

Optimization at the Middle School

Dustin Hinson

Newport Middle School, 8th Grade Mathematics

NEWPORT
INDEPENDENT
SCHOOLS
A Great Tradition. A Great Future.



UNIVERSITY OF
Cincinnati

RET is funded by the
National Science
Foundation, grant #
EEC-1404766

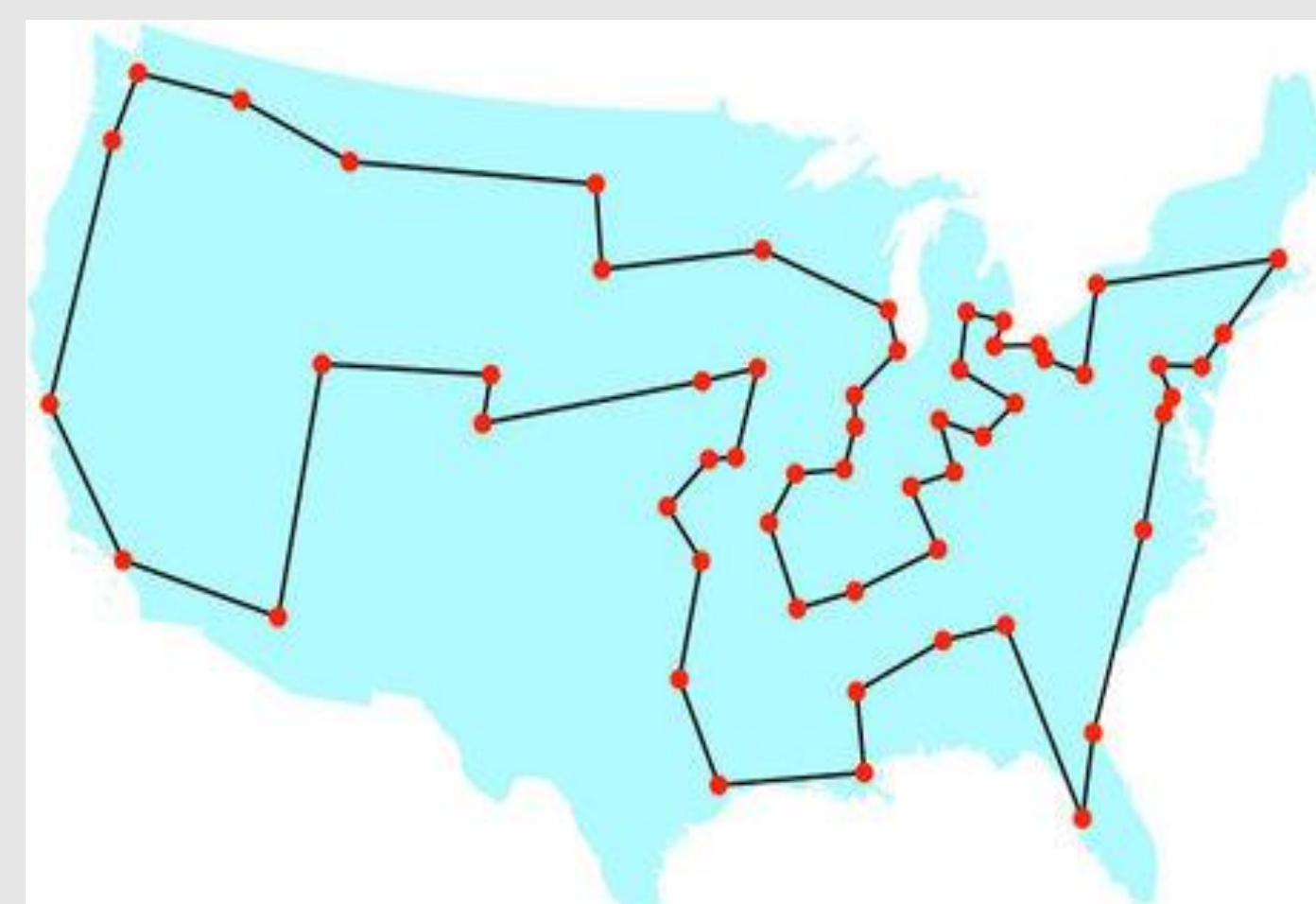
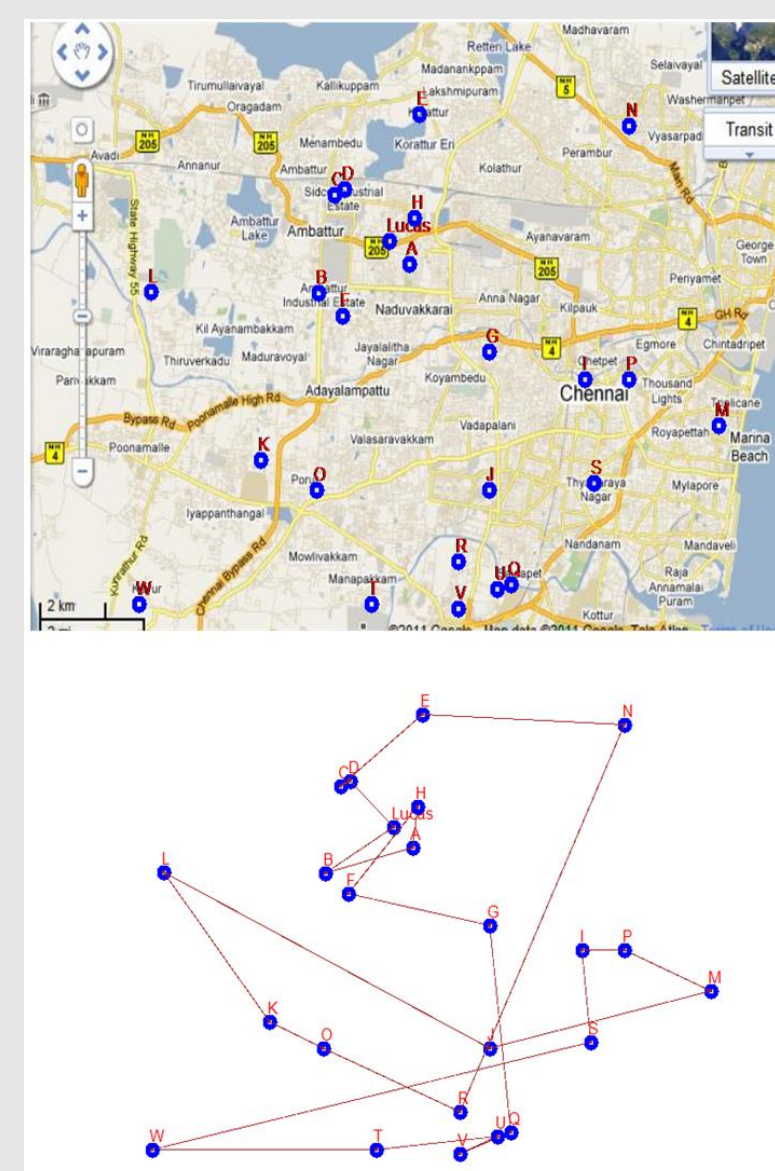
Optimization and its relationship to the Traveling Salesman Problem!

Optimization – an act, process, or methodology of making something (as a design, system, or decision) as fully perfect, functional, or effective as possible.

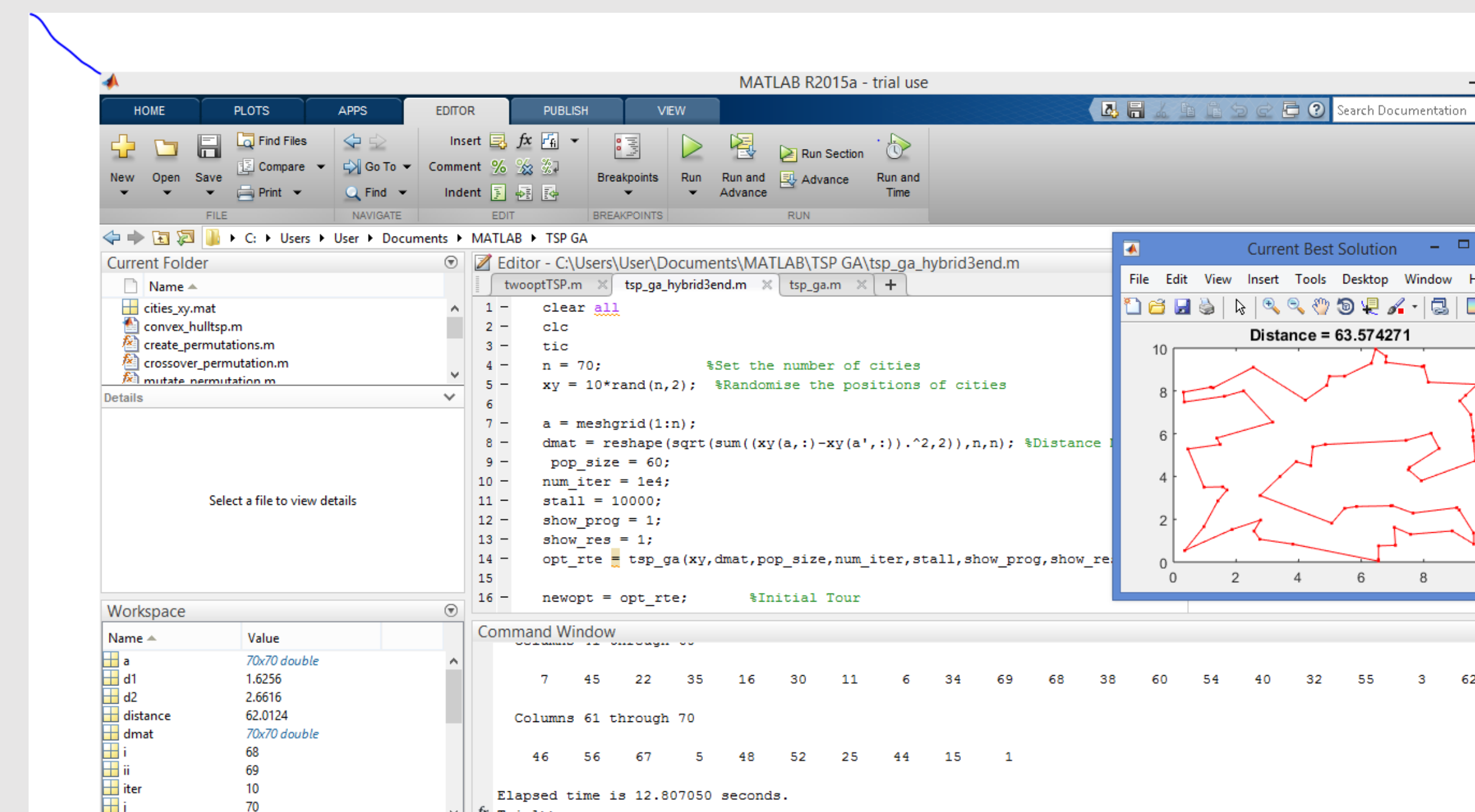


The TSP offers an opportunity for great debate with regards to the most optimized solution.

$$\frac{32!}{2} = 1.3 \times 10^{35}$$



Optimization the real world process!



- Data needs to be collected with attention to precision to answer real world problems
- It needs to be organized in a manner that compliments what the data is trying to say
- Persistence solves real world problems



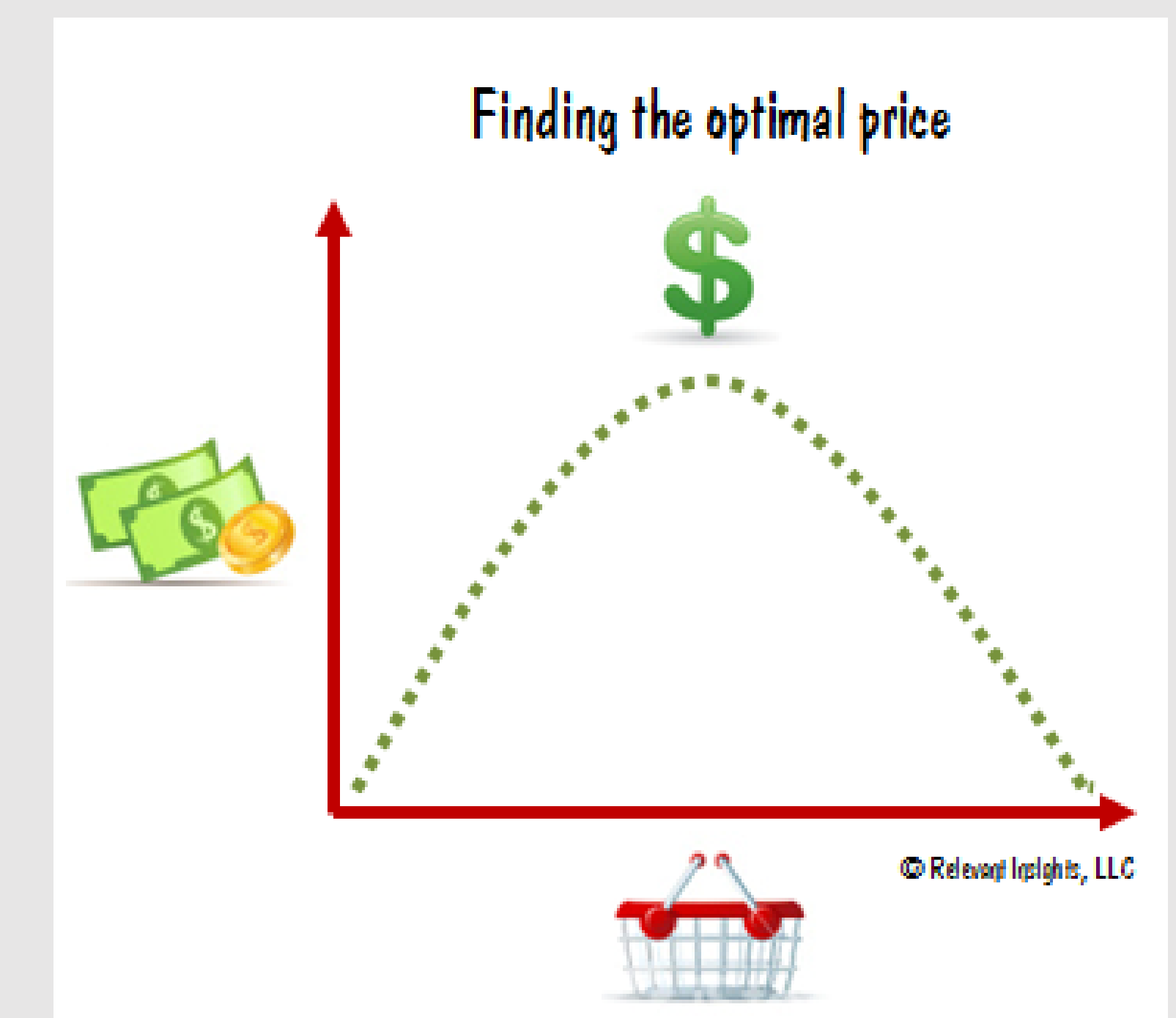
Research prior to application.

Life saving results!



What can you optimize?

Businesses must focus on optimization to survive in today's economy.



Spirit wear!
Go Cats

1. What is optimization and why is it important?
2. What are the best ways to display data for supporting a point?
3. What does a business plan look like and how would I create one?
4. Will I be asked to make business decisions?

