

# The influence of creative problem-solving on the longevity of small and medium enterprises

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## Abstract

This research modelled the influence of critical thinking, creative thinking, organizational innovativeness, creative problem-solving abilities (CPS), and internal business performance factors on the longevity of small and -medium enterprises. A total of 105 Manufacturing and 99 Construction SMEs were compared using a survey. Inferences were drawn using structural equation modelling.

Confirmatory factor analysis revealed that latent variables within the creative problem-solving model overall demonstrated moderate ability to predict longevity. However, the creative problem-solving structural equation models for both sectors showed that creative thinking strongly increased critical thinking which increased SMEs' longevity. For the manufacturing sample, creative thinking also increased organizational innovation which increased longevity. The stronger manufacturing sector also demonstrated more significant paths and larger Beta coefficients overall. Respecifying the structural model by introducing the business performance measure increased the sizes of model coefficients. Creative problem solving however only exerted a weak direct influence on longevity for both sectors.

Creative thinking skills strengthened critical thinking, which in turn increased the longevity of SMEs. More emphasis on creative thinking could also improve innovation skills and longevity. Better creative thinking could also improve creative problem solving. Optimizing business performance factors (sales growth, after tax return on assets, profits after tax, market share, liquidity, customer loyalty, image) appeared necessary for this process to be most effective.

SME managers need creative thinking, critical thinking, innovative thinking, and creative problem-solving abilities. Identifying such creative problem-solving skills and leveraging them can enhance the competitive performance and longevity of individual SMEs.

**Keywords:** Creative problem solving, creative thinking, critical thinking, organisational innovation; business performance; managerial cognitive competencies, longevity.