ABSTRACT: Motivated by markets for expertise, we study a bandit model where a principal chooses between a safe and risky arm. A strategic agent controls the risky arm and privately knows its type. Experimentation is potentially valuable to the principal only with the high type arm. Conversely, irrespective of type, the agent wants to maximize the duration of experimentation. We show that reputational concerns lead to inefficient output choices in all equilibria (subject to a mild refinement). Importantly, breakdown can occur even with infinitesimal type uncertainty. We discuss the implications for, and suggest ways to improve the functioning of, such markets.

KEYWORDS: reputation, repeated games of imperfect public monitoring, relational contracting, strategic experimentation, markets for expertise, media.

JEL CLASSIFICATION: D82, D83, D86.

1. INTRODUCTION

Attention is money for much of the advertising driven Internet. Typically, consumers do not pay for content and instead revenue is generated by their continued attention in the form of clicks. A consequence is that content providers need to sustain continued interest as consumers can freely withdraw their attention at any time. This creates a dilemma: since genuine content (which varies in quality) can only be generated periodically, how do content providers balance the quality and the frequency of the new content they provide with the aim of retaining both interest and trust? Specifically, how do they manage reputation in an environment where “fake” content can be generated at will? And how does this revenue model (as opposed to traditional payment by subscription) affect market functioning?