

Design for America Symposium
Northwestern University

Evanston, Illinois
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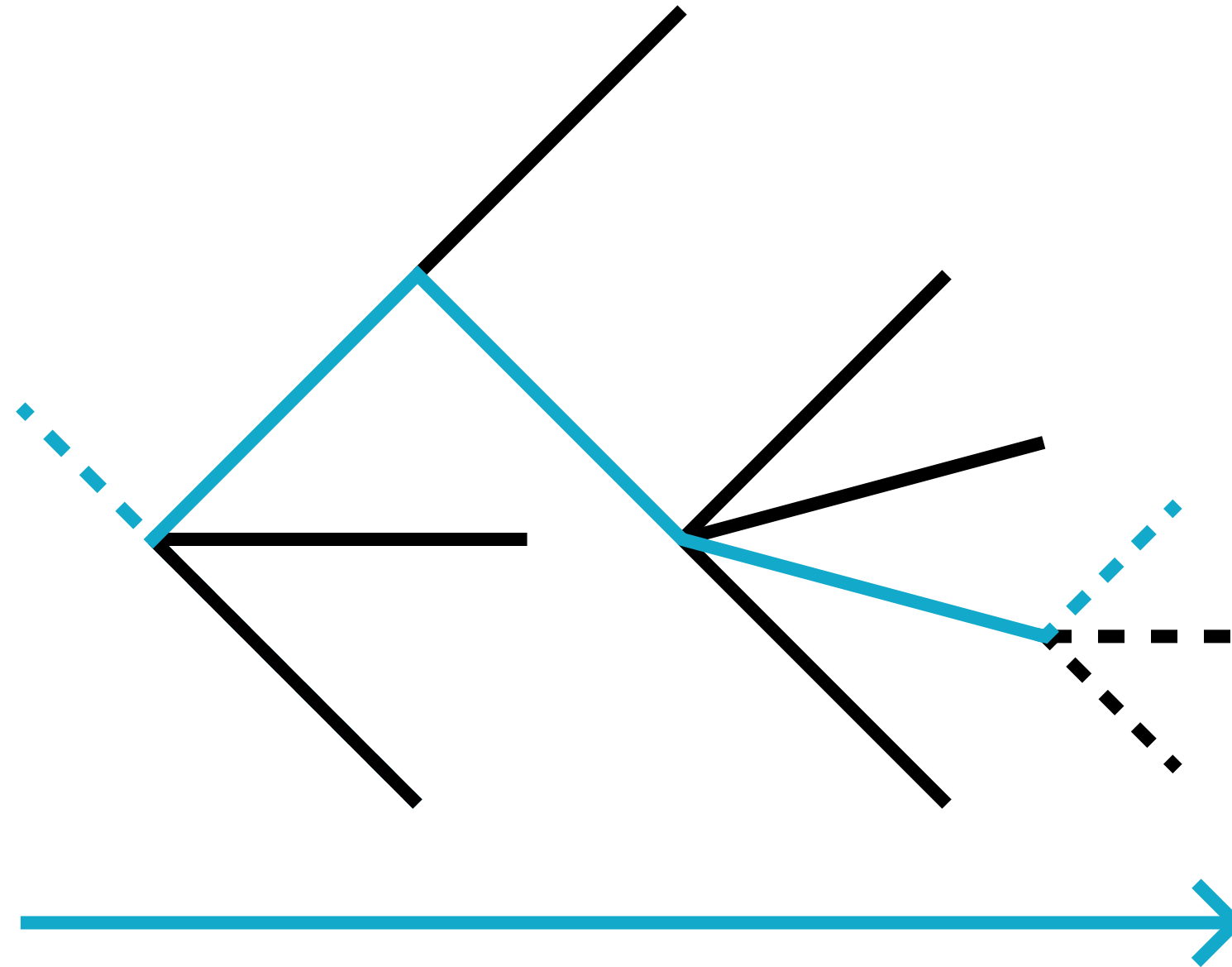
Five Theories of Change

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Presentation posted at
presentations.dubberly.com/DfA.pdf

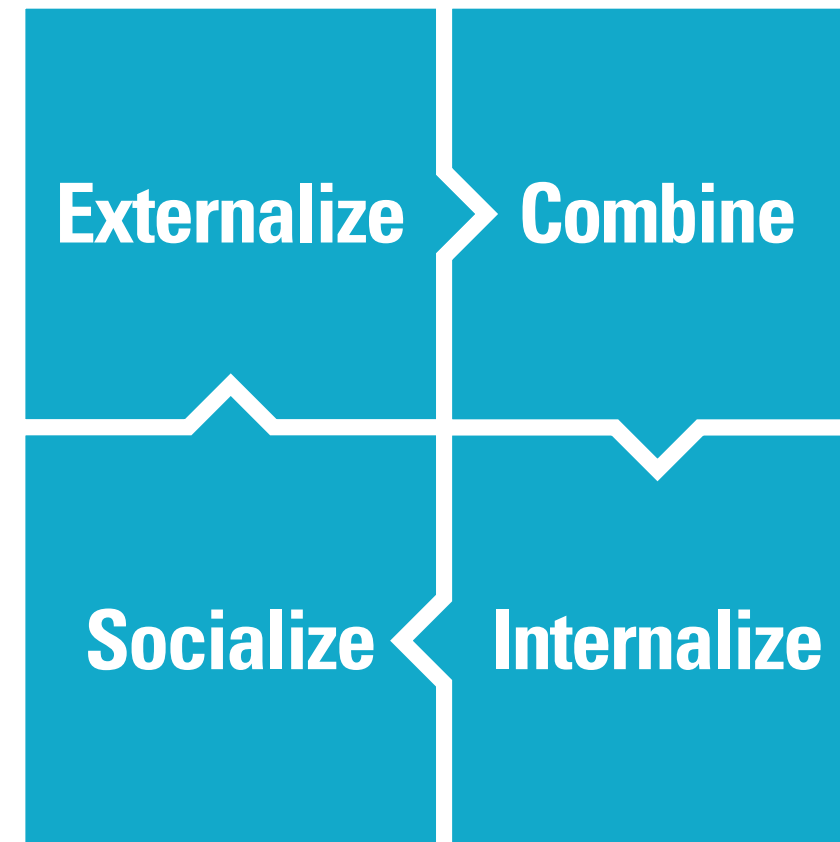
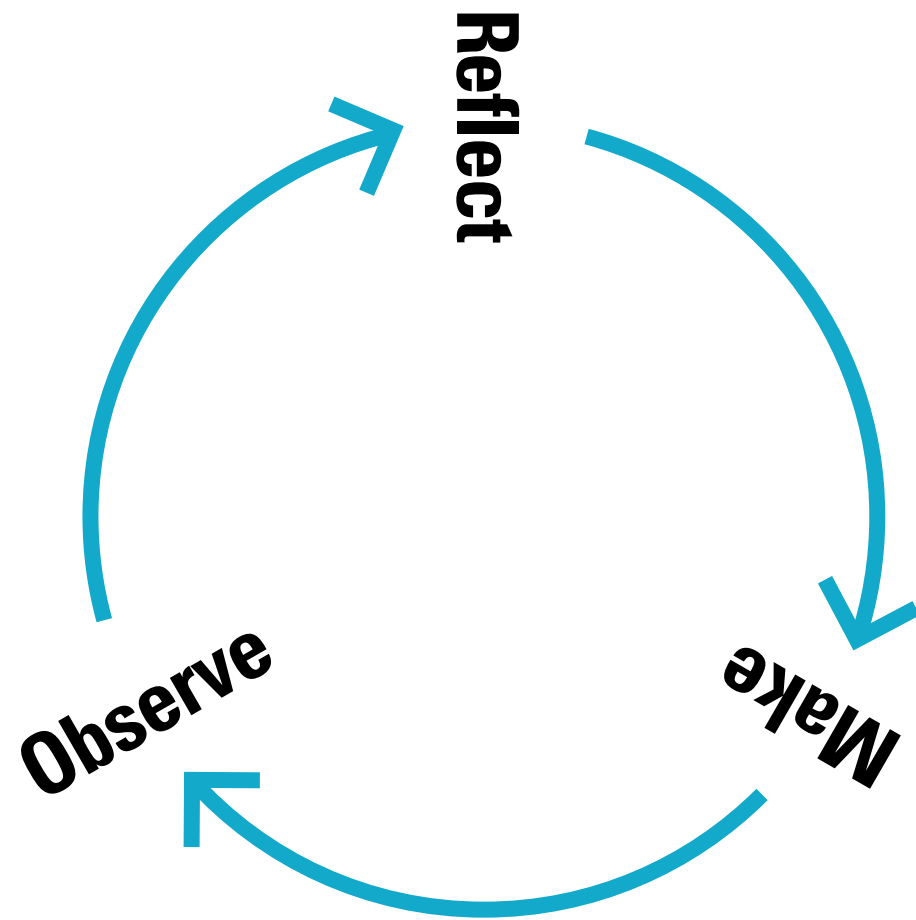
Evolution (i.e., co-evolution)

Variation and selection — via competition, cooperation, drift



Learning

Setting goals, acting to achieve them, measuring results —
iterating to correct error



Nonaka's SECI Model of Organizational Learning

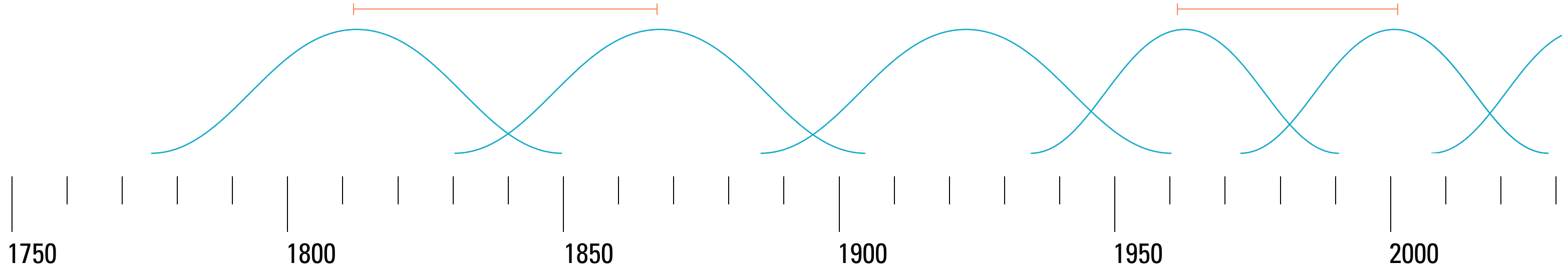
Innovation

Convention > pain > insight > prototype > value > new convention

- | | | | | |
|--|-------------------------------|--|--|------------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| 1780 – 1840 | 1840 – 1900 | 1900 – 1950 | 1940 – 1980 | 1980 – 2020 |
| First industrial revolution | Second | Third | Fourth | Fifth |
| - iron making
- cotton spinning
- water power
- steam power | - steel making
- railroads | - electrification
- internal combustion | - petrochemicals
- plastics
- electronics
- computing | - personal computers
- internet |

Time between peaks almost 60 years

shrinks to about 40 years



Invention

Organizations need to support all these activities simultaneously

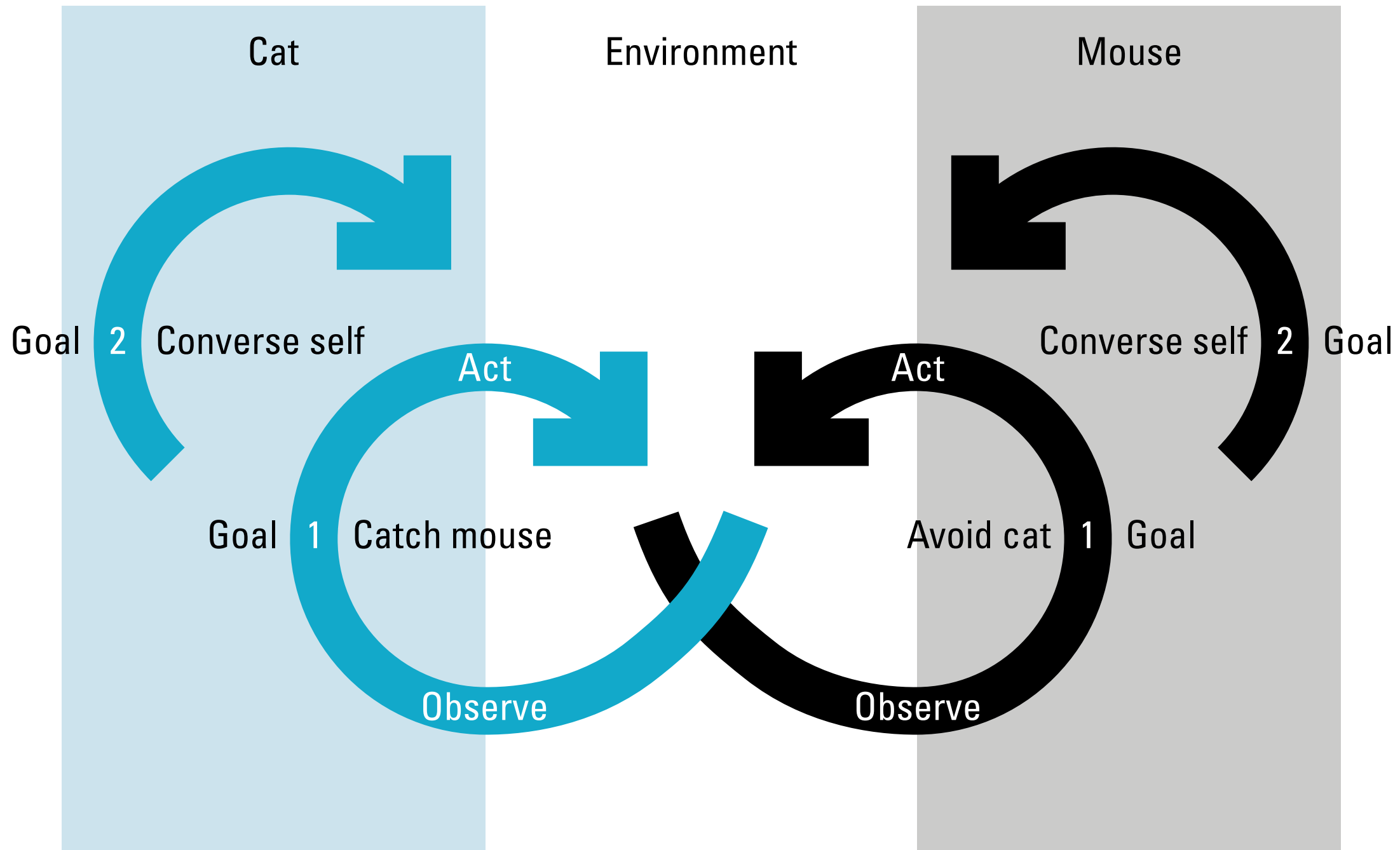
Inventing new language

Discovering practical applications

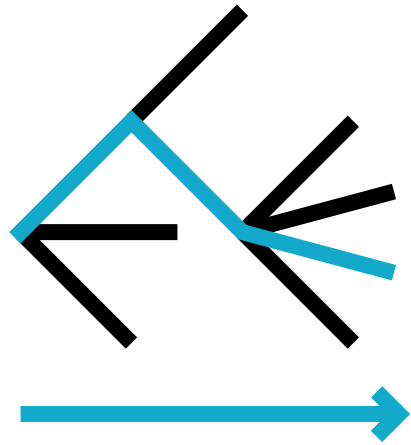
Realizing operational efficiencies

Re-invention

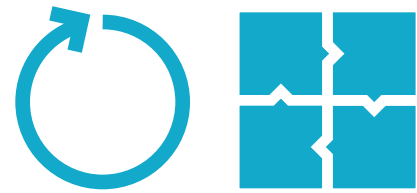
As the mouse teaches the cat, the cat also teaches the mouse



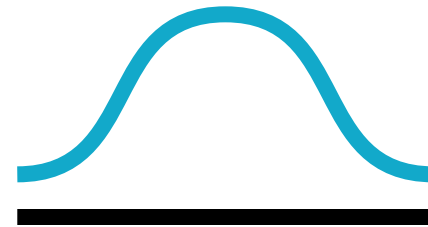
All these processes are linked



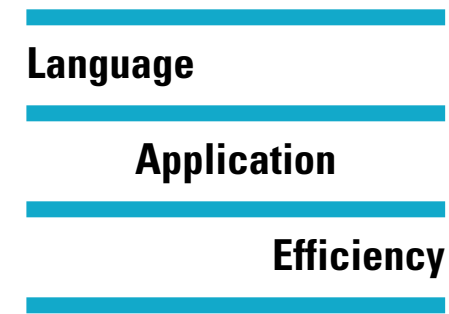
Evolution



Learning



Innovation



Invention



Re-invention

Special thanks to
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