12/02データで11/14データを予測

■学習データの前提
疑似店舗としての行動データを採取したもの

記録された行動
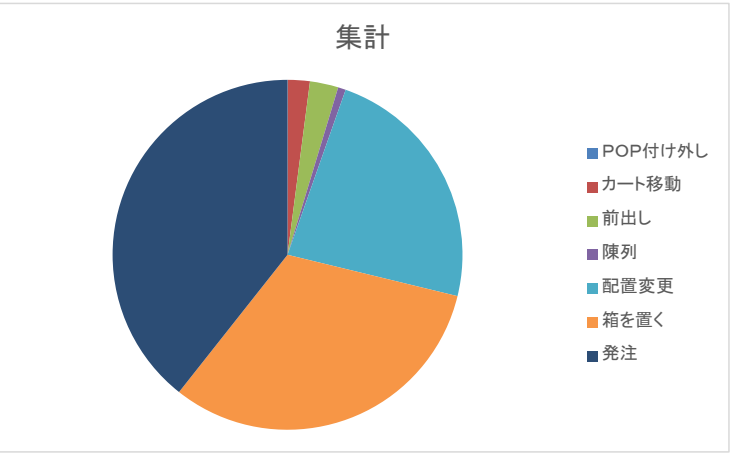
作業名
POP付け外し
カート移動
事務作業
前出し
陳列
配置変更
箱を置く
発注

■予測結果

（1）ロジスティック回帰を用いた予測
①1日分の行動ラベル

行ラベル	データの個数 / result
POP付け外し	21
カート移動	1977
前出し	2556
陳列	693
配置変更	22788
箱を置く	31006
発注	38314
総計	97355

②時間帯別の行動割合

時間帯	POP付け外し	カート移動	事務作業	前出し	陳列	配置変更	箱を置く	発注	時間別ラベル数
2016/11/14 7:15	0%	0%	0%	0%	0%	0%	0%	0%	0
2016/11/14 7:30	0%	0%	0%	3%	0%	7%	5%	85%	2301
2016/11/14 7:45	0%	1%	0%	23%	0%	16%	39%	21%	4349
2016/11/14 8:00	0%	1%	0%	10%	0%	20%	44%	25%	4353
2016/11/14 8:15	0%	0%	0%	2%	0%	14%	34%	50%	4345
2016/11/14 8:30	0%	4%	0%	1%	1%	20%	36%	39%	4352
2016/11/14 8:45	0%	1%	0%	2%	0%	24%	11%	61%	4288
2016/11/14 9:00	0%	7%	0%	1%	0%	23%	33%	37%	4350
2016/11/14 9:15	0%	0%	0%	0%	0%	46%	10%	44%	4352
2016/11/14 9:30	0%	1%	0%	0%	0%	31%	27%	41%	4353
2016/11/14 9:45	0%	4%	0%	1%	0%	31%	45%	19%	4351
2016/11/14 10:00	0%	4%	0%	0%	0%	33%	34%	28%	4353
2016/11/14 10:15	0%	3%	0%	0%	0%	10%	43%	45%	4354
2016/11/14 10:30	0%	3%	0%	0%	0%	27%	30%	41%	4347
2016/11/14 10:45	0%	4%	0%	3%	0%	29%	32%	32%	4352
2016/11/14 11:00	0%	5%	0%	0%	0%	17%	46%	32%	4352
2016/11/14 11:15	0%	1%	0%	1%	0%	39%	41%	18%	4349
2016/11/14 11:30	0%	1%	0%	0%	0%	41%	20%	37%	4325
2016/11/14 11:45	0%	3%	0%	8%	0%	25%	42%	22%	4349
2016/11/14 12:00	0%	0%	0%	1%	0%	11%	19%	69%	4350
2016/11/14 12:15	0%	2%	0%	3%	0%	35%	34%	27%	4354
2016/11/14 12:30	0%	1%	0%	0%	5%	18%	31%	45%	4352
2016/11/14 12:45	0%	0%	0%	0%	4%	5%	37%	53%	4350
2016/11/14 13:00	0%	0%	0%	0%	7%	5%	27%	60%	3691

（2）k近傍法を用いた予測
①1日分の行動ラベル

行ラベル	データの個数 / result
POP付け外し	87
カート移動	116
事務作業	2
前出し	2274
陳列	5307
配置変更	24509
箱を置く	60769
発注	4291
総計	97355
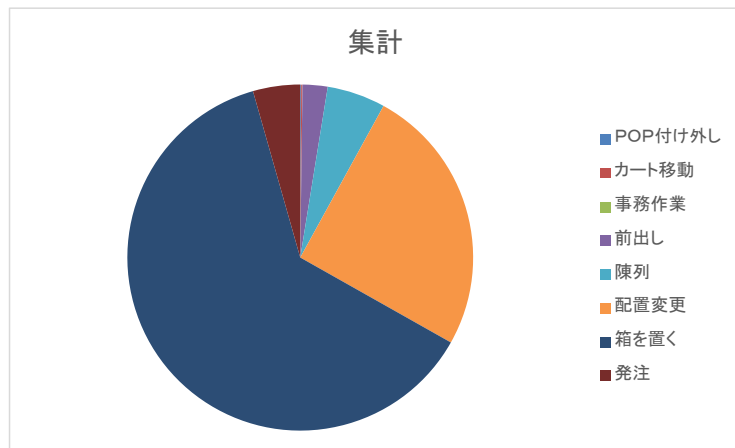
②時間帯別の行動割合

時間帯	POP付け外し	カート移動	事務作業	前出し	陳列	配置変更	箱を置く	発注	時間別ラベル数
2016/11/14 7:15	0%	0%	0%	0%	0%	0%	0%	0%	0
2016/11/14 7:30	0%	0%	0%	47%	29%	10%	14%	0%	2301
2016/11/14 7:45	2%	0%	0%	9%	23%	0%	66%	0%	4349
2016/11/14 8:00	0%	0%	0%	1%	16%	0%	83%	0%	4353
2016/11/14 8:15	0%	0%	0%	14%	10%	2%	75%	0%	4345
2016/11/14 8:30	0%	0%	0%	3%	7%	23%	66%	0%	4352
2016/11/14 8:45	0%	0%	0%	0%	1%	40%	26%	34%	4288
2016/11/14 9:00	0%	0%	0%	0%	0%	12%	76%	12%	4350
2016/11/14 9:15	0%	0%	0%	0%	12%	55%	33%	0%	4352
2016/11/14 9:30	0%	0%	0%	0%	4%	47%	49%	1%	4353
2016/11/14 9:45	0%	0%	0%	0%	3%	27%	70%	0%	4351
2016/11/14 10:00	0%	1%	0%	0%	2%	36%	61%	0%	4353
2016/11/14 10:15	0%	0%	0%	0%	5%	23%	65%	7%	4354
2016/11/14 10:30	0%	0%	0%	0%	0%	44%	56%	0%	4347
2016/11/14 10:45	0%	0%	0%	0%	6%	19%	75%	0%	4352
2016/11/14 11:00	0%	0%	0%	0%	6%	11%	83%	0%	4352
2016/11/14 11:15	0%	1%	0%	0%	1%	40%	59%	0%	4349
2016/11/14 11:30	0%	0%	0%	0%	1%	52%	43%	4%	4325
2016/11/14 11:45	0%	0%	0%	0%	0%	31%	69%	0%	4349
2016/11/14 12:00	0%	0%	0%	0%	0%	19%	46%	35%	4350
2016/11/14 12:15	0%	0%	0%	0%	2%	37%	59%	1%	4354
2016/11/14 12:30	0%	0%	0%	0%	3%	18%	79%	0%	4352
2016/11/14 12:45	0%	0%	0%	0%	2%	11%	86%	1%	4350
2016/11/14 13:00	0%	0%	0%	0%	6%	13%	76%	5%	3691

（3）SVM(RBF)を用いた予測
①1日分の行動ラベル

行ラベル	データの個数 / result
POP付け外し	136
カート移動	1691
事務作業	1190
前出し	892
陳列	93215
箱を置く	231
総計	**97355**
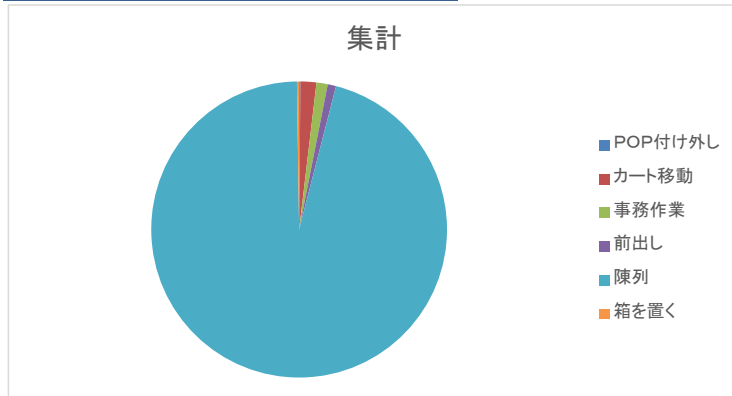
②時間帯別の行動割合

時間帯 2016	POP付け外し	カート移動	事務作業	前出し	陳列	配置変更	箱を置く	発注	時間別ラベル数
2016/11/14 7:15	0%	0%	0%	0%	0%	0%	0%	0%	0
2016/11/14 7:30	0%	0%	0%	0%	100%	0%	0%	0%	2301
2016/11/14 7:45	0%	0%	0%	0%	100%	0%	0%	0%	4349
2016/11/14 8:00	0%	0%	0%	0%	100%	0%	0%	0%	4353
2016/11/14 8:15	0%	0%	0%	0%	100%	0%	0%	0%	4345
2016/11/14 8:30	0%	0%	0%	1%	99%	0%	0%	0%	4352
2016/11/14 8:45	0%	33%	1%	0%	65%	0%	1%	0%	4288
2016/11/14 9:00	0%	0%	0%	1%	96%	0%	2%	0%	4350
2016/11/14 9:15	0%	0%	0%	2%	98%	0%	0%	0%	4352
2016/11/14 9:30	0%	1%	0%	1%	98%	0%	0%	0%	4353
2016/11/14 9:45	0%	0%	0%	0%	100%	0%	0%	0%	4351
2016/11/14 10:00	0%	0%	0%	0%	100%	0%	0%	0%	4353
2016/11/14 10:15	0%	0%	9%	0%	91%	0%	0%	0%	4354
2016/11/14 10:30	0%	0%	0%	0%	100%	0%	0%	0%	4347
2016/11/14 10:45	0%	0%	0%	1%	99%	0%	0%	0%	4352
2016/11/14 11:00	0%	0%	0%	0%	100%	0%	0%	0%	4352
2016/11/14 11:15	0%	0%	0%	0%	100%	0%	0%	0%	4349
2016/11/14 11:30	0%	5%	0%	3%	92%	0%	0%	0%	4325
2016/11/14 11:45	0%	0%	0%	3%	97%	0%	0%	0%	4349
2016/11/14 12:00	0%	0%	0%	0%	100%	0%	0%	0%	4350
2016/11/14 12:15	0%	0%	0%	6%	94%	0%	0%	0%	4354
2016/11/14 12:30	0%	0%	2%	0%	97%	0%	1%	0%	4352
2016/11/14 12:45	0%	1%	8%	0%	91%	0%	0%	0%	4350
2016/11/14 13:00	4%	0%	8%	1%	86%	0%	1%	0%	3691