

Chapter 1 Introduction

According to the Gartner Group, over 1.2 billion Internet-enabled cellular phones were used worldwide at the end of 2000. However, the growth of domestic computer sales declined. When the number of mobile Internet users outnumbered computer users worldwide, there will be a shift in electric commerce from wired computers to Internet-enabled mobile devices (Bergeron 2001).

Online shopping would establish itself as an alternative channel alongside traditional shopping alternatives. There has been widespread discussion of the challenges associated with online shopping. Some have sought to explore the nature of the shopping experience, seeking to know those products and buyers most suited to this new channel.

Cognitive style is defined as an individual's preferred and habitual methods to organizing and representing information (Riding and Rayner 1988). Since the mid-1940s, discussions of cognitive style have emerged. Many researchers indicate that it is appropriate to group similar styles into two distinct families: the Wholist-analytic dimension and the verbal-imagery dimension. (Riding and Rayner,1988). They concluded that the various style labels could be accommodated within two fundamental style dimensions: the Wholist-Analytic and the Verbal-Imagery which may be summarized below.

- The Wholist-Analytic dimension of whether an individual tends to organize information in wholes or parts.
- The Verbal-Imagery dimension of whether an individual is inclined to represent information during thinking verbally or in mental pictures (Riding and Michael 1999).
- . The research tries to study both a new application (mobile commerce) and a

traditional perspective (cognitive style). The objective of the research is to investigate how cognitive styles affect users' performance of online shopping and the difference in users' performance on the wireless or wired web. The following figure 1.1 is the structure of the thesis. The purposes of this research are:

- To review the theories and relative research concerning cognitive styles.
- To investigate the customers' online shopping and browsing performance on wireless websites using computers and handheld devices.
- To offer suggestions on user interface design of mobile commerce websites.



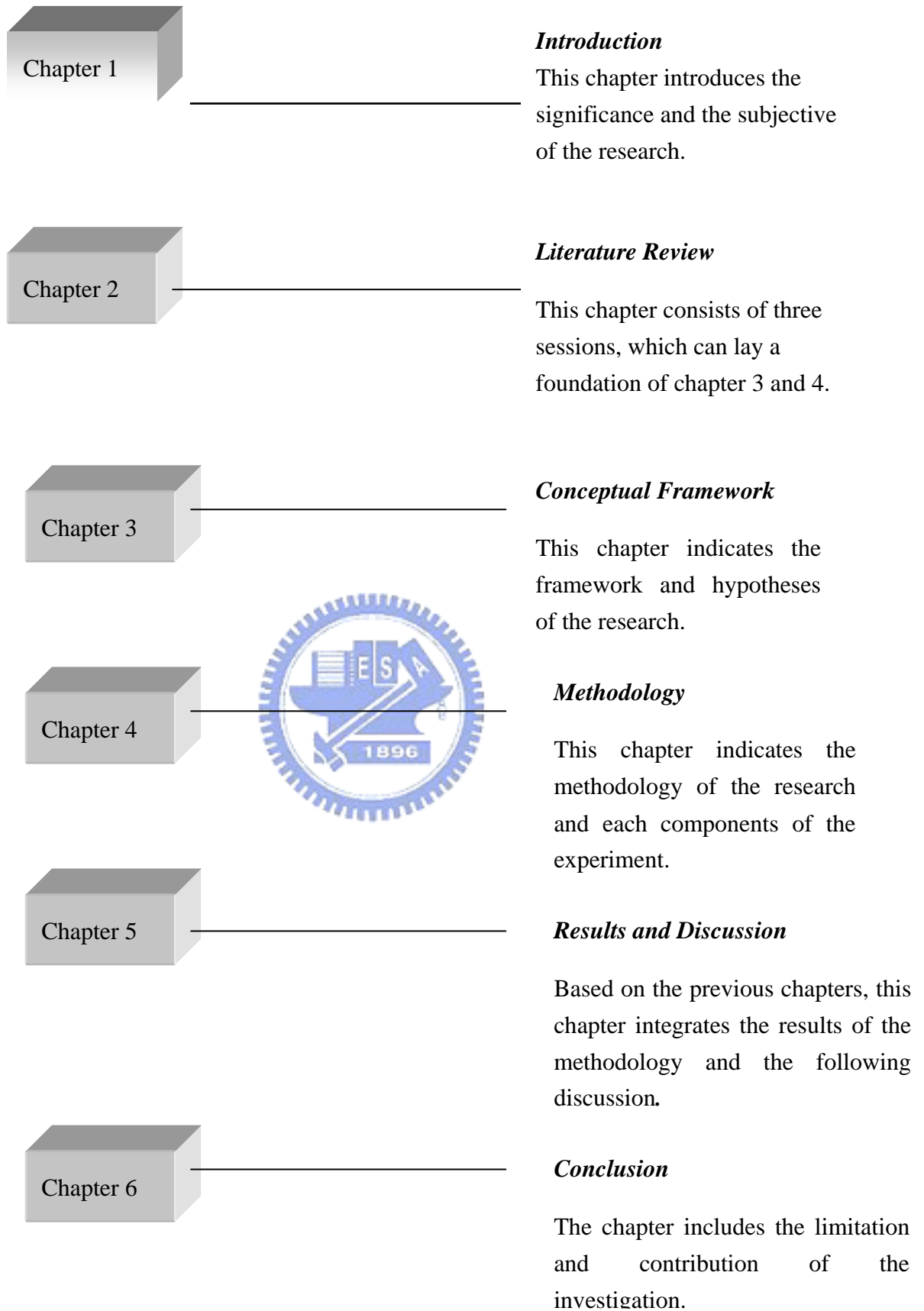


Figure 1.1 The structure of this research