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## SOCIAL NETWORK SITE VALUE DELIVERANCE FEEDBACK LOOPS

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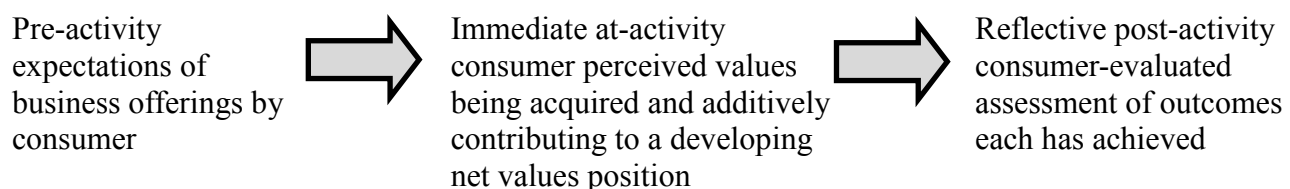
### ABSTRACT

This paper considers the harnessing of operational feedback loops across the business and its social network site (SNS). Built for structural equation modeling investigation, an expectations-value-outcomes (EVO) measurement approach is adopted as an approach to capture the feedback loops generated by SNS's consumers as they engage at one of two large marine and a farm machinery portal-style social network sites.

**Keywords:** expectations, value, satisfaction, trust, loyalty, social network, electronic commerce

### INTRODUCTION

Previously Hamilton and Tee [3]; [4] considered the deliverance of value within social network sites (SNSs). Their models typify a three stage approach with prior expectations leading to values acquisitions and resulting on consumer outcomes as shown in figure 1.

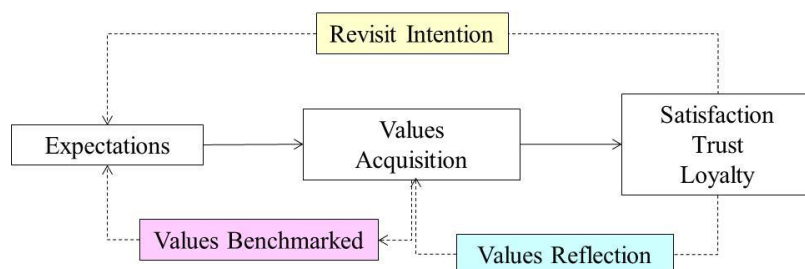


**FIGURE 1:** SNS expectations-values-outcomes (EVO) timeline

Recently, their pre-activity considerations have expanded to include information systems approaches of consumer experience [1] and the SNS's believed usefulness to the consumer. When considering value a five dimensional approach is derived, and this is framed as at-activity (or during-activity) consumer capture. Assessments deemed by the consumer to have been acquired include their reflective views on satisfaction, the trust they have now established in using this SNS, and the loyalty they believe they are and will display concerning this SNS. In Hamilton, Prideaux and Tee's [5] study, and in most other EVO studies, this consumer-changing EVO process is considered as a one-way process – leading to an outcomes decision set, and a changed perceptive position now held by this consumer.

In this paper we pursue a cyclic improvement to our data capture, and seek to build a two way EVO feedback modeling approach that allows a strengthening the EVO business solution over-time. As per figure 2 we include three major feedback loops, and we describe several minor loops that may hold significance within SNS business-specific applications.

First we deploy the time shift approach embedded in the EVO model and recognize that the time shift from 'pre-activity' engagement (expectations), to 'at-activity' actioning, and through to 'post-activity' considerations regarding the experiences encountered can be suitably framed to capture all three-stages of opinion within the one survey. Next, we add the post stage feedback loops and determine how these may be gauged, and finally, we set the agenda for our next SNS research benchmarking developments and our other business-specific applications.



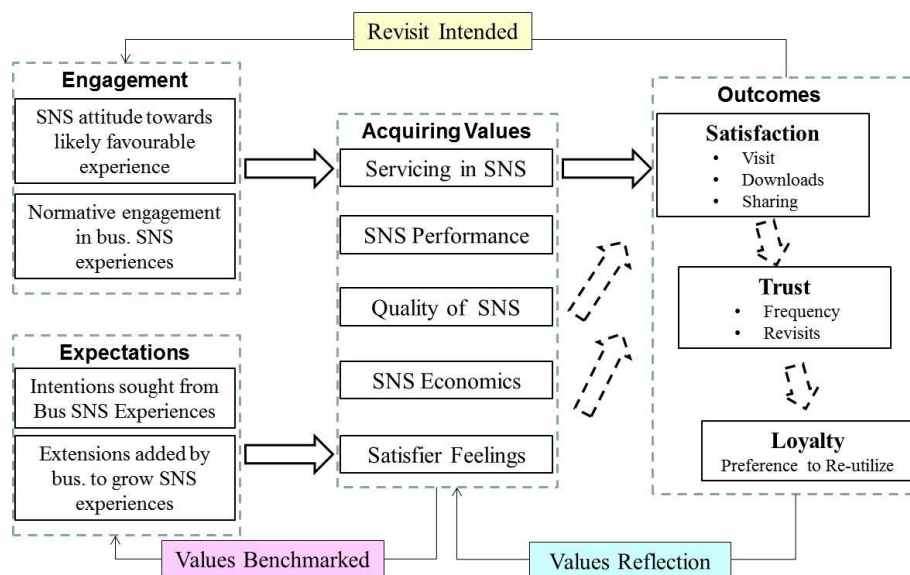
**FIGURE 2:** Major feedback SNS loops in the EVO model

### Time Sequencing of EVO Models

Before a consumer participates in a SNS engagement they adopt a pre-activity position. This position depends on their skillfulness in using an information technology approach [7]. In addition the consumer is about to enter an uncertain domain, but chooses to do so because of a pre-activity determination (or perception) of the SNS's usefulness in allowing the consumer to gain the required insight they are seeking. This motivation to consume then links into the psychological aspects of consumer behavior [2], and these two SNS activators work in conjunction with the consumer's expectations concerning the SNS and its community's deliverance capabilities. This suite of expectations is captured as intentions (or directly expected deliverables) and extensions (or additional features that go beyond the expected deliverables). Thus four constructs frame the consumer's pre-activity SNS input perceptions, and these are modified over time by the consumer directed SNS feedback loops.

During the activity or at the activity a value acquisition arises where the consumer gains value through a performance experience, through experiencing a quality dimension, by experiencing an economically worthwhile situation or reward, by sharing in a servicing experience and by participating across emotionally satisfying experiences. In framing these positions the consumer benchmarks them individually (or collectively as one overall values benchmark) against their expectations suite.

These five value dimensions [3]; [10] combine to deliver a suite of three main outcomes (or construct) measures. First, the consumer frames a reflective view as to how satisfying was the SNS experience, and as to what level of value they perceive it to be worth. Next, through the consumer's actioning behaviors and reflective satisfaction considerations [9] a level of trust is established against the SNS [8]. Finally, a level of loyalty is developed [6] – hopefully with the consumer being sufficiently tempted to revisit the SNS in the near future. For each of these outcome construct a degree of values reflection is adopted and a degree of revisit intention is unleashed. Hence a new resultant EVO feedback model emerges as shown in figure 3.



**FIGURE 3:** SNS EVO model with major and minor feedback loop paths

### EVO Questioning Approaches

The development of the EVO questionnaire is applied under pre-activity, at-activity, and post- activity questioning techniques – in line with Hamilton, Prideaux, and Tee's [5] and Hamilton and Tee's [3]; [4] modeling – but applied to SNSs. The SNS feedback loops are applied as post-EVO timeline divisional action loops. To frame their relative feedback strengths we pursue consumer responses such as: when I reuse this SNS I perceive it:

- performing as I expected
- giving me the quality experiences I expected
- being economically worthwhile in achieving my aims
- treating me to the servicing engagements I expected
- leaving me feeling the personal values I've experienced are as I expected
- leaving me satisfied to the level I expected
- offering engagements that give me the level of satisfaction I expected
- always sharing trustworthy information between its community of users
- connecting me with other loyal users who share similar interests.

### Validation Approaches

This study is approached using on-line surveys at two significant Australian SNSs – one in the marine industry and one in the farm machinery area. Both sites tap different users and each has an active social network. Each SNS's community of users

(consumers) exceeds 70,000. The communities are asked to complete identical questionnaires and a raffle prize is offered to drive the response rate towards one per cent. The two data sets are to be sectioned into their corresponding calibration and validation sub-sets of around 350 cases each. Each structural equation modeling construct is built through factor reduction. The structural equation modeling approach adopted aligns to Hamilton and Tee's [3] technique and exposes significant individual path strengths, the total effects of each construct, and the significant feedback loops. Qualitative questions are included in the survey as an additional triangulation measure. Support questions further determine the consumer's capabilities, motivation, and consumptive desires against the demographic divisions collected under this study.

## DISCUSSION

This study first expands the understanding of the consumer and their interactions within a business's SNS. It provides a new and broader capture of pre-activity constructs and provides a competitive pre-status from where the business can develop its target market strategies and then present its selected value offerings to the consumer as an at-activity experiential suite captured in five dimensions. The subsequent post-activity assessment phase provides the business with a consumer-assessed determination (satisfaction, trust, and loyalty) concerning the successes (or failures) of its strategically targeted suite of experiential value offerings.

The feedback loop inclusions offer new dimensions to this type of approach. They now allow the business to reassess its offerings based directly on the interpretations of its SNS consumers, rather than by a business assessment of a one-way EVO process. These consumers are most likely the committed adopters of this business SNS and they likely provide a leading edge feedback interpretation for the business. In the future these feedbacks can then contribute to the build of a repositioned competitive edge for the business. Hence, this study's EVO feedback loops approach brings a capability to release new dynamics concerning the next change processes that likely warrant management consideration if management is in pursuit of enlisting a rapid response strategy to consumer shifts as portrayed within their SNS environment(s).

## CONCLUSION

Understanding feedback loops in EVO models and in SNSs enables the business to adjust to its consumers changing preferences and to include additional value drivers where and when required. EVO feedback loop activations allow the business to make considered decisions and to pursue agile solutions - thereby shifting in line with and in close proximity to the changing focal points of the SNS and its consumer's activities.

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