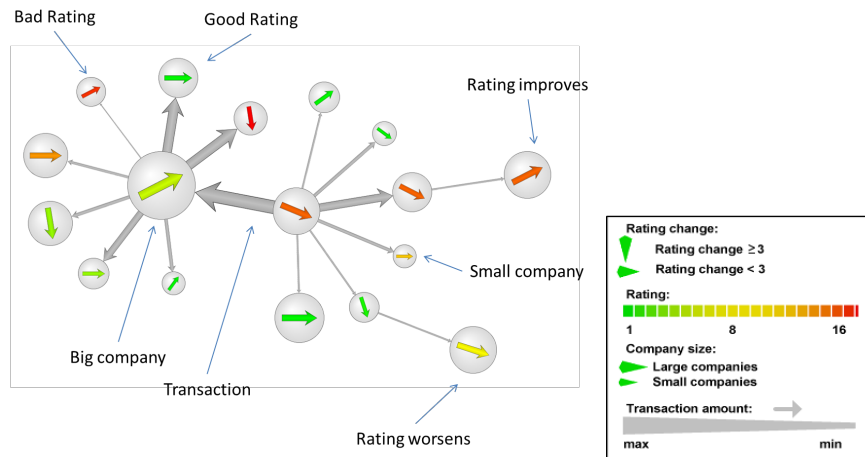




## Example: Graphs for risk analysis



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## Expectations of the Industry

- Strong background in
  - Main field of study (computer science, business informatics)
  - Depending on industry: programming skills, domain expertise, etc.
- More and more „big data“ experience
  - Data management
  - Information visualization
  - Visual analytics
- Things they get from our students without asking
  - Information design
  - Visual thinking
  - Broad background, links and pointers to visual solutions for various data types and application areas

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## Student Profiles

- Background
  - 40%: computer science
  - 30%: business informatics
  - 20%: mathematics
  - 10%: other (mostly psychology and engineering)
- Relatively strong programming skills
- Computer graphics affinity
- Increasingly motivated to learn visualization aspects for their business careers
- Strong connection to real-world use cases seen as an advantage on top of strong scientific content



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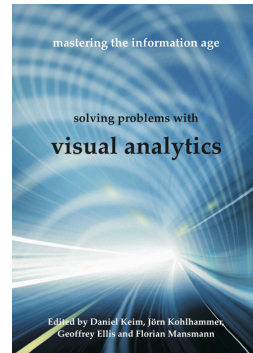
## Changes over the Years

- More practical exercises
  - Application of approaches and concepts, especially in the visual analytics area
  - Interdisciplinary combination of various disciplines (data mining, information visualization, data management)
  - Reasonably large data repositories
- Use cases from industry experience
  - Hands-on experience with real-world data sets and data types
  - Anonymized data sources
  - Involvement of students in e.g. the VAST challenge
- More jointly covered foundations of aspects common to information visualization and visual analytics
- Larger data sets

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## Outlook

- Our teaching goal
  - learn to think visually
  - convey information effectively
  - handle big data
  - learn the basics
- Future demand of industry
  - use big data as an advantage
  - graphically present data and information
  - follow trend to interact with information
- Information visualization and visual analytics becoming different emphases of the same trend
- Further build-up of IV&VA team at Fraunhofer IGD



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