# Chapter 5 Recommendations and Conclusions

Recommendations

* 1. Targeted Risk Mitigation for Young Borrowers:

Given the increased likelihood of loan defaults within the demographic of borrowers aged 22-32, it is advisable for lending institutions to adopt more rigorous risk assessment measures tailored to this cohort. These measures might involve the imposition of more stringent credit score prerequisites, a decrease in loan-to-value ratios, or the implementation of targeted financial education programs. The implementation of such initiatives is poised to effectively mitigate the inherent risks associated with extending loans to young borrowers.

* 1. Income-Based Risk Assessment:

In light of the elevated probability of loan defaults within the demographic characterized by lower monthly incomes, lending institutions are advised to undertake a meticulous assessment of the financial profiles of loan applicants. This evaluative process may involve the establishment of discerning income thresholds for loan approval, the implementation of targeted financial literacy programs, or the consideration of loan restructuring options tailored to individuals with diminished income levels, particularly in metropolitan areas.

* 1. Consideration of Employment Tenure:

Lending institutions can strategically leverage the robust correlation observed between employment tenure and loan defaults. Through the implementation of nuanced practices, such as extending preferential terms like reduced interest rates or elongated repayment periods, to borrowers boasting extensive employment histories—particularly those meeting predefined thresholds within the same company or industry—financial institutions can adeptly mitigate the inherent risk of default..

* 1. Evaluation of Prior Credit Default History:

In evaluating loan applicants, lending institutions should meticulously take into account their historical credit default incidents, encompassing factors such as credit card delinquencies or defaults. Individuals with such credit histories present a markedly escalated risk of loan default. Therefore, an unequivocal imperative exists for the adoption of more stringent underwriting practices tailored to those with a track record of credit challenges. Emphasizing the reliance on reliable indicators such as CRISIL ratings and other credit assessments becomes imperative for sound decision-making in the lending sphere.

* 1. Loan Type Differentiation:

It is imperative to recognize that personal loans manifest a heightened default rate relative to other loan categories. In response to this, lending institutions can proactively institute more rigorous approval criteria meticulously designed for personal loans. Alternatively, diversifying their loan and debt portfolio to encompass lower-risk alternatives, such as educational or home loans, serves as a strategic approach to mitigate the elevated risk associated with personal loans.

* 1. Promotion of Credit Rating Awareness:

Lending institutions are well-advised to proactively promote borrowers' adept comprehension of their credit ratings. Moreover, the provision of resources and incentives to facilitate the monitoring and enhancement of credit scores holds the potential to diminish the probability of loan defaults, particularly among borrowers who demonstrate a keen awareness of their creditworthiness.

* 1. Recognition of Venture Loans' Value:

It is crucial to acknowledge that venture loans exhibit the lowest default rate among all loan types. In light of this, lending institutions may consider expanding their portfolio to include more venture loans or crafting analogous financial products. This strategic move can effectively mitigate overall default risk, aligning with the national imperative to promote entrepreneurship incubation, initiatives such as Make in India, and other concerted efforts fostering economic growth.

* 1. Implementation of Financial Counselling Programs:

Lending institutions would be wise to contemplate either implementing or promoting financial counselling programs for borrowers. Such initiatives empower borrowers to make judicious and informed financial decisions, consequently reducing the inherent risk of loan defaults.

* 1. Stringent Risk Assessment for Digital Lending Services Users:

Given the elevated default rate associated with frequent users of digital lending services, lending institutions should enforce more rigorous risk assessment and loan approval criteria for this particular segment of borrowers.

* 1. Utilization of Collateral Assets for Risk Reduction:

Institutions may contemplate providing more favorable terms to borrowers who offer collateral assets as a form of security. Such borrowers are less likely to default, and collateral can serve as a valuable tool for mitigating risk, enabling safer lending practices.

* 1. Advocacy of Budget Management:

Institutions should actively advocate for budget management among borrowers. By providing educational resources or tools that facilitate the creation and maintenance of budgets, lending institutions can potentially reduce the risk of loan defaults.

* 1. Effective Customer Churn Management:

To address customer churn, lending institutions should endeavour to offer more competitive interest rates and minimize loan processing delays. Satisfying customers in these areas can lead to enhanced customer retention and a positive ripple effect through word-of-mouth recommendations.

Conclusion

This dissertation delved into the burgeoning influence of emerging credit scoring systems and their transformative impact on lending methodologies within the digital lending sector. The investigation commenced by situating itself within the backdrop of expanding loan accessibility and the proliferation of online lending platforms, with a specific focus on the landscape in Bangalore, India. This contextual exploration underscored the significance, as well as the intricacy, of accurately evaluating the risk associated with extending loans in an epoch dominated by fintech lending entities.

Subsequent to an exhaustive literature review, this study scrutinized pivotal prior research addressing the intersection of machine learning, predictive modelling, and credit scoring. A thorough analysis of 15 seminal academic papers not only furnished a robust theoretical foundation for the current research but also illuminated specific domains warranting further empirical exploration. The research methodology, characterized by the adept application of statistical techniques such as two-way Multivariate Analysis of Variance (MANOVA) and machine learning algorithms, including Deep Neural Networks, facilitated the construction of a robust credit scoring model. The model was developed leveraging a dataset comprising 870 samples, each characterized by over 30 attributes.

The data analysis revealed compelling insights into the determinants of customer default on loans and their propensity to switch lenders, particularly within the demographic of working professionals in Bangalore. Noteworthy findings encompassed a 39% higher default rate among young borrowers aged 22-32 in contrast to their older counterparts, a 53% lower median income of ₹36,000 among defaulters as opposed to ₹79,600 for those who did not default, and a 55% elevated default rate associated with personal loans compared to other loan types. Going beyond the exploration of causal relationships, the study showcased a predictive accuracy exceeding 85% through the application of Deep Neural Networks, underscoring the substantial potential of advanced algorithms in this domain.

Derived from the empirical analysis, the concluding chapter presented a comprehensive set of twelve targeted recommendations designed to mitigate credit risk. These recommendations advocate for interventions such as mandating a minimum credit score 15% higher for demographics deemed high-risk, augmenting credit rating awareness through financial literacy programs, and endorsing budget management mobile applications to foster positive financial behaviors. Moreover, the proposals underscored the merits of leveraging machine learning models, emphasizing their capacity for nuanced, data-driven decision-making with heightened predictive capabilities.

This dissertation underscores the profound influence of technology in reshaping the framework underpinning contemporary lending methodologies. Through the utilization of advanced algorithms, financial institutions can transcend the confines of conventional risk assessment, fostering enhanced financial inclusion through discerning and transparent credit allocation. As alternative scoring mechanisms progress, their ramifications extend beyond mere credit risk evaluation, heralding an era of exceptionally personalized financial services.