

Ist 3D-Druck disruptiv?

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COLUMN HBR.ORG

D'Aveni 

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Creativity in meeting individuals' needs will come to the fore, just as quality control did in the age of rolling out sameness.

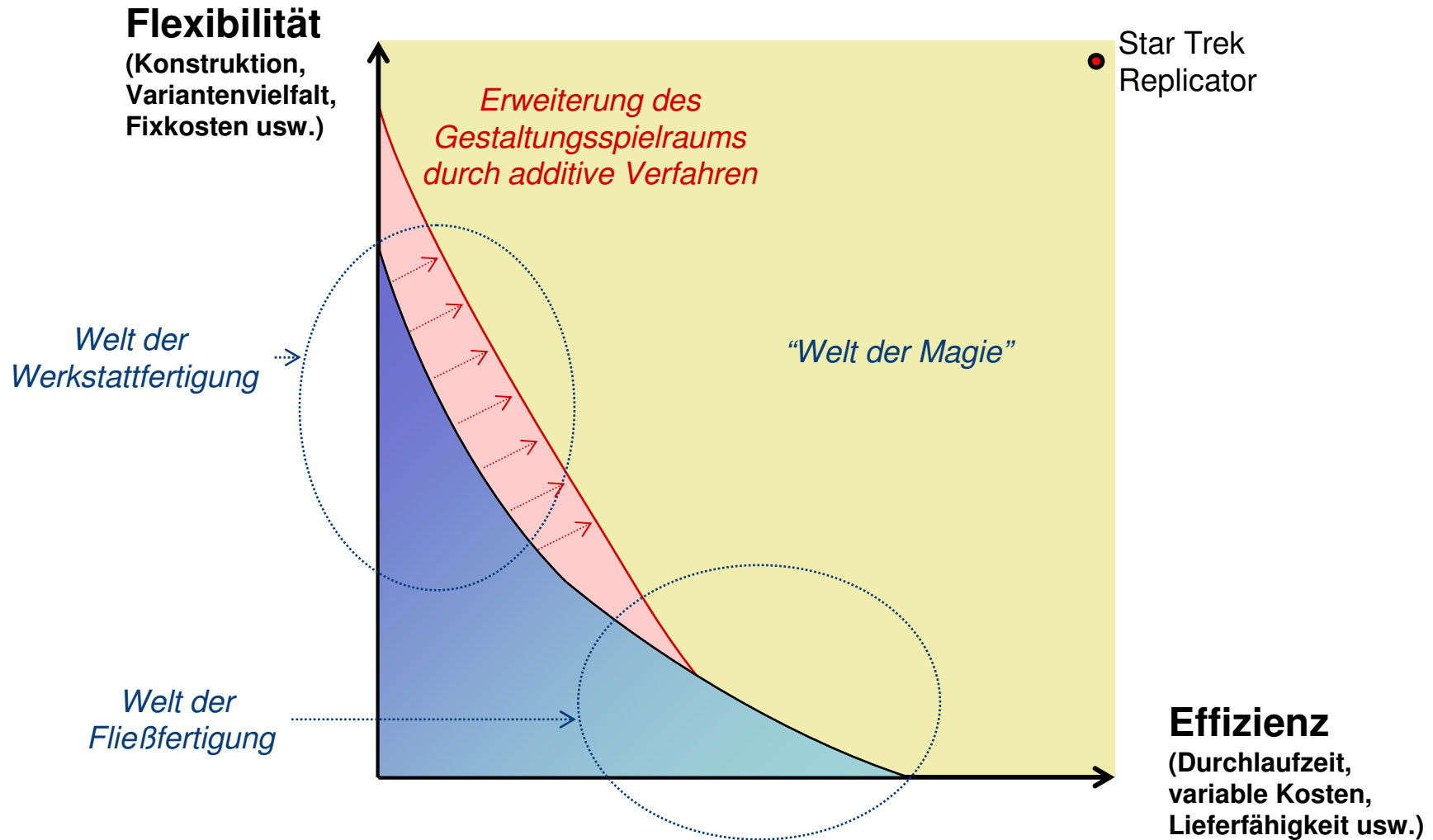
These first-order implications will cause businesses all along the supply, manufacturing, and retailing chains to rethink their strategies and operations. And a second-order implication will have even greater impact. As 3-D printing takes hold, the factors that have made China the workshop of the world will lose much of their force.

China has grabbed outsourced-manufacturing contracts from every mature economy by pushing the mass-manufacturing model to its limit. It not only aggregates enough demand to create unprecedented efficiencies of scale but also minimizes a key cost: labor. Chinese government interventions have been pro-producer at every turn, favoring the growth of the country's manufacturers over the purchasing power and living standards of its consumers.

Under a model of widely distributed, highly flexible, small-scale manufacturing, these daunting advantages become liabilities. No workforce can be paid little enough to make up for the cost of shipping across oceans. And few managers raised in

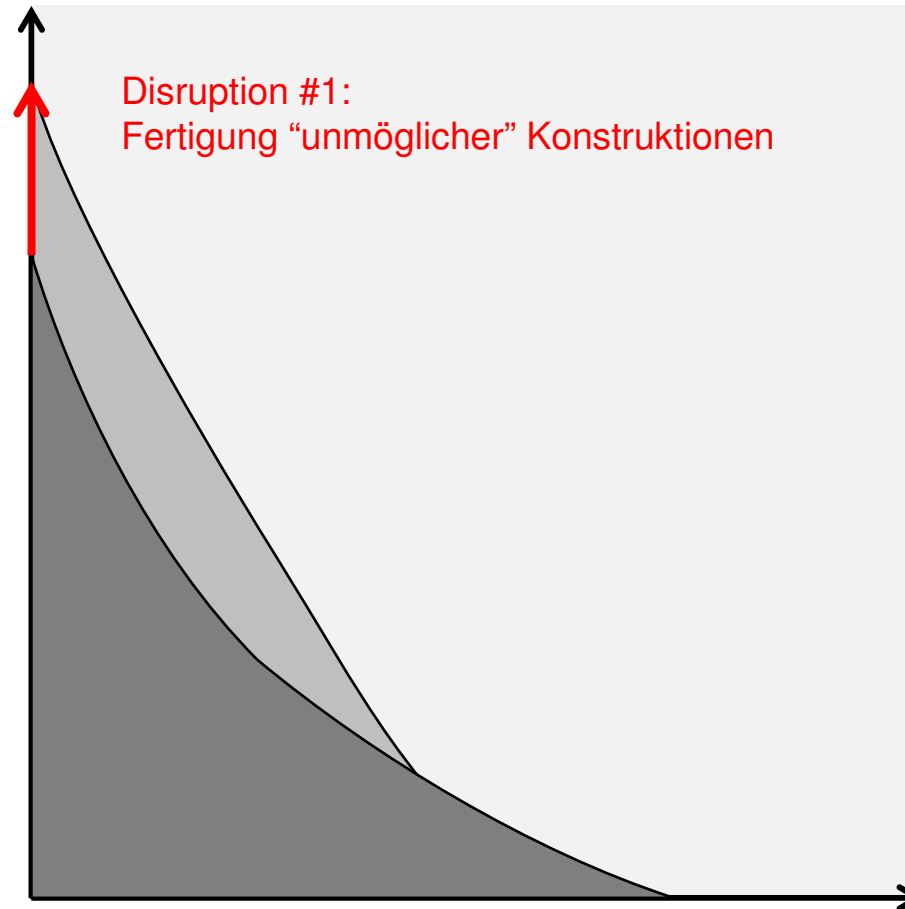
Quelle: Harvard Business Review

Was bewirkt additive Fertigung?



Flexibilität

(Konstruktion,
Variantenvielfalt,
Fixkosten usw.)

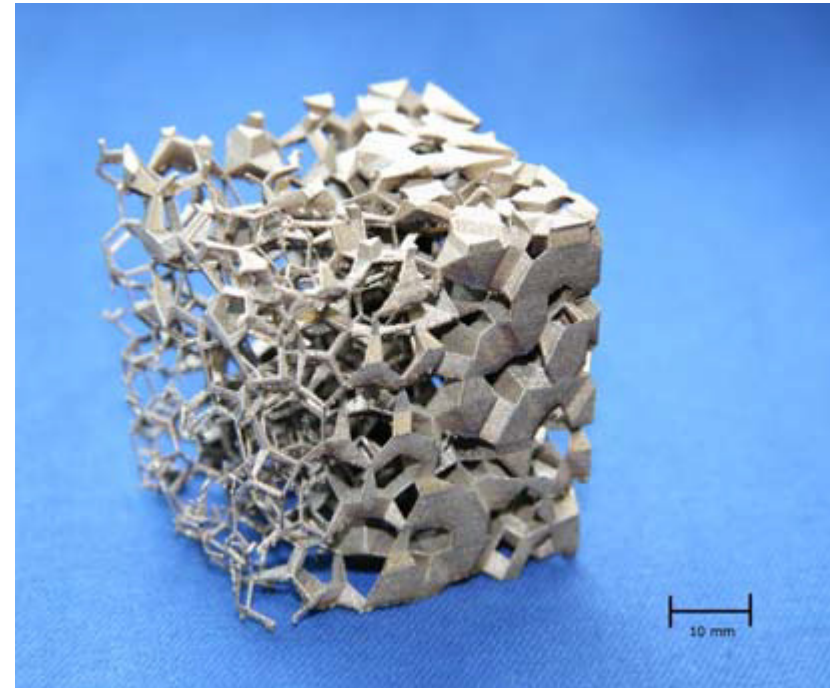


Effizienz

(Durchlaufzeit,
variable Kosten,
Lieferfähigkeit usw.)



Quelle: ESA



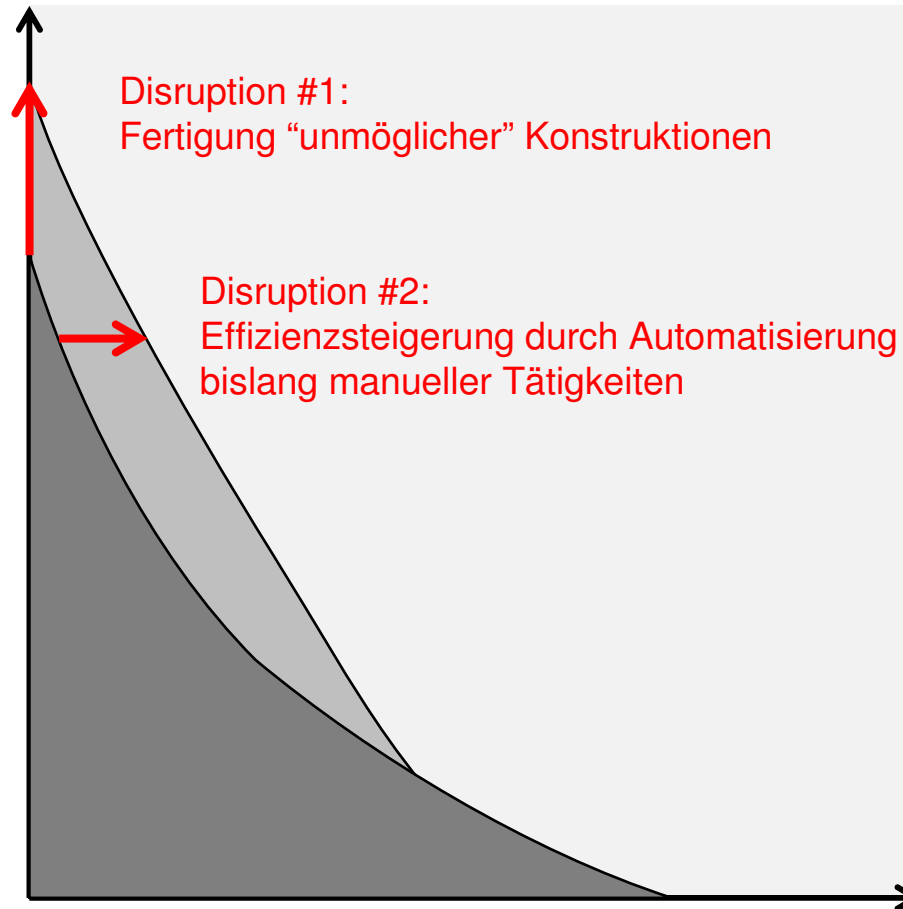
Quelle: Fraunhofer IFAM

Ökonomischer Nutzen:

- *Differenzierung durch Qualität und Funktionalität*
- *Neuartige Anwendungsbereiche*

Flexibilität

(Konstruktion,
Variantenvielfalt,
Fixkosten usw.)



Effizienz

(Durchlaufzeit,
variable Kosten,
Lieferfähigkeit usw.)



Quelle: Objet



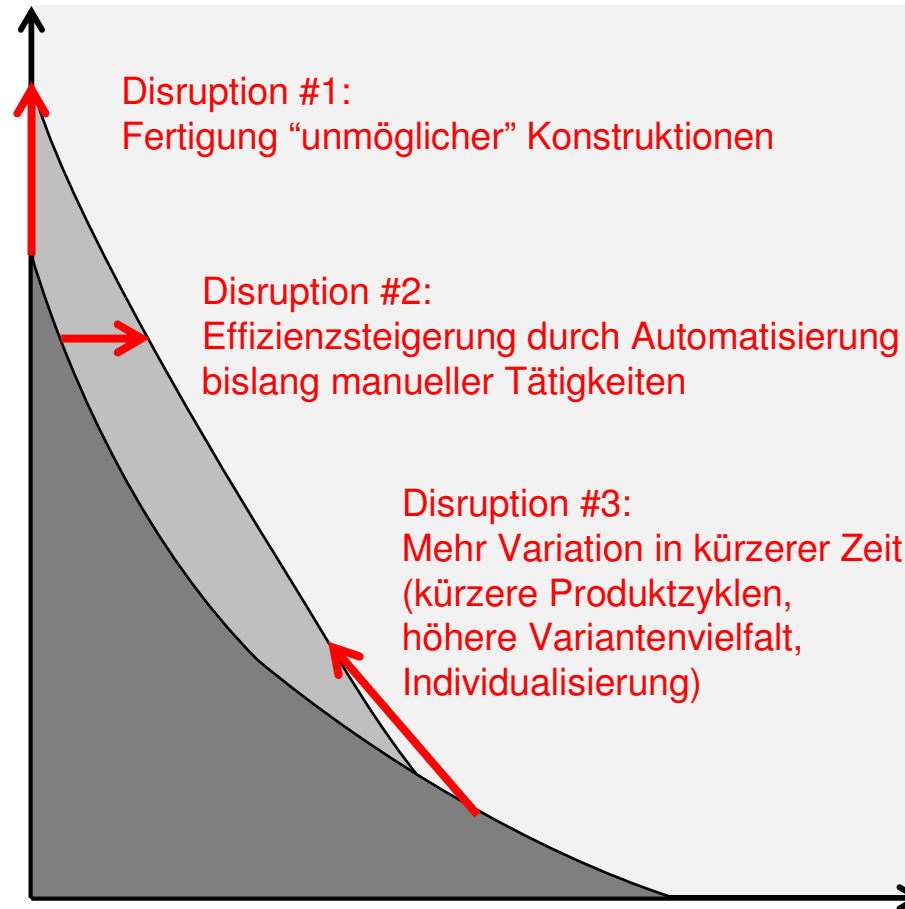
Quelle: The Verge

Ökonomischer Nutzen:

- *Höhere Geschwindigkeit*
- *Niedrigere Kosten*

Flexibilität

(Konstruktion,
Variantenvielfalt,
Fixkosten usw.)



Effizienz

(Durchlaufzeit,
variable Kosten,
Lieferfähigkeit usw.)



Quelle: Mykita

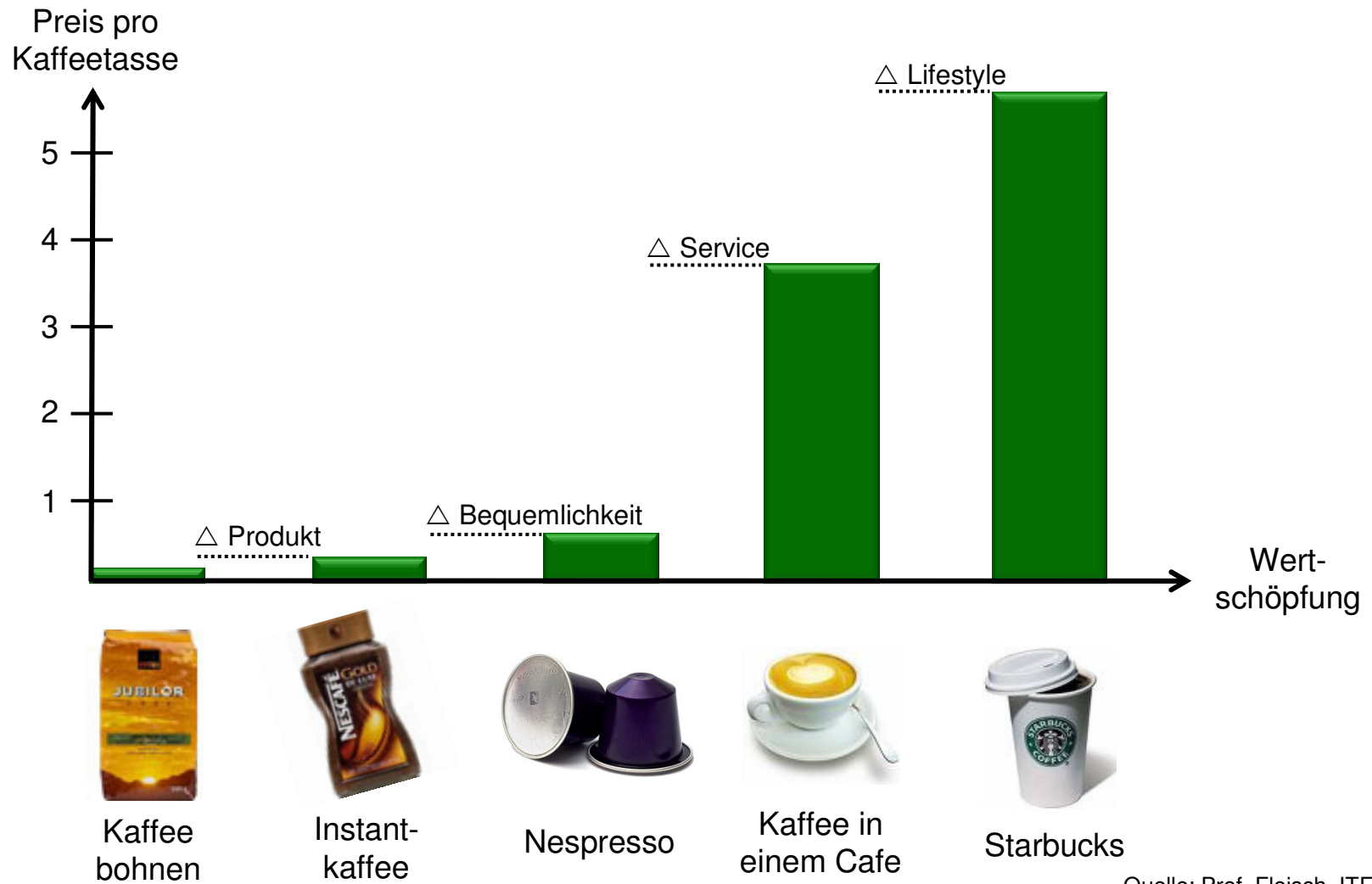


Quelle: Motorola

Ökonomischer Nutzen:

- *Höhere Wertschöpfung*
(Voraussetzung: Kunde nimmt höheren Wert wahr und ist auch bereit, dafür zu bezahlen!)

Beispiel: Value-added services



Quelle: Prof. Fleisch, ITEM-HSG

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