

**we want a magazine.**





# Welcome to MagCloud

## *Magazine Publishing Reinvented*

**P**ublishing is being democratized, print is becoming personal, users are demanding choice in the content they consume and the manner in which they consume it, and production is being fulfilled on demand. This is especially true in the magazine publishing industry. In the US alone, consumers spend more than \$10B a year on magazines, across 18,000 titles.

Today's magazine readers love choice and want flexibility in what they read, how it's presented and how they receive it.

MagCloud is the codename for an HP Labs incubation project to evaluate new, online marketplaces for buying and selling custom and niche magazines with print on demand fulfillment. MagCloud is inventing new ways to bring consumers and publishers together in a web-based marketplace where choice, flexibility and print on demand are the cornerstones of the community.

### **Making Publishers' Lives Easier**

Small independent magazine publishers, online content creators, schools, universities and small businesses can custom publish electronic copies of current and back issues of their magazines and make them available to a broader readership thanks to the MagCloud web portal.

MagCloud takes on the heavy lifting for publishers by providing automated magazine ordering, print management, and advertising aggregation services. Think of MagCloud as a virtual magazine newsstand in the cloud. Readers can discover and order a magazine via the MagCloud web portal and have it delivered right to their doorstep; all while MagCloud is managing the process for publishers.

This service is ideal for publishers of small run magazines – special interest groups, clubs, schools and niche magazines

– looking to minimize their operational and print costs, and their advertising revenue.

MagCloud also offers a great opportunity for electronic magazine publishers, popular blog and website owners looking to provide their readers with great content but in a portable, printed magazine style format.

### **Magazines on Demand**

And thanks to the MagCloud virtual magazine marketplace, consumers have access to a wide array of special

*Join the MagCloud*



# WHAT'S MAGCLOUD?

- \* print-on-demand
- \* HP Lab project
- \* niche, small-run publishing





# MAGCLOUD

## how does it work?



WHAT'S NEW

INFRASTRUCTURE

### Roads: A Part-Concrete Solution

While asphalt keeps the economy rolling – but when it sinks into disrepair in recent years state budgets have squeezed transportation department budgets as costly oil caused fuel prices to more than double. As a result, thousands of miles of roads in the U.S. are being replaced by a new material called E-Krete that's easier on the environment than asphalt.

E-Krete is easier on the environment than asphalt.

It's a concrete and part flexible material. It can be applied as a liquid coating on top of existing blacktop. Experts

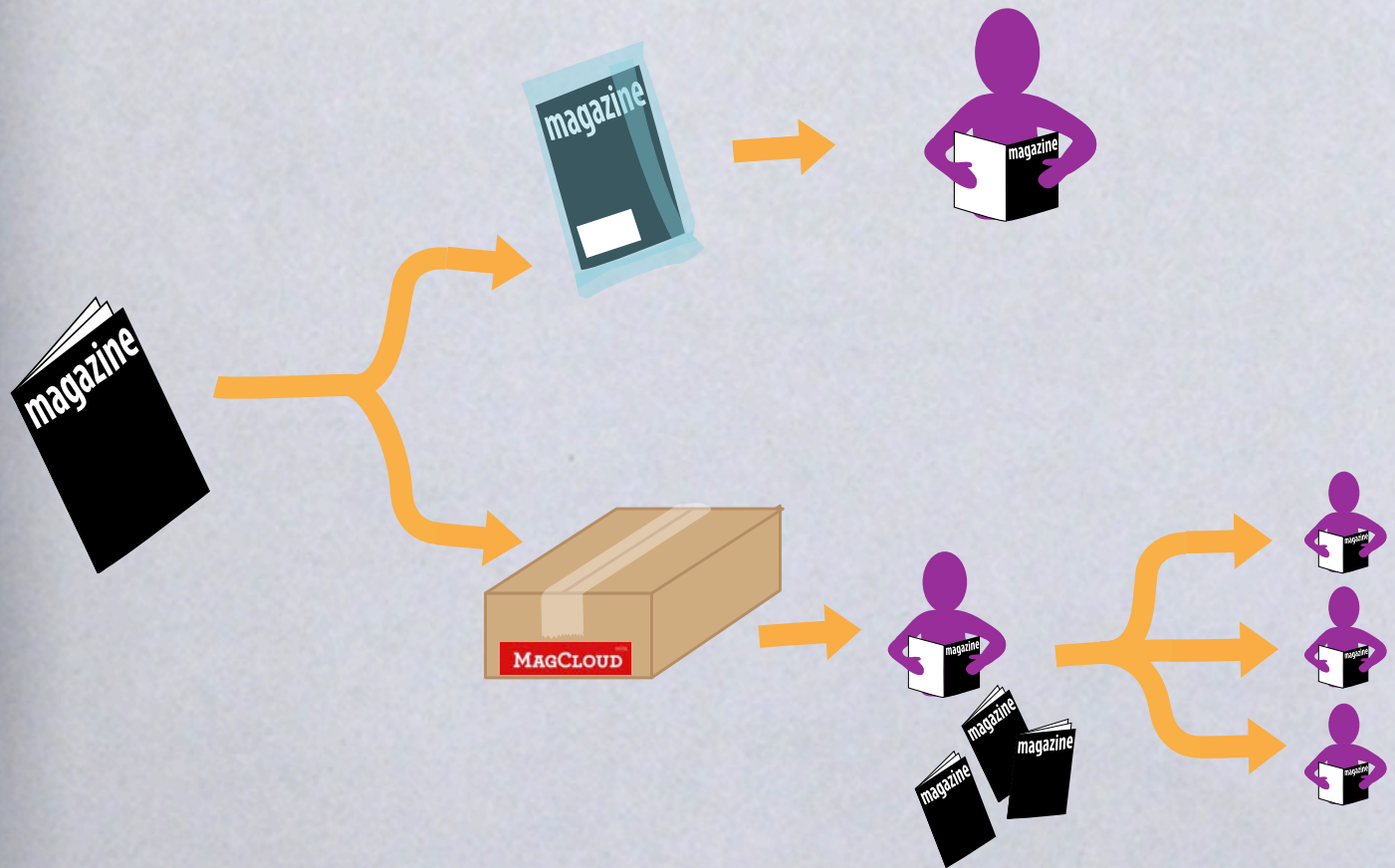




# MAGCLOUD

## how does it work?

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WHAT'S NEW

### INFRASTRUCTURE

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**before we start printing,  
what's the impact?**





WHAT'S NEW

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# PUBLISHING IS A PROBLEM.

by Kathryn Hautanen, Erin Jacobs, Erica Meade and Kate Ranson-Walsh





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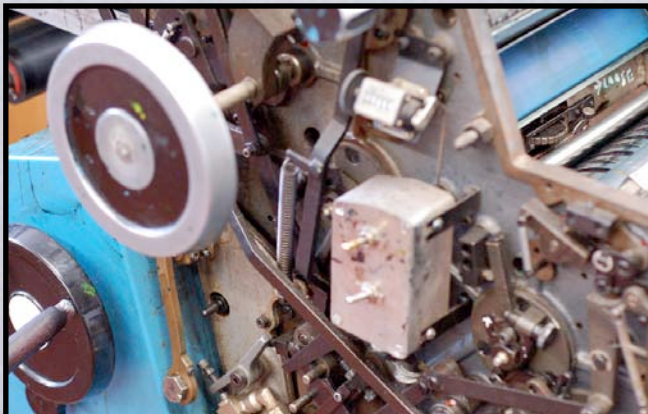
material called E-Krete that's made of concrete and part flexible polymer. It can be applied as a liquid coating on top of existing blacktop. Experts

# 12

# BILLION

magazines

printed each year





WHAT'S HOT

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of miles of roads in the U.S. are in need of repair. PolyCon, a concrete manufacturing company, says that while it's not as gentle on the environment, it's a more durable material that can be applied as a liquid coating on top of asphalt. Experts



E-Krete is easier on the environment than asphalt



# 35 million trees

To produce the 12 billion magazines printed in the US every year, the publishing industry uses approximately 35 million trees worth of paper. Of the magazines printed



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# 14

# BILLION METRIC TONS OF CO<sub>2</sub> equivalent emissions



is  
**MAGCLOUD**  
a solution?





# SIDE BY SIDE

**TRADITIONAL MAGAZINE**  
subscription/newsstand  
push model  
35% sell-through rate  
30 lb paper  
mass-market

**MAGCLOUD**  
subscription/order  
pull model  
print-on-demand  
80 lb paper  
niche



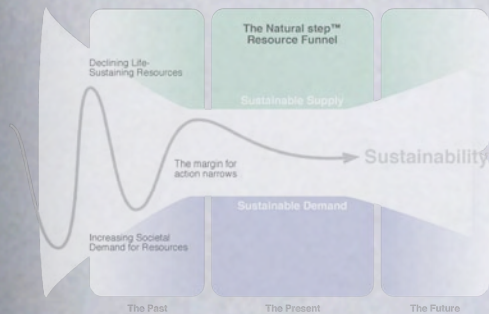


# 3

# FRAMEWORKS

## NATURAL STEP

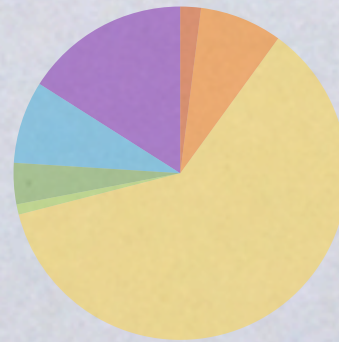
- + systems conditions
- + backcasting



- only qualitative

## LCA

- + industry context
- + specific data



- expensive & time consuming

## TOTAL BEAUTY

- + provides a baseline
- + comparable metric



- incomplete information



# 1 NATURAL STEP

## system conditions

### SC 1: CRUSTY

- Metal
- Ink (Pb, Cd, Cr(IV), Hg)
- Oil (shipping, plastics (polybag))
- Ink Cartridges (fossil fuel)
- Photo Imaging Plate
- Oil to transport printer
- Metals to make container ship
- Metals for staples
- Materials for trucks to transport

### SC 2: MANMADE

- Plate developer
- Pollution from transport
- Blankets
- Rags
- Foam packaging for printer crate
- VOCs
- Ozone

### SC 3: DEGRADATION

- Paper
- Crate
- Clay (for coated paper)

### SC 4: HUMAN NEEDS

- Parts and supplies come from all over the world
- VOC emissions and heavy metals affect people who work at the printer
- Physical conditions affect people operating machinery
- Logging industry (occupational hazards)



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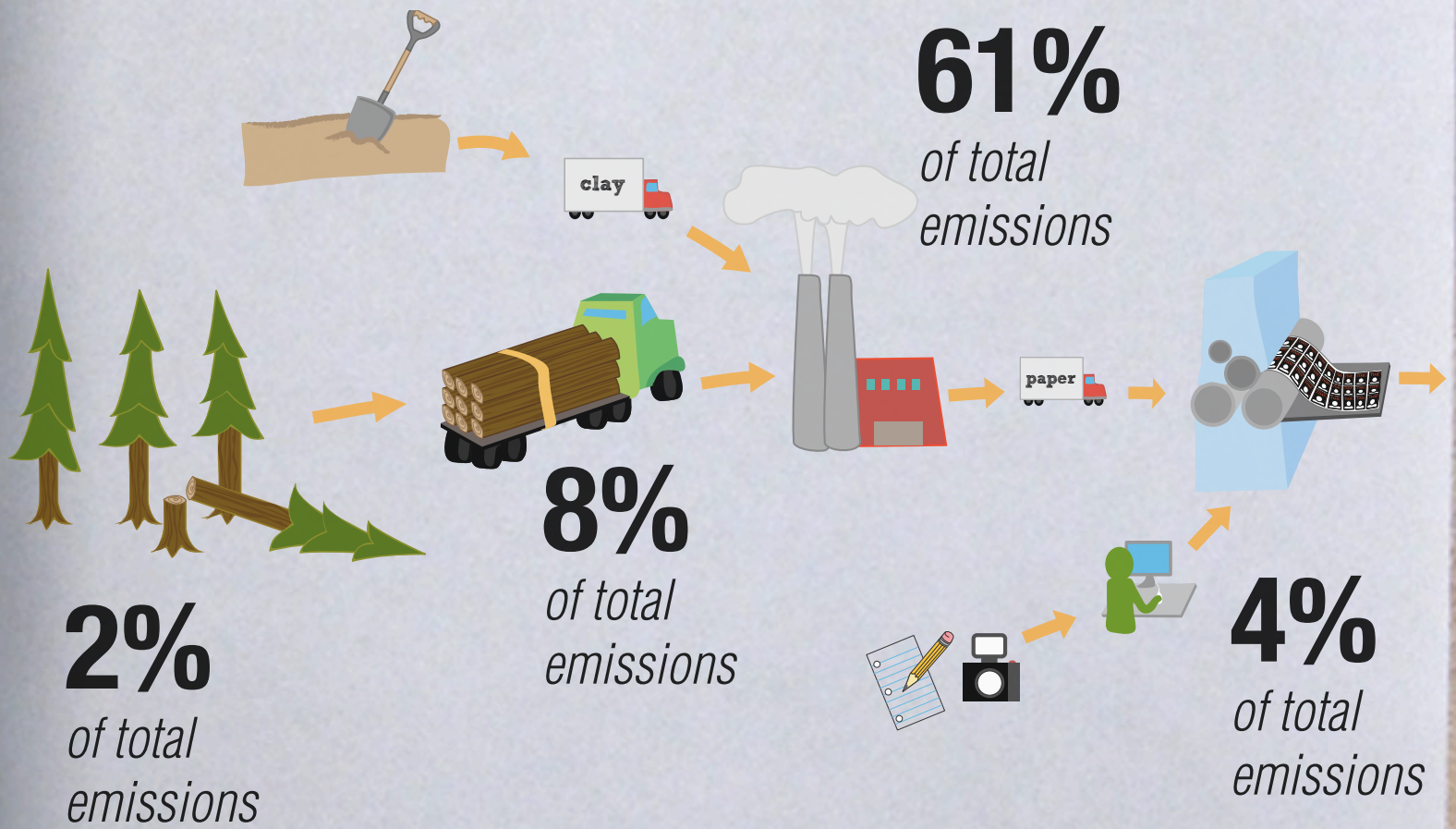
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of roads in the U.S. are being replaced with E-Krete, a flexible concrete and part flexible. It can be applied as a liquid coating on top of existing blacktop. Experts

# 2

# TIME LCA

## what is the impact?





### INFRASTRUCTURE Roads: A Part- Concrete Solution

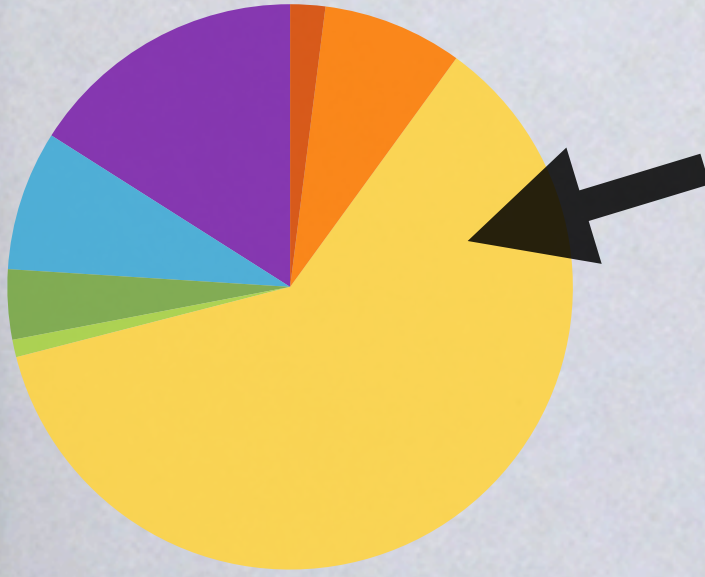
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# 2 PAPER is the problem



# 61%

of total CO2 equivalent emissions in a magazine's life cycle.

- Forest Management and Harvesting
- Transportation of wood and clay to the pulp/papermills
- Pulp and Papermill
- Transportation of paper to printers
- Printing
- Transportation and distribution
- Final fate



WHAT'S NEW

**INFRASTRUCTURE**  
**Roads: A Part-**  
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# MAGCLOUD'S paper is better.

Mill/Distributor	SFI	FSC	PEFC	ECF	Recycled Content	Energy Accreditations
Appleton		■		■	■	
Artic Paper		■	■			
Avery Graphics	■	■		■	■	
Blanks USA	■	■	■		■	
Burgo		■			■	
Condat		■				
Convertible Solutions		■		■	■	
CTI Paper USA	■			■		Carbon Neutral, Green-E Certified
Domtar	■	■		■	■	
Finch	■	■		■	■	
Gmund		■		■		
GPA	■	■		■	■	
Iggesund		■	■			Carbon Neutral
International Paper				■	■	
MacTac Labels					■	
Mohawk		■		■	■	Carbon Neutral, Green-E Certified, Green Seal, Green Power
Neenah Paper		■		■	■	Carbon Neutral, Green-E Certified, Green Power
New Page	■	■	■		■	
Smart Paper		■		■	■	
Spicers		■				
Wausau Coated		■			■	
Wausau Paper		■			■	Green Seal



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# 3

# TOTAL BEAUTY

## how does it compare?

		TIME	MAGCLOUD
CYCLIC		11	36
SOLAR		49	100
SAFETY		?	?
EFFICIENT		?	?



# MAGCLOUD

is not a  
perfect solution.

- \* uses paper
- \* creates waste
- \* uses polybags
- \* thrown away





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# 1 NATURAL STEP backcasting

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By 2020, we envision the production and distribution of magazines will have minimal impact on the earth.



# 1 NATURAL STEP backcasting

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This will be achieved by:

- ✱ increased consumer consciousness
- ✱ transparency of environmental impact
- ✱ compostable polybags
- ✱ selective subscription
- ✱ updated newsstand model

WHAT'S NEW

INFRASTRUCTURE

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# 70%

of magazines at newsstands go unsold.





# 1 NATURAL STEP backcasting

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## Digital Newsstand:

- \* leverages existing low-cost, print-on-demand technology
- \* allows readers to pick and choose sections of a publication
- \* reduces waste

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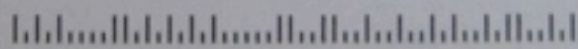
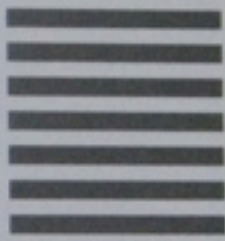
NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

**BUSINESS REPLY MAIL**  
FIRST-CLASS MAIL PERMIT NO 444 RED OAK IA

POSTAGE WILL BE PAID BY ADDRESSEE

**TEAM KATKAT ERIERI**

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