

# Leveraging Web 2.0 for Informed Real-Estate Services

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**Abstract.** The perception about real estate properties, both for individuals and agents, is not formed exclusively by their intrinsic characteristics, such as surface and age, but also from property externalities, such as pollution, traffic congestion, criminality rates, proximity to playgrounds, schools and stimulating social interactions that are equally important. In this paper, we present the Real-Estate 2.0 System that in contrary to existing Real-Estate e-services and applications, takes also into account important externalities. By leveraging Web 2.0 (content from Social Networks, POI listings) applications and Open Data enables the thorough analysis of the current physical and social context of the property, the context-based objective valuation of RE properties, along with an advanced property search and selection experience that unveils otherwise “hidden” property features and significantly reduces user effort and time spent in their RE quest. The system encompasses the above to provide services which assist individuals and agents in making more informed and sound RE decisions.

## 1 Introduction

Contemporary real estate economists (Geltner and H., 2007), (Van Dijk et al., 2011) agree that the value of an apartment, building or land in an urban area is not only represented exclusively by the intrinsic characteristics of the property, such as the quality, location and size of its construction, but also by both positive externalities such as proximity to playgrounds, schools, dynamic local cultural relations, intellectual circuits of exchange, peaceful and stimulating social interactions; and negative externalities such as air and noise pollution, traffic congestion, noisy neighbours, high criminality rates.

Real-Estate 2.0, in contrary to existing Real Estate web services and applications (xe<sup>1</sup>, foxtons<sup>2</sup>) that are restricted only to intrinsic characteristics of properties, aims to harvest and integrate various forms of Real Estate (RE) information that is actually available today in various Web 2.0 sources, under the form of point of interest (POI), content and opinions expressed in

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1. <http://www.xe.gr/>

2. <http://www.foxtons.co.uk/>