

The LIVING Supply Chain

Logistics and Manufacturing Under Attack:
A Workshop

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MANAGEMENT

SCRC

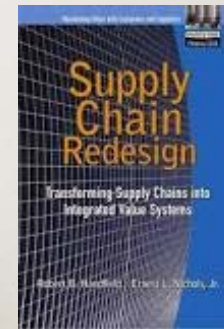
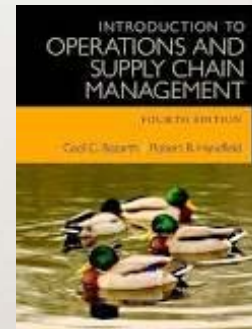
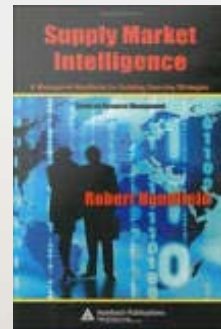
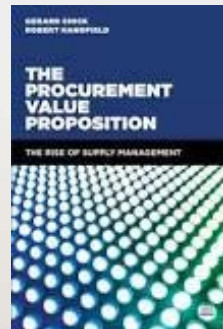
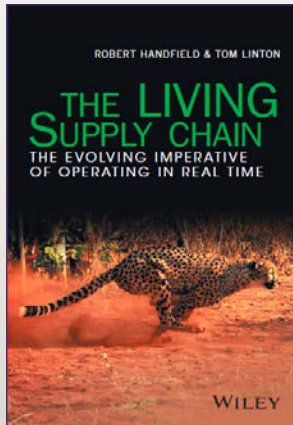
SUPPLY CHAIN RESOURCE COOPERATIVE





Rob Handfield is Executive Director of the Supply Chain Resource Cooperative (SCRC), and the Bank of America University Distinguished Professor of Supply Chain Management at North Carolina State University. He has published in more than 100 peer reviewed journal articles, and a few popular procurement books.

Dr. Handfield has worked with many Fortune 500 companies for over 30 years, and is a thought leader in the field of supply chain management and life sciences supply chains. He has spoken on those subjects across the globe.



Handfield's blog "Supply Chain View from the Field" receives over 50,000 visits annually (<http://scm.ncsu.edu/blog>)



The New Rules of
Supply Chain
Management:

The LIVING
Supply Chain

The LIVING Supply Chain

Explore the implications of shifts in global supply chains in the context of the “LIVING” Supply Chain framework

- Live
- Intelligent
- Virtual
- Interactive
- Networked
- Good

The LIVING Supply Chain



Live

Real-time information drives Supply Chain Management

L

G

Good

Transparency drives accountability and sustainability

I

N

Networked

Multi-enterprise, multi-function aligned across business priorities

V

I

Interactive

Issues are monitored, validated, and translated into actions

Velocity

Asset Velocity improves cash flow and reduces inventory, real-time analytic transparency optimizes flow over friction

Intelligent

Cloud, mobile, automated tools reduce cost



LIVE = Real-Time, Collaborative Data



INTERACTIVE: A Value for the Enterprise

“This is the world we live in, if you are not real time, collaborative, mobile and multi-enterprise, you can’t survive”

- Mike McNamara. CEO Flex

“The Idea behind the Pulse Center is to enable people to have the RIGHT information in REAL time. It is about having the right information, the right parts, and the right deliveries available at the right time. And not all information needs to be broadcast in real-time. It depends – on what it is you need to know!”

- Mircin Fic, Director of Real Time, Flex

Guidelines for Creating Data Transparency

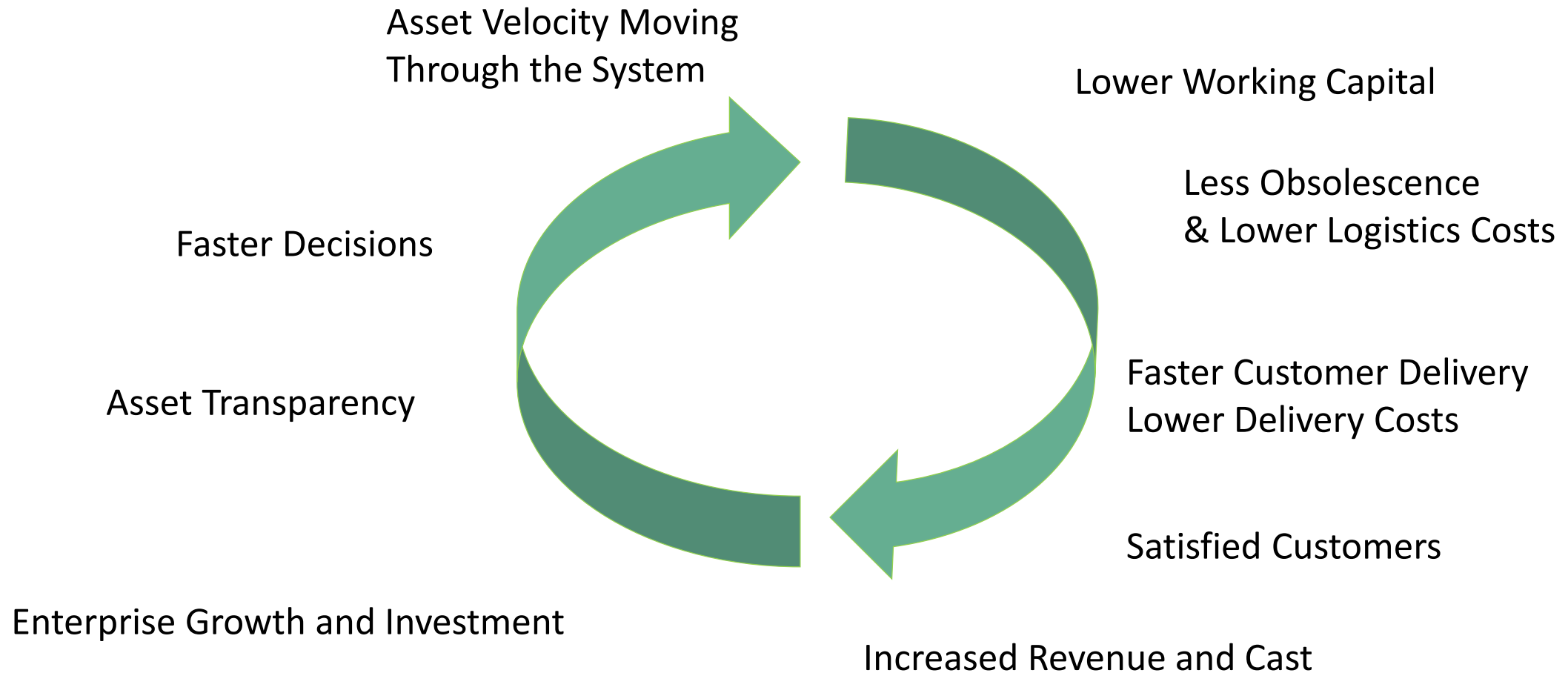
- People who are most directly impacted by information need to see it.
- People who see or hear events that impact the supply chain (e.g. disruptive events, problems, etc.) are empowered to “create an issue”
- Issues are normally reviewed and validated. All data input into the system must be validated before it is dispersed.
- Data is typically shared within a business unit or functional group, unless it requires escalation to more senior levels.
- Everyone empowered to see data can add insights, input, and other comments.
- A group of users called executives can have complete visibility. However, data can be “abstracted” up to the executive level using a “permissions” model.
- Every organization is unique, and so the data transparency “toggles” need to be flipped based on the unique strategy and desired organizational communication model.

VALUE = VISIBILITY (depth) / VELOCITY (days of supply)

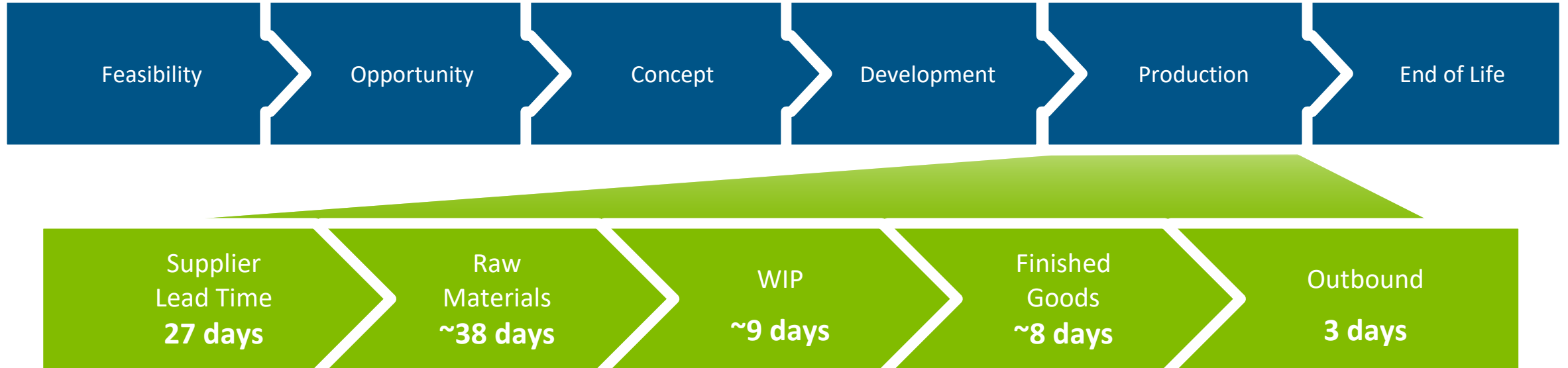
flex
LIVE SMARTER



The Velocity Flywheel Effect



Velocity Drives Working Capital Reduction



~55 days **\$3.5B** in inventory

1 day improvement ~ **\$65M**

50 ways to 50 days



Demand to Supply - Visibility, Risk, Execution, App

1

Supplier

1. Supplier Contracts
2. Flexibility rules
3. LEAN Lead times
4. Supplier managed inventory
5. Continuous replenishment program
6. Incoterms
7. Minimum order vol/value
8. Packaging units
9. Return privileges
10. NCNR

2

Customer

1. Customer contracts
2. Buffer agreements (FG, WIP, RAW)
3. Cash in advance
4. Inventory financing program
5. Incoterms
6. Vertical integration
7. Customer- controlled parts mgt
8. Supply Chain optimization, production sites (Simflex)

3

Flextronics operations

1. MPS process
2. LEAN manufacturing
3. MRB elimination
4. Bone Pile reduction
5. Return to vendor
6. Return to customer
7. Supplier Quality
8. Work order aging
9. WIP DOS control
10. Internal materials flow
11. Materials receipt process
12. OTD – On time Delivery

4

Flextronics materials

1. Demand management
2. LvC / LvA
3. Purchase Order execution
4. Parameter settings (A/B/C classification)
5. Excess materials mgt
6. Obsolete materials mgt
7. CMT claims
8. Non Nettable warehouse mgt.

5

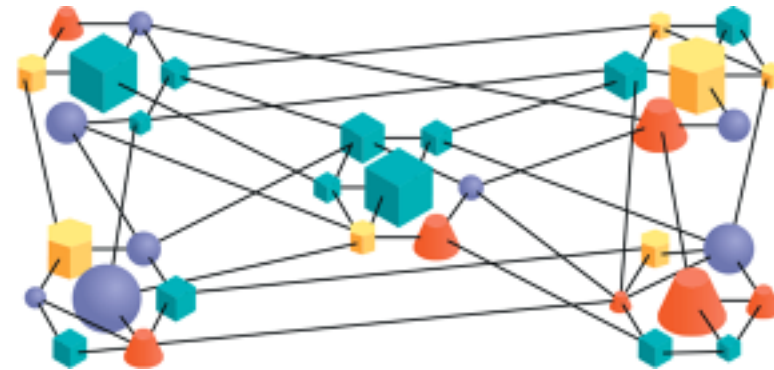
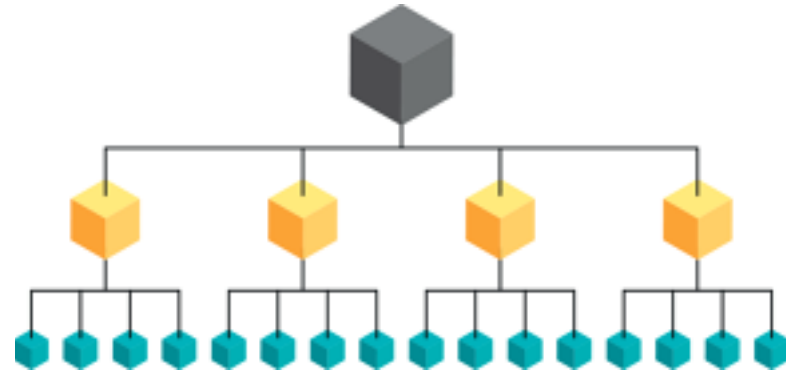
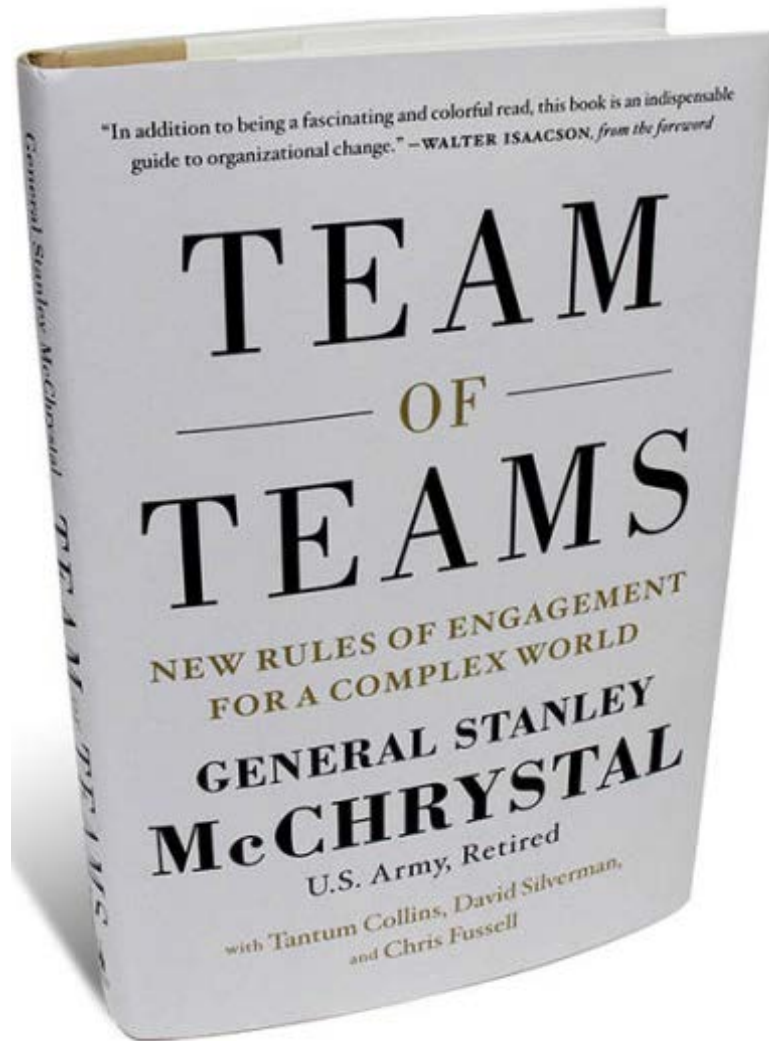
System, tools and processes

1. Situation room
2. ELEMENTUM
3. Real time data / APPs
4. Visualization
5. Analytics
6. MRP systems (BaaN,...)
7. Kinaxis
8. Cronet
9. Best Practice Sharing
10. Backflashing process
11. Materials Risk mgt
12. Supply Chain Institute/Training

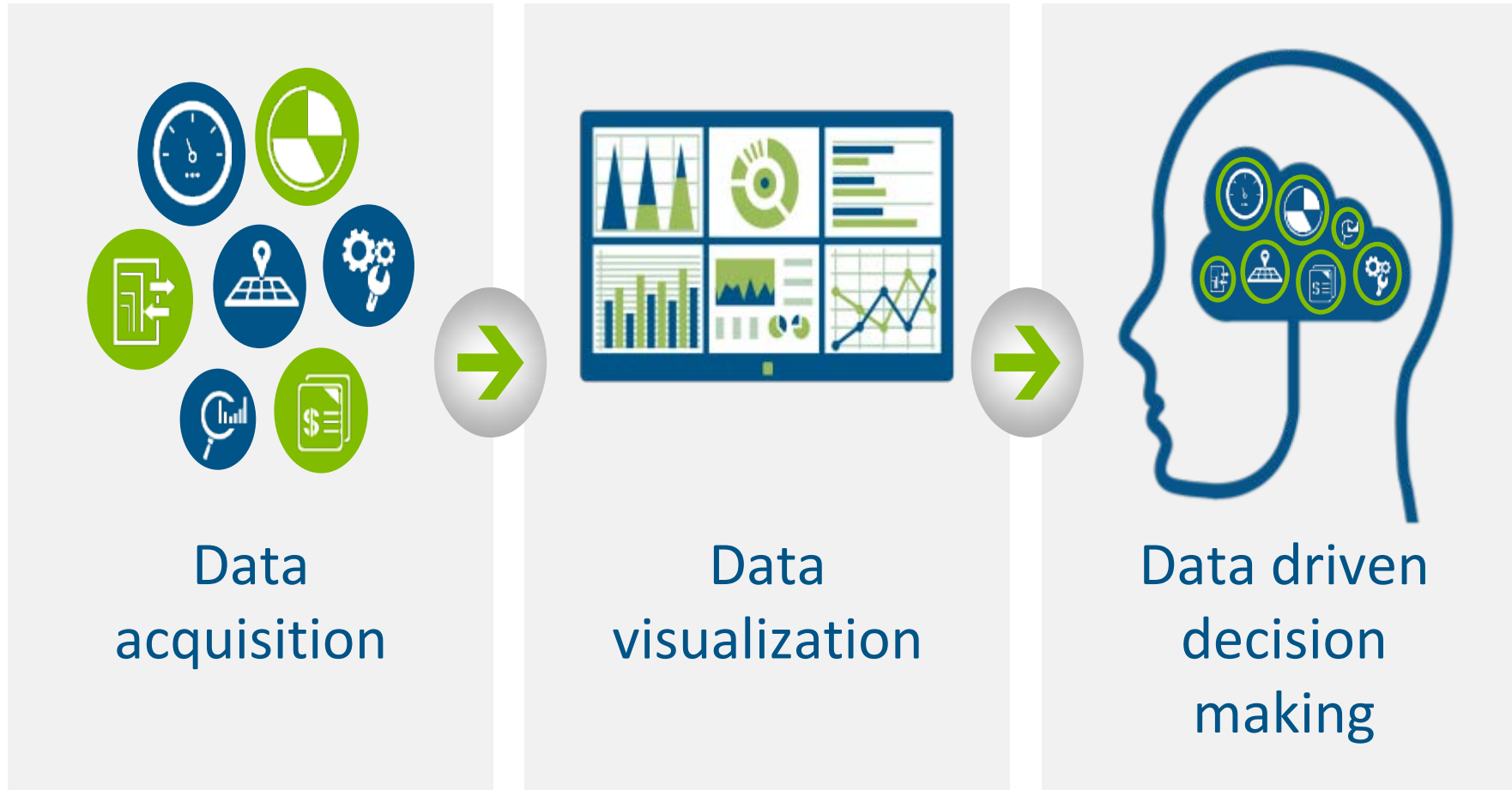
Tianjin Explosion



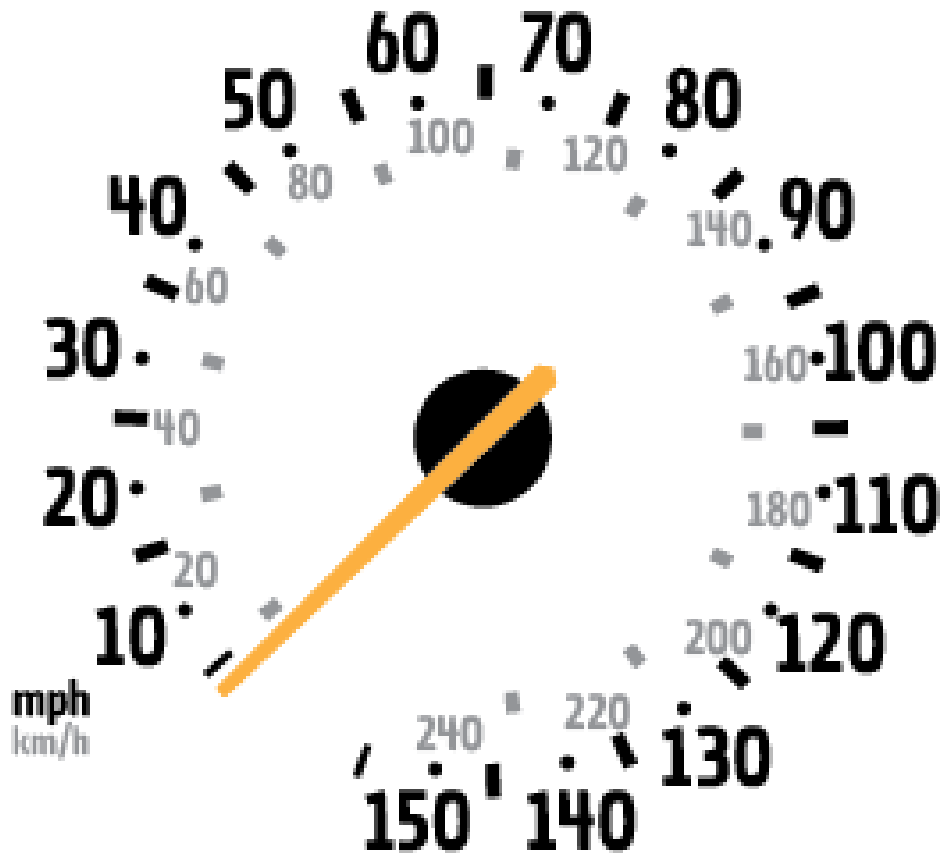
Velocity: Fighting the War in Iraq



INTELLIGENCE = Data-driven



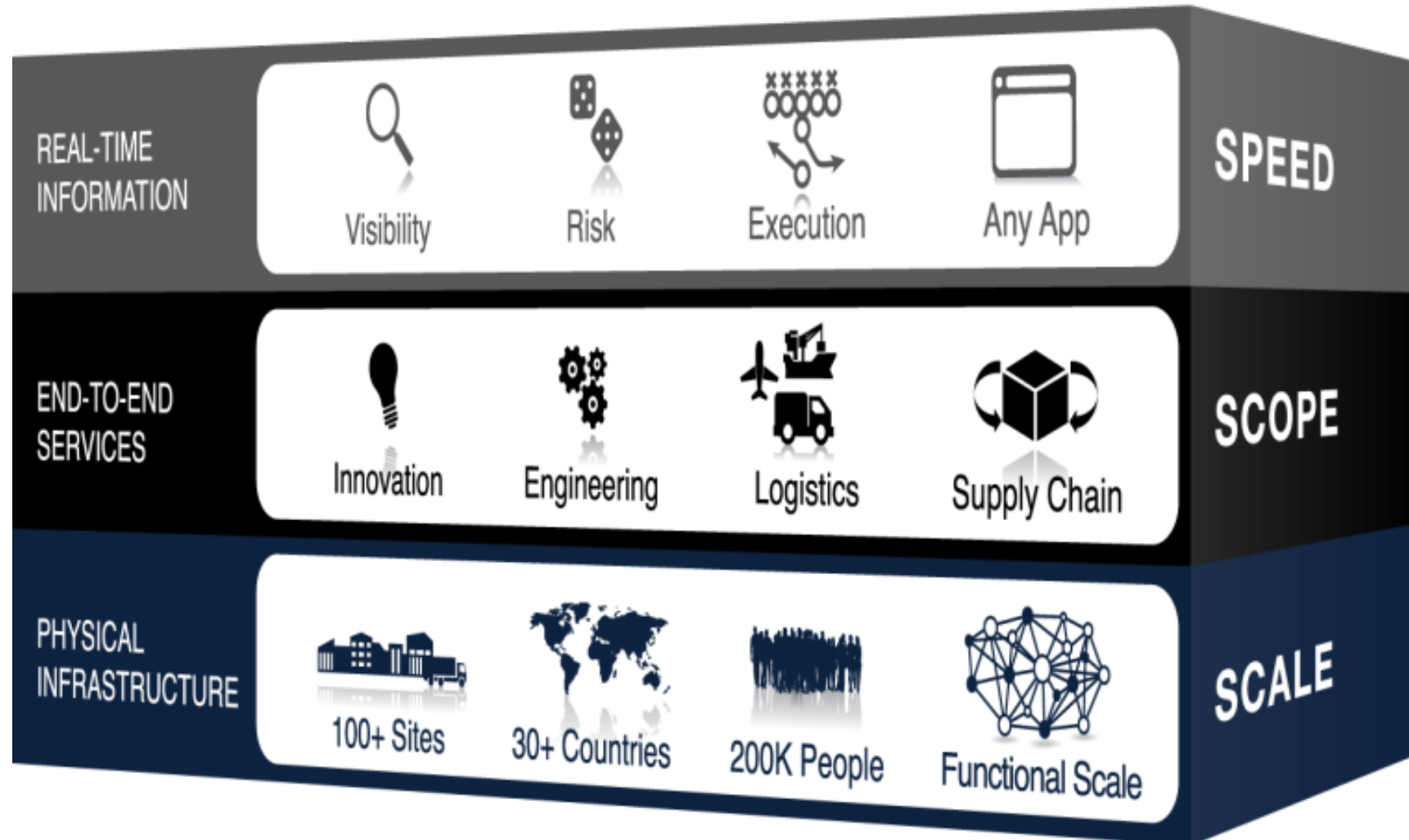
The Car Analogy...



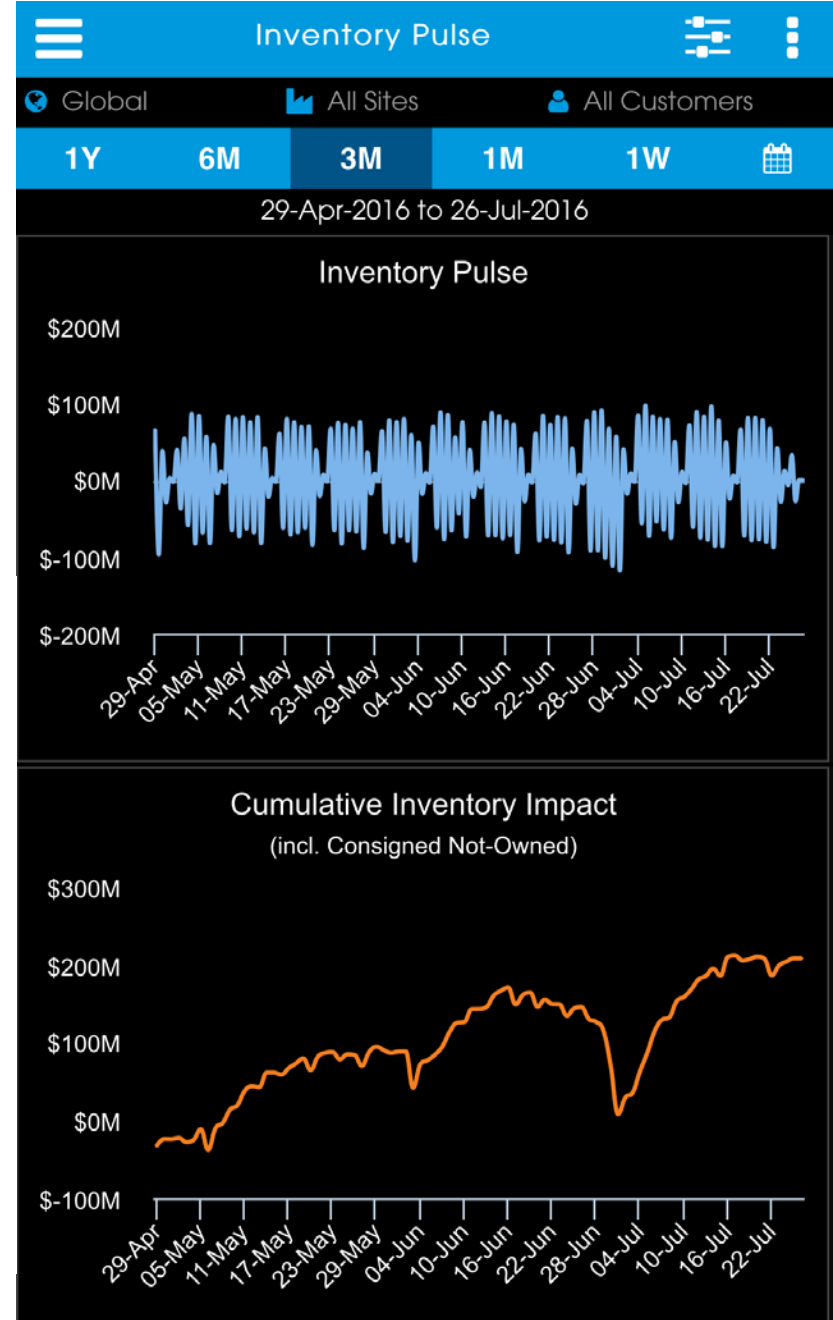
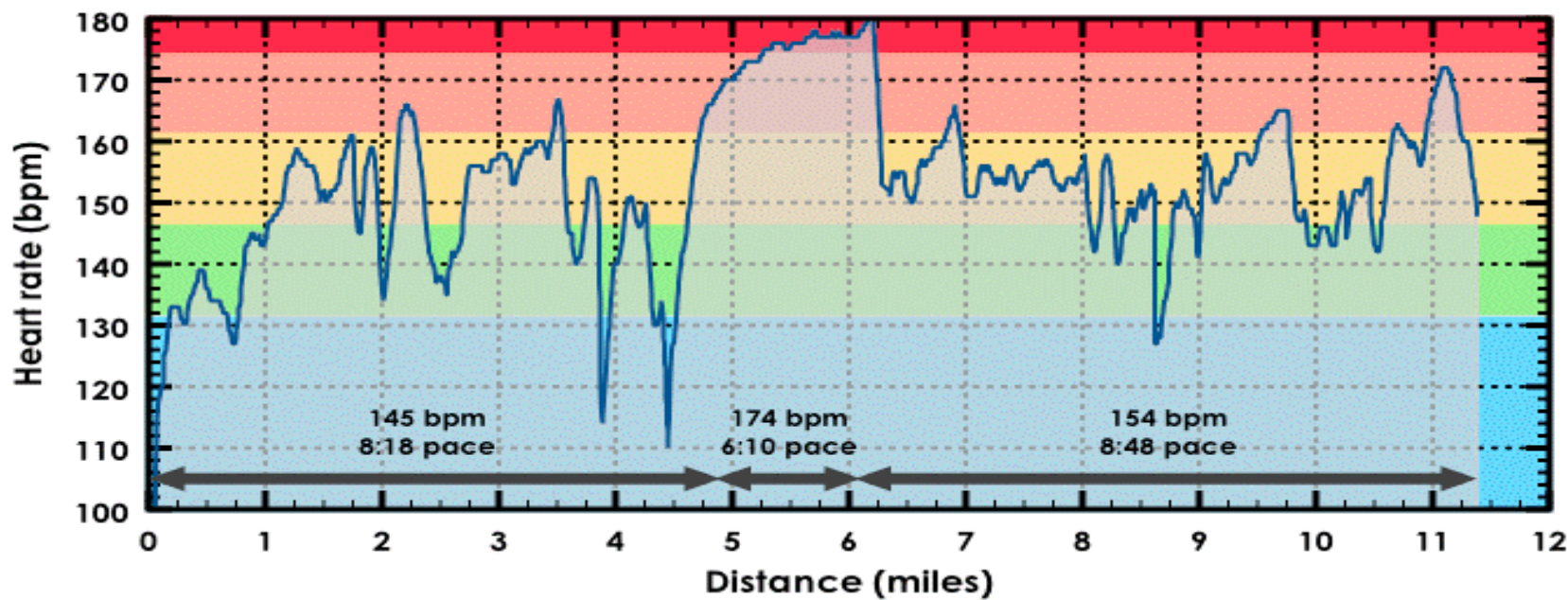
To reach your company's 2020 goals, there is a significant business benefit in developing a real-time risk forecasting analytics capability enabling insight and effective decision-making, allowing the enterprise to act as one.

VISIBILITY = VELOCITY

Flex designed a broad reach platform encompassing many different dimensions



Human Pulse and Real-time Global Inventory Pulse on Smart Phone



What does it mean to have a “GOOD” Supply Chain?



Approaches for Creating a LIVING Supply Chain

