



**The Impact of a
Crowdsourcing Apparatus on
Organizational Capacity in
the Nonprofit Context:
The Case of Bar-Kayma**



Bar-Kayma

For culture, art, music and peace in Jerusalem

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Bar-Kayma

**For culture, art, music and peace in
Jerusalem**

- A nonprofit, registered association located in Jerusalem, Israel.
- Works with Organized Artist Collectives (OACs) that fringe the mainstream social framework, practicing artists.
- These are comprised of groups of artists who have joined forces under a collective name.
- I explored BK's network as a multi-case system (Stake, 2013) over nine months.



Crowdsourcing

The outsourcing of an organizational function to a given online community

Examples:

Uber

Mturk

Fiverr

InnoCentive



Organizational Capacity

The organization's capability to fulfill its goals

Following Hall et al. (2003), I subdivided capacity into three types of capital that organizations can deploy

1. **Financial capital: BK's income**
2. **Human Resources Capital: BK's audience size**
3. **Structural Capital: BK's members' satisfaction**



The Impact of a Crowdsourcing Apparatus on Organizational Capacity in the Nonprofit Context: The Case of Bar-Kayma

- ❑ Intervention: Crowdsourcing Apparatus
- ❑ Outcome of interest: Organizational capacity (in the nonprofit context)
- ❑ Case Study: Bar-Kayma



Theoretical Approach

Organizational behavior

- relatively recent discipline in social sciences.
- It is an applied discipline.
- focuses mainly on two areas: the behavior of people within organizations, and the behavior of organizations in their environments.

Online communities and Social Networks

- Online communities constitute virtual organizational form that has the potential to yield unparalleled knowledge collaboration.
- Interdependent relationships between actors.
- Informal mechanism of give-and-take, where learning processes occur, mutual trust is constructed and collaboration is done in practice.



Research Question:

Can Bar-Kayma improve its organizational capacity AFTER the implementation of BanKayma?

Hypothesis 1: BK's income will increase

Hypothesis 2: BK's audience size will increase

Hypothesis 3: BK's members' satisfaction will increase



Research Approach: MSCM

Modified Success Case Method

- ❑ Brinkerhoff (2003) developed the Success Case Method (SCM) as a tool to evaluate the impact of a new intervention on for-profit organizations.
- ❑ The method is based on a case study approach which involves quantitative techniques for sampling outlier consumers and provides a qualitative analysis in the form of storytelling.
- ❑ Coryn et al. (2009) Modified the SCM (MSCM) to fit to an environment of nonprofit organizations and added a time-series component to this model.



Participants

- 1 BK's CEO
- 1 of BK's board members
- 1 BK's accountant
- 12 (out of twenty) OACs represented by their project managers



Mixed-Methods: Data Collection

Field notes and participating observations

- In May 2016 (the month of the implementation), I travelled to Israel and worked with BK for 30 days.
- Each working day I visited BK's offices and shared a desk with its CEO. I visited at least one OAC every day in their locations of work and observed their activities.
- Ongoing conversations with BK's CEO to refine the research objectives and feasibility. (May 2015 throughout February 2017)

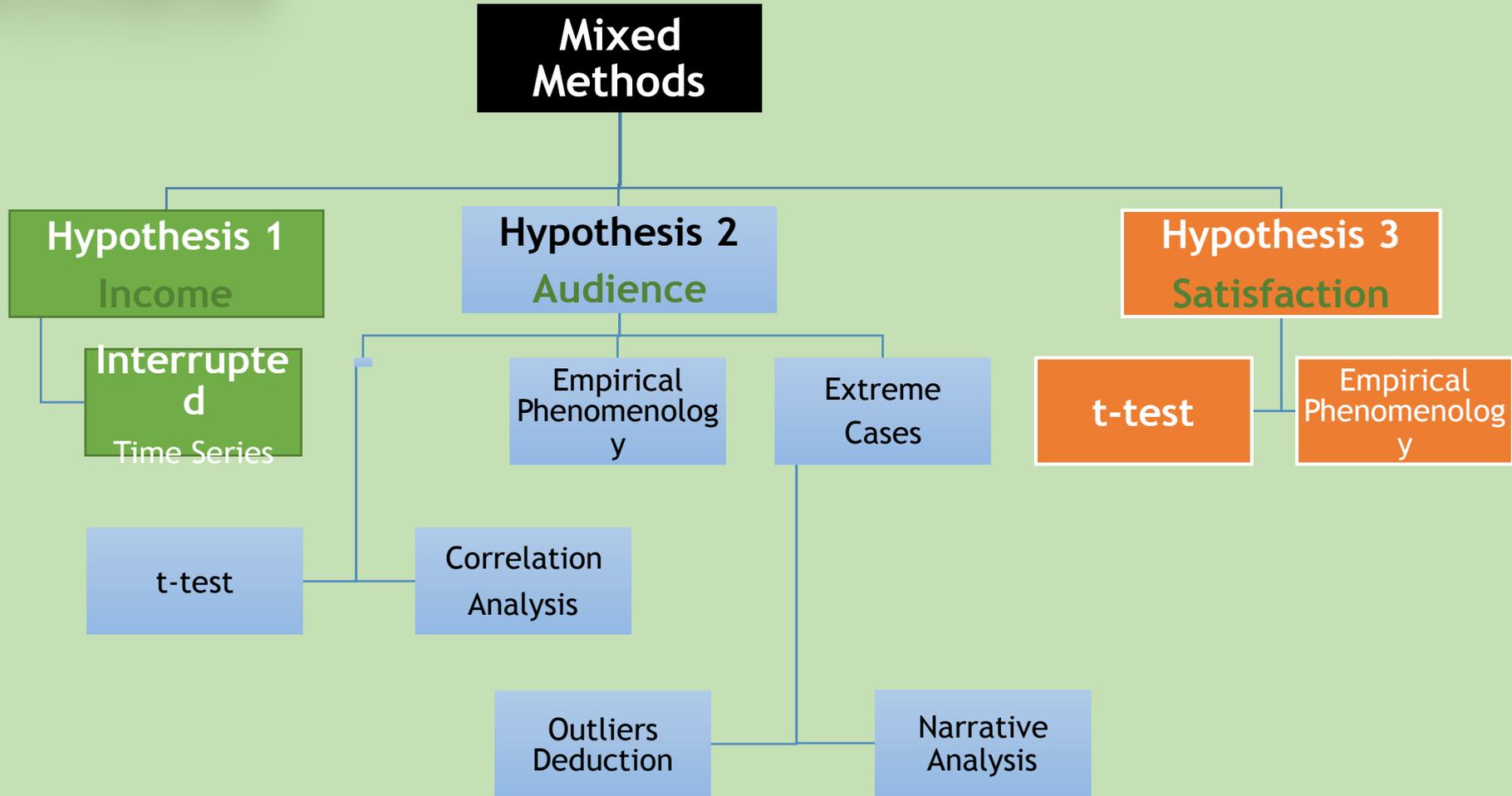


Mixed-Methods: Data Collection

- ❑ BK's organizational records and databases
 - ❑ BK's income and expenses from January 2015
 - ❑ OACs income and expenses
- ❑ Daily events were retrieved from Jerusalemite.org
- ❑ Interviews, Surveys, Questionnaires



Design





Findings: Financial Capital

Hypothesis 1: After the implementation BK's income will increase.

Null Hypothesis: There is no statistically significant difference in the slopes before and after the implementation of BNK

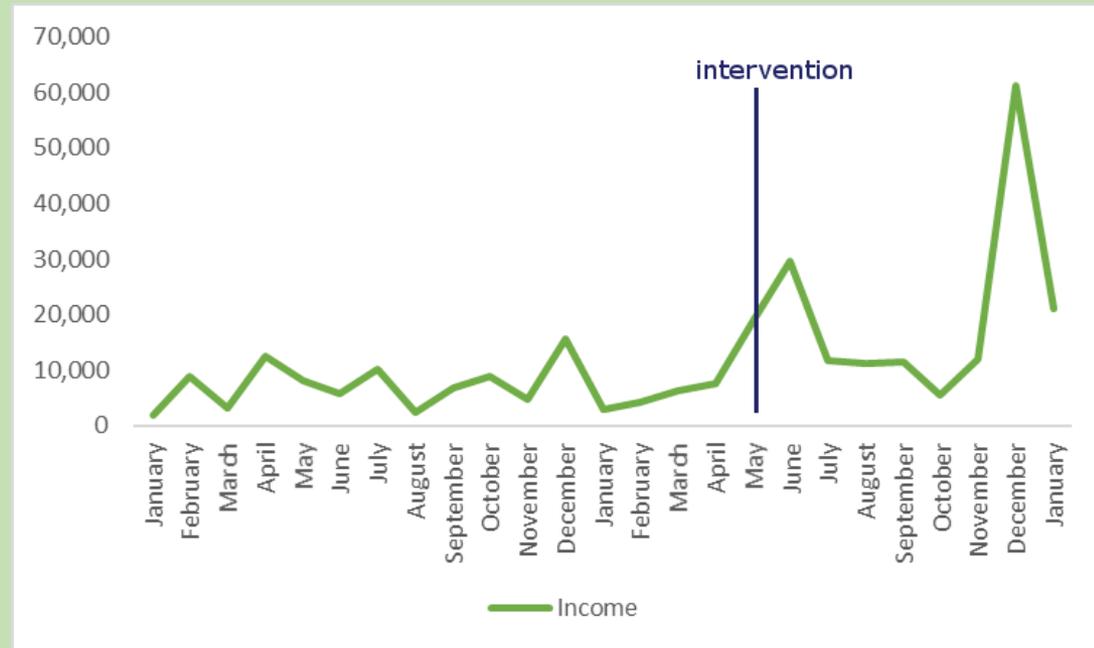
Statistical Method: Interrupted Time Series Analysis with ARIMA.

Findings:

Table

Variable	Estimate	P
period	313.37	0.013
phase	-17645.41	0.000
interatct	683.30	0.001

Chart





Findings: Human Resources Capital

Hypothesis 2: After the implementation BK's audience size will increase.

Null Hypothesis: There is no statistically significant difference in the mean before and after the implementation of BNK

Statistical Method: Paired samples t-test.

Findings: Table

	Before BNK		After BNK			
Audience	M	SD	M	SD	n	t
All OACs	9472	24826	12320	30892	10	-1.48
P.12	1636	1598	2577	2427	9	-2.9*
Omitted						

* $p < .05$.



Findings: Human Resources Capital

Hypothesis 2 - Additional analysis: Daily events

The results show that there was a positive correlation between the time since the implementation of BanKayma and daily events in the network, $r = 0.832$, $n = 9$, $p = 0.005$.



Findings: Human Resources Capital

Empirical Phenomenology Analysis

Nine out of twelve OPMs stated that an increase of their OAC's audience size is one of their primary goals.

P5: “The goal is quite clear - to hold regular meetings and to reach out to a lot of people”.

The qualitative analysis suggests that there was an increase in the audience size following the implementation of BNK. From the total of nine participants (BK's CEO and eight OPMs) that indicated an increase in their audience size, six explicitly attributed it to BNK.

P12: “Laying an organizational infrastructure that increases content production and decreases engagement with bureaucracy”.



Findings: Human Resources Capital

Mixed-method

All participants estimated larger audience size, but one who provided similar estimate.

Extreme cases were detected

- (H) Participants 5 and 14 estimated an increase of more than 150%
- (L) Participant 11 estimated that there was no change.

Narrative analysis revealed that all three cases used BNK to reach out to audience and to increase their activity volume.



Findings: Structural Capital

Hypothesis 3: After the implementation BK's members' satisfaction will increase.

Null Hypothesis: There is no statistically significant difference in the mean before and after the implementation of BNK

Statistical Method: Paired samples t-test.

Findings: Failed to reveal a significant difference

BNK Feature	May 2016		February 2017		n	t	df	P
	M	SD	M	SD				
Bill	4.55	0.69	5.00	0.00	11	-2.193	10	0.053
BNK Network	3.89	1.36	3.89	1.05	9	0.000	8	1.000
Jerusalemite.org	4.18	0.98	3.82	0.87	11	1.491	10	0.167
Mailing List	3.86	1.46	3.43	1.40	7	0.596	6	0.573
Raffle	3.92	1.24	3.83	1.27	12	0.192	11	0.851
Crowdfunding	4.00	1.29	2.57	1.40	7	2.335	6	0.058



Findings: Structural Capital

Empirical Phenomenology Analysis

A qualitative analysis of participants' experience indicated that participants expressed their satisfaction with Bar-Kayma and Bankayma throughout the research period. This finding explains the quantitative results that did not reveal significant change.

Furthermore, the analysis revealed that participants utilized BNK and referred to it as a unique and groundbreaking apparatus. Participants typically expressed a sense of detachment from the official bureaucratic system, and viewed BK as a channel of mediation that allows them to focus on their work and simultaneously facilitates efficient handling with essential managerial facets.



Conclusions

Hypothesis 1: BK's financial capital increased.

Hypothesis 2: BK's human resources capital increased.

Hypothesis 3: BK's structural capital increased.

Finally, it was concluded that through the implementation of BanKayna, Bar-Kayma improved its organizational capacity.



Limitations

Design: A single-group setting (lack of a control group) impairs the confidence to refute alternative explanations of the findings.

Data: The time-series included only 25 time points. More time points would increase the confidence in the results.

Unequal results: Qualitative analysis of Hypothesis 3 provided a complementary explanation to the quantitative results, and although the findings are not contradictory, they are unequal.

Regionality: CS takes place on the Internet, and does not depend on regionalities. However, the case studied operates within a defined region (city).



Significance

Unprecedented empirical evidence of a nonprofit organization that increased its organizational capacity through the implementation of CS apparatus. The research gap was noted and calls for empirical research were made (Roth, Brabham, & Lemoine, 2015).

Corresponding with calls for a qualitative research through interviews with individual members of a given crowd in order to **identify motivational conditions for crowd participation** (Brabham, 2008).

Corresponding with previous calls in the literature to identify **new financial models that reduce the workload** of organizations while maintaining proper economic management (Carroll and Stater, 2009; Hall et al., 2003)

Strong case study, as recipients of BK's services are artists and activists that come from fringe sub-cultures and poses challenges that might be greater than those that other nonprofits face.



Significance

Successful deployment of what that I conceptualized as a crowdsourcing organizational approach, **without the need to provide any incentive to crowd members**, besides the crowdsourcing apparatus itself. This finding has a potential to pave the way for other nonprofit organizations to implement similar model and by that to reduce costs and substantially increase their capacity.

Finally, I observed conditions that constitute a semi-autarkic economy within the studied network, where suppliers and consumes merge alternately and regularly



Implications for the Organization

Bar-

Kayma: Bank Kayma

The apparatus is not in line with the organizational goals and meets the initial expectations.

However, two recommendations regarding BNK's features were offered for the organization:

1. **Raffle:** Participants expressed frustration with the obligatory fee. It is recommended to reconstruct the tool and to consider a redirection of its support base to the public rather than the OACs.
2. **Crowdfunding initiatives:** Participants expressed skepticism in regard to crowdfunding initiatives. It is recommended to develop a dedicated platform rather than relying on existing ones. It is proposed that such platform will (1) Focus on continuing projects by not requiring deadlines, and (2) require no commission or fees apart from the overhead to BK.



Directions for Future Research

Replication of the Impact Model

- ❑ Existing CS apparatuses: The evaluation method used in this study can be utilized to evaluate the implementation of a CS apparatus by other nonprofit organizations that already implement such apparatus.

Ideas: Fractured Atlas, this-is-my-earth.org

- ❑ Traditional managerial approach: Nonprofit organizations typically provide services through considerable workforce (Sowa et al., 2004). Following the discrete description and assessment of each of BNK's features, a CS model can be implemented in numerous nonprofit organizations and evaluated.

These endeavors may eventuate in a meta-analysis of the findings.



Directions for Future Research

In the final phase of the research, BK's CEO stated that all three BK's employees noticed that BNK allows them to reduce the time that they used to invest to carry out organizational tasks that are now performed by crowd members, and this enables them to both accept new OACs and to invest more time in improving the CS apparatus.

The evaluation model can benefit from including measurements on cost reduction in terms of time invested.

Evaluate the regionality effect. Investigating trans-regional organization, where members of the crowd are not likely to interact with the organization both in the virtual and in the physical realms, and compare the results.



Thank you