

# Innovation success and failure



**CHALLENGE  
TODAY,  
CHANGE  
TOMORROW**

# Success and failure (Project SAPPHO)

- SPRU 1972, replicated by Rothwell et al. 1974, 1976
- 58 innovations in scientific instruments, chemicals and mechanical engineering
- Success and failure pairs
- Similar in many dimensions



# Pattern of success

- Formal project planning
- Marketing
- Specialised external communications (scientific)
- Senior management commitment

# Pattern of success

- Formal project planning
- Marketing
- Specialised external communications (scientific)
- Senior management commitment



# Pattern of success

- Formal project planning
- Strongest discriminating variables related to marketing
  - ‘User needs understood’ strongest, involving R&D, design, after-sales service
- Specialised external communications (scientific)
- Senior management commitment



CHALLENGE TODAY,  
CHANGE TOMORROW

# Pattern of success

- Formal project planning
- Strongest discriminating variables related to marketing
  - ‘User needs understood’ strongest, involving R&D, design, after-sales service
- Specialised external communications (scientific)
- Senior management commitment



CHALLENGE TODAY,  
CHANGE TOMORROW



# Pattern of success

- Formal project planning
- Strongest discriminating variables related to marketing
  - ‘User needs understood’ strongest, involving R&D, design, after-sales service
- Specialised external communications (scientific)
- Senior management commitment (‘skin in the game’)
  - authority
  - risk-taking
  - Co-ordinating and mobilising large teams
  - knowing-how to get things done



CHALLENGE TODAY,  
CHANGE TOMORROW

# ‘Old School’(?)

## Freeman and Soete (1997)

- 19<sup>th</sup> century Inventor- entrepreneurs
- 20<sup>th</sup> century Professionalisation of R&D departments
- Successful innovating firms:
  - Strong professional R&D
  - Performing or connected to basic research
  - Patenting
  - Large enough for heavy R&D for long periods
  - Short lead times
  - Readiness to take high risks
  - Early and imaginative identification of potential markets
  - Efforts to involve, educate and assist users
  - Effective co-ordination of R&D, production and marketing



CHALLENGE TODAY,  
CHANGE TOMORROW



# Bell Labs

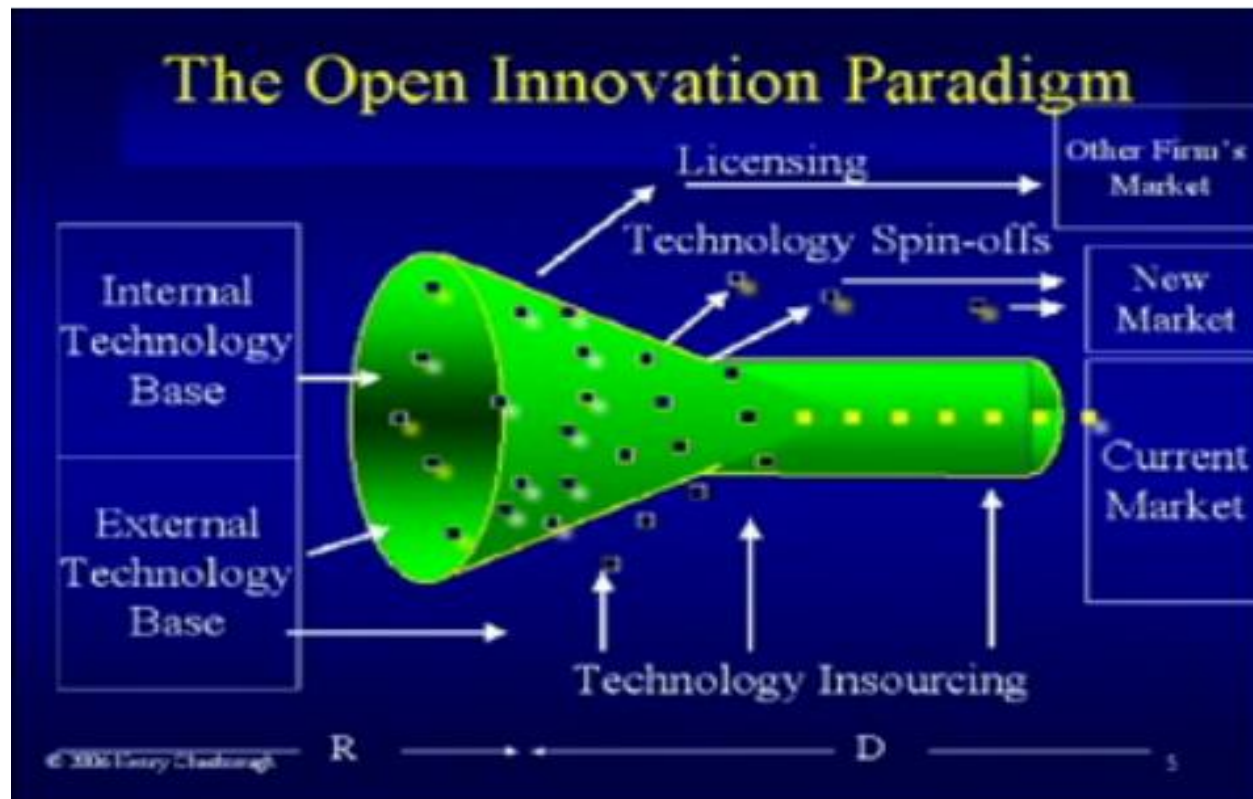


CHALLENGE TODAY,  
CHANGE TOMORROW

# 'New school'? Chesbrough



TODAY,  
CHANGE TOMORROW



# ‘Open’ Innovation

- Appropriability and new business models
- Recognises ‘leakage’ problem
- Incorporates users
- Lower overheads
- Suitable for globalised era
- But:
  - No evidence that R&D collaboration is increasing
  - Evidence suggests open is not new
  - Scepticism that returns from open can sustain large firms

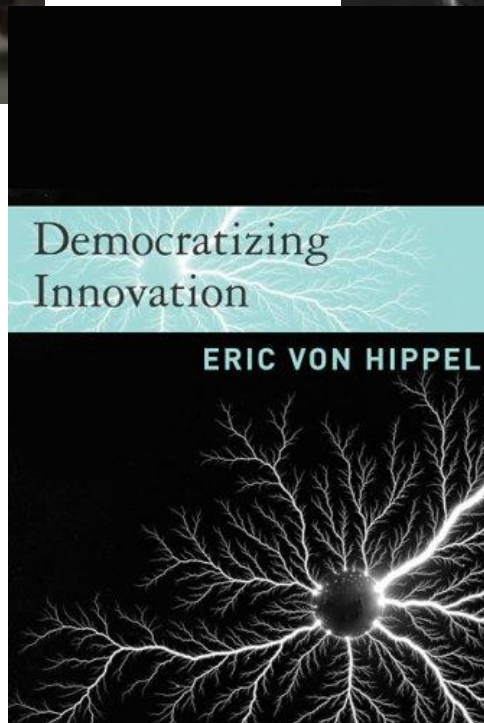
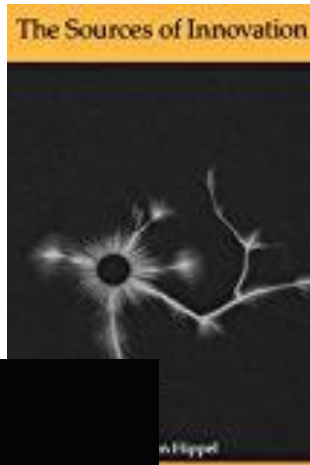
# User Innovation

## Eric von Hippel



Newcastle  
University

Business School





# User Innovation

- 'The New Inventors: How users are changing the rules of innovation' (NESTA/ CENTRIM/ SPRU)
- Showed increasing importance of users in games, music, social media industries



CHALLENGE TODAY,  
CHANGE TOMORROW

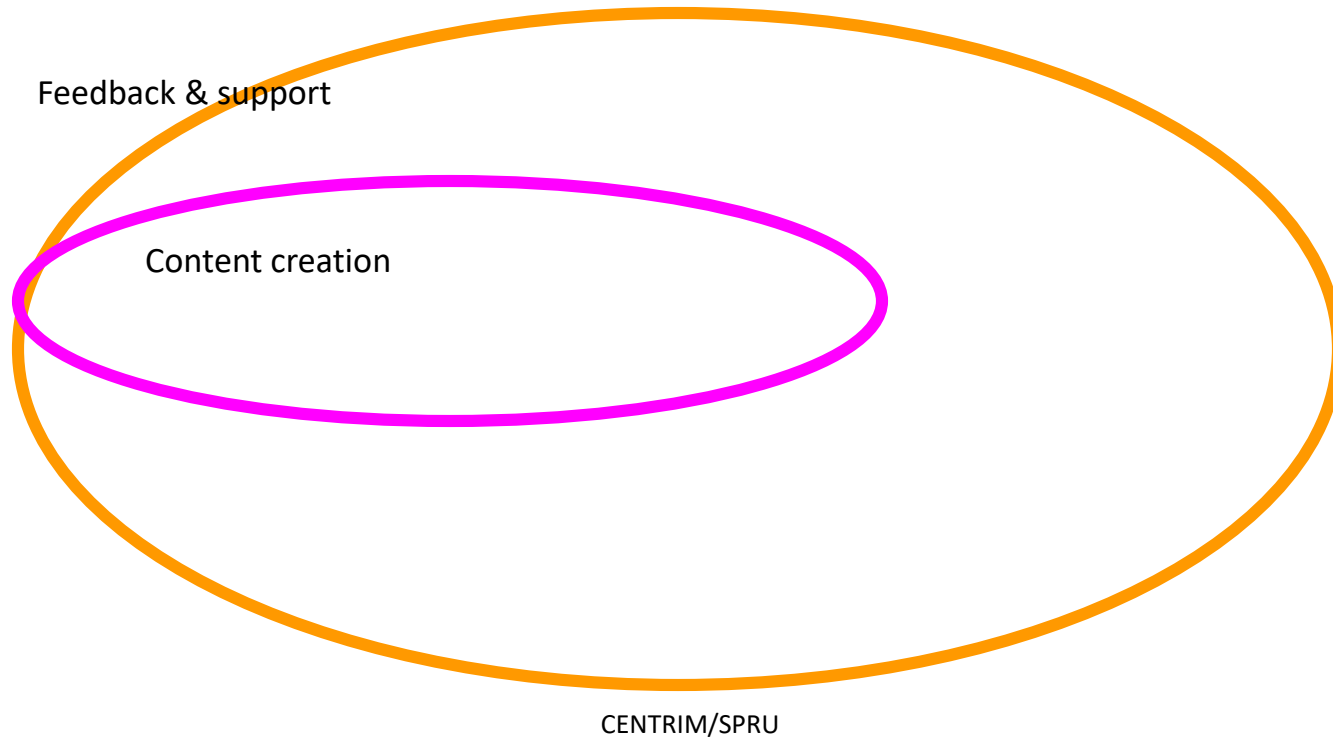


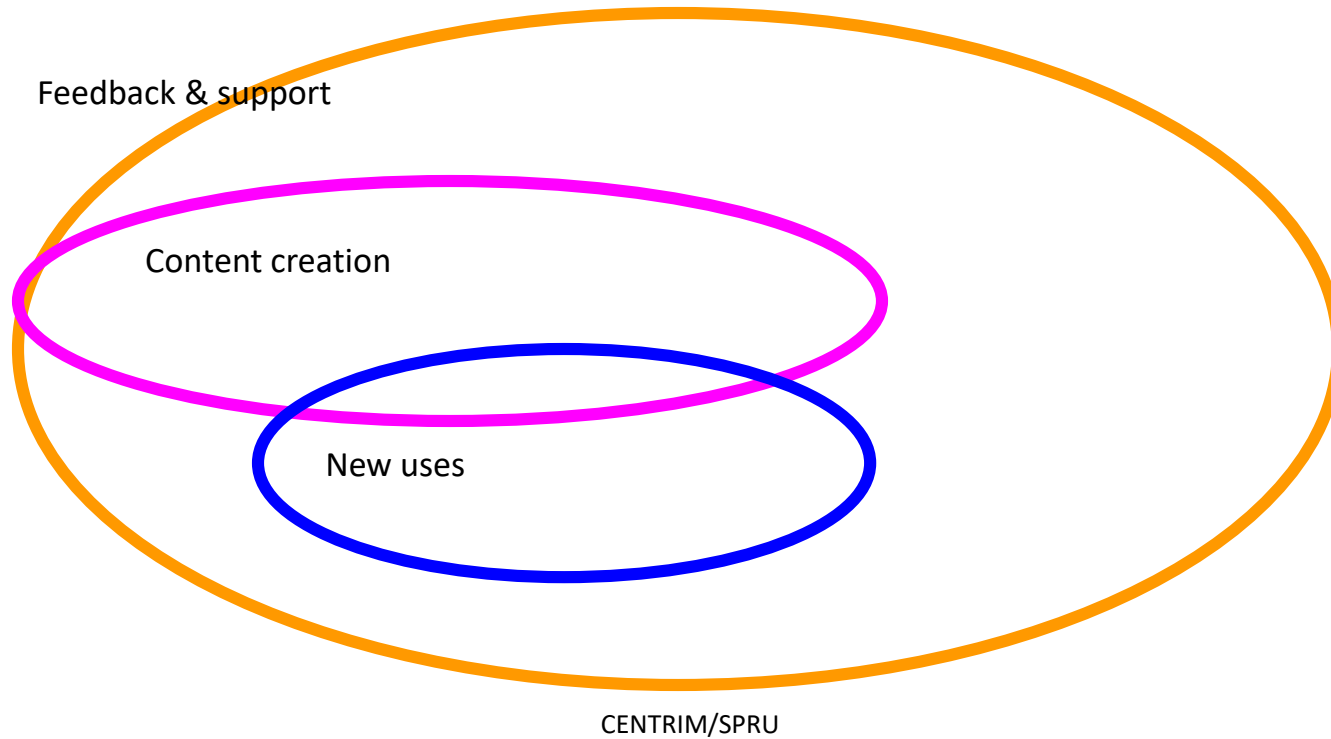
## User Innovation in digital technology

Feedback & support

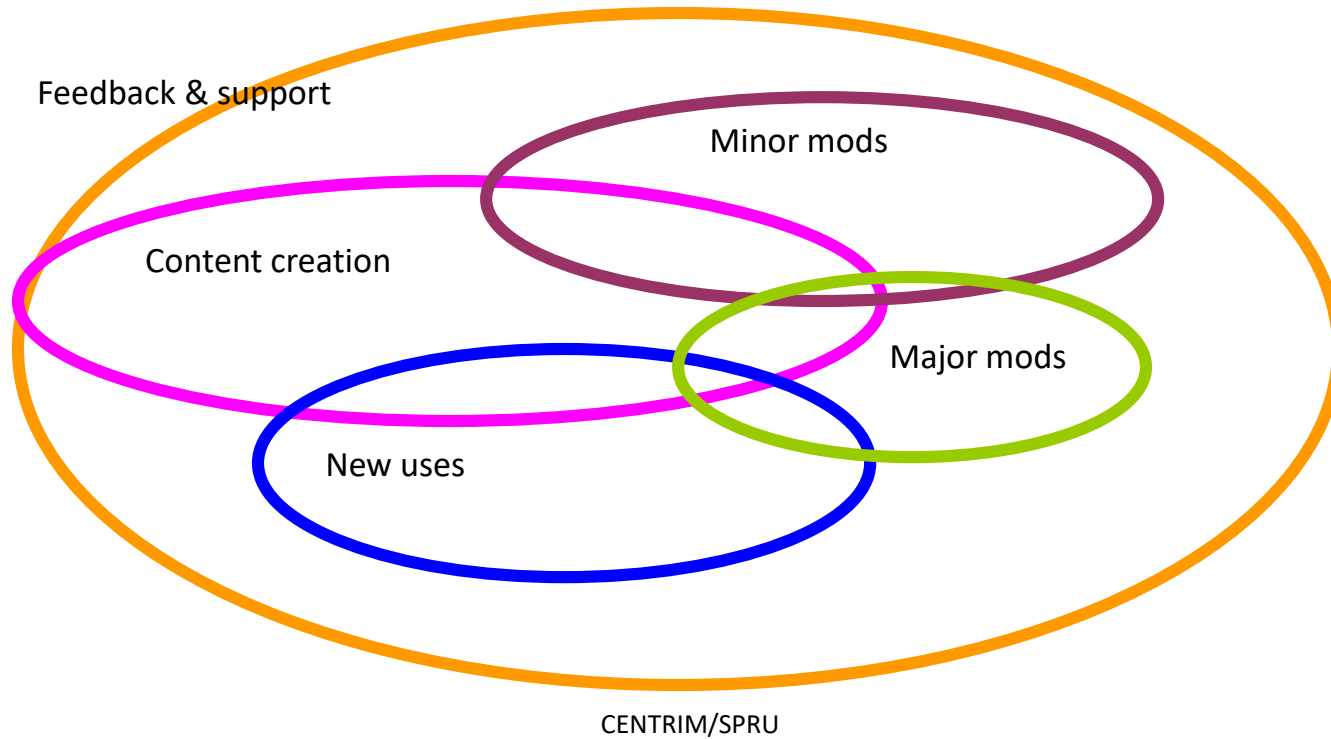
CENTRIM/SPRU

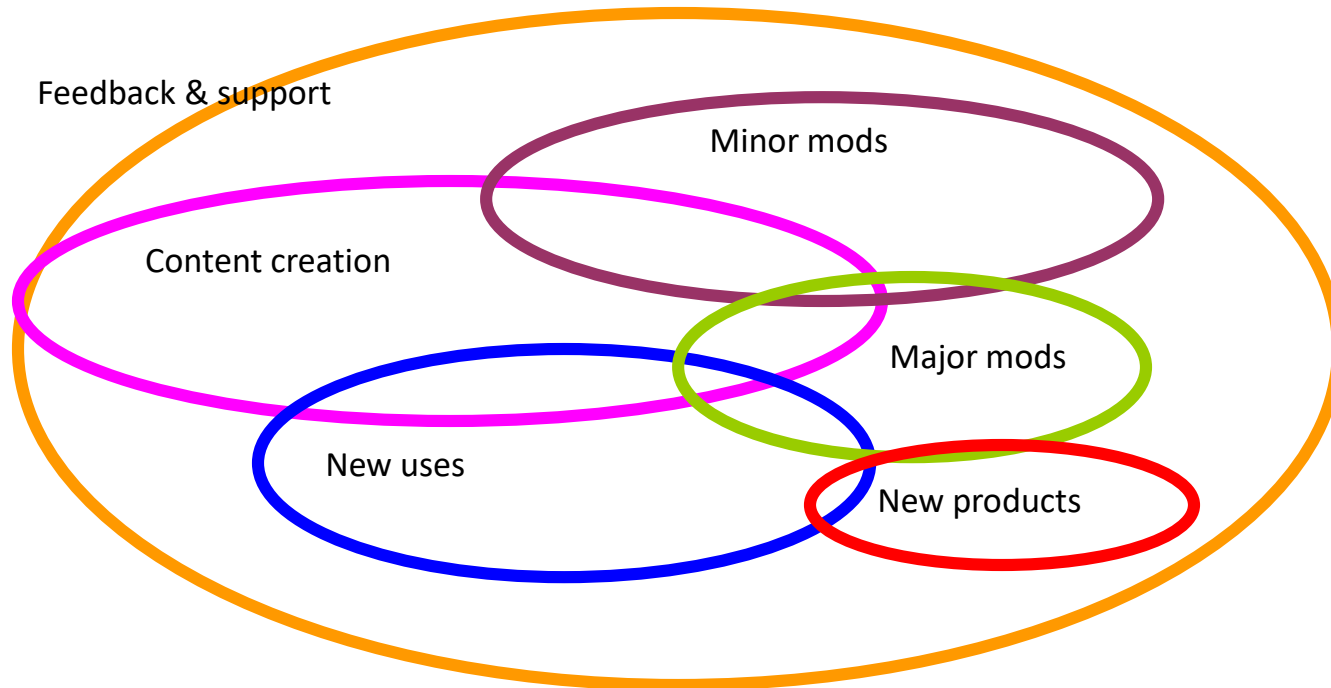
CHALLENGE TODAY,  
CHANGE TOMORROW



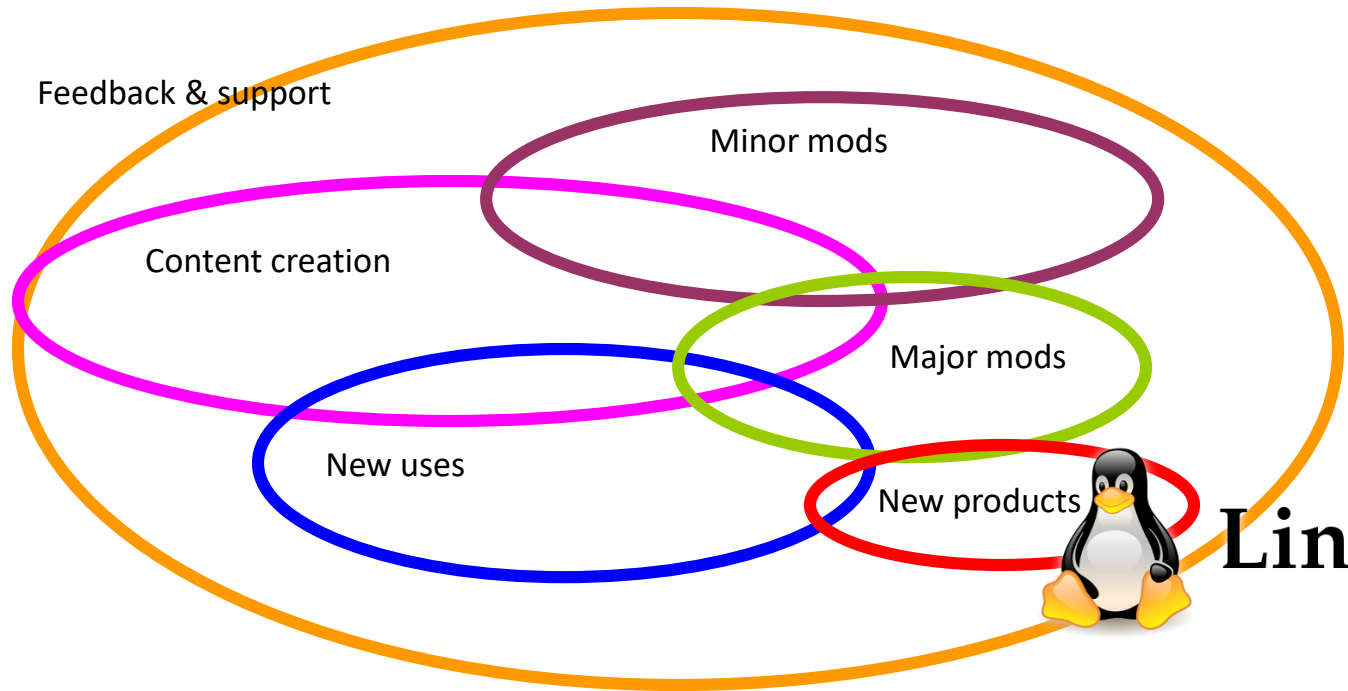


CHALLENGE TODAY,  
CHANGE TOMORROW



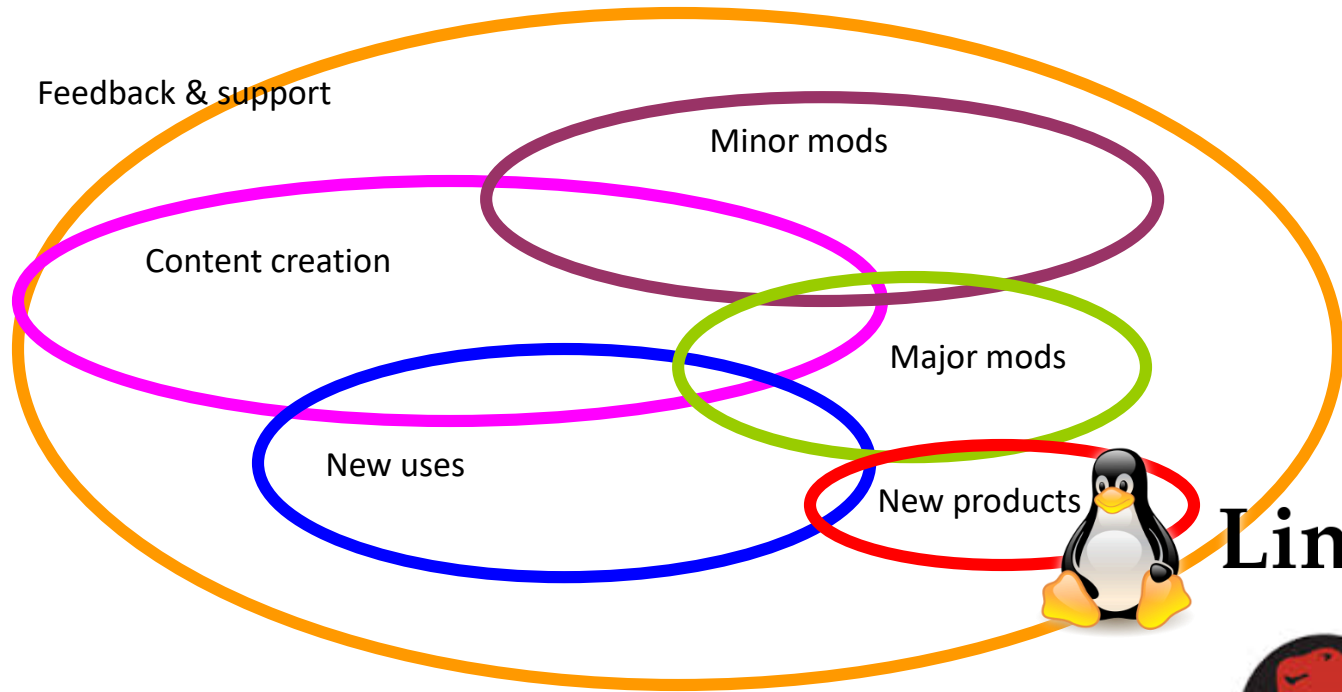


CHALLENGE TODAY,  
CHANGE TOMORROW



**Linux**





Linux





# New genre: Social Games

## ➤ Social Games

### ➤ Defining features:

- Experience, rather than technical properties
- Played in groups, not solo
- Ease-of-use, accessible peripherals
- Aesthetics- not realism- caricatures, dazzle

### ➤ Examples- SingStar, Buzz, Guitar Hero, Dance Dance Revolution, Wii games





# ➤ *Controllers*







CHANGE TOMORROW





CHANGE TOMORROW





CHALLENGE TODAY,  
CHANGE TOMORROW

# User Innovation in video games



- MyBuzz players contributed 218,750 quizzes with 1.7 million questions in first 6 months



- Microsoft releases free toolkits to stimulate user innovation & learning



- Homebrew community for learning

# Benefits of User Innovation

- Stimulates engagement with a product or platform
- Provides ideas
- Supplements formal education and training in STEM subjects

# Capturing the Benefits of Innovation (after Teece)

- Essentially, (1) the ability to transform new ideas into commercially viable products/processes, and (2) defending this advantage from competitors

# What can managers do to influence the following factors?

- Secrecy
- Accumulated tacit knowledge
- Lead time to market, after sales service
- Learning curve
- Complementary assets
- Product complexity
- Standards- *de jure* and *de facto*



# Electronics/computing standards success and failure (from Chiesa & Toletti, 2003)

Standard	Outcome	Key Actors and technology
Betamax	Failure	Sony, pioneering technology
VHS	Success	Matsushita/ JVC alliance, follower technology
CD	Success	Sony and Philips for hardware; Columbia/Polygram content
CDi	Failure	Sony hardware; content lacking
DCC	Failure	Philips, digital cassette
Minidisc	Failure	Sony competitor to DCC, relaunched after DCC withdrawn, some success
MS-DOS	Success	Microsoft/ IBM
Navigator	Mixed	Netscape pioneer, set de facto standard
Internet Explorer	Success	Microsoft overtook Netscape

- Pioneering radical new products
- IP protection- patenting, copyright, trademarks, registered designs

# Value (from Osterwalder and Pigneur, 2010)

- Value proposition
  - Why should customers pay for your product/ service?
    - Over other offerings?
  - Which customers?
- Satisfies a need, solves a problem
  - Quantitative
    - Price, speed of service
  - Qualitative
    - Symbolism, status, aesthetics, experience
- Novelty (familiarity)
- Performance
- Customisation
- Accessibility
- Risk reduction

# Monetisation

- Sell ownership rights
- Charge for use
- Charge continuous subscription
- Charge to lend/ lease/ rent
- Charge a fee for license to use IP
- Charge derivative fees e.g. brokerage
- Charge advertisers to use your facilities/ content

- What is the value proposition?
- Who will pay for this value proposition?
- How will you protect the value proposition from competitors/imitators?
- How will you monetise the value?

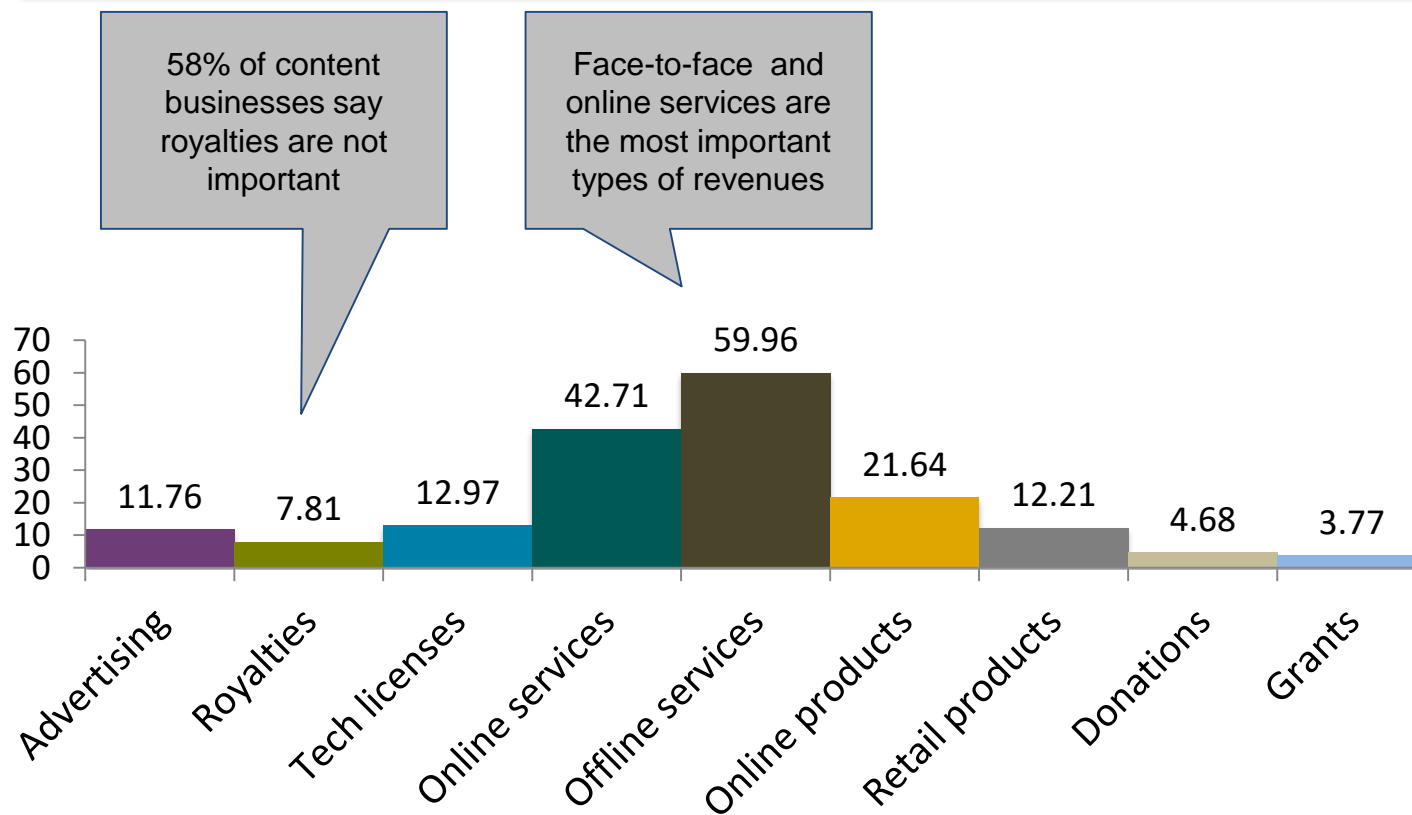




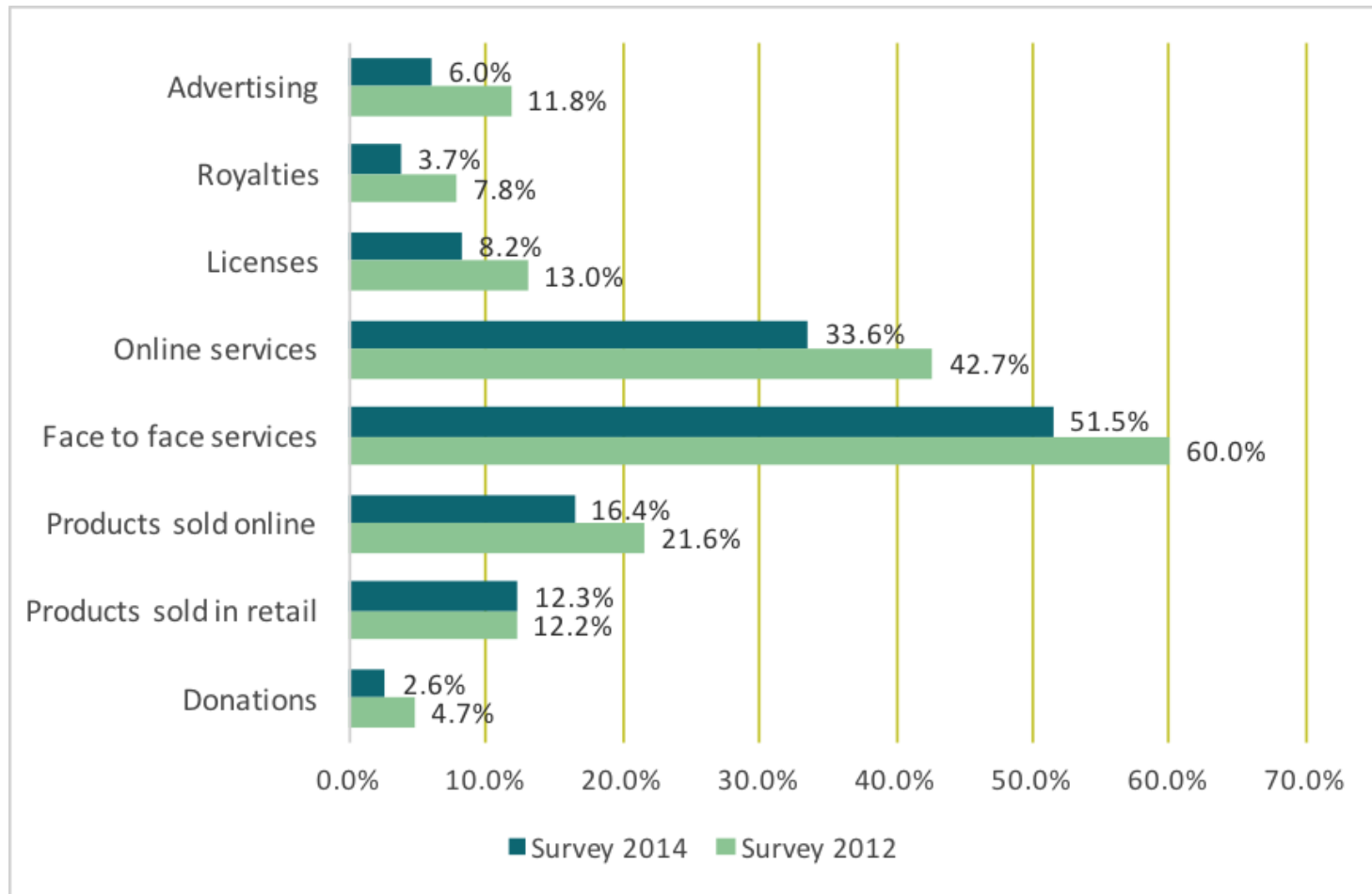
## **Business Models in the Brighton Creative-Digital-IT cluster**

# A diverse – yet servitised – creative economy

Types of Revenue in the Brighton CDIT cluster  
% of firms reporting revenue as important



## Sources of revenues 2012 - 2014



# Changing revenues sources and performance

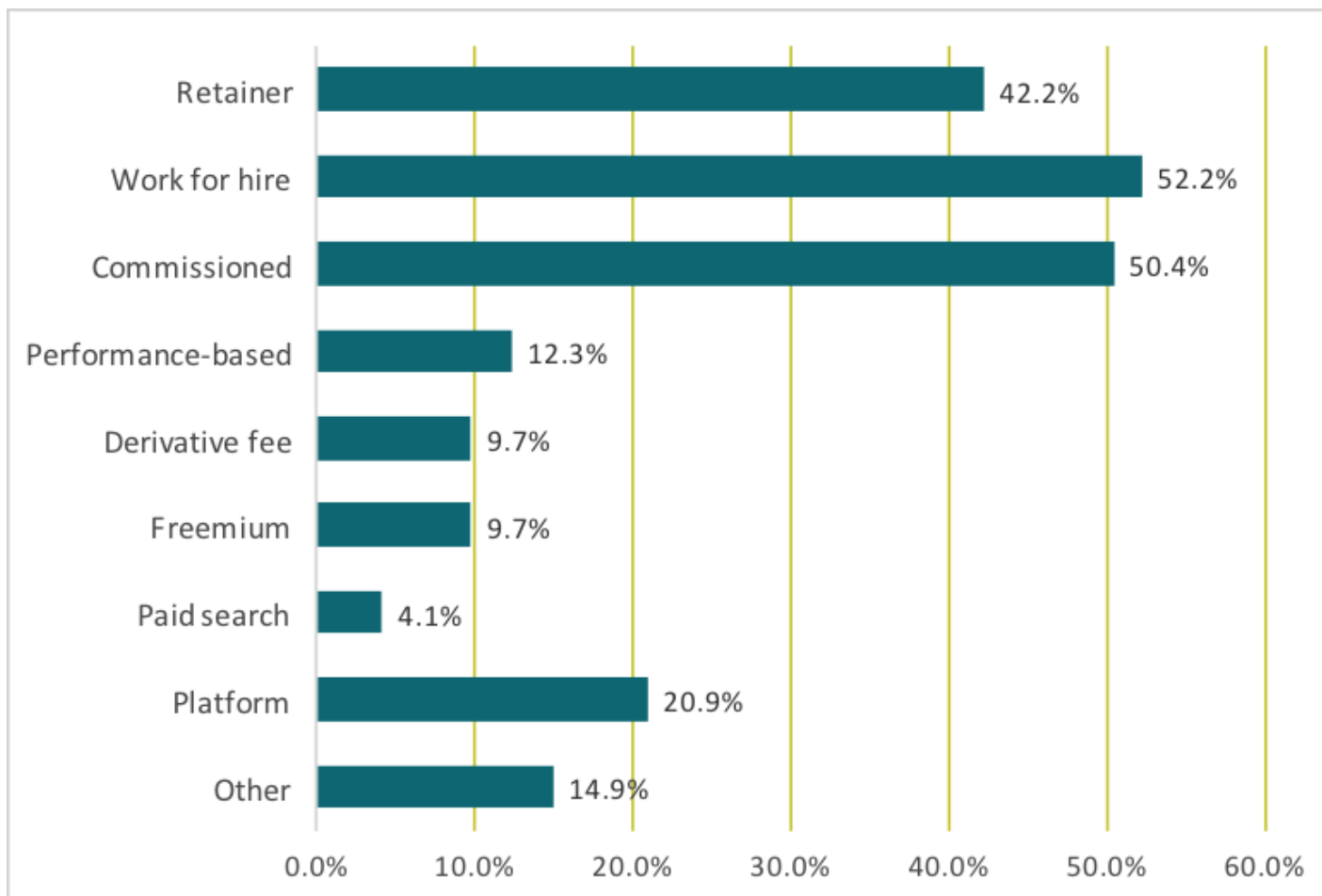
	%	Turnover growth	Profit growth	Employees growth	Innovation
Did not change	57.1%	9.0%	11.7%	5.0%	3.0
Changed	42.9%	16.1%	21.0%	17.2%	3.4
	100%				

CHANGE IS GOOD!

CHALLENGE TODAY,  
CHANGE TOMORROW



## Business Models important to firms



## Business model definitions

- **Retainer model.** A client pays you to work for an extended period, often with an indefinite end date or intention of continuity
- **Work for hire.** You deliver work for a client over a period with a clear end date and *the client keeps the IP*
- **Being commissioned.** You deliver work for a client over a period with a clear end date and *you keep the IP*

# BM differentiation and performance

	Turnover growth	Profit growth	Employees growth	Innovation
One business model	10.4%	10.3%	2.4%	2.5
Two business models	9.4%	18.2%	14.4%	3.4
Three business models	18.6%	22.8%	9.2%	3.6
Four business models or more	11.5%	11.8%	26.8%	4.5

CHALLENGE TODAY,  
CHANGE TOMORROW

# Skoosh and



- Buying from wholesale business model- lower prices
- Larger hotel chains and websites setting rate parity
- OFT case and internationally
- Skoosh Karma BM based on buddhist principles



**skoosh** my profile my reservations my reviews  
Sign in | Not yet a member? Register

Google™ Custom Search Search

Home About Us Contact Us FAQs Best Sellers Add My Review

**Your current search**

Destination: Norwalk  
Arrival: 11/20/10  
Departure: 11/21/10  
Nights: 1  
Rooms: 1  
Adults: 2  
Children: 0

[Change Requirements](#)

**Filter your search**

Price: to: [Go](#)

Star rating: [1 star](#) [2 stars](#) [3 stars](#) [4 stars](#) [5 stars](#)

**1 hotel available in Norwalk** [Share This](#)

Results in order of: Price Prices shown in: USD

**Doubletree Hotel Norwalk** ★★★★★

 Doubletree Hotel Norwalk is equally convenient to those here on business and those here for pleasure ([more info](#))

Room 1	Average/Night	All Nights	Total for this option
Standard Queen/King bed	124.99 USD	124.99 USD	124.99 USD

Total price is for the room(s), not per person, and includes all taxes. **124.99 USD**

[Select Hotel](#)

# Business Model

## Innovation and competition

- Retainer models allow for “thinking and tinkering”
- Project forms less so
- Online models- hyper competitive
  - Web portals- Skoosh case
  - *“It’s one of the unfortunate impacts of the transparency on the Internet, everyone can see what everyone’s doing, and some companies use that to everyone’s advantage and some companies use that to close down their competition.”* (Interview, 23/7/13)
  - Online content- games, apps- negotiating with platform leaders



# Capturing more value

- Work-for-hire and moving to IP ownership for value capture
- Finding time for tinkering
  - External finance
  - dedicated R&D people
  - 5.5 hour day
  - ‘down tools’ week



# ‘Operation Bottom Drawer’

- Moving from successful product family to new product ideas
- Creating in a new market- video games appealing to women, families, groups, older people
- Everyone gets to pitch an idea
- Non-judgmental, ‘involutionary’ brainstorming
  - Crazy ideas first
  - Combinations



CHALLENGE TODAY,  
GROW TOMORROW





## Game Idea Template

Questions to answer during the 3 min pitch:

- The game name
- What is the core mechanic?
- Why is it fun?
- Why is it social?
- Which demographics will play?
- How many players?
- Is it fun if you are not playing?

# Game Idea Template

Questions to answer during the pitch:

- The game name
- What is the core mechanic?
- What is the game perspective?
  - Draw a screenshot
- How long is the game?
- Describe 5 minutes of game play
- How is it controlled?
- Does it have online functionality?
- Does it have downloadable content / user generated content?
- Why is it fun?
- Why is it social?
- Which demographics will play?
- How many players?
- Is it fun if you are not playing?
- Is there a big market for the game?



# BLUE TOAD MURDER FILES™

*Blue Toad Murder Files: The Mysteries of Little Riddle* is a four player co-operative episodic downloadable video game available for PlayStation 3 and PC.

Set in the sleepy village of Little Riddle, the main aim of the game is to follow clues to find the guilty party. Along the way you'll also encounter a variety of different and challenging puzzles which help you move through the peaceful world of Little Riddle.

You play as one of the four members of the Blue Toad Detective Agency. The game can be played solo, or with up to three friends.

As one of the detectives you move around the village by selecting locations on the map. Choose your venue wisely - will you meet the Doctor and hear his flimsy alibi? Or unearth the Station Masters motivation? Each stop provides an opportunity to meet a different villager and question them on the minor misdemeanours taking place in Little Riddle.



With each step of the investigation a puzzle is played to help a villager or get further clues about the case. But pay attention, you will also be questioned by the Chief Inspector about

Not registered yet?  
Join now

Register

Don't worry if you've forgotten your password

Email Address

\*\*\*\*\*

Login

## BLUE TOAD MURDER FILES

6 episodes, only

£9.99



Teaser Video 2

## The Result: Blue Toad Murder Files

- Relentless' self-published game
- Murder mystery- consistent with casual genre
- Episodic, digitally distributed on Sony Playstation Network
- Now selling well on iOS and over 100,000 Chrome players



# Creative Director on the old and new business model

“I’m happy that I’m not creating games that you have to part with \$60 to play – which was the old model; however \$60 is a nice sum of money to take, and then you don’t have to worry about monetising further.

And now although there are proven monetisation strategies, such as market transactions and subscriptions or ad funding, but it’s still finding its feet a little more. It still doesn’t get to the point where you can comfortably say: well, we’re going to take \$60 out of each user. That’s unlikely in most cases, or probably all cases.”

## Capitalizing on creativity?

- Brighton Fuse 1 suggested firms create value for clients and lose out in value capture
- 2 years on we find:
  - >80% of firms are profitable
  - Firms are specialising in less business models
  - 40% retain IP through commissions
- However:
  - Work-for-hire and retainer model still dominate
  - Online and offline retail revenues still low
  - Royalties and licensing revenues still low

# Conclusions

- Success in innovation has always depended on ***understanding user needs*** and what users value
- User involvement has increased due to web technologies
- Success also depends on ***capturing*** value through various means
- High quality technology or product is not sufficient, differing business models have vastly differing effects
- However, the design of business model is overemphasised, often there is no choice