

整數規劃在建設公司多角化策略下融資利息成本最佳化之應用

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摘要

企業成長為每個企業首要考慮的問題，以多角化方式成長能提高企業綜合能力並穩固財務基礎。進行產業多角化擴張的企業必須認識到其業務性質與財務風險，嚴格衡量分析現有業務組合和新業務機會，並且對它們實施積極的管理和控制。為進行整體分析，首先對個案公司營運現況說明，繼而對多角化策略之整體面與財務面進行探討，多角化方式經營難免要承擔財務風險，各事業部也當然遭遇市場考驗。本研究以個案公司建設事業部近期推出 4 個專案之融資方案做為研究範圍，建立以整數規劃為架構之數學最佳化模式，得整合規劃後之利息成本最小化之結果。

關鍵字：企業多角化;財務風險;融資;最佳化;整數規劃。

Abstract

For each company, the growth of the company is the primary consideration, and growth in a diversified strategy can improve the financial capabilities of the company. Companies that diversify their business must realize their business nature and financial risks. Existing business portfolios and new business opportunities must be rigorously measured and proactively managed and controlled. To facilitate the overall analysis, first explain the current situation of the case company's operation, and then discuss the overall and financial aspects of the case company's diversification strategy. The company's operation is inevitably subject to financial risks, and each business unit is of course experiencing the test of the market. In this study, the land and construction mortgage of the four building projects that the case company's land development department recently launched is as the research scope, and established a mathematical optimization model based on integer linear planning. The result of minimizing the interest cost can be found after the integration planning of each case.

Keywords : Diversification ; Financial risks ; Financing ; Optimization ; Integer linear planning