PRODUCTION, DISTRIBUTION AND CONSUMPTION - MANUFACTURING

DESI S MAKERS’ INQUIRY: National Investigation on Makers and Making

05/JUNE/2015 h.14.30 - 17
POLIFACTORY Building B7 CAMPUS BOVISA DURANDO
via DURANDO 10, MILANO
PART ONE: DOP: WHAT & WHY

H 14:15 – 14.30
SHORT INTRODUCTION TO DOP CLUSTER

H 14:30 – 15:00
ICE BREAKING: WHY ARE YOU INTERESTED IN DOP?
PART TWO: WARM UP

H 15:00 – 15.15
DOP CLUSTER: A PROPOSAL FOR STARTING THE CONVERSATION

H 15:15 – 16.00
CASE STUDY PRESENTATION:
- MAKERS’ INQUIRY ITALIA
- OPEN DISCUSSION
PART THREE: DISCUSSION

H 16:15 – 16.30
DISCUSSION: DOP FUTURE ACTIONS AND DIRECTIONS

H 16:30 – 17.00
FINAL SUM UP AND NEXT DOP AGENDA
DOP (DISTRIBUTED AND OPEN PRODUCTION):
WHAT & WHY
What is happening in the field of PRODUCT-SERVICE SYSTEM DESIGN and PRODUCTION?
DEMOCRATIZATION OF TECHNOLOGIES

OPEN FABRICATION SPACES

DISTRIBUTED (MICRO)PRODUCTION

PERSONAL FABRICATION

INDEPENDENT DISTRIBUTION

SOCIAL/COMMUNITY MARKETS
DOP aims at exploring the relationship between "design and the change of production model" adopting an innovative perspective.
DOP TOPICS

DISTRIBUTED PRODUCTION
Infrastructuring for experimenting with production processes and aims.

DESIGN FOR FUTURE FACTORIES
New connections among design, digital fabrication and manufacturing networks.

OPEN PRODUCTION
Open and collaborative production for local resilience.

DESIGN FOR INDIE INNOVATION
New personal and autonomous design and production process.
DOP ACTIVITIES

- KNOWLEDGE EXCHANGE
  (case studies, surveys, collaborative research, …)

- EDUCATIONAL AND CULTURAL INITIATIVES

- RESEARCH INITIATIVES
MAKERS’ INQUIRY

EXPERIENCE
MAKERS’ INQUIRY

A NATIONAL INQUIRY ON ITALIAN MAKERS AND “MAKE IN ITALY”
NOWADAYS MAKERS ARE ‘UNDER SURVEILLANCE’... WHY?
EVERYBODY LOOKS FOR THEM: within Fab Labs, on social media, at MakerFaires... people ask makers how to develop new products, new technical solutions,...

FINE! ... THEN?
... there are few data...

AND MAKERS DON'T RECEIVE A FEEDBACK.

How to study this phenomenon adopting a more open and collaborative approach?
A NATIONAL INQUIRY ON MAKERS AS INDIVIDUALS AND MAKING AS SOCIO-ECONOMIC ACTIVITY

(a self-funded and non-profit initiative)
AN INCLUSIVE VISION OF ‘MAKE IN ITALY’:

MAKERS
DESIGNERS SELF-PRODUCERS
LAB MANGERS

(first objective: 250 answers)
MAKERS’ INQUIRY: KEY ELEMENTS

- Involving Makers in the survey definition
- Studying making as an economic activity
- Creating useful open data for Makers, researchers, organisations and institutions
INVESTIGATION TOPICS

- Personal data
- Basic information on making
- Technical and technological skills & capabilities
- Values associated to making
- Participation in places and communities
- Processes (design, fabrication and distribution)
- Projects and products
- Economic aspects of making
RESULTS...
From July to October 2014

245 PEOPLE INVOLVED

(134 people answered to more than 30 questions over 60)

MAKERS (40)
DESIGNERS (65)
LAB MANAGERS (29)
Average age: **36 YEARS OLD**
(21 years old the youngest, 60 the oldest)

**WOMEN (30%)**
**MEN (70%)**

**90% OF THEM SPEAK ENGLISH**
(In Italy just 6 graduate over 10 do, source: AlmaLaurea)
GEOGRAPHY (OF MAKE IN ITALY)

TERRITORIAL DISTRIBUTION

URBAN DISTRIBUTION | PROVINCIAL DISTRIBUTION
134 makers, designers and lab managers live and work in 58 different cities.

... A NEW DISTRIBUTED (MICRO)PRODUCTION MODEL?
GEOGRAPHY (OF MAKE IN ITALY)

Big cities
(Milan, Rome, Naples, Bologna, Turin)

Regions
(Emilia Romagna, Veneto, Lombardia, Centre of Italy)

MAKE IN ITALY: BETWEEN CITY MAKING & INDUSTRIAL DISTRICTS?
60% of them deal with making from 1 to 5 years (18% from less than one year) (8% from 5 to 10 years ago)

Makers Movement (2005)
Great Recession (2008 to now)
(54%) Making is a secondary or complementary activity
(it is the main activity: 26%)
(it is just an hobby: 19%)

MAKERS ARE NOT ONLY ‘ADVANCED HOBBYISTS’. COULD MAKE IN ITALY BE SEEN AS A COMPLEMENTARY ECONOMY?
LABOR/ENTERPRISE

31% PROFESSIONALS
31% FREE LANCE
(30% did not answer)

MAKERS: NEW TYPE OF PROFESSIONALS AND/OR NEW FORMS OF ENTERPRISE?
50.7% at **HOME**
38% at **FAB LAB**
27% at **CRAFT LAB**
21% at **OFFICE**

**AT HOME/OFFICE BUT CONNECTED WITH FAB LABS AND CRAFTSMEN?**
SKILLS & CAPABILITIES

**DESIGN (CAD/CAM):**
more PRO than AM.

**INFORMATICS:**
more AM than PRO.

**ELECTRONICS:** the weak point.

**DIFFERENT DESIGN CULTURES TO HYBRIDATE?**
SKILLS & CAPABILITIES

FABRICATION:
more analogue than digital, more AM than PRO.

... WEAK SIGNALS OF A STRONG RETURN TO “BE ABLE TO MAKE”?
VALUES

EXPERIMENTING (74%) in order to START UP (65%) having a strong interest in LEARNING (60%) HAVING FUN (53%).

IS THIS A NEW APPROACH TO INNOVATION?
MAKING IS...
(MEANINGS)

- Self-production (75%)
- Fab Labs (61%)
- Digital Fabrication (53%)
- DIY (51%)
- Sharing (47%)
- Openness (39%)
- Hobby/free time (10%)

... IS MAKING A SERIOUS BUSINESS?
1 out of 2 uses them…
1 out of 3 doesn’t use them because she/he owns a private one.
1 out of 4 uses a craft lab

MICRO PLACES FOR MICRO AND LOCAL COMMUNITIES?
Make in Italy is:
- Prototypes (57%)
- Micro series (48%)
- Personalized artefacts (44%)
- Unique pieces (40%)
- Limited edition (28%)

MAKE IN ITALY: BETWEEN UNICITY AND MICRO COLLECTION
SERVICES

Make in Italy is:
- After sale service (37%)
- Home delivery (30%)
- Guarantee (11%)
- Quality certificate (8%)

MAKE IN ITALY: A LACK OF BASIC SERVICES
‘WORD OF MOUTH’ is the most widely used commercial formula (41%) together with E-COMMERCE (39,5%).

DISTRIBUTION: IS IT THE “WEAK POINT” OF THE WHOLE PROCESS?
MATERIALS’ purchase is the most important item. 1 maker out of 3 DO NOT INVEST IN TECHNOLOGIES.

DO MAKERS NEED ALLIANCES?
‘WHAT MAKERS WANT’

- Tax benefits (68%)
- Less bureaucracy (61%)
- Legal recognition (42%)
- Financing (42%)
- Access to credit (38%)

(MAYBE) MAKERS ASK MORE FREEDOM THAN MONEY...
EMERGING RESEARCH QUESTIONS

- Is making a possible complementary economy?
- Is making a new form of labor and/or enterprise?
- Is making a generator of distributed microproduction and local alliances?
- Is making a possible ‘third way’ in the production field?
3 POSSIBLE RESEARCH DIRECTIONS

DIRECTION #1
Exploring the makers’ hybrid nature

DIRECTION #2
Exploring the (social, technological, economical) values of new/emerging distributed production systems

DIRECTION #3
Exploring the value of “make” qualities (also in terms of services)
POSSIBLE NEXT STEPS...
... to study and compare Makers communities and DIY practices among many countries

CULTURES (DESIGN AND MAKING)
USE OF TECHNOLOGIES
MARKET OF MAKING
PROJECTS/PRODUCTS
SERVICES
SKILLS AND CAPABILITIES
... IS IT POSSIBLE TO PERIODICALLY REPLICATE MAKERS’ INQUIRY IN OTHER COUNTRIES?
People, cities, regions and countries could be developing makers' inquiry both individually and together…

… but how will it be possible?
THANKS.

www.makersinquiry.org

MASSIMO BIANCHINI | Dipartimento di Design, Politecnico di Milano massimo.bianchini@polimi.it
MASSIMO MENICHINELLI | Aalto University / Fondazione Make in Italy CDB massimo.menichinelli@aalto.fi
STEFANO MAFFEI | Dipartimento di Design, Politecnico di Milano stefano.maffei@polimi.it
ALESSANDRA CAROSI | Dipartimento di Design, Politecnico di Milano alessandra.carosi@mail.polimi.it