



Applying the Concept of Innovation Trinity to E-Learning Analysis

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Agenda

- ❑ Model of Innovation Trinity
- ❑ Surveys on Current E-Learning Practices
- ❑ E-Learning Frontier



I. Model of Innovation Trinity

- ❑ Innovation dichotomy
- ❑ Innovation trinity
- ❑ Innovation codes

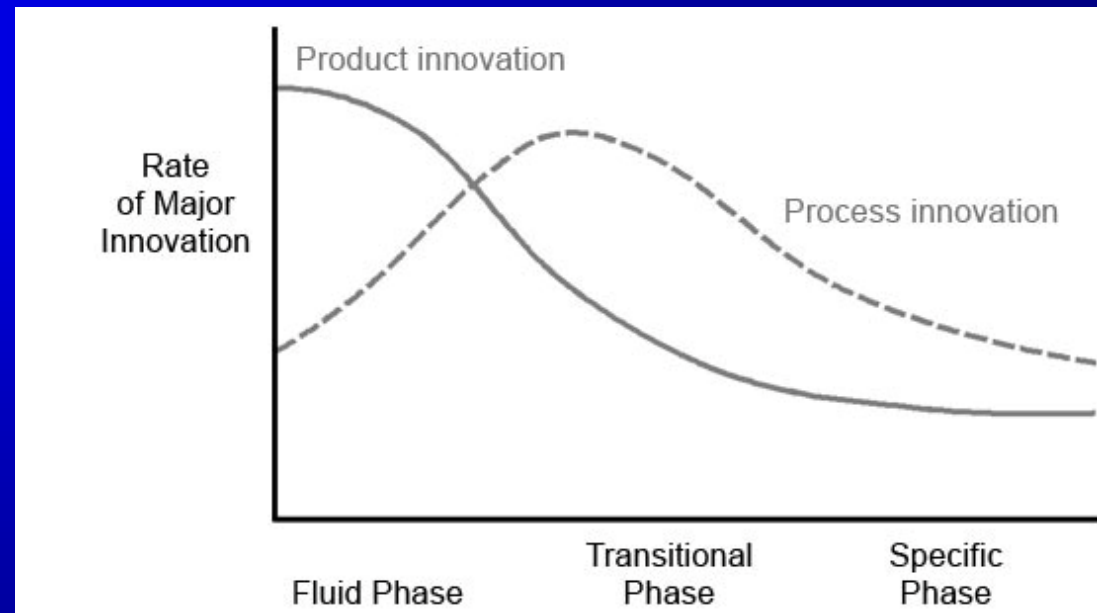


Innovation Dichotomy

❓ Meaning

❓ Typical types

❓ Limitations

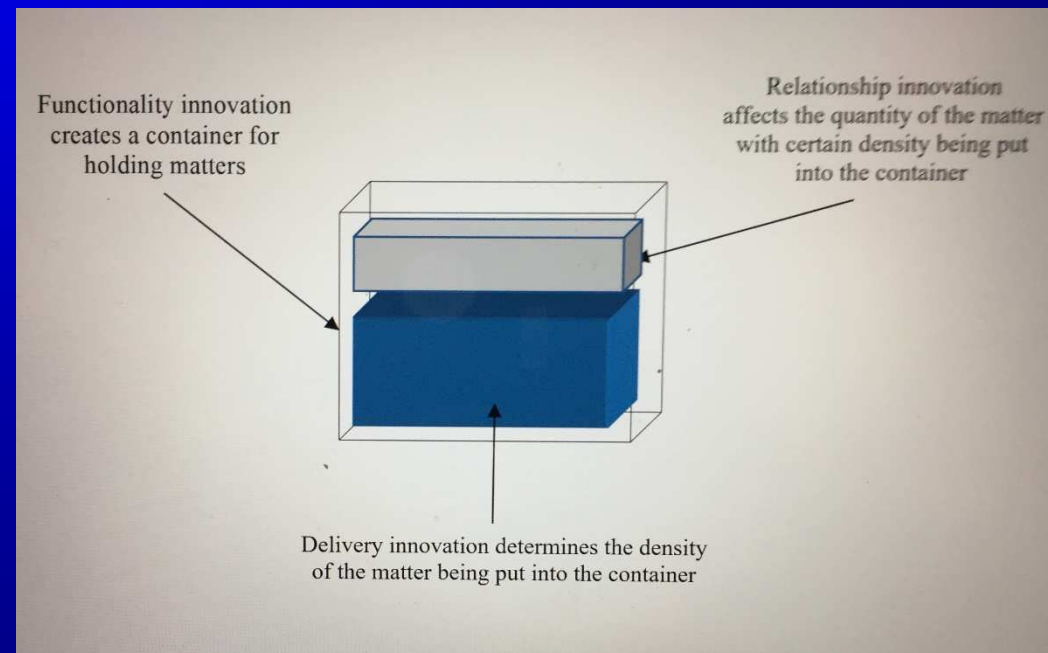


Innovation Trinity

☐ A common denominator

- Functionality
- Delivery
- Relationship

☐ Success samples



Innovation Codes: 3-7-3-9-7

3: three basic types of innovation: F, D, R

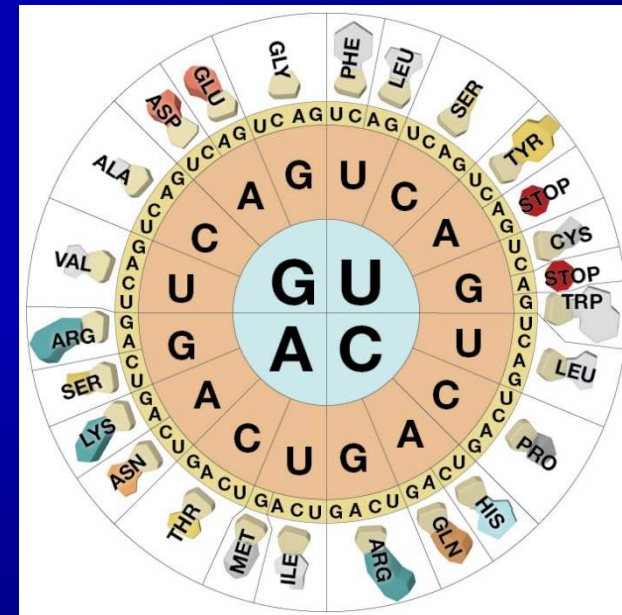
7: seven innovation landscapes

3: three binding forces

– Learning, perception, gravity

9: nine battle fields

7: seven innovation stages



II. Surveys on Current E-Learning Practices

- ❑ Survey Orientation
- ❑ Students' Inputs and Outputs in Different Settings
- ❑ Students' Reasons and Comfortability
- ❑ Interface and Received Supports
- ❑ Students' Suggestions for Improving Online Courses



Survey Orientation

Item	2014 Survey	2015 Survey	2016 Survey
Survey responses	73	50	85
Survey scope	-Students in all disciplines -Alaska wide	-Students in Business Management only -Alaska wide	-Students in all disciplines -Alaska and Wyoming
Survey priority	Motivation for taking online classes	Interaction with others in e-Learning	Improvement for online courses

Students' Inputs and Outputs in Different Settings

Items	Online Setting	Classroom Setting	Both Settings
Output measurement: Answers to “How do you learn in different settings?” (%)	I learn more in online courses (4%)	I learn more in face-to-face courses (68%)	I learn equally in both settings (28%)
Input measurement: Answers to “What are your involvement in courses of different settings?” (%)	I am involved more in online courses (25%)	I am involved more in face-to-face courses (33%)	I am involved equally in both settings (42%)

Students' Reasons and Comfortability for Taking Online Courses

Items	Answer (%)	Rationales
Reasons	100%	
Flexibility	69%	Schedule, style, pace
Only offered Online	14%	No Choice
Needed Course for Degree	10%	Curriculum enrichment
“Easy” to pass	7%	Teacher was easy, or course is easy
Comfortability with using computers	100%	
High Comfortable	64%	High competent due to daily use of various applications
Low Comfortable	16%	Basic skills need some helps
Technically Uncomfortable	8%	Difficulty & frustrated
Psychologically Uncomfortable	12%	Competent but prefer F2F instructions

Interface and Supports for Taking Online Courses

Items	Choices	Answer (%)
Importance of face-to-face interaction in course learning	Not important	12
	Somewhat important	56
	Very important	32
Helps got from instructor or peers in taking online courses	Extremely Helpful	8
	Very Helpful	18
	Equal Helpful	22
	Less Helpful	41
	Not at all Helpful	11

Students' Suggestions for Improving Online Courses

Improvement Suggestion	Responses
Use more video conference facility (one-to-one video chat)	90%
Better communication between instructor and students	78%
Add hands on segment	61%
Use Virtual reality technology	40%
Dealing with online cheating	14%
Other (abolish them all, standardize them all)	7%

III. E-Learning Frontiers

□ Current Paradigm

- An alteration of functionality
- Convenient/cost-effective delivery
- Disrupt the old without a new linkage

□ Emerging Frontiers



An alteration of functionality along with e-Learning

- ❑ Dual-function of education institutes:
 - Provide trained people,
 - Grant a degree to graduates

- ❑ With online courses, leaning more towards to obtaining a degree instead of obtaining certain level of knowledge



Convenient/Cost-Effective Delivery

- ❑ Students are better access to learning materials and resources, but
- ❑ Students do not experience cost saving in taking online courses



Disrupt the old without a new linkage

- ❑ E-Learning came loose the old linkage among stakeholders
- ❑ E-Learning did not initiate substantial new linkage among stakeholders or engaging new stakeholders, such as employers.



Emerging Frontiers

- ☐ Hands on
- ☐ Consolidated learning
- ☐ Innovated learning



Questions?

