

IT-Based Management Summary

Group 06

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Forecasting and Probabilistic Budgeting: Sales Volume Context (Learning with Case Studies)

Use Case

It is about Candle Manufacturing Inc. company, which produce three different candles like molded candles, solid candles and pulled candles. The company needs to setup the annual sales budget for the next year. To accomplish this, the traditional *time series-based forecasting* methods are applied and two new approaches has been introduced:

multinomial regression-based

stochastic process-based forecasting of time series

To answer question about sales volumes that can expected for next year, the R software package are used as we can

- perform a traditional time series analysis and use the model for **time series-based forecasting** for the next year
- sd

```
summary(cars)
```

```
##      speed      dist
##  Min.   : 4.0    Min.   :  2.00
## 1st Qu.:12.0    1st Qu.: 26.00
## Median :15.0    Median : 36.00
## Mean   :15.4    Mean   : 42.98
## 3rd Qu.:19.0    3rd Qu.: 56.00
## Max.   :25.0    Max.   :120.00
```

Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.