A natural experiment

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When commercializing innovations, the innovators face a trade-off intrinsic to the radicalness of a new product. Whereas a radical product may have a higher likelihood of attracting the attention of consumers, it also faces a higher risk of not being accepted by those same customers who evaluate the product relying on schemas developed around existing products in favor of more incremental innovations (Taylor and Greve, 2006, Pinch and Bijker, 1987).

To reduce this risk, artists and innovators often embed a radical idea in the form of an established product by altering signaling dimensions such as the packaging or the design (Tripsas, 1997). Indeed, disguising a radical innovation within a familiar shell aligns the product with the customers’ evaluation schema, leading to a positive evaluation by risk-averse consumers (Rindova and Petkova, 2007). Examples of this behavior include early automotive manufacturers, which introduced car models with a wooden horse head attached to the front to symbolically link cars to horse carriages, and are still present nowadays with digital cameras resembling film cameras (Moreau et al, 2001).

The question arises as to how artists react when they can no longer disguise an innovation’s true nature and are forced to truthfully communicate the radicalness of a new product? Would they accept the risk of market failure due to misalignment with the customers’ schema to evaluate their new product or would they reduce the radicalness of their creative output prioritizing incremental innovations?

Just like a commercialization strategy for an innovation can focus on its incremental or radical features(i.e. Abernathy and Utterback, 1978; Tushman and Anderson, 1986), the creative output of artists is considered radical when it deviates from established trajectories, genres, and customer expectations (Taylor and Greve, 2006). … Considering the innovation process as a funnel from ideation to commercialization, the direction of whether the characteristics of a new idea determine the commercialization strategy, or the commercialization strategy determines the choices of innovators can go both ways (SOURCE). This raises challenges around how to determine the degree / strength of the relationship given the endogeneity that arises from the simultaneity.

The context of interest for this study is the music industry (Berg et al, 2023; Harrison et al, 2023; Zanella et al, 2022), which experienced a policy change introduced by Billboard in 2002. Billboard is the organization responsible for, among other things, aggregating radio plays and industry sales to construct and publish several different charts on the song and album level for various genres. These publicly available lists, which include the genre-spanning “hot-100 charts”, represent the industry primary reference of a song’s performance and the associated album’s future sales potential(Anand and Peterson, 2000; Zanella et al, 2022*)*. Until 2002, a songs chart position was based on aggregated sales and plays of the song’s original release, as well as those of any derivative products such as its remixes. In other words, a radically new song could be marketed under the name of an old song with an added suffix like “remix” in order to boost its performance on Billboards’ charts. In 2002, Billboard officially restricted this practice, by stipulating that a song’s derivative releases (i.e. remixes) would have to be “sufficiently similar to the original” or be tracked as a separate song.

We combine official data from the billboard “Hot100” chart, information on individual musical recordings from MusicBrainz, and song characteristics from Spotify and Discogs. Our dataset spans all artists represented in the “Hot 100” between 1998 and 2005. To identify changes in an artist innovation strategy, we define an artist’s album as the new product, and the prior collection of an artist’s albums as the established product line. Our dependent variable of interest is the similarity of songs in the new product to existing songs in the artist’s product line. We aim to identify the causal effects of the change in Billboard’s policy with a difference-in-differences approach. In particular, artists that had a song in the hot100 charts comprise the treated group, while artists that had songs in the rock or hiphop specific charts, but not in the hot100, before treatment introduction are chosen as the control group. The rationale for this is that, although the policy changes affects all of billboard’s charts, there are certain genres in which remixing neve has been a central element of artistic expression (rock) or always has been (hiphop). Hence the assumption is that a policy change affecting the incentives to remix for chart performance will not change the behavior of artists active in this genre.

With this work we contribute to the ongoing research on how companies react in response to changes in the information regime of relevance (Zanella et al, 2022) by considering how participants in the creative economy adopt their innovation strategy across their product portfolio when they can no longer disguise the nature of a radical innovation in a familiar shell.