THE UNIVERSITY　　　　　　　　　　**OF HONG KONG**

Department of Mathematics

Computational Science Seminar

Using a Transactor/Revolver Scorecard to Make Credit and Pricing Decisions

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Abstract

The traditional approach in consumer lending is to develop a credit scorecard which ranks borrowers into Goods and Bads according to their risk of defaulting. To maximise the profitability of credit card customers, a second classification between Revolvers and Transactors becomes important. Transactors are credit card users who pay off all their balance every month. Thus they will not default but the credit card organisation does not make much profit from them. Revolvers are users who do not pay off their balance every month and so although they are possible defaulters, the credit card organisation makes extra income from them because of the interest charged on the unpaid balance. Building a Transactor/Revolver scorecard together with a Good/Bad scorecard over the Revolvers, can give rise to a risk decision system comparable with the standard approach. We used credit card data from a large financial institution to conduct the analysis. The work shows how Transactor/Revolver scorecards could be used in the initial accept/reject decision to obtain the most profitable portfolio including what interest rate to charge. The model incorporating Transactor/Revolver score is more accurate than the profitability model which ignores such estimates. This is because Goods are more likely to be transactors than revolvers and hence are less profitable than one would expect.

Speaker: Dr. Mee Chi So is an Associate Professor within Southampton Business School at the University of Southampton with expertise in credit scoring and marketing analytics. She obtained her first degree and a master's degree major in Operational Research from the University of Hong Kong. In 2009, she completed her Ph.D. at the University of Southampton. In her Ph.D. study, she collaborated with two large banks in UK and Hong Kong to look at how to derive optimal credit limit strategies for credit card lenders. In 2011, she took up the position as a Research Facilitator at the University of Southampton. Since 2013, she has taken up the Lecturer position. Apart from her academic education and experience, she was a CRM analyst in B&Q and a market research analyst in the international company IDC.

Date:	June 22, 2018 (Friday)
Time:	10:30am – 11:30am
Venue:	Room 309, Run Run Shaw Bldg., HKU

All are welcome