



Simplify complex business decisions using data science

# What do business decision-makers expect from data science teams?

Insights that drive optimal decisions to complex problems



Determine location and capacity of warehouses



Determine which plant should manufacture which product



Build financial portfolios by balancing risks and rewards



Allocate aircraft and crew to flights

## **Decision optimization –** the secret sauce for better decisions

Decision optimization technology has delivered significant ROI across industries



**25%** increase in transport punctuality. 33% reduction in daily kilometres walked<sup>1</sup>

30%
reduction in risk
 for same yields <sup>3</sup>



Optimize manufacturing of **10K** products across 20 plants<sup>2</sup>



Upto **30%** savings on energy costs<sup>4</sup>

## IBM ILOG CPLEX Optimization Studio uses decision optimization technology to create optimal plans and schedules

#### **Business problem**

Build optimization models using either:



General purpose programming language APIs



Optimization Programming Language

### **Mathematical model**

**Optimization engines that can solve:** 



Mathematical programming models



Constraint programming and constraint-based scheduling models





What-if analysis to evaluate alternate scenarios

Recommended actions to achieve business goals



Supports all sizes of optimization models



Support for unlimited decision variables and constraints



High performance and scalable

# Get started easily by choosing from multiple purchase options



### Optimize your decisions!

Don't take chances with your critical business decisions. Get the benefits of working with a trusted partner that has 30 years of proven decision optimization expertise. Experience modeling and solving optimization problems with IBM ILOG CPLEX Optimization Studio by visiting ibm.co/2MMr0jZ

- <sup>1</sup>https://www.ibm.com/common/ssi/cgi-bin/ssialias?subtype=AB&infotype=PM&appname=SWGE\_SW\_SW\_USEN&htmlfid=SWC14103USEN&attachment=SWC14103USEN.PDF
- <sup>2</sup>https://www.ibm.com/case-studies/continentaltires
- <sup>3</sup>https://www.ibm.com/us-en/case-studies/BondIT
- <sup>4</sup>https://www.ibm.com/case-studies/greencom-networks

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