

# THE POWER AND PERIL OF PARTICIPANT VIDEO FOR STAKEHOLDER COMMUNICATION

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## ABSTRACT

Video delivers a multi-sensory experience and instantly grabs a stakeholder's attention. It is a powerful tool to tell the story vividly, creating a close to first-hand experience. Video can serve as an objective argument for the researcher's opinion and can make the data tangible while virtually connecting the non-participating stakeholders to the users and stimulating more empathy. In relaying the voice of the participants, video presents a simulacrum of the actual interaction, providing the audio and visuals, if not the ability to interact oneself. At the same time, videos of the interactions by the very nature only provide a partial representation, as high-level decision makers only have the time for extracts as part of larger presentations or workshops. Using video snippets can be very successful for informing stakeholders of key data points and to challenge assumptions. However, when stakeholders are asked to view video as objects engendering further debate, the need to make this expectation explicit is crucial to ensure that the videos are not seen as "facts." In this paper we illustrate both the potency of video when it is used as an informational tool, and the potential problems that arise when it is mistaken for one.

## INTRODUCTION

Video is a powerful mechanism to relay information to stakeholders, since it projects a view that is objectively real, at least inasmuch as it is a document of an interaction with a participant. However, this reality is tempered by the fact that preparing video for presentation is a form of curation. The editing process is conducted with a view toward achieving particular ends. As researchers, we often choose video to feature those participants who are most able to effectively communicate a perspective, be that delight or disgust. Moreover, we edit the video that we show to others to feature the clips that capture our attention and, we hope, the attention of the stakeholders that we share this footage with. With our best intentions also come unintended consequences, and in some cases, the video excerpt might overshadow the broader context in which it was presented. Without the full story, viewers may generate incomplete impressions and can arrive at different conclusions than the ones that the researchers mean to communicate, or fail to realize the role they can and should take to "participate" with the video by asking questions, discussing what they have seen, and debating the conclusions that should be drawn from it.

As researchers and designers, the process of extracting and selecting is also one of balancing multiple stakeholders and multiple ends. Our stakeholders include the participant, who is given a literal voice in the video but whose intent and context may be lost in the editorial process. Stakeholders also include non-participants, in particular the business decision makers who, while often not involved in the research process, are the ones who determine what designs and features ultimately are incorporated into the the product or service. We should also not forget that we ourselves are stakeholders, with interpretations and opinions that we want to contribute to the decision-making process. Thus, video to *inform* may work in opposition to video to *design*.

## LITERATURE AND THEORY

Presenting the object of research, in the form of a human individual, to non-participant stakeholders is an ongoing challenge. It has been addressed in a multitude of ways, all of which come with potential interpretive challenges. As Nielsen (2003) notes, “To present field studies to designers is an act of communication that involves choosing both the material and the form of the presented material. And at the same time the presenter must be aware of how the material will be received and interpreted.” Johansson and Messeter (2005) in some ways avoid the interpretive dilemma by disembodiment of the participant. They argue that representations of the user “should be considered as means for changing perspectives during a design project.” For them, truth does not matter so much as usefulness.

Video began as a research and innovation tool as a mechanism to get closer to truth. Researchers at Xerox PARC were early advocates for the use of video in “capturing and demonstrating user-relevant methods of addressing, categorizing, and resolving work-related activities” and enabling “the users to speak—and be heard—in their own terms using their own naturally occurring categorizations.” (Brun-Cottan and Wall 1995, 63). As time progressed, they realized that there is necessary de-contextualization in presenting even this seemingly highly contextualized data. As Brun-Cottan later wrote, “Tailoring findings to maximize understandings across differing organizational perspectives is a common and sensible practice. Unhappily, the two in concert often act to fragmentize and de-contextualize the accounts in which our findings are embedded.” (2009, 159). Rajmakers, Gaver, and Bishay pointed out that there are curatorial decisions made when filming, noting that “Representations such as film are inherently opinionated because they are inherently incomplete; it is impossible for filmmakers to avoid making choices about what is important” (2005).

These perspective focus on the use of video as “film” telling a story. But video in short form has also been long used “to manage the tension between abstract discussions of design principles and detailed discussions” of the object of design (Mackay, et. al, 2000). Buur, et. al (2000) explored the use of videos in multiple formats, and for uses beyond representation, crafting scenarios, participatory games and co-creation sessions with video segments. Cramer, et. al. (2008) have argued for the value of what they term “video utterances” of under three minutes as a way “to make an evocative and convincing argument in a short time with minimum misinterpretation.”

These varying practices around short form video can also lead to differing assumptions about their purpose when put in front of stakeholders. There is a gap between these extracts as Buur’s “media for on-going negotiation and reflection on stories of the design to be created” and Cramer’s “convincing design arguments with concrete examples from the field.” Both uses (and

many in between) are equally valid. However, a shared understanding of the purpose of the video impacts the utility of the medium, as it does with any artefact of participatory innovation. Just as prototypes have been anatomized and characterized into many types, ranging from idea filtration systems to cultural probes to performative spaces, video can be moulded into a multitude of roles. Taking some liberties with the wording on Kim, et. al. (2008) we posit that “it is possible to clearly identify and plan for *video* characteristics and we must base those considerations on why and how we intend to use a particular *video* to support the *innovation* process”

We have used short form video in our work for a variety of ends. Following Johansson et. al (2002), we refer to these short clips as snippets. We feel this is a particularly apt designation as the term has implications of a piece that is representative of the whole and of a particularly quotable passage. Based on our successes and challenges, we have learned that the effective deployment of these snippets is dependent on the team’s clear articulation of their place on the continuum between documentary evidence and design artefact. As video becomes an increasingly popular medium for communication within business organizations, the importance of explicitly framing the context and the purpose of what is shown is crucial.

## CASE STUDIES

Pitney Bowes (PB) is a nearly 100-year-old United States based enterprise with worldwide operations. Its traditional core business has centred on enabling other companies to send postal mail more effectively by producing software and hardware that produces, sorts, folds, and franks mail. In recent years, as mail has declined, this core business has extended into marketing services, parcel labelling and delivery, and an extensive array of document management and business software solutions. The current direction is to increase the number of services that are delivered digitally while also not losing sight of businesses needs around mailing and sending items. As employees within a small innovation group, we work on customer-centred research projects that are based in areas where the business units want to explore and grow. Our case studies are from projects that we have worked on in this context.

### THE POWER OF VIDEO TO CHALLENGE ASSUMPTIONS

Pitney Bowes’s new SendPro® product line includes devices that not only frank mail like traditional meters, but also print labels for a variety of parcel carriers. These products were developed in part based on a worldwide research project focused on developing concepts for digitally enabled platforms for mailing and shipping. In addition to the concepts for the digitally enabled device that is now on the market, “Portapress” was one of many additional concepts that were proposed

by the contracted design firm. The research team had observed that many small businesses use only stamps. In their brief, they described the device as a “compact, convenient and fun alternative” to meters and internet postage. In explaining the concept to executives, they spoke of the emotional importance of a tangible, handheld experience, drawing comparisons to iPhones.

While Portapress was not a primary focus for investment, the General Manager in charge of the product line was enamoured enough by the concept to explore the viability of such a device. He asked Mack, who had been a member of the original research team, to lead a project to better define the parameters of the device and to understand what value it might have for small businesses. Mack framed this project as a series of participatory innovation sessions with individuals. Each session started with a contextual interview with the participant to understand his or her work and use of stamps. In the second part of the session, the participants were introduced to various prototypes and allowed to interact with them, enabling them to explore how they might use the device and to comment on the physical properties.

The research team created several low fidelity prototypes in different shapes, evoking common handheld business tools such as self-inking stampers, mice, wands, pens, and packing tape dispensers. The importance of “handheld” was paramount to PB’s business leaders, and became a core assumption behind the form factors proposed by the prototypes. The research team visited small business employees in their offices, with the goal of using the participatory innovation sessions to learn:

- What form factor was most appealing, and why?
- How would the participants alter the prototypes?
- What is the participant’s expectation of how the device would mark an envelope (would they move it, would they place it, would they press a button, etc.)
- Do different form factors imply/inspire different expectations for how the participants would assume it would work?
- What kind of image would the participants expect to be printed?
- Where would the participants expect a mark to be printed?

With the participants’ permission, the team recorded video of the interactions. Our goals in capturing video was multifold. We wanted a reference for later analysis, and also wanted to provide business managers with visceral examples of the interactions and feedback. The prototypes we brought into the field inspired the conversations and interactions we were hoping for. The objects gave the participants just enough of a physical touchstone to inspire them to develop their own ideas around a postage printing device. In one case, a participant who hated all the options grabbed pen and paper to sketch out her own designs for improvement

and creative imaginings of what device she would want and how she would use it. Others picked up nearby physical objects (including the researcher’s voice recorder) to illustrate what would better represent the device than our prototypes. The team used this feedback to develop new prototypes and introduce different forms to subsequent participants. It became clear early in the project that “handheld” as defined by the original project brief was not as important to participants as business leaders assumed. Yet, because that had been a key selling point when the concept was first presented, the assumption that the device must be something that would be picked up and manipulated in order to function was difficult to challenge. Simply saying that “the participants don’t like it” was not enough to convince the business stakeholders that this form of “handheld” was not appealing to potential customers. However, having the participants speak for themselves enabled the team to explore new physical forms in the next round of prototypes. A key video showed a financial planner in his office, holding a prototype and an envelope, trying to figure out how to effectively use the one to put a stamp on the other (Figure 1).

In the video, he thinks aloud while manipulating the prototype, saying, “This kind of an idea of just printing on the envelope, kinda makes sense as long as it’s gonna print well. As long as you can’t... you know. That’s the question. This is pretty nicely stamped. So with this kind of a thing, the chances of flubbing it are high. Because if people have to do it themselves, people screw up... Well, let’s say, whatever it printed, it just printed badly and all of a sudden, that doesn’t qualify as a stamp, so then you just wasted 49 cents, and it’s annoying, and you don’t even know how to go about it to get the money back. It’s like you just threw the money out. I wouldn’t want that to happen because that never happens with a stamp, unless I put it on the wrong envelope. So, it would have to be pretty glitch-free as far as that goes, because you don’t want to start throwing money out just to have the convenience of having something that you makes stamps on your desk, and you don’t want it to start costing you money.”



Figure 1: Participant showing unreliability of handheld device.





Figure 2: Participant enjoying button interaction.

The video enabled the team to have the participant directly inform stakeholders that their assumptions were incorrect. This documentary evidence enabled the team to explore alternate physical forms. In fact, a key model was proposed by participants, and also captured on video: “You could take an envelope and put the thing on the envelope and just push a button.”

Video was a proving factor for this new form as well. Management assumed that without being “handheld” (as they conceived of it) the device would not have the “delight” factor promised by the original consulting team. However, the new design, which was still hand sized, enabled a level of manipulation and feedback that participants found satisfying. This was exemplified by a video of a participant grabbing the device, which now had a push button, and declaring “Also more excitement, when you push the stop like that. Because you put a stamp here and you do the same thing. This is just more exciting—once in a while you can push something like that.” (Figure 2).

#### THE RISKS OF PASSIVE MISINTERPRETATION

The second project focused on developing a mobile “Helper App” for individuals who were moving residences. At the time the research was conducted, Pitney Bowes facilitated the change of address procedure on behalf of the United States Postal Service (USPS). In this process, individuals notify the USPS of their intent to move via an online portal or physical form and provide the agency with their new mailing address. The USPS then redirects mail to the new location and provides mailers with information on the change of address. Many companies see the 39 million individuals and households in the United States who move to new residences each year as unique and highly-desirable targets for marketing because moving is often accompanied by an intense period of spending as individuals re-situate themselves and their families in their new residence. During this time, movers will typically make significant purchases from home improvement and electronic goods stores, as well as commit to contracts from internet and telecommunications providers. They will also be seeking out new local shops, such as grocery stores,

drug stores, and dry cleaners. This life change is known as a “hyper-spend” moment by companies seeking to market to these individuals, and many companies pay for advertising space online as well as in mail pieces directed at movers—a set of potential customers Pitney Bowes had unique access to at the time. The business unit in charge of the change of address procedure framed its strategic intent as “Deliver frictionless products and services to movers that simplify and enhance their moving experience while adding value to our partners and supporting our revenue goals.” The stakeholders believed that a mobile app, or several apps, could deliver on this promise. They assumed that such tools could “simplify the moving experience” by helping movers acclimate and orient themselves as they settled in by providing them with content to discover their new neighborhood, and enhancing that content with functionality such as location-aware reminders. They believed that the Helper App would add value for the partners by giving them new ways to deliver marketing offers, which would in turn generate revenue for Pitney Bowes.

Pethrick and Hong’s research brief was to test these assumptions about the potential value of the Helper App for movers. In order to do this, they recruited participants who were about to move or who had recently moved. Their initial sessions with participants were focused around probing for deep understanding of how participants used their smartphones and apps in both everyday decisions and activities and those related to moving. The insights gathered from this phase of the research were used to provide the product team with a foundational understanding of user behavior, motivations, and values. Research focused on specific features of the mobile app was conducted in subsequent phases of investigation. The team facilitated a number of participatory innovation sessions with individuals in the participants’ homes. Participants were asked to interact with their existing mobile phones and applications as well as paper prototypes that allowed them to prioritize applications and features that were important to them (Figure 3).



Figure 3: Participant describing his absolute need for privacy with regards to app usage while his young son downloads (and plays) a game using his father’s device.

As with the first case study, clips of participants were edited from the raw footage to underpin the insights and recommendations. One of those clips featured a woman who was very detailed and specific in describing a particular mobile app associated with a large chain of coffeehouses and why that app was significant to her. She described how this app and her banking app were the first things she checked on her smartphone every day, noting “my money and my coffee... I love the daily challenges and the rewards. All the bonus star promotions make it easy to earn free drinks.” (Figure 4).

Her enthusiasm for the coffee shop app was so pronounced that the the stakeholders viewing the the snippet became extremely engaged. They then focused their efforts on emulating the specific app she described. However, they did not initially understand that her

emotional connection came not from the user interface of the app itself, but from the way the app was designed to fit into a larger relationship with the brand that included discover, rewards, and timely reminders.

The participant's reaction as shown in the video was authentic, but the context of her enthusiasm was not fully communicated in the video snippet nor in the initial scaffolding the team created for stakeholders. By seeking to replicate the coffee shop app itself, and not the level of engagement, the stakeholders missed that the design contextual to the purpose of the app itself. They ignored the functional differences between a “lifestyle” app, such as one for a coffee house, and a “productivity” app like her banking app. The Helper App would best be characterised as a productivity app, so replication of form and function of a lifestyle app would not help it achieve all of its assumed values.

The key takeaways were that contextually appropriate rewards, be they from discovery, loyalty or pure luck, increase user engagement and ‘stickiness,’ and that reminders coupled with timely information, are convenient and valued. This deeper nuance eventually provided crucial insights for the researchers that enabled them to identify key factors for designing the app. However, these takeaways were not as clear to business stakeholders, because the video did not explicitly convey the differences between the category of the participant’s favourite app and the app that the team was designing. The video was successful in presenting the participant’s response but only incompletely communicated the significance of the response and the need for the stakeholders to engage deeper with the data to understand and negotiate the meanings. We learned that because many stakeholders are not familiar with the processes for contextualizing and interpreting video snippets, they need to be explicitly directed to engage more deeply with what they see. In order to do that, we as researchers also need to better frame the context, research purpose, and methods for the stakeholders before showing the video.



Figure 4: Participant showing delight in a particular mobile app and explaining its current significance in her life.

## CODA: THE POTENTIAL PERILS POPULARIZING VIDEO

Video has increasingly become a standard part of today’s communication landscape. Constant video on news channels and social media updates have made short form film a part of the landscape of everyday life, a form of background images to illustrate what is being spoken about. This ubiquity has had advantages for participatory innovation—the tools are less expensive and easier to obtain, and the outputs more readily accepted by stakeholders. At the same time, it also means some stakeholders expect to see video to support any discussion of customers. While not in itself a bad thing, video procured simply to illustrate has the potential to blur the lines and confuse stakeholders around what is data (video that has been filmed as part of participatory interactions) and what is simply illustration (video that has been procured to demonstrate a particular point).

Recently, Mack was asked to participate in a project in which large scale surveys were used to create a typology of customers. Such a typology, while inexact and not representative of specific individuals, can be useful for marketing efforts and other corporate initiatives. The end result of the work was a set of archetypes, which senior members of the market research team wanted to illustrate for executives with video. In order to do this, the team hired a researcher to conduct video interviews with participants who were pre-screened to fit each archetype. The participants were asked questions and directed to do tasks intended to elicit responses believed to be characteristic of their archetype, thus demonstrating certain behaviors. The team was frustrated when participants did not respond according to type, necessitating many interviews with each archetype in order to get the snippets desired (Figure 5). If stakeholders viewing videos such as these are fully aware of their purpose, and the context in which they were created, they can be well used as legitimate demonstration tools. However, we include this coda to

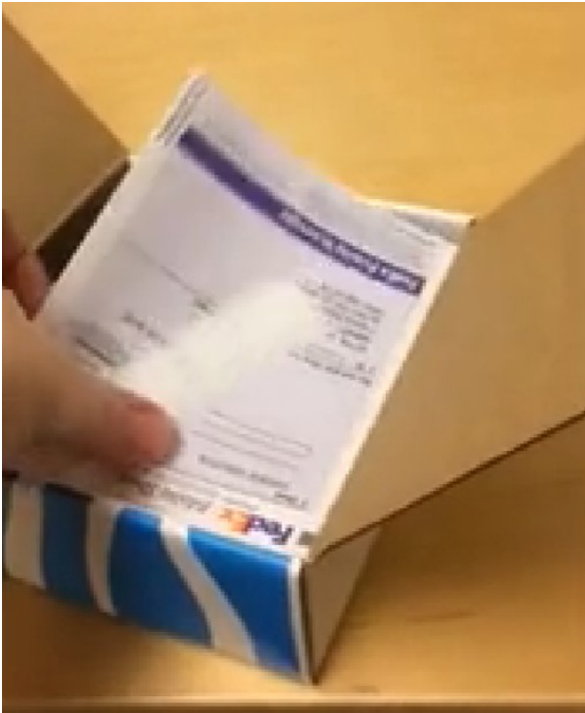


Figure 5: Participant self video to show how she ships items.

point to the potential risks inherent in the use of video snippets that are not fully contextualized. Just as an incomplete understanding of how to engage with a video snippet nearly lead an innovation team down the wrong path, mistaking illustrations for data can result from a lack of clarity, and mistaking archetypes for real customers can degrade the power of participatory innovation.

## DISCUSSION

While ideally all stakeholders are actively engaged in participatory innovation, the reality is that key decision makers frequently look for researchers and others to provide them with the information they need to take action. This means that individuals who have not interacted with participants, or in the participatory innovation process, need to learn enough about both the process and the outcomes to make informed decisions. The challenge in many of our environments, is that the high-level stakeholders may not fully understand what participatory engagement entails, or what role they are personally expected to play in the process. They are familiar with being informed, but less familiar with taking part in creation. As researchers and creators, we can forget that these stakeholders may need guidance in the nuances of sensemaking.

In the case of Portapress the video snippets of participatory interactions were used as “documents” that supplemented pictures and words and clarified communications to stakeholders much as Cramer (2008) had found. The snippets challenged stakeholder

assumptions, forcing them to view the problem, and opportunity in a different way than they had before, leading to a shift in design iterations. The stakeholders did need to be open to the snippets as pieces of data representing people, but in this case they were not asked to deliberate the meaning of the video snippets. In this sense, they were in a familiar role of processing data and envisioning new possibilities, though they did need to overturn previously held beliefs about behaviour.

As Buur (2000) argues, video becomes even more powerful when it becomes part of the design exercise. However, a key point, made by Cramer is the importance of “using video with appropriate scaffolding” (2008, 126). As we learned, only if the stakeholders understand the process of manipulating, discussing, and interpreting what they see. The stakeholders for the Helper App did not fully realize that they were being presented with “design artefacts” that created a different challenge. The stakeholders’ incomplete impressions led them too quickly to conclusions. The stakeholders needed to understand the snippets as objects whose meaning needed to be debated and made explicit rather than as answers to questions. In being interpreted as the “answer,” the video caused the stakeholders to want lead the innovation process in a focused direction that was, arguably, not appropriate for their stated end goals.

The tendency to look at a video snippet as a piece of “hard data” means that when it is used outside the participatory innovation process it has the potential to be deeply misinterpreted. When video is procured with an end goal of illustrating something predetermined, is especially important that this is made clear. In this case, there is no interaction with the video as artefact, and stakeholders do not necessarily know it has been constructed. When video represents a fictional reality that is to be accepted without debate, it does not serve the goals of researchers who want to represent reality, designers who want to negotiate meaning, or participants whose end interests we hope to serve through innovation.

Harking back to the initial question of why and how we intend to use a particular video to support the innovation process, video may be filmed during the participatory innovation process for a variety of reasons, or even without a full intent for how it will be used. As researchers, innovators and designers, this initial phase of capturing videos opens doors for later usage (while also closing some, depending on the what is filmed). Video may be used to inform, to challenge assumptions, to stimulate discussion, to spark creativity. The challenge on us is to be mindful of our tacit understandings when we do use them, so that we can make these purposes explicit to our stakeholders, and enable them to be fully engaged, and participatory with the process.



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