Abstract—Virtual Communities (VCs) have become a forum for programmer seeking knowledge to resolve problems and communicate with each other. The Internet makes participant relatively easy to switch for one VC to another VC that provides similar content or services. However, many VCs have failed due to the reluctance of members to continue their participation in these VCs. In volatile cyberspaces, VCs without specific domain knowledge may face challenges such as large populations, unstable memberships, and imperfect information and memory, which also affect knowledge flows within members. The most important aspect of VCs from the members’ perspective is the increase satisfaction, and engage behavioral intention to use VCs, but satisfaction does not always predict continuous usage. This study proposes a conceptual model based on commitment-trust theory (CTT) and investigates the continuance intention in VC. It seeks to theorize the antecedents and consequence of relationship commitment in the VCs and identify how CTT can be adapted in a knowledge sharing environment. The members of Programmer Club, a representative professional community in Taiwan, were chosen to participate in the survey, and 488 usable responses were collected in three months. Structural Equation Model (SEM) was used to test the model, the findings show that relationship commitment and trust is the strongest predictor of members’ continuance intention. Implications are proposed in the final section.

Keywords—Commitment-trust Theory, Relationship Commitment, Virtual Communities, Knowledge Sharing, Trust, Share value, Relationship Benefit, Relationship Termination Cost, Communication, Opportunistic Behavior.

I. INTRODUCTION

Virtual Communities (VCs) have become a forum for programmer seeking knowledge to resolve problems and communicate with each other. The Internet makes participant relatively easy to switch for one VC to another VC that provides similar content or services. In volatile cyberspaces, VCs without specific domain knowledge may face challenges such as large populations, unstable memberships, and imperfect information and memory, which also affect knowledge flows within members [1]. A large number of new virtual communities are not well-accepted by individuals. Thus, it is important to find out the expectations of individuals towards visiting and revisiting behaviors [2]. The most important aspect of virtual communities (VCs) from the members’ perspective is the increase satisfaction, and engage behavioral intention to use VCs [3], [4], [5], [6]. However, satisfaction does not always predict continuous usage [7]. If a number has many available choices, satisfaction will not always keep him or her from switching to other VCs. Recently, much research has investigated the members’ commitment to continuous use is critical to venders [8], [9], [10], [11]. Relationship commitments adopt form Morgan and Hunt (1994) as an enduring desire to maintain a valued relationship. In organizational context, commitment is seen as central because it not only leads to such important outcomes as decreased turnover, higher motivation, and increased organizational citizenship behaviors [9]. In this study, we investigate the role of relationship commitment in members’ behavioral intention to continue use a VC in a voluntary content. It seeks to theorize the antecedents and consequence of relationship commitment in the VCs and identify how commitment-trust theory (CTT) [9] can be adapted in a VC environment.

The remainder of this article is organized as follows: First, we review competing literatures which are widely used with commitment-trust theory. Second, the research model is proposed and the corresponding hypotheses are listed. Third, the research methodology is discussed, and the fitness of the proposed model is then assessed using Partial Least Square (PLS) regression, following the finding and discussion. Finally, implications of the study to both researchers and practitioners are discussed.

II. THEORETICAL BACKGROUND

A. Virtual Community and Relationship Commitments

Relationship development is one of the four needs – information, transaction, fantasy, and relationship – driving the formation of a VC [12] and it occurs when members participate and interact with one other long enough with sufficient human feeling. However, though participation may lead to relationship development, it does not guarantee the formation of relationship, it requires strong relationship. If bad experience is encountered during participation and interaction with the others, relationship will not be developed [11]. Commitment to a relationship explains an individual’s