In recent years, there has been growing interest in both industry and academia in augmenting mobile web browsing with support from the cloud [4, 1, 3, 16, 18]). These efforts are motivated by the goals of lowering costs of data transfer, and reducing web latencies and device energy consumption.

Cloud support is used for most browsing functionalities such as execution of JavaScript (JS), and for compaction of data (e.g., image transcoding and compression)

Our results indicate that CB does not provide clear benefits over Direct (a device-based browser) either in energy or download time.

In this paper we take a first step towards understanding the performance implications of mobile cloud browsing solutions by comparing the two extreme points – one that does not use the cloud at all, and another that primarily relies on the cloud. Our evaluation is conducted in the context of a popular commercially available cloud-based mobile browser.

Our evaluation focuses on two metrics: (i) page download time, and (ii) device energy consumption.