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Community Digital Storytelling for Collective Intelligence: Towards a Storytelling Cycle of Trust

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Abstract

Digital storytelling has become a popular method for curating community, organisational and individual narratives. Since its beginnings over twenty years ago, projects have sprung up across the globe, where authentic voice is found in the narration of lived experiences. Contributing to a Collective intelligence for the Common Good, the authors of this paper ask how shared stories can bring impetus to community groups to help identify what they seek to change, and how digital storytelling can be effectively implemented in community partnership projects to enable authentic voices to be carried to other stakeholders in society.

The Community Digital Storytelling (CDST) method is introduced as a means for addressing community-of-place issues. There are five stages to this method: preparation, story telling, story digitisation, digital story sense-making and digital story sharing. Additionally, a Storytelling Cycle of Trust framework is proposed. We identify four trust dimensions as being imperative foundations in implementing community digital media interventions for the common good: legitimacy, authenticity, synergy, and commons. This framework is concerned with increasing the impact that everyday stories can have on society; it is an engine driving prolonged storytelling. From this perspective, we consider the ability to scale up the scope and benefit of stories in civic contexts. To illustrate this framework, we use experiences from the CDST workshop in northern Britain and compare this with a social innovation project in the southern Netherlands.

Keywords

Digital Storytelling, Communities, Sense-making, Trust, Collective Intelligence, Social Innovation, Activism

Introduction

The Collective Intelligence for the Common Good project seeks to transform society for the better by improving civic engagement and enabling democratic decision-making to collectively develop solutions to address societal challenges (Schuler et al. 2015). At the very core of issues located in civic contexts, stories of every day lived experiences are to be found. Storytelling has long been used as a vehicle for learning and dialogic encounters have been demonstrated to be an effective method of affecting change, from the board room of the World Bank to the illiterate poor of Brazil (Denning 2001; Freire 1996). Story-telling and story-listening served both Stephen Denning and Paulo Freire well respectively, and the countless people that benefitted from their methods. The success of storytelling as a persuasive method is well publicised (Chomsky 2002; Couldry 2008; Lambert 2006) and is increasingly being incorporated into community partnership projects through digital forms (Freidus & Hlubinka 2002; Hartley & McWilliam 2009).

Digital Storytelling, or DST, has been evolving as a community movement over the last 20 years, largely due to the pioneering work of the StoryCenter (formerly the Centre for Digital Storytelling, or CDS), as set out in Lambert, 2006. Broadly speaking, DST refers to the process of combining narrative and digital technology. This can span a wide range of methods and outputs; those processes closely based on the StoryCenter model are referred to as “classic digital storytelling” (Lundby 2008) and typically occur over a three-day period in a workshop format (Lambert 2006). The act of reflection in the form of digital storytelling has been identified as a transformative tool for personal, organisational, and community development (Freidus & Hlubinka 2002). Sharing stories has been seen to strengthen community, and beyond that, digital stories as artefacts hold the potential power to mediate relationships amongst community groups (ibid.).

In the past few years, increasingly powerful platforms are becoming available for making digital storytelling more “captivating, interactive and immersive”¹. However, the tools are not the real issue: Instead, the multiple sensitivities and conflicted roles within community spaces need acknowledging and addressing for the storytelling agenda to become meaningful in a Collective intelligence context. How can shared stories give impetus to community groups to identify what they seek to change and how can digital storytelling be effectively implemented in community partnership projects to enable authentic voices to be carried to stakeholders in society? Such questions become ever more pressing in a society where a continuous process of collective sense-making between multitudes of stakeholders is needed, such as in collaborative stakeholder engagement networks and social innovation - the process in which relevant societal stakeholders jointly develop solutions to wicked problems that none of them can solve on their own. (Aakhus & Bzdak 2015; de Moor 2015).

What is lacking in many contemporary tool-oriented DST approaches is that they mostly focus on the *production* of the stories, and in classic DST models the creative

¹ A curated list of tools that facilitate creation of digital storytelling in the wider sense, where digital media can be layered with interactivity to make stories more immersive: <https://www.journalism.co.uk/news/9-tools-for-journalists-to-produce-immersive-stories/s2/a554425/> [accessed 01 February 2016]

representation of the *personal journey* is often given primacy. In a community context of social innovation or activism however, not only can the DST process engender transformative experiences for members, the stories themselves have the ability to act as societal boundary-crossing artefacts, to reach community and external stakeholders up and downstream.

How to make these stories part of a larger, ongoing stakeholder network discourse, for example in considering social innovation, remains unclear. Some organisations are experimenting with collaborative research and practice to develop more comprehensive approaches to community-rooted commons where understanding of civil society and social change are driving factors, such as the 'Stories of Change' Arts and Humanities Research Council (AHRC) funded project.² However, this level of funding is not available to the average grassroots collective who wish to inspire activism and change.

The Community Digital Storytelling (CDST) method was developed to build upon the classic DST model, inheriting the benefits of the StoryCenter workshop format, but enabling the project to be taken out into community groups as a more flexible learning experience. CDST was designed with a limited budget, where no costs are passed on to the participants, as a mobile workshop to inspire learning and activism in communities of place. The CDST method was observed to be successful in engendering learning and activism, however its reach beyond the duration of projects has been limited. To better connect storytelling with collective intelligence processes, we need a language to focus our community activism efforts.

To this purpose, the authors extend the existing CDST method with the Storytelling Cycle of Trust model. The model adds four trust dimensions to the CDST stages, creating a framework for analysis of storytelling for collective intelligence; both projects and processes. We illustrate this cycle with examples drawn from some of the cases we have been involved in: a CDST workshop in northern Britain and an ongoing social innovation storytelling process in the southern Netherlands.

The Community Digital Storytelling (CDST) Method

A new media ecology dominates our contemporary society: the paradigmatic shift has reflected a cultural transference toward society-wide communications (Hartley & McWilliam 2009). User-generated media is both pervasive and increasingly in demand, as the growth of new and established social media and networking platforms attest. Within this world view, DST as a concept enables personal stories to be told and shared using readily-available digital technologies (Hartley & McWilliam 2009; Lambert 2006). Lundby (2008) draws attention to the small-scale characteristics of this media practice: they usually last only a few minutes; they are low-budget; they comprise a personal narrative in the voice of the storyteller. The digital story created in the classic form centres on a crafted narrative; whilst the digital element of this media format gives a story its 'wings', it is in experiencing the

² An example of publically funded project, in this case addressing current and future energy choices across two UK regions <http://storytelling.research.southwales.ac.uk/StoriesofChange/>

process that the transformative effects of catharsis, sense-making, and community learning are enabled (Copeland 2014).

This StoryCenter method, developed over more than 20 years of working with groups, is based around a three day model (Lambert 2006). Whilst formulaic, the process is designed to empower participants to create their own digital artefacts, supporting them through developmental journey of first airing and then sharing their sculpted story. Copeland (2014) illustrates the process of the three day workshop model which identifies the steps taken to facilitate transitioning a participant from being able to share their thoughts in the form of oral storytelling to digital storytelling (Figure 1). Key to understanding the value of the StoryCenter model over and above the required time commitments and, in many cases, cost to the participant, is the synergistic effect that extends beyond the development of the collection of artefacts; the act of taking part in the process itself has been noted to be transformative (Crook 2009; Lambert 2006; Copeland 2014).

	Stage	Activity	Outcome
Day 1	Story Circle	Story Work	Script
	Creative Writing		Storyboard
	Photo Editing Tutorial	Voice	Scanning
Day 2		Preparation	Practice
			Record
	Movie Editing Tutorial	Edit	Images
Day 3			Project Set-up
			Rough Edit
	Movie Premiere	Conversion	Transitions
			Music
			Titles / Credits
			Screening

Figure 1: the StoryCenter 3 day workshop model (Copeland 2014, p.108).

The CDST method was developed in response to issues identified with the classic DST model for community activism workshops based on location; primarily around commitment to a three-day workshop (Copeland & Miskelly 2010; Copeland 2014). In

addition to time commitments, these other barriers have been observed in restricting full participation in DST-type events: resources; venues; costs; context of place: incentives; self-confidence; mandate; and motivations (Copeland & Miskelly 2010; Copeland 2014). The CDST model builds upon the three day model by capturing the key components, as identified in Figure 1 above, and offers a more flexible treatment to enable a wider group of participants in identified areas the chance to take part. Reducing barriers to participation, such as time commitment, resource, and cost, makes it easier to recruit those interested in taking part in the process. Although it should be noted that even when a high-profile organisation such as the British Broadcasting Corporation (BBC)³ sends dedicated recruiters into communities of place, it can still be difficult to attract core numbers of participants to community media engagement workshops (Copeland 2014).

To address the issue of recruitment to community storytelling projects, a first *preparation* phase is added to the CDST method. This enables topic framing and initial interviews with the selected participants to happen ahead of the workshops, thereby reducing the number of whole-group hours required. It also lends legitimacy to the group by gathering participants who are prepared to share their localised experience with their authentic voice, independent of any funding pressures or socio-economic advantages.

Preparation forms the first of five phases in the CDST method, each of which can be run as discrete activities. The second phase, *story telling*, through to the fifth and final phase, *digital story sharing*, incorporate the steps used in the StoryCenter model but run over a potentially much longer time frame. Figure 2 illustrates this CDST method:

³ See Meadows & Kidd (2009) for a detailed description of the BBC 'Capture Wales' project, which ran from 2001-2008, including the method of training facilitators for community digital storytelling events and the structure put in place to enable deployment of such a large scale documentary of local voice across all regions of Wales, UK.

5 Phase CDST Method	
1 Preparation	1. Participant seeking 2. Topic framing 3. Interview - <i>Meaningful Maps</i>
2 Story telling	4. Story circle
3 Story digitisation	5. Workshops - <i>Observation</i> - <i>Data gathering</i> 6. Artefact generation
4 Digital story sense-making	7. Story screening 8. Group discussion / interview
5 Digital story sharing	9. Story sharing - <i>sharing locally</i> - <i>sharing on-line / globally</i>

Figure 2: The 5 phases of the CDST method (Copeland 2014).

Phase 1, *Preparation* allows the groundwork of participant selection, topic framing and initial interviews to be carried out asynchronously and in doing so, building viewpoints around the topic being explored.

Phase 2, *Story telling*, is arguably the most important, as it brings all participants together for the story circle; physically a joined circle of participants, each given equal importance and time to share their personal stories in a 'safe' space.

Phase 3, *Story digitisation* is the longest phase where the participants learn how to create their digital artefacts. This follows a workshop format where participants are taught software and skills for digital media editing and production. Flexibility with this phase of the process allows participants to come as and when they can.

Phase 4, *Digital story sense-making* is the culmination of the creating phase where all participants are brought back together to share in the screening of the finished stories. In the CDST method this phase also enables varying levels of engagement to be evaluated through a secondary group or individual discussion, drawing out reflections on learning and activism.

Phase 5, *Digital story sharing* is the final CDST phase where the stories are made available through an agreed platform or shown in further screenings within the locality.

CDST: The Case Study

To illustrate the CDST method, experiences from a northern Britain case study⁴ are drawn upon. The case study concerns a CDST investigation into two rural places within the Yorkshire Dales National Park.

The first - *preparation* - phase allowed a group of participants to be selected and for them to be given space to consider their stories around the topic of living in that community of place. The legitimacy of such a project is grounded by the value to potential participants to discuss their experience of living in their community of place. Participants were approached because they had either expressed an interest in community storytelling, were known to the researcher or were recommended by members of the communities. The topic had been framed quite openly to help attract interest from a variety of people, although an interest in inter-generational storytelling prevailed. As part of the initial preparation, the first author 'interviewed' each participant individually using a semi-structured questionnaire, data from which satisfied part of the research criteria of the project. This format enabled the storytellers to identify the issues and observations with living in the place, and to share stories at an informal level. The "Meaningful Maps" pattern (Schuler 2008, pp.249–250) was used as a prompt to help visualise boundaries impacting the lived experience in that community of place, as inspired by the Liberating Voices project. The participants' stories took shape, and as the final part of the interview, the interviewer summarised this story back to each of the participants, encouraging them to reflect on the general structure and storyline. This transaction remained verbal as the participant retained the authority to share their story at this stage.

The *story telling* phase was the first coming together of the group of community storytellers. The story circle is said to be situated at the heart of the practice of digital storytelling (Lambert 2009); it really has been shown to be, drawing on the 'circle of trust' metaphor, that Lambert (2006) describes. Story circles should be set out accordingly, as close to a circle as possible. This helps focus the storytellers inwards, away from external distractions. It also gives equal presence to each, affording the opportunity to receive and provide feedback. The participants shared their stories, told along the lines of those shaped in the preparatory interview, uninterrupted until the end, at which point questions were allowed. This questioning, marshalled by the facilitator to remain only constructive, enables each storyteller a chance to hear the impact of their story on a listener, potentially leading to reflective changes in how they might choose to present their narrative. In both case study instances, the story circle was viewed to be a positive experience, where learning was observed and an appetite for activism engendered (Copeland & Miskelly 2010; Copeland 2014).

⁴ The case study may be reviewed in detail in Copeland (2014). It is important to note that full ethical consideration was given, where participants signed a consent form and understood they could withdraw at any stage or withhold details of their story from the project.

Emotions ran high at times; not only did the reliving of a journey to that place or point in time evoke tears, the first group were met with tragedy when an elderly lady known to many was not able to share her story in the story circle because she had sadly passed away only days before.

The *story digitisation* phase was planned according to the majority needs of the two different groups of participants, in one place, being held weekly in the evening, and in the other over two consecutive days - both accommodating flexibility of presence for each individual. This is the longest commitment required of the participants to successfully create their digital stories, which are essentially short movies of around two to three minutes. It is probably the most stressful but that ultimately leads to a very rewarding conclusion. In this CDST case study, stereotypes of age-related experience with digital media technologies were challenged; in one village, a gentleman in his eighties was the most savvy with the photo editing software, being a photography fan and having attended a leisure learning course at the local college. In the other village comparatively, an octogenarian who had suffered a stroke needed facilitator input for this developmental phase. Not all who shared their stories in the story telling phase stayed to create their movies; their participation in the earlier phase was still very valuable however as a real local issue was voiced with the authenticity of lived experience.

The fourth phase, *digital story sense-making*, brings the full group of participants back together at a story screening event. In DST workshops based around the StoryCenter model, this is where the impact of the transformative experience can be observed. In the CDST case, a sense of closure of the journey was observed, but more importantly perhaps, the whole group discussion following the screening enabled the participants to review and dissect local issues and reflect on their own and their neighbours' lived experiences. It was rewarding, not only to witness the *synergy* in the room through the forms of activism being expressed to help address local issues that were considered changeable, but it was also very valuable from a research perspective to record the dialogue (with permission) to be included as part of the data set. This phase was "praxis" in action, where action and reflection within our world causes us to change it (Freire 1996).

The final fifth phase of *sharing the completed digital stories* was planned and discussed with the participants from the start. However, respecting the code of ethical research conduct meant that the researcher had to acquiesce to the changed perspectives of the majority of storytellers, who, having seen their final stories shared in a closed environment felt they were too personal to be released through the World Wide Web. Permissions remain intact to share either parts of the story, or the stories in a specific academic context. Reviewing other very personal stories shared with the world through channels such as the StoryCenter website demonstrates that groups of people are prepared to lend their authentic, passionate voice to emotive issues: Modelling this at a localised level by the means of a bank of stories with well-defined, possibly differentiated access rights is considered by the authors to be the best solution.

In summary, Copeland (2014) identifies that digital storytelling in communities of place can be an effective way to engender learning and activism. Within the CDST method, it is the story circle that brings the most gravity to the digital storytelling

experience. The story circle remains a powerful tool in community learning as it has been observed to bring benefits to community discussions even when participants do not remain with the group to create the digital artefact. The CDST method enables community activists to gather meaningful dialogues, supporting authentic narrative and synergy amongst the participants. The authenticity and synergy observed in this case study was shown to affect learning and activism. This method, however, did not inspire further action at a wider level, primarily because too few of the participants were willing to share them beyond the bounds of the workshop; such is the risk with transformative processes that afford critical reflection. How then can we build upon the synergy created by CDST workshops to create a meaningful collection of authentic narrative to reach stakeholders at a decision-making levels? Developing a commons of digital stories, grounded in and defining legitimate ongoing storytelling is the next step. To clarify the roles of and connections between the trust dimensions identified in passing so far, we next introduce the Storytelling Cycle of Trust.

The Storytelling Cycle of Trust

Community-based digital storytelling methods have tended to focus on the creation and capturing of stories that do justice to the needs and aspirations of communities and of individuals. To take the digital storytelling format to the next level - how to make this process part of a larger, ongoing stakeholder network discourse aimed at collective intelligence and social innovation - forms our goal. We start by identifying the following dimensions as key:

- Legitimacy.
- Authenticity.
- Synergy.
- Commons.

First of all, stories need to be *legitimate* in the sense that the selected storytellers truly represent the stakeholders they tell stories about or whose perspectives they adopt. Further, in a community context, there should be legitimacy in the chosen topics.

When using personal narrative to affect change, *authenticity* of voice is vital: Hartley & McWilliam (2009) suggest DST as a form achieves this. Whilst consultations might only offer a degree of tokenism in levels of participation (Arnstein 1969), deliberative spaces can be created for authentic voice to be heard and recorded.

Synergy in the process is afforded by weaving together multiple authentic and legitimate individual voices into stories that represent a balanced story of the community as a whole. A critical mass of community participation is helpful in driving a synergistic effect.

Finally, populating a digital domain of openly available content enables storytelling to drive other processes affecting social change, such as when one social innovation inspires another one, often in a very different field or network. In effect, this means some form of a storytelling *commons* needs to be established. A commons is any collectively owned resource held in joint use or possession to which anyone has

access without obtaining permission of anyone else (Nemeth 2012). Once a commons has become established, is being populated, and becomes accessible to stakeholders in larger society, the cycle can be evaluated and repeated.

In considering all four dimensions consecutively, a Storytelling Cycle of Trust can be formed. By observing that over time legitimate and authentic voices produce synergetic stories that truly represent the interests of the community as a whole, and these stories become accessible through a trusted, non-manipulated commons, *community stories* are afforded more meaning, weight, and impact, becoming a key collective intelligence resource. By embedding the Community Digital Storytelling method in such a Storytelling Cycle of Trust, we suggest that it can be better scaled up to reach new and wider audiences. As has already been demonstrated in the use of boundary objects in promoting social creativity in cultures of participation (Fisher and Shipman, 2011), we propose that commons-based stories can play an analogous role in brokering community partnership agreements and social policies.

The diagram below illustrates this method:

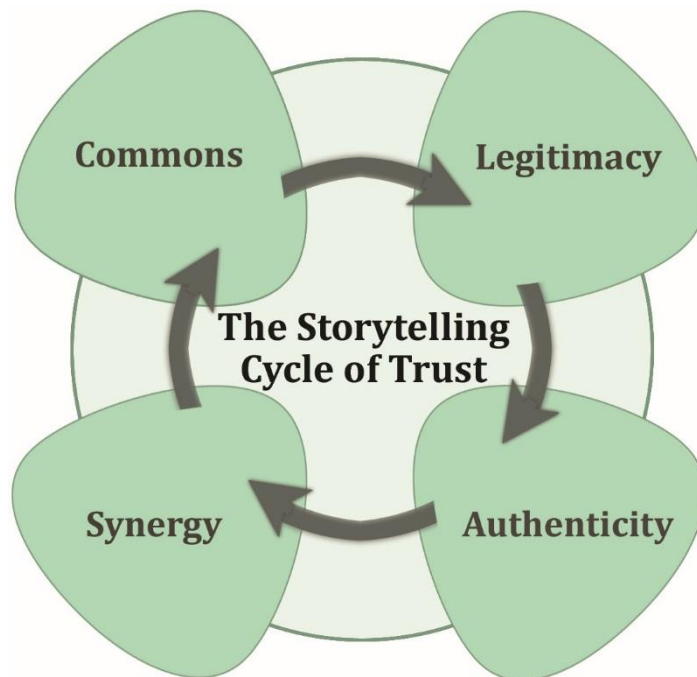


Figure 3: The Storytelling Cycle of Trust.

The Storytelling Cycle of Trust: The CDST case

The Storytelling Cycle of Trust is now reviewed using the CDST case study to illustrate how the dimensions encapsulate and link the stages into a cycle to bring the method one step closer to the Collective Intelligence for the Common Good project; Figure 4 below first compares the stages and dimensions.


CDST method Stages	Storytelling Cycle of Trust Dimensions
Preparation	Legitimacy
Story telling	Authenticity, Legitimacy
Story digitisation	Synergy, Commons
Digital story sense-making	Synergy
Digital story sharing	Commons
 Preparation	Legitimacy

Figure 4: A comparison of the components in the CDST method and the Storytelling Cycle of Trust.

Legitimacy

CDST interventions are designed to allow for individual preparation sessions before the story circle, as previously described. This allows the facilitator to channel the purpose of the inquiry (for example, addressing the topic of social justice) and give the participant time to consider their views and the chance to practice sharing their story. The legitimacy of an individual's contribution to a community discussion can be assessed in this preparatory phase. As observed in the CDST case study, some participants were reserved about the legitimacy of their own participation (Copeland & Miskelly 2010): A sense of confidence in civic engagement can be supported through sensitive facilitation. Phase 1 of the CDST method helps ensure that varying viewpoints can be appropriately represented according to the topic selection, affording legitimacy to the preparation phase, albeit filtered through the project coordinator.

Authenticity

For some types of civic interventions, for example discussion around broader citizenship, recruiting participants to engage in deliberation might not pose any problems. However, it is important to remember that some people are less willing to speak openly on their points of view. When planning to engage a group in open dialogue, a safe space is required. The story circle offers a safe space (Lambert 2006). In the CDST case, participants were observed speaking openly about their perspectives, and in sharing their lived experiences. Stories are told free from critical analysis at the point of delivery, and questions can be posed after each storyteller has come to the end of their timeslot. The facilitator must remain prescient to the requirement of retaining authenticity of voice. The dialogic space after personal stories have been told was observed as being a positive and supportive discussion. Learning was seen to happen, two examples being a new awareness of challenges facing youths in rural spaces as well as how important heritage and ties are to the place.

Synergy

Following a community digital storytelling event, we can ask whether the individual stories together tell the story of the community. Synergy builds from the story circle through the story digitisation phase, as narratives are crafted into movies. Immersing participants so deeply into their stories through the process of deconstructing the idea and reconstructing it as a finished piece really contributes to the transformative potential of this process. It is important to remember that the tools chosen to digitise the stories are peripheral to the process of allowing the stories to be heard, however, those tools selected may dramatically impact the participants' experience. This third phase of the CDST method has the longest duration of contact time amongst the group. And whilst participants are working individually on the whole to create their stories, collegial attitudes were observed in helping people to find additional relevant images, for example, or practising recording their audio. The synergy of the group learning together comes from this active story weaving part of the process and the subsequent experience of sharing the screening of the final stories.

Commons

Several issues were encountered in the latter stages of the CDST case study. Firstly, holding on to the group of participants to the end of their workshop for the final screening of completed digital stories proved challenging. This was partly due to the flexibility offered in the digitisation phase; professionals who felt they had already given enough time to the process were reticent to return, although only one participant who made a story did not share the screening with their peers. Another who participated in the story circle did not return to digitise their story, although their early contributions resonated amongst the group and were mentioned repeatedly throughout the workshop. Secondly, issues of consent to sharing stories online arose, as previously mentioned. Some participants gave full permission; others wanted to retain control over who could view their story. Had the participants been able to watch stories from an online repository of similar community viewpoints, a model of sharing would have been familiar from the outset. Examples of these types of story can be accessed through the StoryCenter and Stories for Change network websites⁵ and indeed were used to screen digital stories in the workshops. The difference with a trust-building framework for compiling community digital stories in a civic intervention seeking social justice is that the stories need to speak to the next round of storytellers that their lived experiences within that particular local or regional community are valued and should be heard.

The synergy seen in the community learning initiative can be capitalised upon by enabling participants to act as ambassadors: use of social media and personal networking to spread messages of civic engagement should be encouraged. Building a commons brings evidence and legitimacy to further civic investigations, thereby moving this collective intelligence into the next iteration of the storytelling cycle.

⁵ Two online resources for observing the power of the crafted narrative spoken with authentic voice: <http://www.storycenter.org/> <http://storiesforchange.net/>

Going cyclical: the Tilburg storytelling for social innovation case

We now apply the Storytelling Cycle of Trust to the Tilburg Storytelling for Social Innovation case, again examining both the CDST stages and the trust dimensions. In this section, we will not so much focus on the inner workings of storytelling practices, as was done in detail in the CDST case study. Instead, we describe the Social Innovation case in particular as an example of building a public commons and going cyclical.

Introduction: Storytelling for Social Innovation

The southern Dutch region of Midden-Brabant, with Tilburg, a city of 200,000 inhabitants, at its heart, has made social innovation a top priority. Social innovation - collaboratively addressing wicked societal problems by involving stakeholders from across the board, including government, education, corporations, and citizens - is the essence of its innovative and collaborative culture and economy. To demonstrate the strength of its social innovation ecosystem, the city submitted a bid for the European Capital of Innovation Award (Municipality of Tilburg, 2013). One of the outcomes of the research informing the bid was that the Tilburg region has numerous social innovations. A major identified weakness, however, was the lack of knowledge sharing between stakeholders and beyond about the processes and outcomes of the innovations. It was thought that storytelling might be a way to partially fill that gap. An initiative was started to create a regional storytelling for social innovation living lab.

One of the catalysts of social innovation in the region is the Social Innovation Award Academy: this is an informal club of winners of the annual Social Innovation Award. The winners are representatives of best-practice social innovation cases. An award has been won, for example, by the developers of Into D'Mentia, a dementia simulator. This allows caregivers and professionals, to - to some extent - experience through a physical "living room simulator" how disoriented patients with Alzheimer's feel; greater empathy is one clear outcome. Subsequently, a range of training programs have been developed for caregivers and professionals to better enable them to care for the patients.

One of the experiments in the living lab saw the teaming up of the regional Midpoint Centre for Social Innovation (MCSI) plus (initially) the Tilburg City Marketing department with the Language Centre of Tilburg University. The objective was for the stories of the social innovation award winners to be (re)-told by the Language Centre students taking the English Business Communication course. This provided interesting, motivating cases for the students to consider for their main course projects, whilst also resulting in a much needed quality English storytelling capacity for the social innovators.

This Language Centre "Social Innovation Storytelling" project has run for three consecutive years (2014-2016) to date. Students in their role as "story hunters" collected stories of eight of the Social Innovation Award winners' cases in total. Each

iteration of the project started with a launch, in which a representative of the Social Innovation Award Academy introduced 'social innovation' and what that year's cases entailed. Each group of students was assigned a different case.

With each case, the grouped students studied social innovation as a concept as well as investigated their assigned case. Collaborative learning was incorporated through peer discussion and interviews with identified parties from the award winners. A final plenary presentation of their case was attended again by the representative of the Social Innovation Award Academy.

Each case resulted in three digital outputs: a YouTube video of the plenary presentation, a PowerPoint presentation, and a digital 'business prospectus'. All case materials were also collated and presented on a digital "social innovation storytelling portal" (Figure 5). This portal makes the stories available to case stakeholders, but also to the next generation student story (re)tellors.



Figure 5: The business story of 'Into D'Mentia' on the social innovation storytelling portal⁶.

Applying the Storytelling Cycle of Trust - Framework

We apply the full Storytelling Cycle of Trust framework – including the CDST stages and trust-dimensions - to the Tilburg case.

The CDST stages

In terms of *preparation*, cases were selected by the Midpoint Centre for Social Innovation from the pool of Social Innovation Award winners, while the case contacts selected who to interview within those cases. Story topics were partially selected by the lecturer and students, partially by the case representatives. The students prepared themselves for the interview, by looking at course materials, Social Innovation Award winners' stories told by their predecessors and desk research on their assigned case.

⁶ See <https://kumu.io/psi/heart-of-brabant-social-innovation-navigator#social-innovation-award-academy> for the collected stories of the Social Innovation Award Academy.

The *story telling* did not take place in the form of a story circle. Instead, there were two different levels of storytelling going on. First, the case representatives told the main general story when interviewed by the students. The students then used the interviews to zoom in on the business story, but also added their own business communications insights and perspectives. As such, the stories are a mix of different sources and voices.

Story digitisation was done by the student groups, producing the business prospectus document and the PowerPoint presentation, and the lecturer creating a video of their plenary presentations.

Digital story sense-making occurred mostly in the plenary presentations at the end of the course by the student groups, lecturer and representative of the Social Innovation Award Academy. On one occasion, case contacts attended the presentation.

Digital story sharing was an important part of the process. After their plenary presentations, the student groups sent their digital story materials to the case contact for approval. The coordinator of the social innovation storytelling portal then uploaded the documents to the portal, the presentation videos to YouTube, and extended the electronic map of the Social Innovation Award Academy with the new cases.

The Storytelling Cycle of Trust Dimensions

Ensuring *legitimacy* is essential to the storytelling for social innovation-process. The Social Innovation Award winners are 'best of class', having gone through an extensive evaluation process before winning the award. Case contacts are trusted key members of both the Social Innovation Award Academy and the communities in which the social innovations are embedded. They are therefore legitimate representatives of the case stakeholders. The course lecturer is an expert in business communication and has gone through an intensive process with the students in class to ensure the quality of the business stories remains intact when told.

As the case stories are layered, involving different kinds of storytellers (case representatives and students), *authenticity* may sometimes be hard to guarantee. Although case contacts were legitimate representatives of the stakeholders in their case, those stakeholders were not directly involved in the process of telling the primary stories. However, since the case contacts are so centrally positioned within and trusted by their communities, this should be acceptable.

Synergy is high in terms of weaving together a balanced story of case content (case representatives) and business communication content (students and lecturer) aspects. Again, as there was no direct feedback from all case stakeholders; some relevant case content elements may be missing, but the overall stories - approved by the central case contacts - should remain valid.

The contribution to the *commons* is particularly strong, as the specific purpose of social innovation storytelling is to share knowledge across communities. Through the social innovation storytelling portal, stories are accessible to everybody in the region and beyond. Students have been actively using the stories produced in earlier courses for inspiration. In addition, case contacts have indicated their willingness to

use the business communication insights in their further case development efforts. Yet to be addressed is how to expand communication to actively promote the stories among wider audiences. As the stories now reside in various channels, including YouTube, serendipity may lead to surprising new connections.

Discussion and Conclusions

Day (2011) argues that the informal educational practices located in community learning are key to community empowerment, and Freidus & Hlubinka (2002) describe the 'cultural tools' we use and mediate for sense-making, reflective storytelling being one example. Community learning situations centred on storytelling and dialogic interaction is what CDST workshops are designed to enable. But beyond the act of storytelling, when stories are given a new life in a digital form they may "serve as objects which mediate relationships" (ibid., p.26).

Boundary objects are those with the potential to communicate between groups (Kimble et al. 2010; Wenger 1998). Kimble et al (2010) identify the power of boundary objects and how the flow of information may be controlled in combination with the right broker in an organisational setting and Bjørgen (2010), demonstrates that DST as a method acts as a boundary-crossing tool in an educational context. Wenger (1998) suggests that in developing a social theory of learning, in fact a learning-based theory for society is being addressed, learning being "fundamental to the social order we live by" (p.15).

As boundary objects, digital stories carry the currency of authentic voice across networks when brokered effectively. The 'circle of trust' inherent in classic digital storytelling methods (Lambert 2006) affords an in-the-moment experience for the participants, one that serves to form and develop community identities; the responsibility for maintaining the sanctity of this potentially intimate encounter resides with the facilitator/broker. Through a wider 'cycle of trust', crafted stories in a digital media are carried beyond the original story tellers over time to reach a society-level awareness. This longitudinal view is assisted by a cyclical framework, although the nature of the stories being made must be considered for the cycle to move beyond a single iteration. Deeply personal narratives might not be well matched for the needs of a storytelling commons.

How to manage an open collection of digital stories is another consideration; the selection of stories to feed into a new cycle of development will be influenced by the facilitator/broker. One solution to countering possible rhetoric is to encourage distributed story circles, where subsets of stakeholders experience the story sharing in different spaces. Further to this, research is still needed to find out what role community digital stories as boundary objects can play in furthering collective intelligence processes where, for example, stories are increasingly re-told (such as by the students in the Tilburg case), or used to inspire others' stories beyond the original circle. The prescience of factoring in the right checks and balances so that such stories can help trigger new social innovations, without doing injustice to the original storytellers, is key. Connecting the *Storytelling Circles* with the *Storytelling Cycles* is a concept for future research.

In furthering collective intelligence, identifying concrete participatory deliberation mechanisms by which community activists and stakeholders can advance their work is both helpful and necessary. Digital storytelling in a community context (as opposed to an art form, or learning experience) is a much used medium for conveying authentic experiences, especially across the horizontality of civic networks to reach their peers. Inroads are being made to pushing the verticality; reaching stakeholders upstream with authentic storytelling, rather than polished digital forms with a corporate sponsor. The AHRC funded Stories of Change project mentioned earlier is a good example of a vertical network, even if top-down in this case. However, when trying to scale up in all directions for impact, a more cyclical approach is needed.

We introduced the Storytelling Cycle of Trust as a conceptual bridge between the world of peer-oriented community-centred digital storytelling and collective intelligence processes, such as social innovation. It helps to identify strengths and weaknesses of community digital storytelling approaches in terms of legitimacy, authenticity, synergy and commons. Our goal was not to come up with fully worked out definitions of these concepts. This is future research, and will be informed by relevant work from the Community Digital Storytelling, Community Informatics, Stakeholder Engagement, Social Innovation and Collective/Civic Intelligence literature, e.g. (Williamson and De Souza, 2007; Aakhus and Bzdak, 2015; Murray et al., 2010; Schuler et al., 2015). Our informal case analysis, however, has already proved useful to position community digital storytelling approaches in a larger societal context. Our analysis of Copeland's Community Digital Storytelling, for example, showed that it is strong in authenticity and synergy, but relatively weak in legitimacy (in terms of involving larger societal networks) and commons. To further illustrate, we performed a similar analysis of the Tilburg storytelling for social innovation case, which is strong in legitimacy in terms of involving larger stakeholders networks, but, for example weaker in authenticity, as storytelling-processes are layered where the stakeholders about whom the stories are told have only been involved indirectly.

In summary, the Storytelling Cycle of Trust framework - tentative as it is - sets out a process concerned with increasing societal impact the everyday stories can have beyond the community from which they originate; it is the engine of prolonged storytelling, cyclical rather than replicating a single span project. The biggest advantage of looking at community digital storytelling from this new perspective is the ability to scale up the scope and impact of stories, promoting the creation of trusted pathways from individual community member stories all the way up to a vibrant storytelling commons with an increasing impact on society.

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