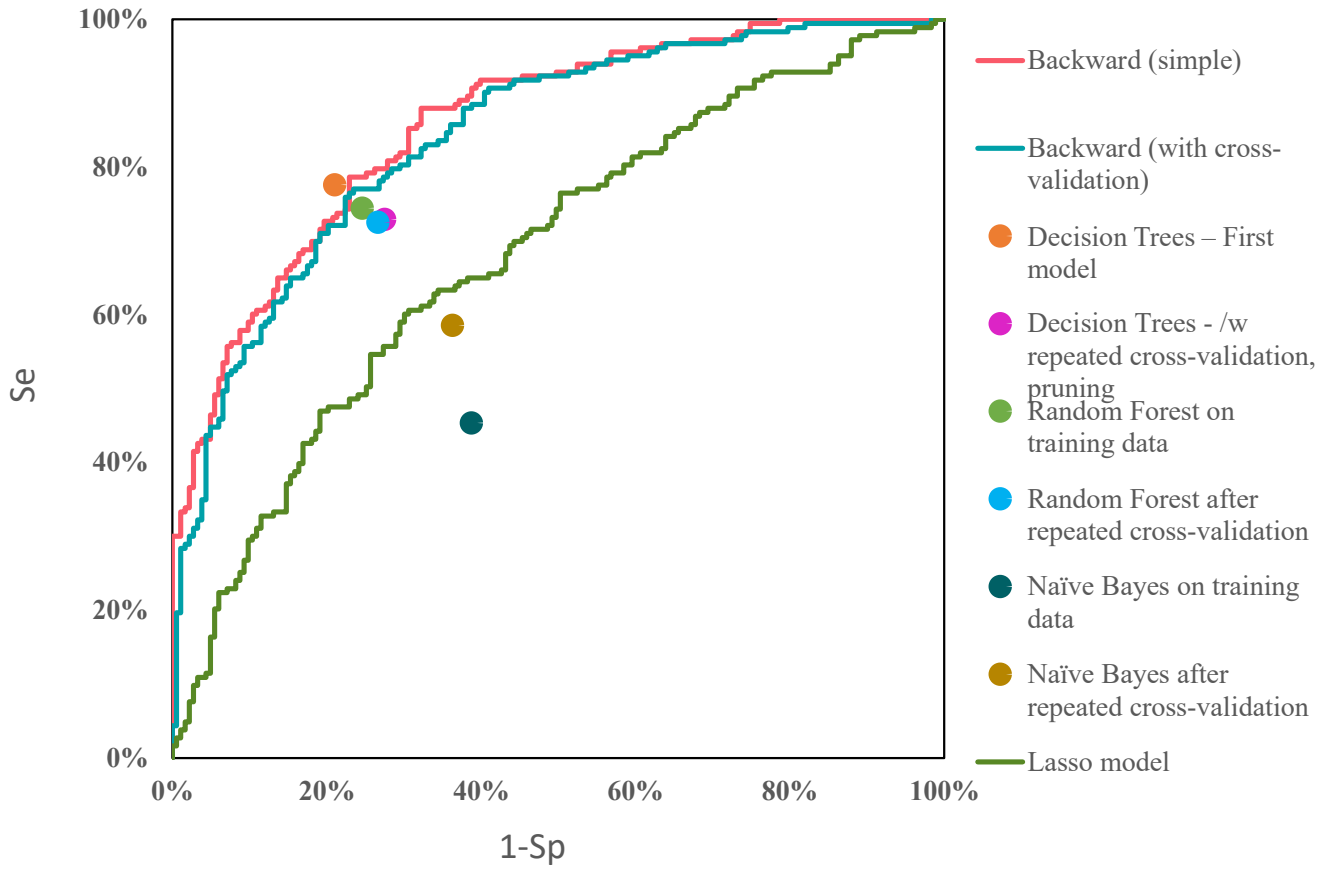
Comparison



Marcell Granat

Comparison

It is well-known that the customers do not pay back the loan always until its expiration date. If it happens, the customers get mails or phone calls about that. If it does not have any affect, the lender company can use the service of a loan-agency. The price of this service is mostly between **15 and 40% of the loan.**

> Brealey, Myers - Principles of Corporate Finance

Amount of the loan: **1000 euro**

Loss at the case of FP: **400 euro** (40 % of the loan)

Win at the case of TP: **100 euro** (10 %, as interest)

Rank	*Model*	*Profit*
1	**Backward (with cross-validation)**	**4 200,00 €**
2	Decision Trees – First model	2 600,00 €
3	Naïve Bayes on training data	- 1 700,00 €
4	Random Forest after repeated cross-validation	- 4 575,00 €
5	Decision Trees - /w repeated cross-validation, pruning	- 7 650,00 €
6	Random Forest on training data	- 7 700,00 €
7	Naïve Bayes after repeated cross-validation	- 9 325,00 €

Comparison

It is well-known that the customers do not pay back the loan always until its expiration date. If it happens, the customers get mails or phone calls about that. If it does not have any affect, the lender company can use the service of a loan-agency. The price of this service is mostly between **15 and 40% of the loan.**

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Amount of the loan: **1000 euro**

Loss at the case of FP: **150 euro** (15 % of the loan)

Win at the case of TP: **100 euro** (10 %, as interest)

Rank	*Model*	*Profit*
1	**Decision Trees – First model**	**9 850,00 €**
2	**Backward (with cross-validation)**	**8 250,00 €**
3	Random Forest after repeated cross-validation	6 581,25 €
4	Decision Trees - /w repeated cross-validation, pruning	5 475,00 €
5	Random Forest on training data	5 300,00 €
6	Naïve Bayes on training data	4 550,00 €
7	Naïve Bayes after repeated cross-validation	3 206,25 €