**Structured Abstract:**

**Purpose.** A major factor hampering the continuing and explosive rise of e-commerce, particularly for experience goods, is the lack of sensory (and mainly tactile) information that could help to reduce uncertainty in consumer purchase decision making online.

**Methodology.** By means of a systematic literature review of the ACM (Association for Computing and Machinery) database, a comprehensive inventory of sensory-enabling technologies (SETs) is compiled. This inventory is enriched with illustrations of particular applications for online retail marketing purposes. The SETs have been classified according to their specific marketing application potential by three researchers.

**Findings.** This study provides an inventory of 30 touch-enabling technologies as distilled from the IT field of academia, enriched by particular application ideas for online retailing to address the forgotten sense of touch online.

**Research limitations/implications.** We formulate a research agenda targeted at marketing academia specifying directions for future empirical validation of the inventoried SETs.

**Practical implications.** This study aims to raise awareness among online retailers of marketing opportunities comprised in touch-enabling technology. We shed light on how computer-mediated retail channels can enrich the vividness of presenting their offerings and enhance online interactions with customers by addressing the largely forgotten sense of touch.

**Originality.** This article is unique in that it infuses the academic retail marketing literature with insights from the IT discipline, contributing to a sensory enrichment of online shopping experiences, both from a utilitarian and from a hedonic consumer motivational perspective.

**Keywords:** Sensory-enabling technology, touch, haptic, online retailing, online atmospherics, sensory marketing

**Article Classification:** literature review