



*Capturing the
iUser:*

*Web 2.0 'Freemium'
Business Models*

William Park, CEO

October 2010



Background - DeepDyve

Research. Rent. Read.

- Millions of articles from thousands of journals
- **Research** and preview abstracts for FREE
- **Rent** full-text articles
- **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 RPTA". In the top right corner are links for "Login" and "Sign Up". The main header features the slogan "Research. Rent. Read." and a sub-header "The largest online rental service for scientific, technical and medical research For just \$0.99". Below this is a search bar with the placeholder text "Enter a sentence, or cut and paste a paragraph", a "Refine" dropdown, and a "Search" button. A green banner on the right side of the search bar says "Sign Up for a FREE TRIAL". Below the search bar is a navigation bar with three main sections: "Research" (with a magnifying glass icon and text "Search across 30 million articles from thousands of authoritative journals."), "Rent" (with a dollar sign icon and text "Rent premium articles for just \$0.99. View open access articles for FREE."), and "Read" (with a book icon and text "Read the entire article in DeepDyve's Viewer. Done."). A "Learn More" button is positioned to the right of the "Read" section. Below the navigation bar is a "Featured Content" section with a "Browse All Content" button. This section is divided into two columns: "Journals" and "Articles". The "Journals" column lists "Genetics", "Journal of Bone and Joint Surgery", "Annual Review of Physiology", "Journal of Applied Physiology" (which is highlighted with a blue arrow), and "Clinical Chemistry". The "Articles" column lists several titles, including "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...", and "Sulforaphane treatment protects skeletal muscle against damage induced by exhaustive...". To the right of the "Articles" list is a small image of a book cover titled "Journal of Applied Physiology". At the bottom of the page is a footer with five columns: "Welcome to DeepDyve" (with the slogan and a brief description), "Browse" (with links for Journals and Publishers), "About" (with links for Company, News & Events, Careers, and Blog), "How It Works" (with links for FAQ and Contact Us), and "Partners" (with links for Publisher Tools and Widgets).

Rent full-text Article Affordably

The screenshot shows the DeepDyve website interface. At the top, there is a search bar with the text "Enter a sentence, or cut and paste a paragraph" and a "Search" button. Below the search bar, there are navigation links for "Journals", "Clinical Chemistry", and "October 2009". The article title "The Case of a Bow Legged Toddler" is prominently displayed. The article preview includes the journal name "Clinical Chemistry 55:10 1895 (2009)", the author "Armanda D. Tatsas and Alison Woodworth", and a brief description of the case. Two X-ray images of a child's legs are shown. A table of laboratory results is also present. On the right side of the preview, there are buttons for "Rent for \$0.99" and "Download Article from Publisher".

deepdyve
RFTA

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	5.3 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.

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 5.3 mg/dL (1.6 mmol/L) 2.5–4.5 mg/dL (0.8–1.5 mmol/L)

14.3–6.3 mg/dL (3.4–1.5 mmol/L)

Rent for \$0.99

Download Article from Publisher

Article Details

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.

Rent article for \$0.99 and up

- Articles expire after 24 hours
- No print, no download

Monthly Plans

- \$9.99 - \$19.99
- Volume discount
- Longer expiration date

Publisher Partners - Sample



Publishers motivated to partner with DeepDyve

- **Growth** – new, untapped market opportunity
- **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



What Is “Freemium”? ¹

- Freemium = Free + Premium
 - Term coined by venture capitalist Fred Wilson
 - Varying tiers of content from free to expensive
- Free (samples) is nothing new
 - Free candy bar sample; mail-in coupon for free diapers
 - ...but in traditional marketing, expensive to implement so very few free samples distributed and highly selected
- But free in digital world is different... **5% Rule**
 - Marginal cost close to zero...
 - Therefore ratio of what’s given for free can be reversed
 - **5 Percent Rule:** 5% of users support all the rest (or at least cover variable costs)

¹ “Free”, Chris Anderson, 2009

Examples of “Freemium”

- Skype



- Pandora



- Wall Street Journal



- Automattic (WordPress)



- Zynga



Gaming Companies: Freemium 5% Rule

- Club Penguin (Disney)
 - 25% of monthly players pay \$5/month
- Habbo
 - 10% of monthly players pay \$10.30/month
- RuneScape
 - 16.6% of monthly players pay \$5/mo
- Puzzle Pirates
 - 22% of monthly players pay \$7.95/mo

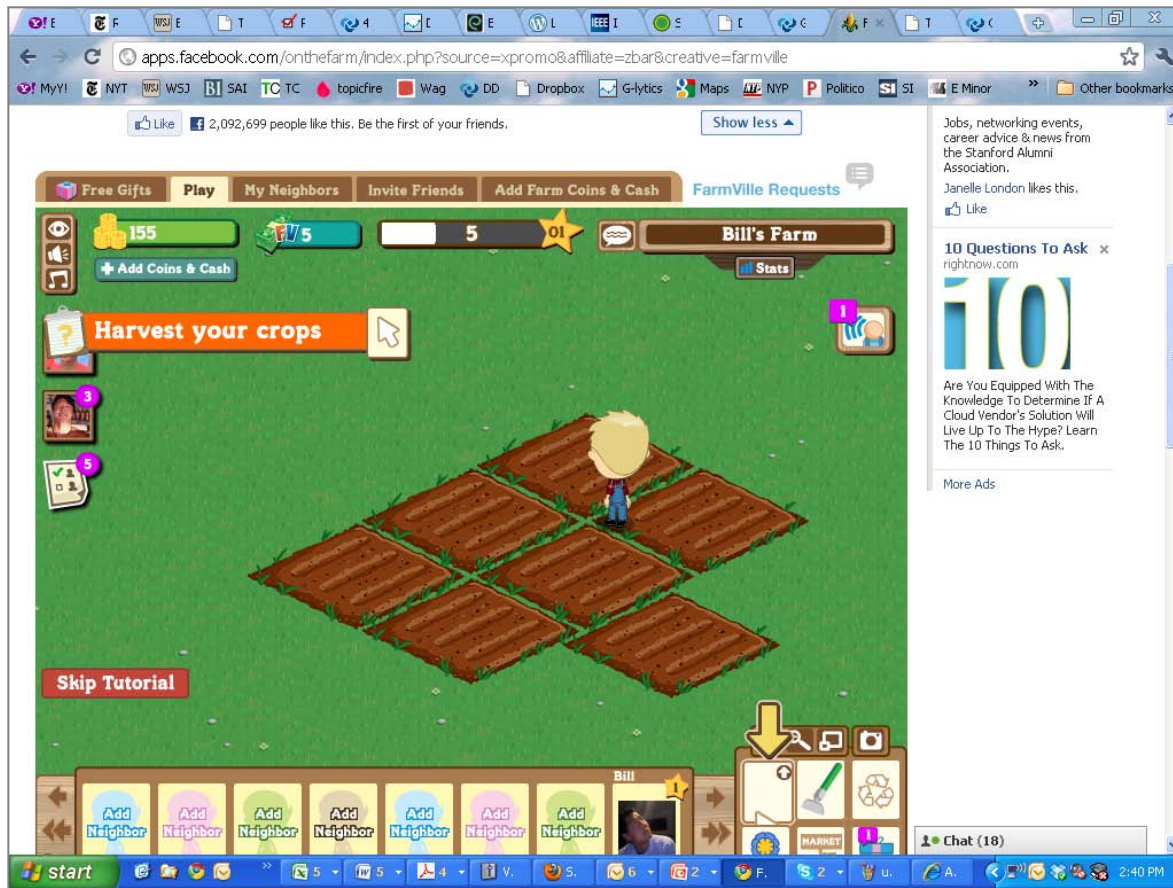
EA Profile



- Price: \$60
- Console: PS3 (\$300)
- Units sold: 60M
- Founded: 1982
- Sales: \$3.8B (TTM)
- Valuation: \$5.5B



Zynga Profile



- Price: Free
- Console: Facebook
- Users: 215M Monthly
- Founded: 2008
- Sales: \$500M - \$1B (est)
- Valuation: \$5B (est)

The Business Case for Freemium

“How To Make \$600M Selling Nothing”



Analysis

- Revenues: \$600M annually, or \$50M / month
- Active users: 215M / month
- Rev per user: \$0.23 per month, \$2.79 per year



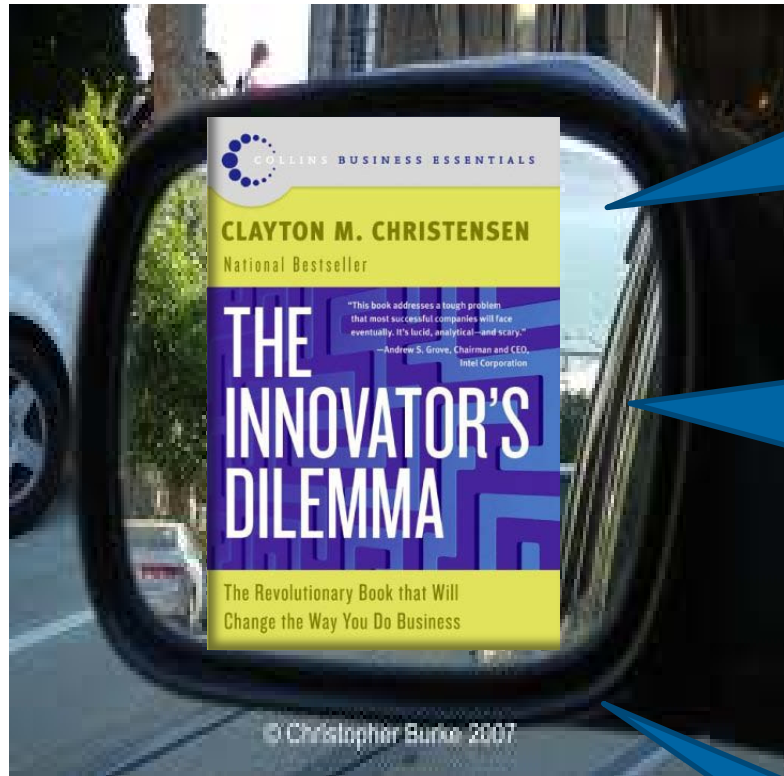
Assuming the 15% Rule

32.25M paying customers

\$1.55 per month or

\$18.60 per year

Innovator's Dilemma – Disruptive “Technology”



Disruptive technologies are innovations that result in **worse** performance in the near term but are **cheaper and more easy to use**.

Because disruptive technologies do not initially satisfy the high end of the market, **large companies overlook them**. However, they eventually **satisfy market demand with lower costs**.

Large companies have **legacy obstacles** (customers, processes, systems) that **hinder a quick response** to disruptive technologies.

Freemium Models – Can It Work for STM?

Keys to Freemium

1. Large, reachable audience
2. Low marginal cost
3. Free version that provides genuine value
4. Precise metrics and conversion funnel
5. Deep understanding of customer perceived value

Freemium Models – Can It Work for STM?

Keys to Freemium

1. Large, reachable audience
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5. Deep understanding of customer perceived value

STM Opportunity

1. **250M** knowledge workers¹ ✓
2. Web, PDF ✓
3. Free Archives – yes but...
Free abstracts ...?
4. Downloads – yes
Traffic conversion...?
5. Librarians, scholars – yes
Other users...?

Market size (#1) and marginal cost (#2) support Freemium.

Other Areas Will Require Further Development.

Is The Opportunity Worth It?

STM Opportunity

1. 250M knowledge workers¹ ✓
2. Web, PDF ✓
3. Archives – sometimes.
Free abstracts ...?
4. Downloads – yes.
Traffic conversion...?
5. Librarians, scholars – yes.
Unaffiliated users...?

STM Publishing Industry

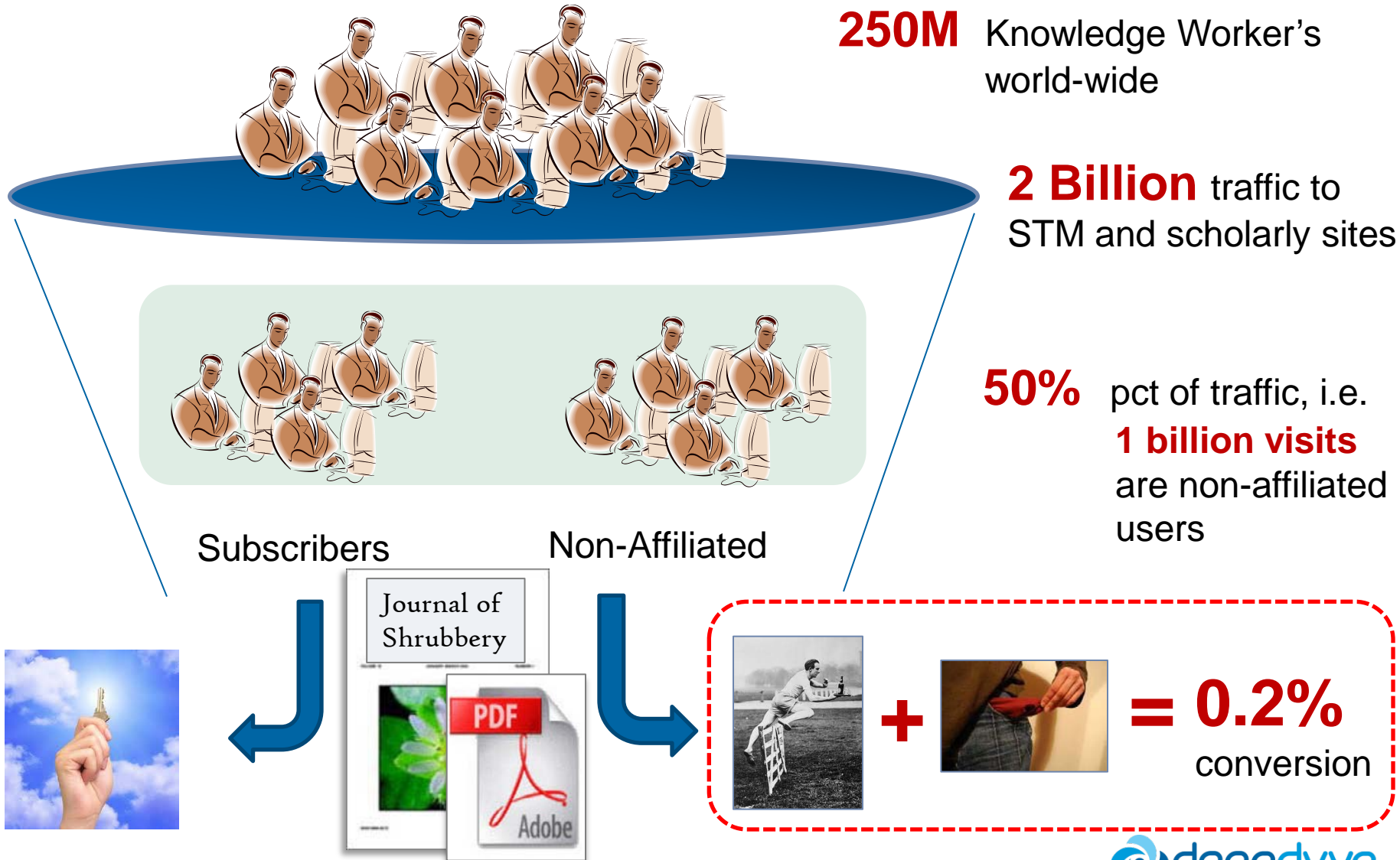
- Market Statistics¹
 - Total revenues: **\$8B**
 - # of “readers”: **10-15 million**
 - # downloads per year: **1.5B**
- Unit Metrics
 - # downloads per reader: **100-150/yr**
 - Revenue per download: **\$5.33**
 - Revenue per reader: **\$533 per yr**
- Pricing & Metrics (for unaffiliated)
 - Subscription price: **~\$200**
 - Average article price²: **\$30**
 - PPV conversion rate ³: **0.2%**

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, publisher interviews

0.2% – The Freemium Opportunity¹



¹ DeepDyve Analysis

Who Are These Users?

DeepDyve User Profile

- Top Countries (%)

1. US (29%)
2. UK (8%)
3. India (6%)
4. Germany (5%)
5. Canada (4%)
6. Australia (4%)
7. China (3%)
8. Netherlands (3%)
9. France (2%)
10. Italy (2%)
11. Rest of world (34%)

- Top Domains

- .edu (6%)
- .org (2%)
- .gov (<1%)
- .com/.co/ etc. (91%)
 - AOL (1%)
 - Gmail (23%)
 - Hotmail (10%)
 - YHOO: (14%)

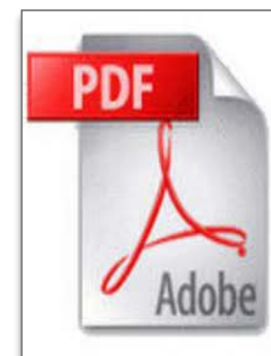
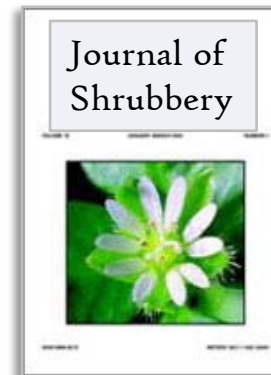
Today's Model – Many Users, Few Choices

Many User Types

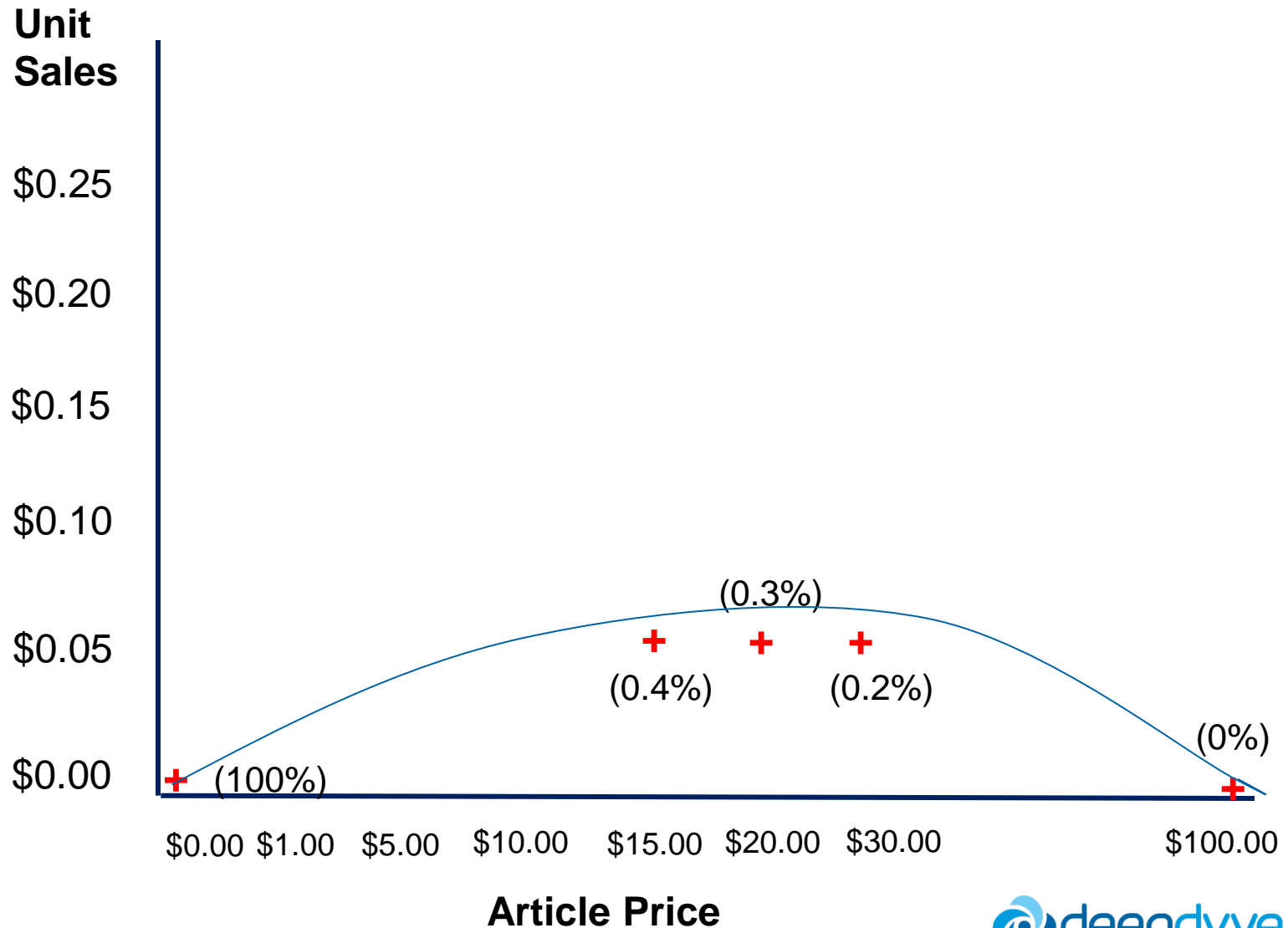
- Institutions
 - Large Academic
 - Large Corporate
 - Government
 - Etc.
- Non-institutions
 - Small Colleges
 - Small / Mid-sized businesses
 - Individuals
 - Etc.
- Regions
 - Americas
 - EMEA
 - APAC

Few Product Options

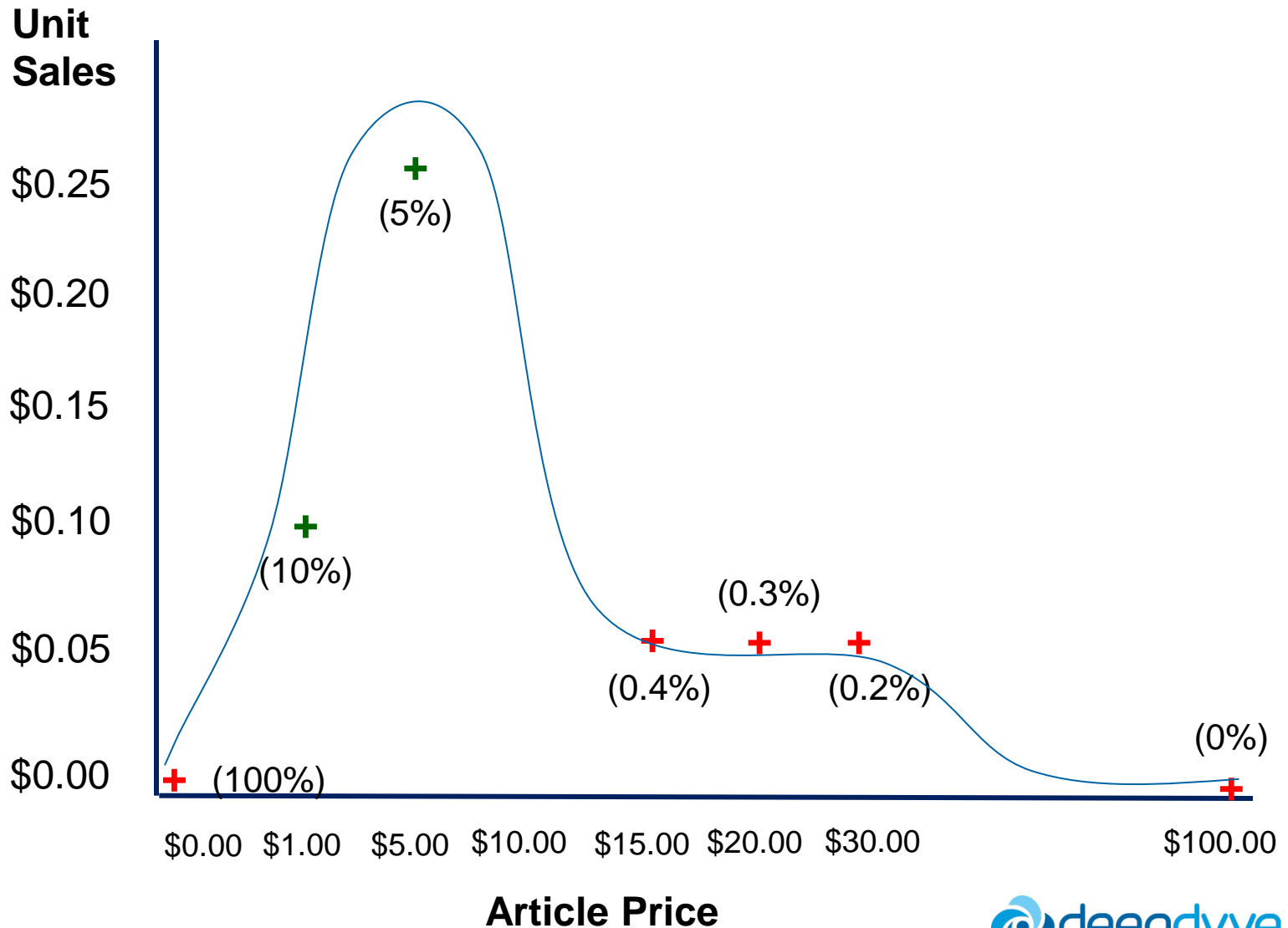
- Features
 - Hard copy (print)
 - Electronic copy (PDF)
- Pricing
 - Site License (volume discount)
 - Individual subscription / PPV



Price Sensitivity – What Is the Shape?



Price Sensitivity – Maybe This?



Sample – Free(mium) Tactics¹

- Time Limited: 30 days free, then pay (ex: Salesforce.com)
 - Pros: Easy to do; low risk of cannibalization
 - Cons: High churn; users may not commit time to get true value (Pandora)
- Seat Limited: up to X people for free (ex: QuickBooks)
 - Pros: easy to implement, easy to understand
 - Cons: Might cannibalize low-end of market
- Customer-type Limited: free for young co's (ex. MSFT BizSpark)
 - Pros: Charges co's according to their ability to pay; captures fast growth customers early
 - Cons: Complicated and hard to police
- Feature Limited: Basic free; Pro for fee (ex: Flickr; WordPress)
 - Pros: best way to maximize reach; when customers convert to paid, it's for right reason which means more loyalty
 - Cons: need 2 versions of product; requires sharp balance on which features are free or fee

Imagine More, Simple Choices

- **Free Platform**

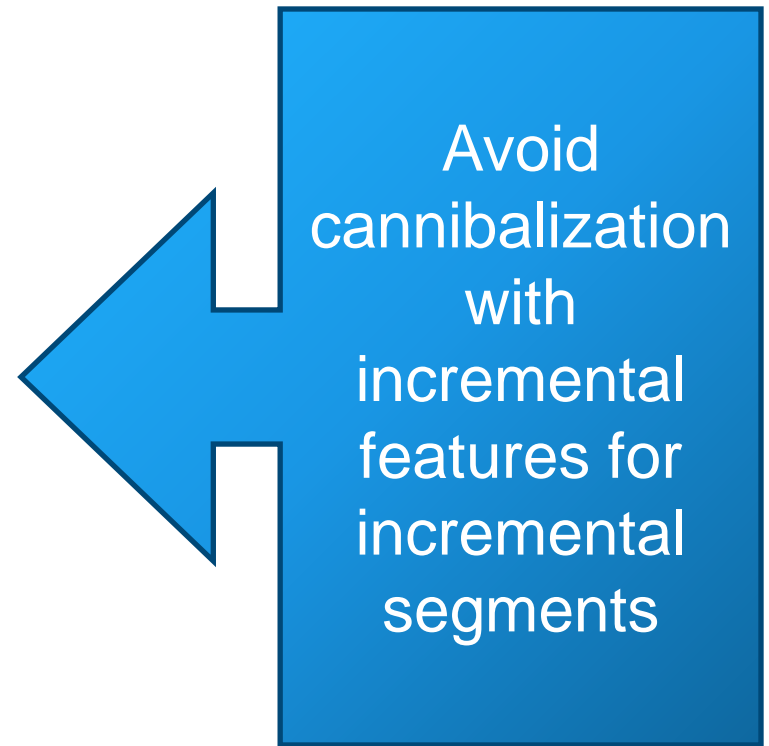
- Quick registration, personalization
- Federated search (ex. PubMed)
- Folders, notes, simple tools

- **“Inexpensive” Add-ons**

- Advanced tools
- Limited reading (rent / read-only)
- Limited print (DRM)
- PPV
- Standard bundles

- **All You Can Eat**

- Site license
- Custom quote



STM 15% Freemium Opportunity?

- # knowledge workers worldwide: 250M
 - # STM institutional readers: 10-15M (5%)
- Freemium Possibility?
 - Plus, capture 10% of new KW's: 25M
 - Upsell them: \$5 per month
 - Opportunity: \$1.5B

What Matters Most to Top 20%? To Rest?

- Freemium business model – capture new customers
 - Feature flexibility
 - Speed
 - Measurability
- Publishers must have a deeper understanding of their costs
 - Journal production
 - Sales and marketing
 - Platform features
- Publishers must gain competencies in new areas
 - Product marketing (not necessarily product development)
 - Merchandising
 - User segmentation
 - Analytics

Questions?

Thank You!

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