

***New Formats for
Content –
“Creating a More
Open Industry”***

Bill Park, CEO

April 2010



Agenda

- Introduction
- STM Industry – Open or Closed?
- DeepDyve Introduction
- Case Study

“The meaning of open”¹

For Google

- Open technology
(*relationship with ideas*)
 - Open source
 - Open standards

- Open information (re: advertising)
(*relationship with end user*)
 - Transparency of user information
 - Control of user information

¹ “The Meaning of Open”, J. Rosenberg, [Google Public Policy Blog](#), 12/21/09

Why is Open Better?

For Google

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¹ “The Meaning of Open”, J. Rosenberg, [Google Public Policy Blog](#), 12/21/09

For Google, Why is Open Better?

Google's belief is their advantage is their

people and their culture

...not "customer lock-in"

"...a **competitive advantage** doesn't derive from locking in customers, but ...from generating better, **more innovative products.**"

"The **brand** value of thought leadership attracts customers and...fast **innovation** keeps them."

"Open systems (can) **spawn industries.** They harness the intellect of the general population and spur businesses to compete, **innovate**, and win based on the merits of their products (not from customer lock-in)."

Science was Closed¹...



Robert Hooke (1635-1703)
Hooke's Law of Elasticity

“ceiinossstuv”

“ut tensio, sic vis”

“as the extension, so the force”

¹ “The Future of Science”, Michael Nielsen. 7/17/08

Science was Closed¹...



CALCULUS MANIA MDCXCIII (1693)

Isaac “The Giant” Newton
vs.
Gottfried “The Hulk” Leibniz

¹ “The Future of Science”, Michael Nielsen. 7/17/08

...Publishing Made Science Open¹

*300 years ago, scientific publishing created a **common platform of information...***

Ensuring that scientific research was properly...

- **Credited** to the originating author(s)
- **Qualified** and therefore authoritative
- **Disseminated** to aid the research and advancement of the field and ultimately humanity

¹ “The Future of Science”, Michael Nielsen. 7/17/08

Is Science (More) Open Today?

But in the past 300 years, how much has changed?

*Is information more
accredited, authoritative, and disseminated?*

Today, is science more open or closed?

¹ “The Future of Science”, Michael Nielsen. 7/17/08

“The meaning of open”

For Google

- Open technology
(relationship with ideas)
 - Open source
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- Open information (re: advertising)
(relationship with end user)
 - Transparency of user information
 - Control of user information

For STM Publishing

- ✓ Open “technology”
(relationship with ideas)
 - ✓ Ideas are freely shareable
 - ✓ Scientific methods, experiments vs. alchemy and theories

“The meaning of open”¹

For Google

- Open technology
(*relationship with ideas*)
 - Open source
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- Open information (re: advert
(*relationship with end user*)
 - Transparency of user inform
 - Control of user information

For STM

- ✓ Open “technology”
(*relationship with ideas*)
 - ✓ Ideas are freely shareable
 - ✓ Scientific methods, experiments vs. alchemy and theories

- ? **Open information (re: content)**
(*relationship with end user*)
 - ? Limited control/access over content, pricing?
Is there “Lock-in”?
 - ? Knowledge of end-user?
 - ? Control of user information (*‘If you tell me more, you get more’*)?
 - ? Ability to repurpose content? (see *Lessig*)
 - ? Collaboration with content?

¹ “The Meaning of Open”, J. Rosenberg, [Google Public Policy Blog](#), 12/21/09

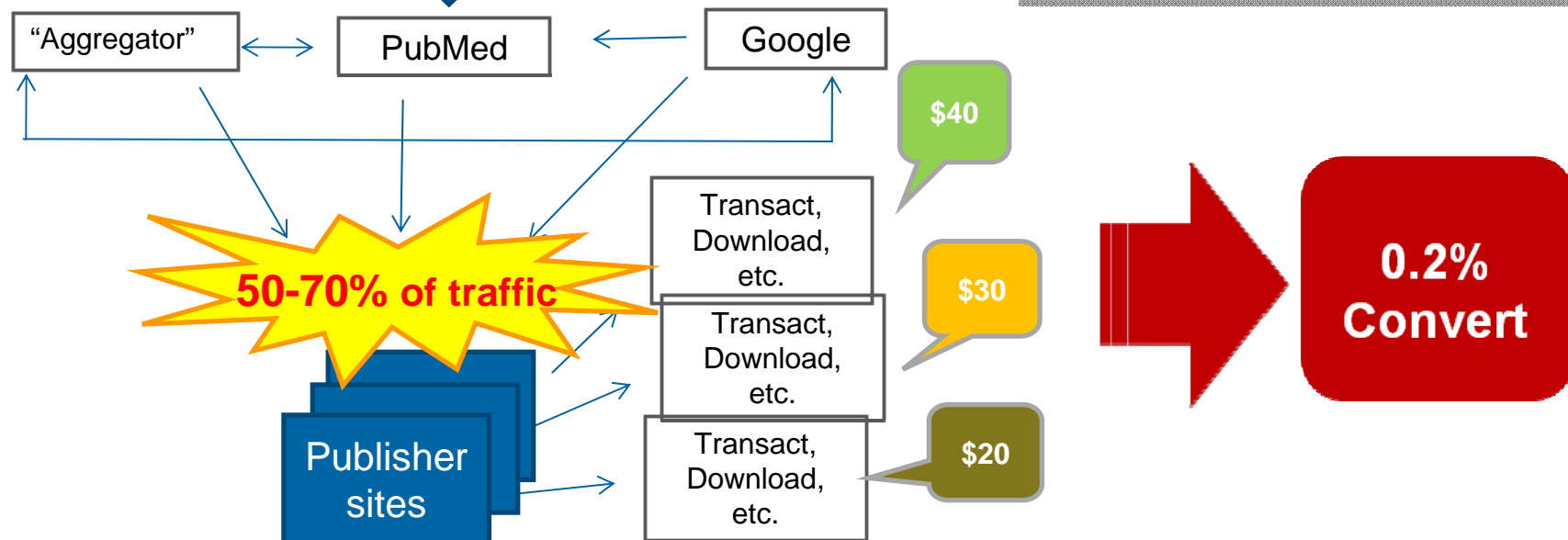
Not Very Open for End Users...



“Pay per view has a number of unattractive features which include”:

- 1. high prices*
- 2. uninformative abstracts*
- 3. inappropriate payment mechanisms”*

- Publishing Research Consortium



Introduction - DeepDyve

Research. Rent. Read.

- Millions of articles from thousands of journals
- **Research** and preview abstracts for FREE
- **Rent** articles for \$0.99 (or \$9.99 - \$19.99 for monthly subscription)
- **Read-only** the full-text for 24 hours (or longer if monthly subscriber)

The screenshot shows the DeepDyve website homepage. At the top left is the logo "deepdyve" with "HSTA" below it. To the right are "Login" and "Sign Up" links. The main banner features the text "Research. Rent. Read." and "The largest online rental service for scientific, technical and medical research For just \$0.99". Below this is a search bar with the placeholder "Enter a sentence, or cut and paste a paragraph" and a "Search" button. A "Sign Up for a FREE TRIAL" button is also present. Below the banner are three columns: "Research" (Search across 30 million articles from thousands of authoritative journals), "Rent" (Rent premium articles for just \$0.99. View open access articles for FREE), and "Read" (Read the entire article in DeepDyve's Viewer. Done). A "Learn More" button is to the right. Below this is a "Featured Content" section with a "Browse All Content" button. It contains two columns: "Journals" (Genetics, Journal of Bone and Joint Surgery, Annual Review of Physiology, Journal of Applied Physiology, Clinical Chemistry) and "Articles" (Acute hypoxia impairs dynamic cerebral autoregulation: results from two independent..., Effects of acute hypoxia and hyperthermia on the permeability of the blood-brain barrier..., Anticipating anticipation: pursuing identification of cardiomyocyte circadian clock function, Rapid muscle atrophy response to unloading: pretranslational processes involving MHC..., Sulforaphane treatment protects skeletal muscle against damage induced by exhaustive...). The footer contains "Welcome to DeepDyve" (Research. Rent. Read. DeepDyve is the largest online rental service for scientific, technical and medical research.), "Browse" (Journals, Publishers), "About" (Company, News & Events, Careers, Blog), "How It Works" (FAQ, Contact Us), and "Partners" (Publisher Tools, Widgets).

Free preview...Rent full-text for \$0.99

deepdyve
RETA

Login Sign Up

Browse ▾ Enter a sentence, or cut and paste a paragraph Refine Search

Journals > Clinical Chemistry > October 2009

The Case of a Bow Legged Toddler

— Clinical Chemistry 55:10
1895 (2009)


Clinical Chemist

What Is Your Guess?

The Case of a Bow Legged Toddler

Armanda D. Tatsas and Alison Woodworth*

A 34-month-old African American male was referred for evaluation of anteromedial bowing of the legs (Fig. 1). Pronounced widening of the wrists and beading of the ribs at the costochondral junctions were also confirmed by X-ray. He was breast-fed until 2 years of age. He had eczema, but no other significant medical or family history. The patient was noted to drink minimal milk, eat little fish or eggs, and spend little time outdoors. The pertinent laboratory results are listed in Table 1.



Analyte	Patient result	Reference interval
Calcium	9.8 mg/dL (2.4 mmol/L)	8.5–10.5 mg/dL (2.1–2.6 mmol/L)
Intact PTH	68 pg/mL (7.2 pmol/L)	10–65 pg/mL (1.1–6.8 pmol/L)
Phosphorus	5.1 mg/dL (1.6 mmol/L)	2.5–4.5 mg/dL (0.8–1.5 mmol/L)

Table 1. Laboratory results for the patient.

— Tatsas, Armanda D.; Woodworth, Alison
Clinical Chemistry, Volume 55 (10): 1895
American Association for Clinical Chemistry – Oct 1, 2009

► More Info

► More Like This Article

— This is a preview. The total pages displayed will be limited.

Preview first page for free (no print, no download)

Rent and view full-text article for \$0.99

Articles expire after 24 hours

“Rent to own” ...then go to publisher site to purchase



...or Join Silver or Gold Subscription

The screenshot shows the DeepDyve website interface. At the top, there is a navigation bar with the DeepDyve logo, a user profile for 'Hi Bert', and a 'Log out' button. Below this is a search bar with the text 'Enter a sentence, or cut and paste a paragraph' and a 'Search' button. The main content area displays the article title 'Surgical Management of Metastatic Bone Disease' from the 'Journal of Bone and Joint Surgery' (June 2009). The article page includes a 'Gold Access' button, a 'Download Article from Publisher' button, and 'Article Details' such as the authors 'Bickels, Jacob; Dadia, Shlomo; Lidar, Zvi' and the journal information 'Journal of Bone and Joint Surgery, Volume 91 (6): 1503, JB&JS - Jun 1, 2009'. The article content features an illustration of a shoulder joint with a cemented intramedullary nail, labeled 'Bone cement'. The text discusses the surgical management of metastatic bone disease, mentioning a study where patients in the surgery group were able to walk after treatment more often than those in the radiation-therapy group. The page number '1509' is visible at the top of the article content area. At the bottom of the page, there are navigation arrows and the text '8 of 15'.

Silver Plan:

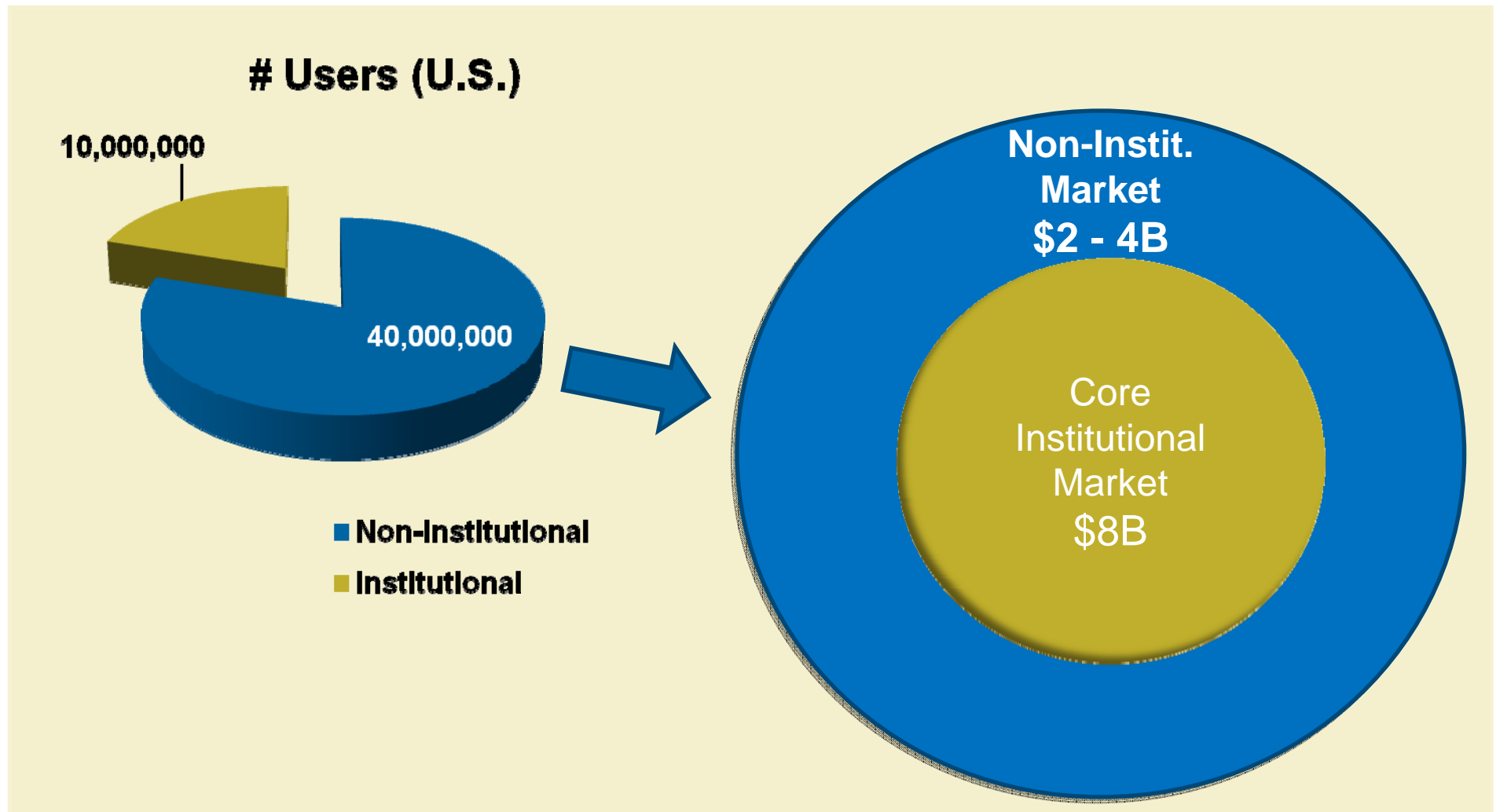
- \$9.99 per month
- Rent up to 20 premium articles per month
- Articles expire after 7 days.

Gold Plan

- \$19.99 per month
- Unlimited articles
- No expiration



\$2 - 4 Billion Market Opportunity



Over 30 Signed Publishers

Publishers motivated to partner with DeepDyve

- **Growth** – new, untapped market opportunity
- **No risk** - free to join; 50/50 revenue share model
- **Expertise** – web 2.0 technology and end-user expertise
- **One-stop shop** – no one publisher has enough content
- **Not competitive** – “view-only” rental complementary to core business



Case Study: DeepDyve Rental Links

doi: 10.1096/fj.09-133520.
Journal. 2010;24:39-48.)

Related factor 2 regulates the stress response to UVA-1-phospholipids in skin cells

Gruber^{*,§}, Herbert Mayer[†], Barbara Lengauer^{*}, Veronika Mlitz^{*}, John M. Sanders[§],
Muller[§], Martin Bilban[‡], Rainer de Martin[†], Oswald Wagner[‡], Thomas W. Kensler^{||},
Mamoto^{||}, Norbert Leitinger^{§,1} and Erwin Tschachler^{*,#}

Dermatology,

Vascular Biology and Thrombosis Research, and

Laboratory Medicine, Medical University of Vienna, Vienna, Austria;

Research Center, University of Virginia, Charlottesville, Virginia, USA;

Environmental Health Sciences, Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland,

Tsukuba, Tsukuba, Japan; and

Recherches et d'Investigations Epidemiologiques et Sensorielles, Neuilly, France

Address correspondence to: Cardiovascular Research Center, University of Virginia, PO Box 801394, Charlottesville, VA 22908, USA. E-mail: nl2g@virginia.edu

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[fj.09-133520v1](#)
24/1/39 most recent
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- ▶ [Articles by Tschachler, E.](#)

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- ▶ [Articles by Gruber, F.](#)
- ▶ [Articles by Tschachler, E.](#)

Goal:

- “**Better half of something than all of nothing**”
- Add DeepDyve rental link on publisher site
- Redirect non-subscriber visitors to DeepDyve.

Case Study: DeepDyve Rental Links

o UVA-1-

Sanders[§],
Kensler^{||},

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- ▶ [Buy / Rent](#)
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Assumption

- “Less is more”
- “Our users are not typical...”

Approach

- Subtle “Buy/Rent” link
- Not clear what “rent” means
- Not evident that “Rent” is distinct, vs. “Buy”

Result

- 0.2% CTR

Case Study: DeepDyve Rental Links

o UVA-1-

Sanders[§],
Kensler^{||},

This Article

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Highlight Link

- More explicit, more explanation

Approach

- Add \$0.99 price to draw curiosity, attention

Result

- **0.4% CTR**
(2x improvement)

Case Study: DeepDyve Rental Links

o UVA-1-

Sanders[§],
Kensler^{||},

This Article

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- ▶ [Buy or Rent for \\$0.99 \(NEW!\)](#)
- ▶ [Supplemental Data](#)
- ▶ All Versions of this Article:
[fj.09-133520v1](#)
24/1/39 *most recent*
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Highlight Link

- More spacing
- More color

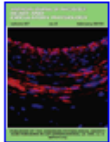
Approach

- Added “NEW” to catch user’s attention
- Improved spacing b/n “Buy” and “Rent”

Result

- **0.8% CTR**
(2x improvement)

Case Study: DeepDyve Rental Links



PDF

Is endogenous ouabain a physiological regulator of cardiovascular and renal function?

To view this item, select one of the options below:

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This Article

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- › [Rent article for \\$0.99 \(NEW!\)](#)
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Sign-In Page ("Challenge Page")

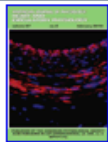
Approach

- Less is more

Result

- 0.4% CTR

Case Study: DeepDyve Rental Links



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Is endogenous ouabain a physiological regulator of cardiovascular and renal function?

To view this item, select one of the options below:

› Sign In

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› Rent Article for \$0.99 **NEW**

› [Rent this article on DeepDyve](#) - Try out this new service! View this article online for 1 day for just US\$0.99.

› Purchase Short-Term Access

› [Pay per Article](#) - You may access **this article** (from the computer you are currently using) for 1 day for US\$8.00.

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Sign-In Page ("Challenge Page")

Approach

- Add Rental as a 'standard' option

Result

- 1.4% CTR
(3.5x improvement)

Case Study: DeepDyve Rental Links

deepdyve
HEFA

Login Sign Up

Research. Rent. Read.

The largest online rental service for scientific, technical and medical research
For just **\$0.99**

Enter a sentence, or cut and paste a paragraph Refine ▾ **Search**

Sign Up for a FREE TRIAL

Research
Search across 30 million articles from thousands of authoritative journals.

Rent
Rent premium articles for just \$0.99. View open access articles for FREE.

Read
Read the entire article in DeepDyve's Viewer. Done.

Learn More

Featured Content [Browse All Content](#)

Journals	Articles
Genetics	Acute hypoxia impairs dynamic cerebral autoregulation: results from two independent...
Journal of Bone and Joint Surgery	Effects of acute hypoxia and hyperthermia on the permeability of the blood-brain barrier...
Annual Review of Physiology	Anticipating anticipation: pursuing identification of cardiomyocyte circadian clock function
Journal of Applied Physiology	Rapid muscle atrophy response to unloading: pretranslational processes involving MHC...
Clinical Chemistry	Sulforaphane treatment protects skeletal muscle against damage induced by exhaustive...

Welcome to DeepDyve
Research. Rent. Read.
DeepDyve is the largest online rental service for scientific, technical and medical research.

Browse
Journals
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About
Company
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Careers
Blog

How It Works
FAQ
Contact Us

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Publisher Tools
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DeepDyve Registration

- 1 month Free Trial (must provide CC #)
- Or free registration, then \$0.99 per

Assumption

- Create high bar + high value offer
- Expect modest registration but good conversion to paying users

Result

- 1%-6% conversion



Case Study: DeepDyve Rental Links

The screenshot shows the DeepDyve website interface. At the top left is the logo "deepdyve BETA" and navigation links "Learn More | Sign Up | Login". The main banner features the text "Research. Rent. Read." and "The largest online rental service for scientific, technical and medical research For just \$0.99". Below this is a search bar with the placeholder "Enter a sentence, or cut and paste a paragraph" and a "Search" button. A navigation bar below the search bar has three sections: "Research" (Search and preview any article for FREE), "Rent" (Rent premium articles for just \$0.99), and "Read" (Read the entire article in DeepDyve's Viewer. Done). A red dashed box highlights a "Sign Up and Get 5 Free Rentals" form with an "Email" input field and a "SIGN UP" button. Below the navigation bar is a "Featured Content" section with a "Browse All Content" button. The "Featured Content" section is divided into "Journals" and "Articles". Under "Journals", "Communications of the ACM" is highlighted. Under "Articles", there are three entries: "CTO roundtable: cloud computing", "Distributed selection: a missing piece of data aggregation", and "The software customer/supplier relationship".

DeepDyve Registration

- Free registration (email only)
- Get 5 free rentals on sign-up

Assumption

- Let users experiment with the view-only concept
- Drive usage and buzz

Result

- **22% conversion**

Case Study: Learnings

- “More is More”
 - Publisher visitors are usually repeat visitors, trained to only look for and click based on muscle memory
- Google visitors are NOT “accidental tourists”
 - 50+% of Abstract visitors click thru to see the “Full Text”
- The dogs are eating the dog food
 - 22% conversion suggests there’s a large audience of users who ARE willing to view-only an article
- Test, test, test
 - Apply lessons to other corporate programs
 - Challenge pre-existing beliefs with data

A Look at the Numbers - Open Can be Profitable

- Market Statistics¹

- Total revenues: **\$8B**
- # of “readers”: **10-15 million**
- # downloads per year: **1.5B**

- Unit Metrics

- # downloads per reader: **100 / yr**
- Revenue per download: **\$5.33**
- Revenue per reader: **\$533 / yr, or \$44 / mo.**

- PPV Metrics

- Average price²: **\$30**
- Conversion rate at publisher site³: **0.2%**

Rent?

PPV Membership?

Single use?
(iPad, DRM)

¹ Mabe MA (2009): *Scholarly Publishing. European Review* 17(1): 3-22,)

² Mark Ware Consulting, “Access by UK SME’s to Professional and Academic Information, 2009”

³ DeepDyve Analysis

In Conclusion – Let's Experiment w/Open

Can we push STM publishing to be more Open to Opportunities?

- Make content more **accessible**, less “customer lock-in”
- Enable more **collaboration** amongst scientists and scholars
- Innovate and integrate to allow content to be more **dynamic**

Questions?

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