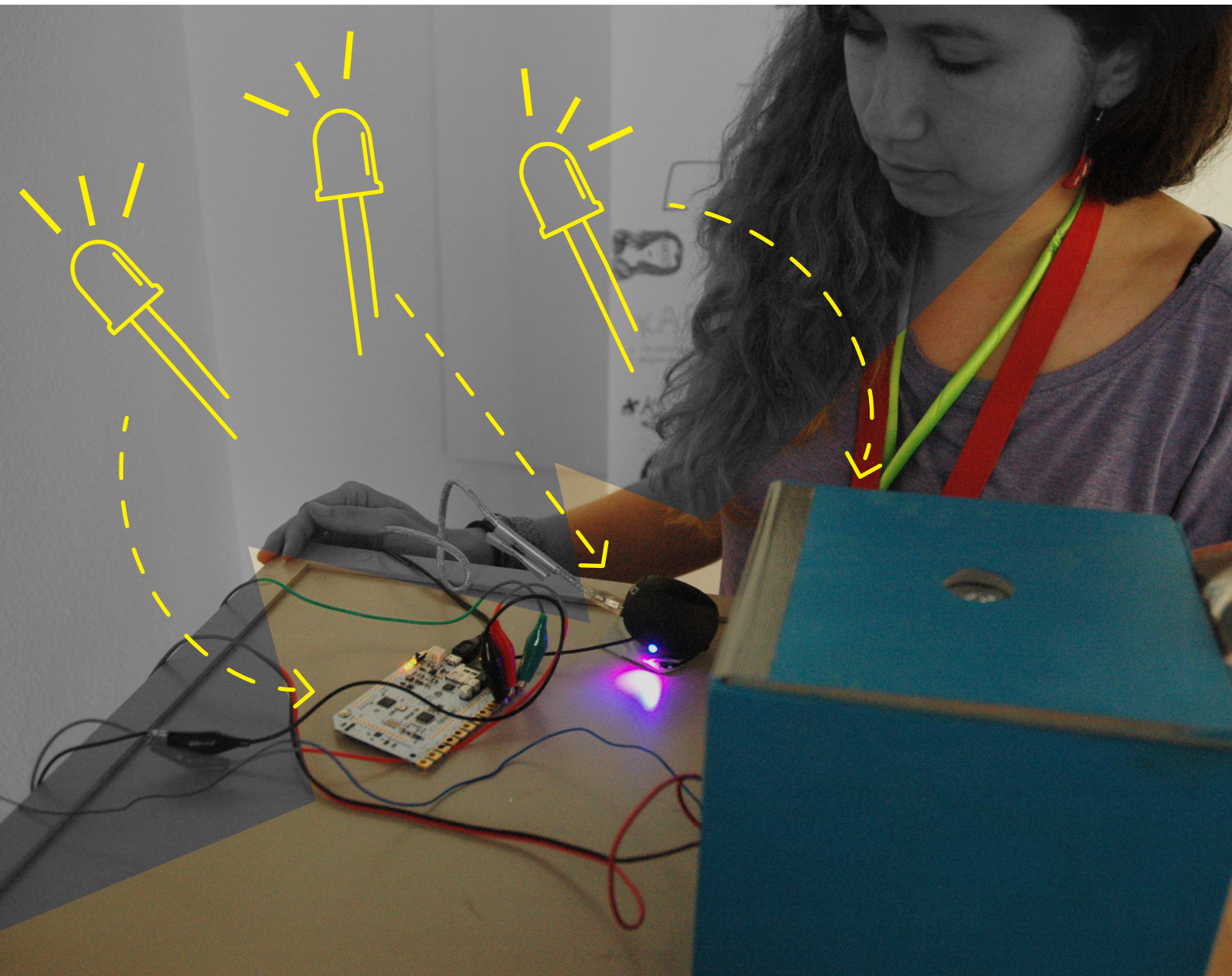
### What?

Align your goal with your event. What will best help you achieve your goal? This is of course not necessarily a hackathon. It could be a workshop, a food or beverage tasting, an auction, a campaign or another type of gathering.

### Who?

Who is your target audience? What catches their attention and motivates them? List segmentation—dividing a larger contact list into a few smaller, more targeted lists based on interests and needs—becomes important. You want people at the event who genuinely want to be there. Maybe you don’t have a target audience, and you want to simply engage as many people as possible for your cause. How will you reach this audience? Use an event management tool to collect registrations and learn what interests your attendees. Social media will expand your reach, get the word out, and generate buzz.





## Stakeholders and incentives

Define your stakeholders. Which (groups of) people have a shared interest in your goal? Think about this question in the broadest possible way: app developers? Entrepreneurs? Government? Cultural institutions? Artists? Researchers?

Define what is in it for them. What are they looking for? You might need to consult people in your networks to find answers to this question. How can you involve your stakeholders, in terms of program, available technologies, other participants and networks available? What type of prize or award can be seen as an incentive? Define the incentives per stakeholder.

## Program

'Over prepare, under structure' should be the guiding principle in preparing for your hackathon. Think of interesting themes that can be explored during the event and the types of speakers that could help participants to consider new angles or perspectives. Which technologies (hardware, software) are needed to enable the types of work you envision? Can you think of exciting interventions that will keep the energy high and inspire participants? Also note that what participants need most is time to work in peace, so don't overflow your event with group-lead activities. At this

first stage, try to define specific aims for your program, and steer clear of creating lists of speakers and activities (post them on the 'Don't Forget Wall').

## Media & communications

How will you reach your stakeholders? What platforms do they have access to? How will you communicate your goal to address the needs of your target audience. In this stage a more general plan or approach is sufficient. At a later stage in the preparation of your hackathon you can define more precisely which communications activities are necessary.

## Where and when?

Date, time, and location are big challenges – especially at the end of the year. Consider sending a short pre-event survey to your audience – one question with a few choices of different dates and locations. Let the results of the survey guide your decisions.

## Reality check

Check the goal, audience/stakeholders & list of incentives. Is the concept program right? Are the incentives attractive? Will you reach your goal?

# Hacking Culture Bootcamp Amsterdam

The aim of the Europeana Space hackathons was to generate concepts and prototypes that could enrol in a business modelling workshop, and that could eventually benefit from intensive guidance towards creating a viable start up. This, in combination with our goal of re-using of digital European heritage and creating a concept within a specific cultural field, provided quite a strict framework for the participants to work in.

Gregory Markus, project leader for the hackathons and at the Netherlands Institute for Sound and Vision, says:

*“Partly due to the communities that each hackathon served, the attention paid to creating something that would have marketability varied. Pilot prototypes also vary greatly. Some are very sophisticated in technical terms so are far beyond what could be realised in a couple of days during a hackathon – others are less innovative but could have more market impact or could be more influential on broader practices, so quite different from the sort of ideas emerging in the hackathons.”*

He does, however, see great potential in using the hackathon format in the context of cultural practice.

*“Hackathons attract a wide array of attendees who are not always interested in cultural*

*heritage. They can come from different backgrounds, have different focuses and be drawn to hack-events for various reasons like problem solving, business development, curiosity, peer pressure or the challenge. There’s is a low threshold of knowledge of cultural heritage needed to attend a hackathon. They are low commitment (1-3 days), they are social, and there is usually free food and/or alcohol involved. It’s not surprising that university students are the main target for hackathon organizers. Hackathons are as much a branding and marketing tool as they are a platform to resource new perspectives and improve interdisciplinary cooperation.*

*← By harnessing hackathons as a marketing platform, cultural heritage will be able to actively and physically work with new audiences, building their rapport with younger generations and being seen not as a museum that one visits, but as a museum that one incorporates into their daily life just like any brand or technology.”*

To give you a better idea of how the hackathons were set up, we will elaborate on the Hacking Culture Bootcamp in Amsterdam, which took place at 8, 9 and 10th of May 2015, at Waag Society in Amsterdam. The participants consisted of 57 students, artists, backend and frontend developers, designers and educators from

the Netherlands, Turkey, Argentina, Serbia and many other places.

### **What did we organise?**

We challenged our participants to create new multi-screen experiences with a focus on digitized historical footage. We planned a 3-day hackathon dedicated to creatives, entrepreneurs, designers, directors and developers, who had the opportunity to experiment with Smart Audio/Video formats and come up with inspiring applications that create new TV experiences for the public or private domain, using Europeana content. The event focussed on Cultural Heritage as Engaging Stories. The participants were challenged to bring history lessons to life, make games for museums, or play with art in a public space. Anything multi-screen was possible, as long as it incorporated multiple devices and heritage material.

### **A new playground for content developers**

During this Europeana Space Hacking Culture Bootcamp hackathonees could experiment with millions of items from heritage institutions all across Europe via Europeana. Through Europeana you can find open data, audio files, photos, paintings, 3D images, historical stories and archival footage. Participants had access to Waag Society's

Fablab, making use of all the machines, from 3D printers to laser cutters. Waag Society facilitated design processes, provided equipment and technological support in collaboration with Proton Labs.

### **Preparation & skills**

Our focus was to develop strong interactive concepts. Having a good idea was enough to join the bootcamp, but being familiar with HTML, CSS, and Javascript (with some optional Java on the server side) was a plus. All technology was provided and supported by Noterik who developed the video application. You can find their open source software toolkit under the GPL3.0 license on GitHub. Of course, participants were also free to bring their own hardware and software. Cultural heritage experts from RBB, Luce, and Sound and Vision were also at hand to share their knowledge about content and creative innovation within the cultural heritage sector.

### **Pre-event**

Four weeks before the hackathon we hosted a pre-event that was attended by 55 participants. The event lasted one evening and provided the participants with an introduction into the practicalities of the hackathon (what, when, how, why).

We also went into the technical support that would be available during the hackathon and directed participants towards the technical toolkit that was already available on Github for this specific event. Teams were assembled during the pre-event and we guided everyone in team building exercises. There was time to ask questions and to get to know each other.

Our main aim was to make sure everyone was well prepared and could get a good and speedy start of the hackathon weekend. We see this as one of the crucial elements in organising a successful hackathon. It greatly helps in making sure that all participants that signed up are committed to the event, especially when the event is free. It also serves as a kick off meeting where the spirit of the hackathon can be established: open dialogue, inspired, collaborative, inclusive, innovative, social and fun.

### **Public event**

As part of the Hacking Culture Bootcamp, we also organized a debate where we talked with experts and the public about media strategies and the potential of cross-media,

interactive concepts for broadcasters and museum sector. Which new technologies are available, and how can we come up with useful applications for these areas? This public event took place on the Friday evening of the hackathon.

We started with practical examples by looking at new forms of storytelling and strategies to engage the public. In the selection of speakers we made sure to highlight different types of expertise, to give a broad spectrum of angles the participants could focus on in their own work. Good speakers can also greatly help in generating media attention for the event. In future events we would ask speakers to remain involved as coaches during the hackathon, to ensure that there is a follow up to the inspiration they provide in their presentations.

### **Judging**

Anything multi-screen could qualify as long as it incorporated multiple devices and made use of digitized cultural heritage content. The focus was on the project's potential applications rather than the content used.



The jury looked at several aspects of each concept:

- Relevance to and value for the cultural heritage sector. Does the proposition offer a new application or perspective on the use of the digitised cultural heritage content and/or the services made available by Europeana? Does the proposition use, re-use, or facilitate the use or re-use of digitised cultural heritage material? It is important to remember that these projects are not only confined to the museum space. Participants are free to choose their own field for exploration.
- Business potential & job creation objective. Does the proposition hold a strong position against current and likely competitors? What is the composition and size of target market(s) for this proposition?
- Likelihood of success. How likely is the proposition to be adopted by users? Does the team have the skills and capacity to successfully accomplish and launch a new business concept?
- Innovation & quality & uniqueness. How innovative, new, or original is the idea? (New technology, original approach, potential uptake by target users) What is the quality of the concept? (Form, function, aim)

The jury consisted of six professionals with different expertise and interests. Groups were invited to pitch their concept and prototype to their peers and the jury. We provided the jury with a scoring template that reflected the aims of the hackathon, but that also left room to go into other aspects that were relevant to the judges. We instructed the jury to formulate feedback points for each group, not just the eventual winners. The hackathon ended with the festive announcement of the winners and some drinks.

The 'viable businesses' aspect proved to be challenging during the bootcamp. It is necessary to communicate such a goal clearly from the onset of the hackathon, without limiting participants in their thinking ("Will I be able to sell this?"). Including a business case coach that helps groups in this area would help steer the results in the right direction. We would also advise that the jury does not limit its decision to the assessment of business cases. Sometimes it might be better to develop a business case for a truly creative, inspired prototype, than to try and market an idea that misses originality.

## 5. How to: Prepare

Preparing your hackathon consists of different phases. Below we have distinguished between the main phases of preparation. You can see it as a checklist, to be used as a reminder to pay attention to various elements of production, communication and building an inspiring program.

### It's a go!

You have decided to organise a hackathon. Time to set up a team with a clear division of tasks and responsibilities. Note that there is no such thing as starting too early. Start planning the hackathon at least 6 to 4 months in advance.

### Find local partners

A hackathon strives to be a multidisciplinary event. At the foundation of the hackathon is the organisation that can provide and support the hardware and software that will be used. Depending on your own expertise, you might need to find a partner to join for this.

### Local partner meeting 1

Organise a first pre meeting with local partners: Local partners all bring their specific expertise and motives for participation to the table. It is therefore good to come together to discuss everybody's goals and contribution.

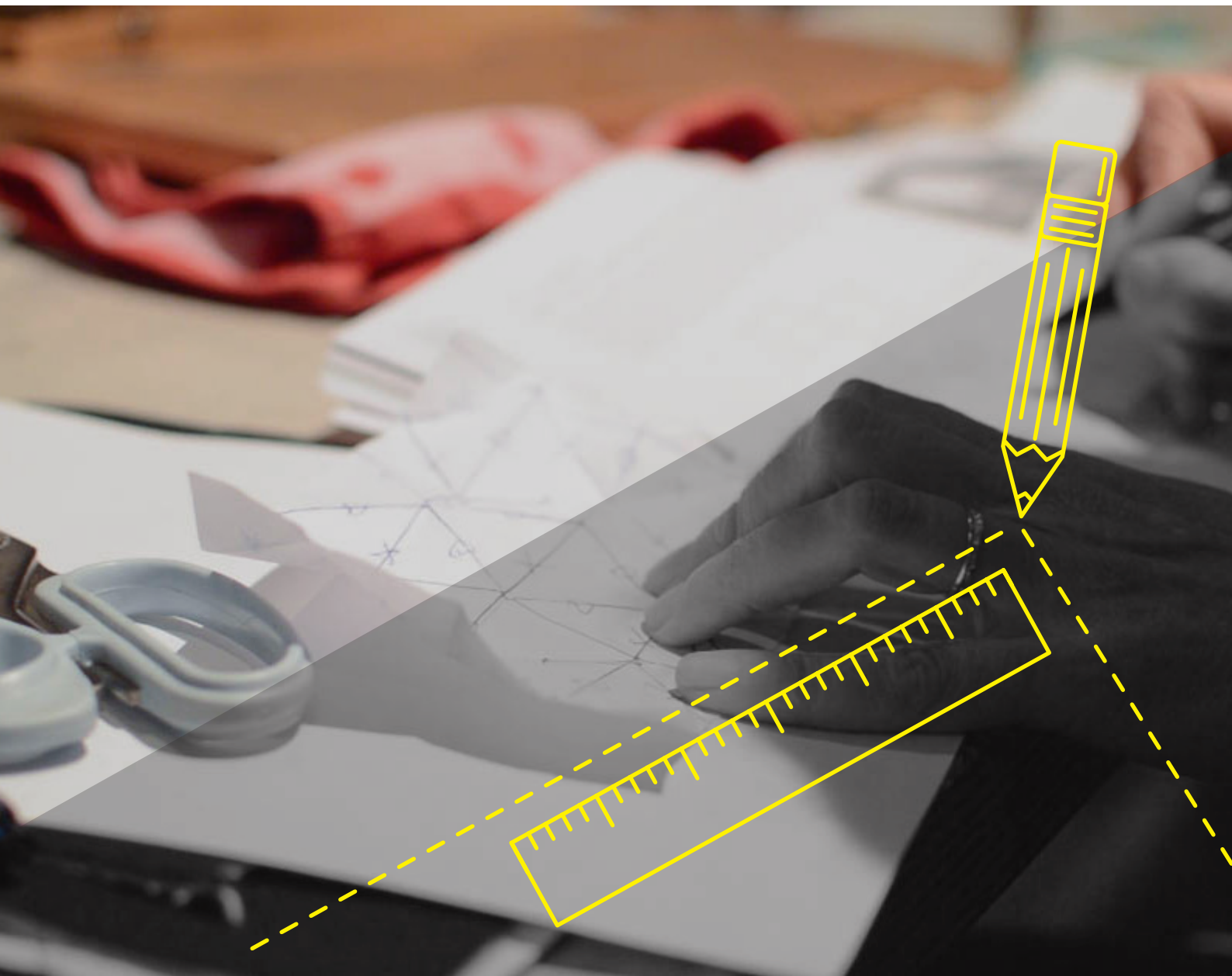
In organizing the event, try to keep the motivations of individuals in mind. Make sure you develop clear expectations between partners, that are also based in the available time and budget per partner. Make sure you know who is involved at what stage of the preparation process and know who to inform at different stages.

### Pick a date

You really can't communicate the specific date early enough. In case you also organise a pre-event, make sure to also pick a date for this already. The pre-event should take place between four and eight weeks before the hackathon itself. When the date is picked, be sure to communicate this online. This can be done through an embedded or stand alone event website. If you can already say something about the program then that would be great. Be sure to mention the theme and possibly also the speakers for the event.

### Reserve the facilities

Now that the date is set, you should definitively reserve the right spaces and facilities. Keep in mind that people might go off soldering parts for their projects, or sewing suits, making a wooden framework, or... The possibilities are truly endless and depend on the preference and creativity of





your participants. A makerspace like a FabLab is therefore a good location for a hackathon. Make sure to reserve different separate rooms for the hackathon, as many people will probably try to escape a busy, crowded room and try to find their own spot to work in peace.

## **Build your program**

It is now time to create a long list of potential speakers, contributors, activities, interventions. Find interesting speakers that connect to the chosen theme, and that can truly inspire the participants. Dream big and place your top picks for the program at the top of the list. Approach speakers and others that you would like to contribute to part of the program. When addressing potential speakers, be open to their ideas and try to incorporate your approach with their interests. This makes it more attractive for people to contribute to your hackathon.

Consider whether parts of your program should be public, such as lectures or final events. The goal of having a public event is to inspire participants and to attract a wider audience. The best time to do this is on the first night of the event. This enables participants to converge insights from the presentations in their hackathon projects. Start creating a timeframe for your event, in which there is plenty of time to work, but also a structured framework that provides

participants with regular feedback while they are still developing their ideas. You can read more about creating a well balanced work flow further on in this piece.

## **Find participants**

To host a great event you must know which people to expect. Make sure that you get a good idea of people's backgrounds to make sure that artists, scientists or developers are not under represented. You need a balance in the level of expertise the participants bring, and technical expertise and design expertise is often the most sought after in hackathon groups. Also keep this in mind when spreading the word / scouting for the event. A well-balanced group of participants will add to the quality of your event. With this in mind, you could choose to have participant apply and then select a balanced and diverse group to participate.

To find your participants, create a list of start ups, (alumni) students, professionals and meetup groups to address. Potentially collaborate with universities and local incubators/accelerators. Find participants from previous hackathons in similar areas that can advance their idea during your event. A minimum of 40 participants is usually necessary to have a well sized group that represents the different types of expertise needed.

## Find a jury

If you are planning of finalising the hackathon with project presentations and awards you should also find a jury. As with the event itself, it would be great if you could set up a jury that is as multidisciplined as the participants. That also reduces bias in favor of one specific field. If your (project)organisation includes advisory board members then it's definitely a good idea to include these in the jury. For the sake of the theme and direction, it is wise to formulate jury criteria. Sharing this with the jury also creates clarity on what they are asked to do.

## Local partner meeting 2

Just before the pre event it is wise to regroup with your local partners once more. Of course you have kept them informed along the way. However, it is still a good idea to discuss final things like hardware and roles of their representatives at the pre-event and main event.

## Host the pre-event

The pre-event does not have to last long. The goal is to get participants to meet each other and to share information on technology and first thoughts on concepts to work on during the later hackathon. Make sure that when it ends, all participants are looking forward to the main event even more. If you have

international participants that cannot join the pre-event, you could involve them by setting up a live-stream. This is quite easily done through YouTube.

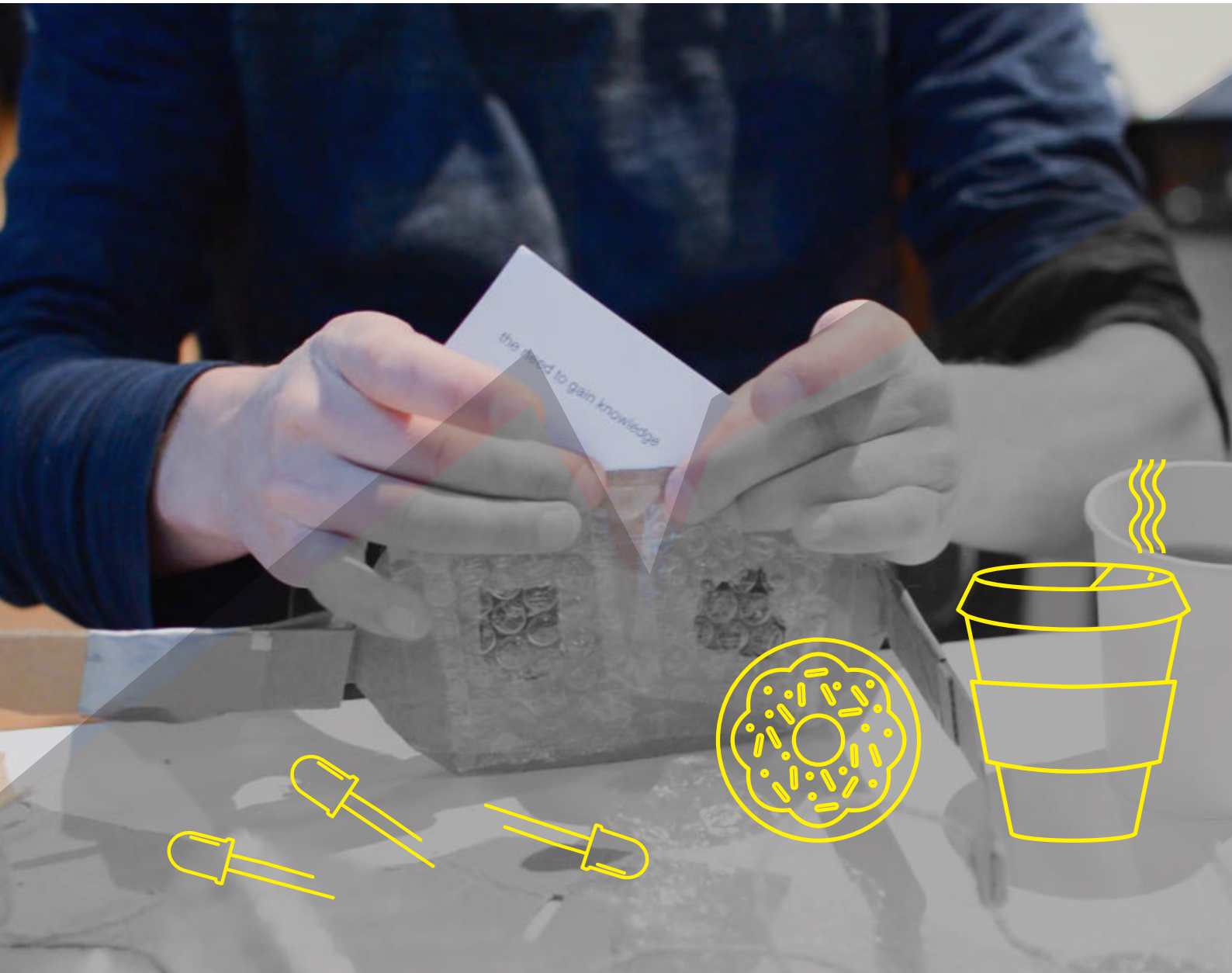
## Final productional issues

If you will be awarding projects in your hackathon, think of proper awards. Think of a system to monitor the distribution and retrieval of hardware, make sure that the staff is informed, make someone responsible for progress of the program itself, communicate the program to participants, arrange catering, reconfirm speakers, etc. etc.

At the beginning of your hackathon, make very clear to your participants which (technical) expertise is available for their support and urge them to use this expertise. The involvement of technical support during the hackathon greatly advances the quality of the prototypes. Also communicate clearly all the available resources to them and provide them with an overview of online resources they can use. You can do this in advance.

## Time for a hackathon!

Remember to create an open and welcoming environment, be attentive to the needs of participants, and most importantly: have fun!



# The spaces of Europeana Space

The objective of Europeana Space was to increase and enhance the creative industries' use of Europeana and other online collections of digital cultural content, by delivering a range of resources to support their engagement. The use of digital cultural heritage by the creative industries is still limited by factors including issues around the IPR status of content and the need for business models demonstrating the potential for exploitation of available content. In addressing these problems Europeana Space has brought together high-level key expertise from the European creative industries, technology-based enterprises, the cultural heritage sector and higher education.

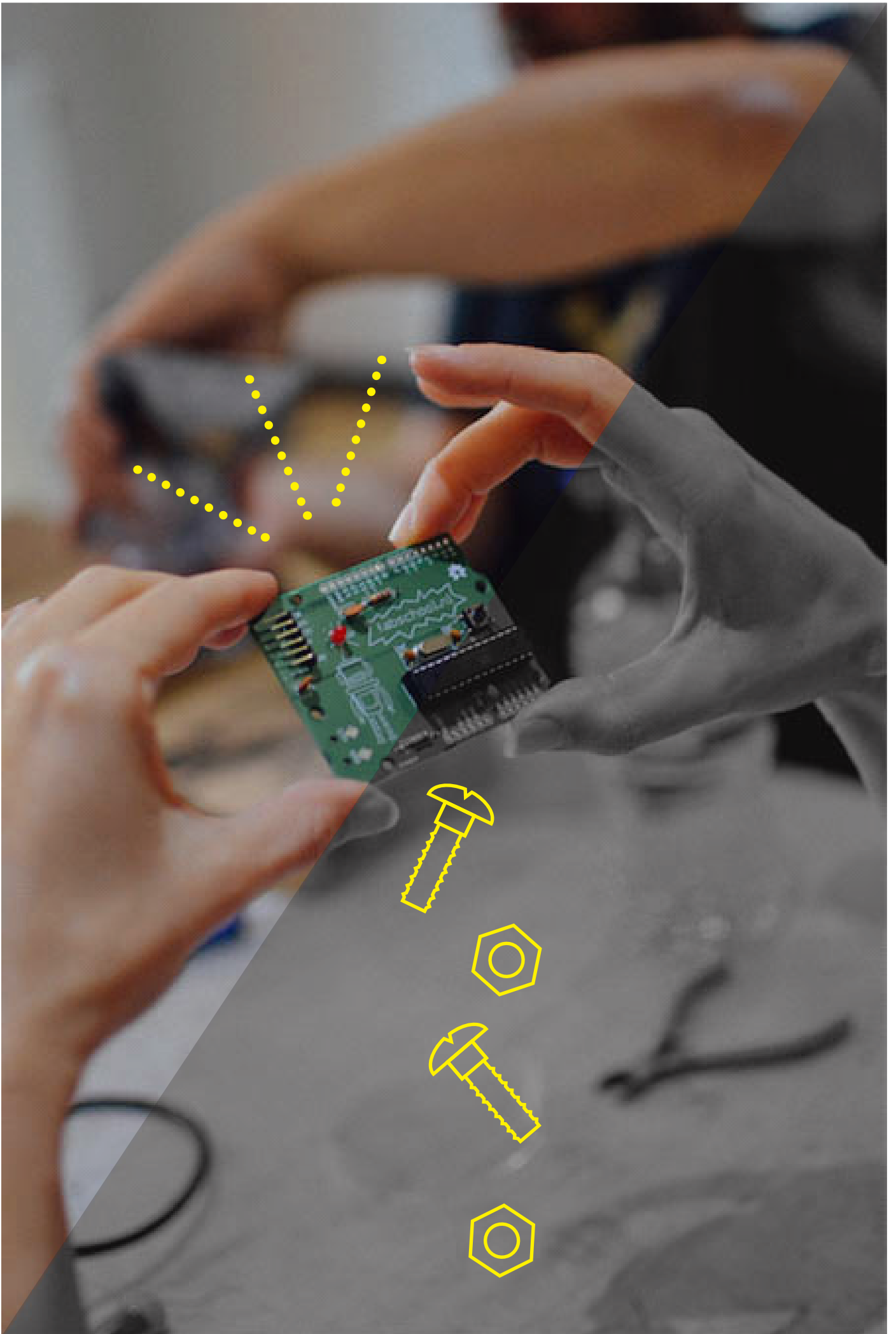
Europeana Space has built three Spaces, the Technical, Content and Innovation Spaces: physical and virtual environments to enable the creative re-use of cultural content. They contain online guidelines and tools; a technical framework; a platform for IPR management; hackathons and workshops to inspire and support content providers, technology partners, creators and industry bodies to develop new content-based services and applications; and incubation/mentoring by business experts to stimulate and support creative entrepreneurship. Six themed pilots presented innovative models of content use in interactive TV, photography, dance, games, publishing and cultural heritage, and five Demonstrators showed best practices for educational purposes. A wide-ranging dissemination and sustainability programme ensured Europe-wide spread of the best practice as developed and shared through the project.

Europeana Space addressed all sectors of the creative industries, from content providers to producers, exhibitors, artists and makers of cultural/creative content, publishers, broadcasters, telecoms and distributors of digital content. Its impact is significantly increased use of Europeana and new opportunities for employment and economic growth within the creative industries through continuing development of innovative applications and services based on Europe's rich digital cultural resources.

The Europeana Space hackathons were organized to engage creative SMEs, developers and individual makers and producers with Europeana content. Each hackathon had the objective of identifying business ideas, the winners would have the chance to refine them further during business modelling workshops and ultimately a three month period of business incubation support. Each hackathon had a specific theme based on the respective pilot it's partnered with. These were the Europeana Space hackathons:

- Hacking Culture Bootcamp - Europeana TV pilot - 8-10th of May 2015 in Amsterdam.
- Hacking the [Dancing] Body - Dance pilot - 20 & 21st of November 2015 in Prague.
- Hack the Book Festival - Open & Hybrid Publishing pilot - 22-24th of January 2016 in Athens.
- Hack your Photo Heritage - Photography pilot - 25-27th of February 2016 in Heverlee.
- The Future Museum Challenge - Museums pilot - 17&18th of March 2016 in Venice.
- Art//Games//Hackathon - Games pilot - 16&17th of April 2016 in Nottingham.





# 6. How to: Create an inspiring program

The success of a hackathon also depends on the actual program. Below you find an image of the Bootcamp Curves, which was developed by Karen van der Moolen (Waag Society) to demonstrate the process people go through when they are creating something new together in a pressure cooker event, such as a hackathon. It is in part inspired by the Kaos Pilot business school pedagogy, but is also deeply grounded in the work we do at Waag Society. Understanding the different phases participants go through will greatly help you in designing a program for them, one that fits their needs and is supportive of their creative process. The Bootcamp Curves works from three basic principles:

## 1. Level playing field

A hackathon is built on what we call a level playing field. Level playing field is both an actual physical environment and a mental space at the same time. Some of us feel they have not created anything physical for a long time. To cross that bridge, we like to stress making is a creative process in which everybody has a role and is able to bring knowledge and expertise to the table. During a hackathon we need a safe space for participants to embody their roles and be respected in each role.

On a physical level, the space needs to facilitate creation, movement and dialogue. Obviously we need stuff and tools to inspire us and be creative with. To shift from the mental to the “physical” mindset of making, the space needs to invite people to move around, take different postures, to sit, stand, walk around depending on the activity at hand. Finally a space needs to invite people to start a dialogue on their work or progress.

## 2. Overprepare, understructure

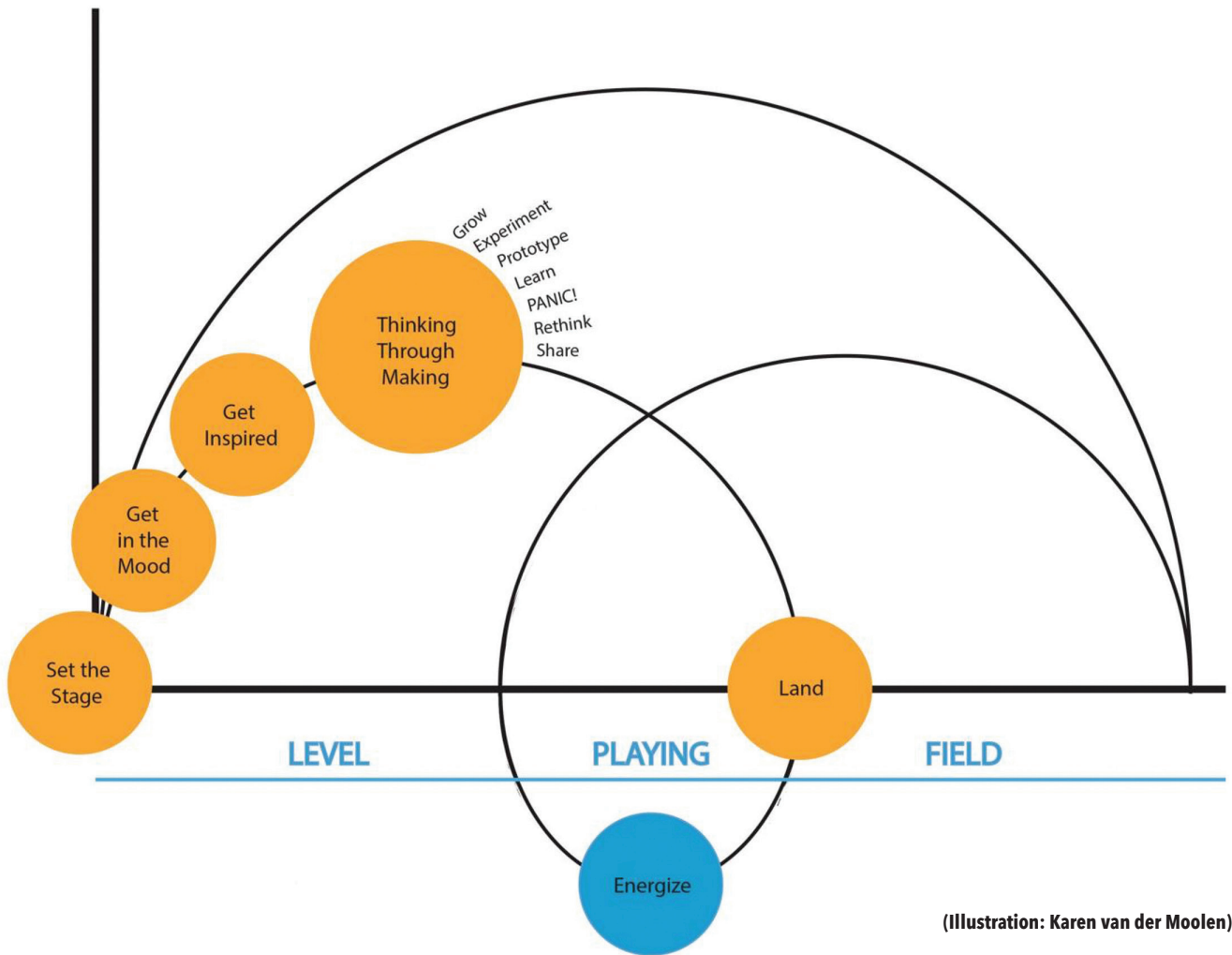
Participating in a hackathon is a creative process that has its own dynamics and each group handles a creative process differently. Some groups need more time during one part, some participants need additional knowledge or skills, while others are more experienced and able to work independently. It is the facilitator’s role to guide participants to make sure they reach their end goal, but be flexible in how to get there.

Making sure there are many tools (both technological and old school paper, clay, fabrics, drawing materials, etc.), professional guidance, a suitable space, books, inspiring speakers, good food, and time to sometimes take a step back, can be seen as over preparing. Not forcing any of this upon the participants, but monitoring their process and assessing when something can be of help, can be seen as under structuring.

## 3. Set that curve, and land it

Even if the process looks unstructured, it really is not. Each hackathon, each single day, even within a specific activity we set a curve (a path towards our (sub)objective), and reach our goal (we land it). On the way we go through the same elementary stages: we set the stage, we get in the mood, we get inspired, we think through making, we land. We learn from our mistakes and moments of panic. We land and see perspective again. We go home, get rest and continue, realizing that we need to take one step back to set that next curve.

We will shortly go into the different stages of this bootcamp curve, but refer you to the original publication if you wish to learn more.



(Illustration: Karen van der Moolen)

## Stage 1. Set the stage

In the beginning of each hackathon we need to take time to create alignment, commitment and ownership. Participants need to be engaged and feel empowered to make the experience a (personal) success.

- We address roles and expectations.
- We stress making is a process in which everybody has a role and is able to bring knowledge and expertise to the table.
- To be able to go with the creative process, we deliberately do not communicate a time stamped schedule.
- We ask participants to trust us and go with the flow.

## Stage 2. Get in the mood

Starting any bootcamp, we like to tune in to the participants' maker mindset in terms of creativity and social dynamics from the very first moment.

A maker mindset is an attitude that gets us into that modus of doing what comes naturally. To first do, then think and reflect. To not be scared of failure, limited by group pressure or rational judgements. To be inspired by sharing things that are not finished, to open us up to alternative ideas or solutions you did not think of before. Creative exercises that are focused on collaboration, quick prototyping and getting to know each other are very suitable to get in the mood.



### **Stage 3. Get inspired**

Creative output does not exist on its own. No one is creative in a vacuum. Most creative processes have started even before you actually realise it.

Our everyday lives form a basis for the creation of new things from our personal perspective. Inspiration can come from many sources. One can do various inspirational exercises, demonstrations, arrange speakers, inspire people to use their senses and encourage dialogue.

### **Stage 4. Thinking through making**

This stage takes up the biggest part of a bootcamp programme. Participants form groups, they experiment, prototype, learn skills where needed, panic, rethink and share. This is not by definition a linear process though. Teams will go through many iterations, taking steps back and forth.

### **Seed and grow**

More important than anything is that individual team members feel passion and pride for the project they are working on. To get teams and ideas to seed and grow, depending on the maturity of ideas or the team at the start of a hackathon, one can use (a combination of) techniques such as elevator pitching, facilitated dialogue, prototyping and self-organisation.

### **Experiment**

To get from idea to prototype it is essential the participants create a common understanding of the project. It is also helpful to play around with materials exploring functionalities, dynamics and shapes. Participants are encouraged to make their concept tangible. Making it physical will trigger conversation on the meaning of the core concepts and relations, reveals challenges and supports the team to decide on next steps.

### **Prototype**

This part of a hackathon typically takes most of participants' time. Using any of the tools and materials available they design, code, solder, print, whatever it is they need to do to make their project become reality. It doesn't have to become technical though; there is also such a thing as a paper prototype.

### **Learn**

When it comes to learning we like to follow a demand driven approach. Most likely there will be a moment when participants or teams need knowledge or skills to take a next step in their process. We encourage them to seek information from various sources: peer-to-peer, video tutorials, google or more traditional workshops. Workshops can be organised on a time schedule or organised on the spot when needed.

## Panic

In any creative process, there is always a moment (or many), when participants are not sure they are heading in the right direction. They are confused about their goals, solution or skills. Don't worry. It is part of the game. It is not really a step they actively take, but a mental stage they will find themselves in. Best thing to do is to stimulate them to rethink and share their troubles within their team, or look for feedback from outside the team.

## Rethink

At the end of a day's worth of designing, coding, soldering and printing in subgroups, it's important for a team to touch base again. How are they doing? They are asked to go back to take a fresh look at their experiments or initial concept designs. Knowing what they know now, does this change anything? Or do they want to add anything? Are they on track? This is a very important reflective moment, that keeps the team members focused, makes them check in with the reality of their progress and decide on next steps.

## Share

During any moment in the process it can be useful to share the progress with others outside of the team. Sharing the work with people from outside will give participants insights, connections, knowledge leads, and/or new inspiration. It can also trigger internal team discussion and support alignment of expectations and establish focus.

## Land that curve

The final stage of any bootcamp is to land that curve. As we like to start with a check-in, now we check-out. We conclude our work, take a step back and take time to absorb it all. We share our work. What did we do? How did we do it? What was the impact it had on us? How do we feel? What could be next? It will help us to take anything we do to the next level.

## And finally, some tips and tricks

- Make sure the events are frequented by potential clients and employers that scout for new contacts;
- The programme encourages getting to know many new people with different skills and levels of expertise;
- The setting is social and inspiring in a low key fashion;
- The available data and technology is existing and/or exclusive;
- There is room for hackers and other experts to show off;
- Sharing of code, skills and results is encouraged and facilitated;
- There is a prize that is in line with the efforts, and if the 'winners' are just as encouraged as the 'losers' (better: leave out this part entirely);
- Equip the teams with knowledge (from coders, to designers, etc.), coaching and contacts to increase the chance of their survival – a life of the project after the flowers have withered.



MOBILITY UPSIDE DOWN

## 7. Further reading

There are a lot of sources that can help you in setting up your own hackathon. We have selected the sources below for further reading and as a reference to this publication.

On the Europeana Space hackathons, through the official project website:  
<http://www.europeana-space.eu/hackathons-home/>

The Quick-start Guide to Setting Up a Hackathon (by Lighthouse Labs, created by Don Burk): <https://www.lighthouselabs.ca/blog/the-quick-start-guide-to-setting-up-a-hackathon>

GLAM Hack-in-a-box, A short guide for helping you organize a GLAM hackathon (Created by DPLA Community Reps Chad Nelson and Nabil Kashyap): [http://dp.la/info/wp-content/uploads/2014/10/DPLA\\_HackathonGuide\\_ForCommunityReps\\_9-4-14-1.pdf](http://dp.la/info/wp-content/uploads/2014/10/DPLA_HackathonGuide_ForCommunityReps_9-4-14-1.pdf)

Guide to Hackathon – What, Why, How and Examples, through Cleverism:  
<http://www.cleverism.com/guide-to-hackathon/>

Hackathon, How to use the concept of a software hackathon within the NHS (Version 1.3, 21 September 2015. Created by Olly Benson): <http://theedge.nhs.uk/wp-content/uploads/2015/10/Hackathon-guide.pdf>

How to organize a Business Lounge? A guide to make it a success (Created by Waag Society for Apps for Europe):  
<https://waag.org/sites/waag/files/public/media/publicaties/business-lounge-guide.pdf>

How to run a hackathon, Understand your goals (By Socrata): <https://www.socrata.com/open-data-field-guide/how-to-run-a-hackathon/>

The MLH Hackathon Organizer Guide (By MLH and community contributors through Gitbook): <http://guide.mlh.io>

How to run a successful hackathon, A step-by-step guide by Joshua Tauberer based on running and participating in many hackathons: <https://hackathon.guide>



The How To Guide For Organizing a Successful Hackathon For Social Good (By Naureen Nayyar through Dutiee, February 2012): <http://www.dutiee.com/guide-organizing-successful-hackathon-social-good>

Report detailing strategy and outcomes of the hackathon “1001 Storytelling hackathon for social impact” in Vienna, 15th to 17th of April 2016: <http://1001.impacthub.net/>

Hackathons, Why co-location? (By Gerard Briscoe, Tarek E. Virani and Mariza Dima of Queen Mary University of London. January 2015, on Creative Works London): <http://www.creativeworkslondon.org.uk/wp-content/uploads/2013/11/HackathonsColocation.pdf>

Digital Innovation: The Hackathon Phenomenon (By Gerard Briscoe of Queen Mary University London and Catherine Mulligan of Imperial College London. May 2014, on Creative Works London): [http://docplayer.net/8689852-This-research-was-supported-by-the-arts-and-humanities-](http://docplayer.net/8689852-This-research-was-supported-by-the-arts-and-humanities-research-council-grant-number-ah-j005142-1-digital-innovation-the-hackathon-phenomenon.html)

[research-council-grant-number-ah-j005142-1-digital-innovation-the-hackathon-phenomenon.html](http://docplayer.net/8689852-This-research-was-supported-by-the-arts-and-humanities-research-council-grant-number-ah-j005142-1-digital-innovation-the-hackathon-phenomenon.html)

The Bootcamp Curves (By Karen van der Moolen of Waag Society. September 2016): <https://medium.com/@karenvdmoolen/the-bootcamp-curves-835e3dd467a7#.suerg8bof>

Hack the Brain Brainbook, A shared manual for organizing Hack the Brain hackathons (By Lucas Evers, Christine van den Horn, Tessel van Leeuwen and Jurre Ongering of Waag Society and Aleksander Valjamae): <http://waag.org/sites/waag/files/public/media/publicaties/hack-the-brainbook-manual.pdf>