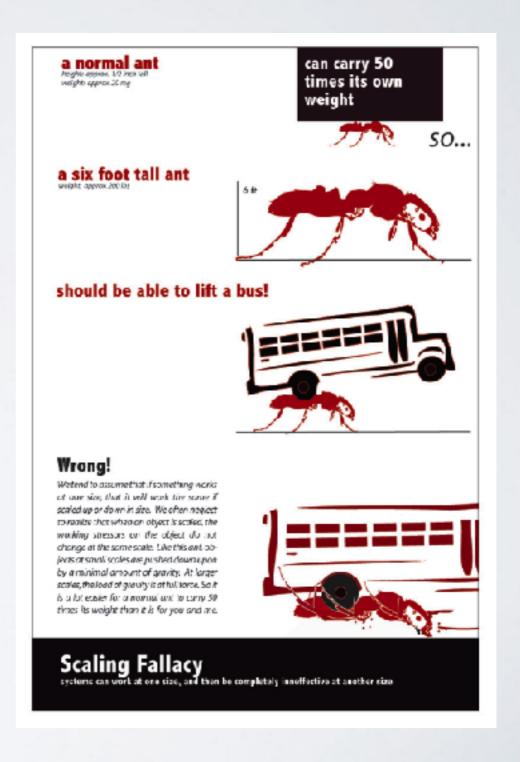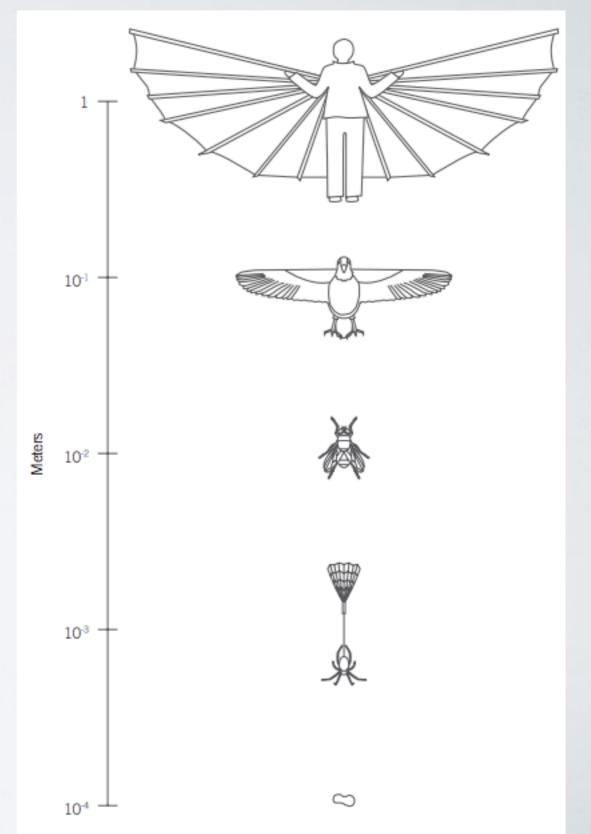# THE SCALING FALLACY

ONYEN: jonavl

THE SCALING FALLACY

- the assumption that a system that works at one scale will also work at a smaller or larger scale

THE SCALING FALLACY

- Flight presents one of the clearest visualizations for this fallacy

- the amount of surface area required for sustained flight increases exponentially as the mass of the flying object increases

EXAMPLES

The REALISTIC size of "human wings"
(if you are 1.80m)

1.80 cm   1.80 cm   =5.4m

1.80 cm

← Shoulderlength x 3

Misha Collins is 1.80

- Birds wings applied to a human would have to be more than 17 1/2 feet!

IN ACTION

- If your design will need to meet the needs of varied users, make sure it can adjust for their needs

- Growth (or downsizing) of an organization may require reconfiguring of organizational structures, and any systems for said organization

- For visual design sure your design takes into account varied screen sizes (eg. if it will be moved from a smartphone icon to a billboard, it will need to be tested and tweaked to meet the need)

- For back-end design, make sure your design considers the workload of the system…

CHALLENGES

CHALLENGES

- Hard to know the future scale of a given design

- Other members of your team may not understand the potential for disaster when scaling a design or product

- Simply scaling a design is much cheaper and faster than designing appropriately for the new scale. This can make it hard to sell management on making the investment

"He can play like this, but he'll only be able to give 105%."

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