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A Model for Implementing the Nationwide Mobilization of Science and Technology Based on the Second Step of the Islamic Revolution Statement

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Abstract

Major accomplishments—such as the building of civilizations—are not solely achieved by great individuals, elites, or innovators. Rather, historical and social movements, transformations, and reforms emerge from the synergy between these groups and the general public. In other words, the alignment of mass public movements with leadership has been the key driver behind remarkable phenomena throughout history. Accordingly, in the "Second Step of the Revolution" statement, Imam Khamenei (may his shadow be extended) calls for the initiation of a public movement (national mobilization) across seven critical domains, including science and technology.

The aim of the present study is to develop a model for implementing a public movement and national mobilization to achieve a leap in the field of science and technology, in accordance with the framework of the Second Step statement. This research is developmental-applied in nature. Qualitative data were collected through in-depth interviews and analyzed using the grounded theory method with MAXQDA software. The statistical population includes experts in the fields of science and technology as well as strategic managers of the country, with a sample size of 14 participants selected and interviewed until theoretical saturation was achieved.

Following the process-oriented approach of grounded theory, a total of 97 categories were extracted. These include: 7 categories for the concept of science and technology mobilization; 8 for its dimensions; 15 for indicators; 9 for structural causes and factors; 18 for contextual causes and factors; 12 for behavioral and situational facilitating factors; 10 for behavioral and situational threatening factors; and 16 for strategies and solutions related to national mobilization and the initiation of a public movement for the advancement and expansion of science and technology within the framework of the Second Step statement.

Keywords: Public Movement, National Mobilization, Science and Technology, Second Step

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Introduction

The Islamic Revolution has now successfully completed its first forty-year phase (first "cheleh") with the effective participation of the people and is entering its second forty-year phase. "The longevity and quality of a government increase when its ideals, message, aspirations, and goals are internalized and institutionalized within every member of society. The more individuals who believe in the ideals and values of a revolution, the greater its sustainability and the greater the likelihood of achieving its goals and aspirations."

The core of the Islamic Revolution's and the country's progress—beyond the foundation of authentic Islamic leadership—has been the support, participation, and backing of the people and the two leaders of the Islamic Revolution, who have understood this principle based on the verses of the Holy Qur'an. As the Qur'an states: *"He it is who strengthened you with His help and with the believers"* (Qur'an, 8:62). "This great multitude of believers referred to in the Qur'anic verse is essentially what we know today as the Basij (popular mobilization) in our society." (Imam Khamenei, Address to commanders of Basij districts, bases, and battalions; November 29, 1995)

Today, Imam Khamenei has clearly stated in the *Second Step of the Revolution* statement that we must draw closer to two major goals: "The coming decades are your decades, and it is you who must diligently and passionately safeguard your revolution and bring it ever closer to its great aspiration of establishing a new Islamic civilization and preparing the ground for the rise of the great sun of Wilaya (may our souls be sacrificed for him)." (*Second Step Statement*)

From his perspective, a public movement is required in all seven key areas of the Second Step, including science and technology. "I have always seriously and firmly urged and warned universities and scholars, research centers and researchers in this regard. But now my public appeal to you, the youth, is to pursue this path with greater responsibility and as a form of jihad." (*Second Step Statement, First Recommendation*)

He reiterated this call on May 22, 2019, in a gathering of students: "We need a public movement toward that horizon. A general movement must be launched in the country. Of course, this movement already exists, but it needs to become more organized, faster, and its progress toward that vision must become more tangible. Naturally, this movement must revolve

around committed youth. Committed young people are the central axis of this movement... toward Islamic civilization, an Islamic society, and the realization of God's religion." (May 22, 2019)

Therefore, the main question of this research is: What can be the model for implementing the national mobilization (public movement) strategy in the leap-like advancement and expansion of science and technology in the Islamic Republic of Iran, aligned with the goals set in the Second Step Statement?

Theoretical Foundations

A. Literature Review:

Mohammad Bagher Zolghadr (2009) in his doctoral dissertation entitled *"The National Mobilization Strategy"* sought to present an appropriate model for drafting the strategic document of Basij and for preparing Basij strategies to deal with the current and future requirements. The results are as follows:

a) In drafting and formulating the strategic document, attention to the interests, preferences, and demands of stakeholders and key interested parties—chief among them the Leader of the Revolution and the Commander-in-Chief—is an undeniable principle.

b) The all-encompassing nature of Basij and the principle of proportionality, balance, and coordination within Basij indicate a comprehensive and aligned attention to all domains and systems influencing Basij. This clarifies that in the context of Basij, simultaneous attention must be paid to all these domains and systems. Accordingly, in drafting this document, thematic strategies have been formulated and presented based on the main domains and systems of Basij.

Ms. Atiyeh Bahrani and Zahra Foroutani (2023) in a study addressed the concept and drivers of scientific authority in the civilizational discourse of the Supreme Leader (may his shadow be extended). The research question concerned the concept of scientific authority as well as its drivers in the statements of the Supreme Leader (may his shadow be extended). The results are presented in the table below:

Table 1: Models of Drivers of Scientific Authority from the Perspective of the Supreme Leader (may his shadow be extended)

Row	Drivers of Scientific Authority	
1	**Islam as an encourager of science:**	harmony between science and religion / utilizing religious foundations in the production of science
2	**Scientific self-sufficiency and rejection of dependence**	self-reliance and localization of science / rejection of blind imitation
3	**Ethics-oriented and justice-centered science**	science based on ethics and spirituality / justice-centered science
4	**Efforts to realize a scientific vision**	foresight / planning for a scientific outlook / idealism
5	**Scientific jihad:**	discourse-making for knowledge production / production of science and technology / groundwork for development
6	**Striving for global scientific authority:**	attaining scientific leadership / breaking the frontiers of knowledge
7	**Beneficial science:**	science that is useful and future-oriented / problem-based approach
8	**Scientific creativity and innovation:**	creativity and innovation in the production of science and technology
9	**Knowledge-based economy:**	transforming science and technology into production / knowledge-based economic development
10	**Learning from the experiences of others while producing science:**	interaction with global scientific centers along with knowledge enhancement

(Bahrani & Foroutani, 2023)

Production of Science and Technology (Principles and Strategies) (2006), prepared by a group of researchers and PhD students in Strategic Management at the Supreme National Defense University, addresses suitable strategies for the production of science and technology in the Islamic Republic of Iran in alignment with the 20-Year Vision Document. Some selected strategies are outlined as follows:

1. Empowering human resources in priority areas in order to reach the frontiers of knowledge, innovation, production, and the transfer of modern technologies.
2. Designing a network for transferring science from abroad to inside the country by utilizing global opportunities through Iranian elites living abroad and improving the national knowledge transfer balance.

3. Enhancing the level of modern information and communication technologies within society, establishing an information society, developing and completing appropriate infrastructures to increase the production of knowledge-based goods and services.
4. Explaining the theoretical foundations and epistemology of scientific development and national development based on Islamic values in order to raise the level, improve the quality, and create synergy between the two.

B. Conceptual Definitions:

Implementation Model:

Although in the past and in ordinary or small-scale subjects, execution and implementation were considered a single stage and a part of the program execution process, today—especially at macro and national levels and in large-scale projects—due to the nature of the actions involved, it cannot be considered merely the execution phase. Given the significance of planning and implementation in strategic program execution, without which implementation operations would face problems, implementation must be placed ahead of execution in the strategic management process. It should be conceived as the link between strategy formulation and execution, and as the foundation and enabler of effective and successful implementation. (Hassan Beigi, 2011: 375)

Erabi and Khodadadi (2006) have identified variables in their proposed model for implementing the Vision Document, including:

- Determination of strategy and annual goals
- Leadership style
- Structure
- Human resource management systems
- Required substructures in economic, social, and technological domains
- Organizational culture
- Communications
- Annual budgeting programs
- Environment (economic, social, political, and technological factors)
  (Erabi & Khodadadi, 2006)

Eckhomos (2001) divides implementation factors into four categories: content, context, process, and outcomes. Noble (1999), in his study of implementation factors, distinguishes between the structuralist approach and the process- or behavior-based approach, differentiating them clearly. According to structuralist researchers, the key factors in strategy implementation include organizational structure and control mechanisms. However, from the viewpoint of behavioral researchers, important factors in strategy implementation include strategic consensus, independent strategic behaviors, leadership, implementation processes, and ultimately communication and interaction processes.

Pettigrew (1991) believes that organizational strategy is divided into three categories: context, content, and process. *Context* refers to the situation in which an organization is embedded. Organizational context can be divided into **internal** and **external** categories. Internal context includes organizational structure, culture, power distribution, and internal resources; external context comprises broader elements of an organization's environment, such as the economy, laws, societal background, and the broader environment in which the organization operates. *Content* includes items such as resources, structure, systems, human resources, and organizational history. The *process*, after examining the organization's context and the content of the strategy (goals, mental assumptions), is the final stage in the conceptual model of strategy implementation.

Altonen and Ikävalko (2002) consider three elements essential for successful implementation:

1. Communication and strategic action,
2. Identification and support of strategic actors, and
3. Structures and systems aligned with strategy.

Burns and colleagues (2008) identify 18 key success factors, categorizing them into five groups:

1. Strategy formulation process,
2. Systematic implementation,
3. Strategy control and follow-up,
4. Leadership and management by the CEO
5. Motivated and competent staff, with
6. Corporate governance driving change.

Mirzaei Ahranjani (1998) divides model elements into three branches: structural, content (behavioral), and contextual factors. The reason this model is named *"three-pronged"* is due to the interconnection between structural, behavioral, and contextual factors in such a way that no organizational phenomenon or event can occur outside the interaction of these three branches. (Mirzaei Ahranjani, 1998)

National Mobilization (Basij-e Melli):

Basij, equivalent to the Arabic word "ta'biyyah" and the English word "mobilization", has always held a special place in the view of Imam Khomeini (RA). His outlook on Basij was not merely instrumental or tactical, intended to achieve short-term goals. Rather, the Imam regarded popular Basij as a strategic approach—meaning that, by rejecting the prevailing and conventional strategies of struggle (ranging from party-based and parliamentary struggles to armed struggle), he introduced comprehensive popular mobilization as an alternative strategy. This was meant both for advancing the Islamic liberation movement and, later, for guarding the achievements of the Revolution—a model that had never before been witnessed in the Iranian nation's struggles. (Zolghadr, 2009: 50)

According to the Supreme Leader, Basij is defined as follows: "Basij is the realization of religious democracy... Some imagine that democracy merely means going to the ballot box and participating in elections. That is only one manifestation of religious democracy. Democracy means that based on religion and Islam, it is the people themselves who lead the life of society. That is what democracy means; this is the meaning of Islamic democracy. Basij, in all fields, is the embodiment of religious and Islamic democracy... If we can harness the strength and power of Basij, it results in a people-based resistant economy; the same applies in science, in various areas of social progress, and in politics as well. The manifestation of religious democracy is Basij." (Speech delivered on the occasion of Basij Week, in a meeting with Basijis; November 23, 2016)

From the perspective and ideology of many rulers and elites of various countries, not all people are yet considered capable of participating in managing society and the country; only the elite are deemed fit to govern. However, this viewpoint is not endorsed by Islam. The new Islamic civilization is one in which all people play a role.

Ayatollah Mesbah Yazdi (may God have mercy on him) and Martyr Morteza Motahhari (may God have mercy on him) both rejected the notion of excluding the general public from managing society and limiting governance to the elite.

The famous English philosopher and originator of the heroic interpretation of history—and, following him, William James and the American historian Frederick Adams Woods—believed that in all dimensions and aspects of civilization and human culture, great achievements have been brought about by a few great individuals, and the rest of humanity, who constitute the vast majority, have played no role.

This theory, in our view, is unprovable, incorrect, and exaggerated; First, because the criterion of what constitutes a "hero" is unclear; Second, because it is not the case that the true initiators of all movements, transformations, and historical and social reforms have always been extraordinary individuals while the rest merely propagated and executed their thoughts and ideas. Rather, there has always been a mutual influence between the two."

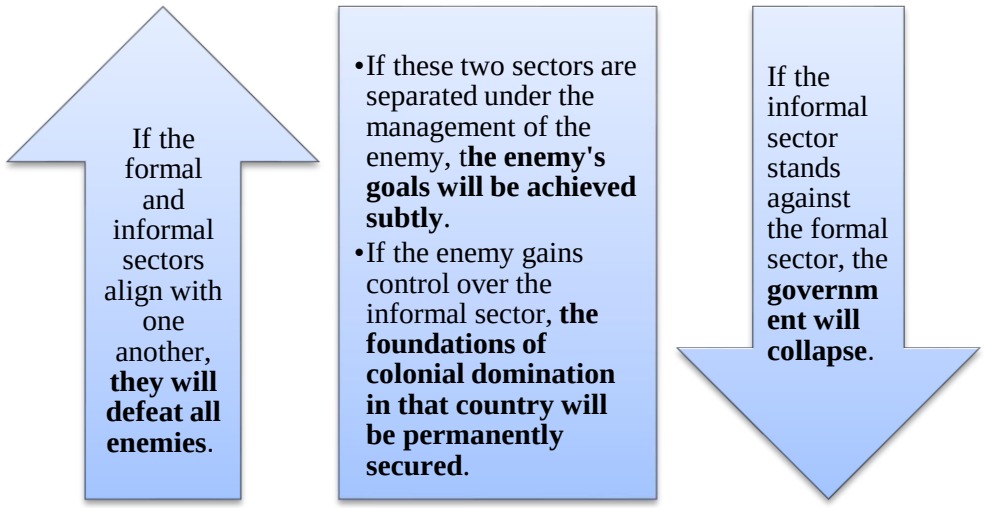
Public Movement:

The Supreme Leader stated in his speech on **May 22, 2019**: "Look, the 'Second Step Statement' is a general depiction of the past, present, and future of the Revolution. Therefore, for the second step, we need a public movement toward that vision; a public movement must emerge in the country. Of course, this movement exists, but it needs to become more disciplined, accelerated, and its progress toward that vision must become more perceptible."

Theories of Social Mobilization:

Theory of Formal and Informal Society

The most accurate and compelling perspective regarding formal and informal society—and the evaluation of our country—has been offered by Professor Faramarz Rafi'pour in his book "It is a pity for Iran to be ruined." Professor Rafi'pour, who completed his doctoral and post-doctoral studies in sociology in Germany, has deeply understood this matter: "Colonialism knows very well that, in general, the power of the informal sector is greater than the power of the formal sector." (Rafi'pour, 2016: p. 139)



Theory of Social Capital

The theory of social capital, as viewed by Western thinkers such as Pierre Bourdieu, James Coleman, Robert Putnam, and Francis Fukuyama, revolves around three fundamental elements: awareness, trust, and participation. They believe that these three elements form the entirety of social capital, and the level and intensity of social capital in any society depend on these three components. Benefiting from social capital leads to the creation and enhancement of national power through the promotion of social cohesion and solidarity, enabling nations to advance toward national development and global recognition.

The most precise definition of social capital is attributed to Putnam, who viewed it as a network of horizontal associations among people. The second interpretation was offered by Coleman, who described social capital as "a number of different elements that share two common traits: they all reside within a social structure and they all facilitate the actions of actors—whether individuals or collective entities—within that structure." (Coleman, 1998 [1377 A.H. Solar]: p. 235)

Theory of Civil Society

Civil society consists of a collection of institutions, associations, and social organizations that are independent of the state and political power. Power is not monopolized by a particular social group or political institution that would otherwise prevent the participation and **competition**

of other groups and organizations, thus hindering the realization of civil society.

(Larijani, 1998 [1377]: p. 179)

In other words, the rule of law is a necessary condition for a civil society, and superior force alone is not sufficient to maintain order within it. (Katoozian, 2006 [1385]: p. 2)

People-Centered Theories within the Framework of Religious Democracy

- An analysis of these theories reveals that—aside from the misuse of such concepts by authoritarian and hegemonic regimes—the central theme of all these theories is the people themselves, or more precisely, the public participation in the social order. Given that the theory of religious democracy has been articulated by the two Imams of the Islamic Revolution, especially by Imam Khamenei, the following is a brief overview of how religious democracy is manifested, emphasizing the positive aspects of the aforementioned theories in light of the concept of Wilayah (Guardianship).

It is both interesting and remarkable that Imam Khomeini, the great architect of the Islamic Revolution, in his congratulations on the establishment of the Islamic Republic on Farvardin 12, 1358 [April 1, 1979], referred to the notion of "Imamat-e-Ummah" (Leadership of the Nation). He emphasized that the Islamic Revolution, with such a lofty and strategic ideal, must foster broad-based engagement and movement among the people, especially the youth, at all levels of society, so that the nation may reach the level of "Leadership of the Nation" in the governance of the country and even the world.

From Imam Khamenei's point of view, Basij is a tool and a technology through which divine support manifests:

"In the early days of Islam, the presence of the masses and their sincere faith brought about victory. This is clearly stated in the Qur'an: *'It is He who supported* you with His help and with the believers.' That means God Almighty assisted the Prophet with His help and through the believers… Basij is this very powerful force… Basij means the entire body of faithful and Hezbollah forces in our country."

(Imam Khamenei, Speech on Basij Day; November 26, 1990 [05/09/1369 Solar])

The Statement on the Second Step of the Revolution

On the occasion of the 40th anniversary of the victory of the Islamic Revolution, Ayatollah Khamenei issued an important and strategic statement on February 11, 2019 (22 Bahman 1397). The most important parts of this statement are reviewed in the following table.

A Brief Overview of the Statement on the Second Step of the Revolution (KHAMENEI.IR)

1. The Forty-Year History of the Islamic Revolution

- Everything was against us.
- There was no prior experience to guide us.
- The combination of republicanism and Islam was the first brilliance of the Revolution.
- The dichotomy of "Islam vs. arrogance" became a defining phenomenon in the modern world.
- The greatness of Iran's forty-year progress is only fully understood when compared to similar timeframes of other major revolutions such as those in France, the Soviet Union, and India.
- The Revolution has been the source of many blessings.

2. Differences Between the Past and Present Challenges of the Revolution Against the Arrogant Powers

• In the past, the struggle was about expelling foreign agents, shutting down the Zionist regime's embassy, or exposing the espionage den (U.S. embassy). Today, the struggle is over Iran's presence at the borders of the Zionist regime, dismantling U.S. influence in the region, and supporting Palestinian fighters, Hezbollah, and the resistance.

• In the past, the West's problem was preventing Iran from purchasing basic weapons. Today, its concern is stopping the transfer of advanced Iranian weapons to resistance forces.

• Back then, the U.S. thought it could overcome the Islamic system with a few traitors or a few planes and helicopters. Today, it sees the need to build a massive coalition of dozens of hostile or submissive governments to confront Iran.

3. Key Capacities of the Country for the Second Step of the Revolution

- Talented and efficient human resources
- The country's material opportunities

Recommendations for Creating a New Islamic Civilization and Preparing for the Rise of the Promised Mahdi (May our souls be sacrificed for him)

- Science and research
- Spirituality and ethics
- Economy
- Justice and fight against corruption
- Independence and freedom
- National dignity, foreign relations, and boundaries with the enemy
- Lifestyle |

Scientific and Technological Advancements in the First Step

After the Islamic Revolution, the Islamic Republic of Iran—like all other countries—has been passing through four stages of academic scientific advancement.

The first stage is education-oriented, which is the initial scientific phase in all universities around the world. In this stage, students are simply admitted and receive instruction.

The second stage, which follows the education-oriented phase, is research-oriented. In this stage, students use the knowledge they have gained to conduct research and produce academic papers.

The third stage comes after the research-oriented phase. In this stage, the research-based university transforms into a technology-oriented university, meaning that academic articles evolve from being purely theoretical to becoming practical and leading to the development of technologies.

The fourth stage is the final stage, in which the technologies developed in universities impact the economy, create employment opportunities, and contribute to the growth of national wealth.

Before the Islamic Revolution, the scientific development of the country's universities had stalled at the first stage. However, after the Revolution, particularly in the mid-1990s, a scientific renaissance in

research and knowledge production began. As a result, Iran's share in global knowledge production increased from about 0.1% in 1996 to 1.94% in 2018. (Raji: 55)

Leapfrogging in Science and Technology in the Second Step

Leapfrogging in science and technology is one of the country's most important priorities. It was stated as the first recommendation among the seven key recommendations of the Supreme Leader in the Statement on the Second Step of the Revolution, aiming to reach the peaks of science and technology and establish a new Islamic civilization.

He stated:

"The youth of this country, through scientific jihad and by causing the fountain of knowledge to spring forth among themselves, should achieve great heights by maintaining a high pace of scientific advancement for years and surpassing current boundaries of knowledge in the most important fields. In doing so, they will defeat the hostile and resentful enemy and bring us closer to the great ideal of the Revolution, which is the establishment of a new Islamic civilization and **preparation for the rise of the sun of the Great Authority (may our souls be sacrificed for him)." (Statement on the Second Step)

Research Methodology

Grounded theory is an inductive methodology for theory discovery that enables the researcher to develop a theoretical account of the general features of a phenomenon, while simultaneously grounding this account in empirical data observations.

(Martin & Turner, 1986: 141; Fernandez, 2004: 84)

Given the characteristics of this research—such as the authenticity of the data (directly attributed to Imam Khamenei (may his shadow be extended)), the high volume and diversity of data, and the resulting need for a rigorous and systematic method; the absence of a strong theoretical framework concerning the thoughts of Imam Khamenei (may his shadow be extended); as well as the potential for incorporating features of other methods and the ability to benefit from qualitative analysis software like

Atlas.ti,—the researcher chose grounded theory methodology for conducting this study.

Statistical Sample

The statistical sample of this study consisted of a group of experts with the following characteristics:

Table 2: Classification of the Statistical Sample

No.	Community of Experts	Estimated Number (People)
1	National-level managers and experts in science and technology	6
2	Commanders and managers of the Basij Organization, General Staff of the IRGC, and the Armed Forces General Headquarters	4
3	Professors from seminaries and universities	4
Total		**14**

Characteristics of the Target Population

- Familiarity with national strategic issues
- Designers and planners in the field of science and technology
- Managers at the strategic levels of organizations responsible for science and technology in the country
- Familiarity with the views and ideas of Imam Khomeini (may God sanctify his soul) and the esteemed Imam Khamenei (may his shadow be extended) in the field of scientific and technological progress
- Preferably holding a PhD degree

Data Analysis and Research Findings

In this chapter, the findings obtained from the interviews conducted with the experts in the statistical sample—using the methods outlined in the methodology chapter—are analyzed and prepared for discussion and conclusion in the final chapter. With guidance from the academic advisors, the researcher compiled a list of experts from the country's science-and-technology sectors (academic and research centers, technological-operations centers, and the Scientific Basij Organization). Efforts were made to select individuals holding strategic-level positions

with substantial expertise and experience. Fourteen interviews were carried out; after the advisors confirmed that saturation had been reached, the researcher proceeded to the coding stage.

Table 4. Counts of Open, Axial, and Selective Codes

No.	Questions	Open Codes	Axial Codes	Selective Codes
1	Structural factors and requirements of national mobilization in the field of science and technology	57	30	9
2	Contextual factors and requirements of national mobilization in the field of science and technology	89	56	20
3	Essence and characteristics of initiating a public movement in scientific and technological progress	118	82	30
	• **Dimensions & components**		40	16
	• **Indicators**		62	42
4	Facilitating behavioral and situational factors & requirements	45	22	12
5	Threatening behavioral and situational factors & requirements	33	17	10
6	Fundamental strategies and solutions for the public movement	56	32	16
	Total	**398**	**229**	**97**

Each organizing theme and its basic themes are explained and described in detail (within the scope of this article) in the following sections.

What Is the Concept of Implementing the National Mobilization Strategy for Science and Technology?

Table 5. Open, Axial, and Selective Codes for "Concept of Implementing the National Mobilization Strategy for Science and Technology"

Open Codes	Axial Codes	Selective Codes
Scientific jihad for nation-building and civilization-building	2	2
Mobilizing the country's scientific and technological capacities	2	2
Targeted research to solve national problems	3	2
Breaking the frontiers of knowledge and attaining scientific authority	2	2
Creating beliefs and shaping resolve ("We can")	3	2
Normalizing the national movement toward progress	2	2
Differentiating the model from the West and extending it to the Resistance Front	2	2

What Are the Dimensions of Implementing the National Mobilization Strategy for Science and Technology?

Table 6: Open, Axial, and Selective Codes of "Dimensions of Implementing the National Mobilization Strategy for Science and Technology"

Selective Codes	Open Codes	Axial Codes
People	12	4
Market and Consumption	3	2
Institutions	1	1
Networks and Communications	5	2
Universities and Scientific Centers	3	2
Infrastructure	2	1
Laws and Regulations	1	1
Resources and Facilities	13	2

What are the indicators of implementing the national mobilization strategy for science and technology?

Table 7: Open, Axial, and Selective Codes of "Indicators of Implementing the National Mobilization Strategy for Science and Technology"

Selective Codes	Axial Codes	Open Codes
Vision Building	3	2
Patience and Perseverance	3	2
Courage and Risk-Taking	3	3
Hope and Mobilization Spirit	8	2
Great Jihad	4	2
Learning by Doing	2	1
Motivation and Interest	4	4
Speed and Leap (Tangible Progress)	9	5
Discipline	3	2
Productivity	4	2
Alignment of Actions with Goals	4	4
Creativity and Innovation	5	4
Expertise and Commitment	2	2
Public Participation and National Resource Mobilization	2	2
Synergy and Cohesion	6	5

Table 8: Open, Axial, and Selective Codes for "Structural Factors and Requirements of National Mobilization in Science and Technology"

Selective Codes	Axial Codes	Open Codes
Establishment of universities, think tanks, growth centers, science and technology parks, and knowledge-based companies for popular institutions (Basij, Relief Committee, Mostazafan Foundation, etc.)	5	8
Middle executive circles in scientific, research, problem-solving, and advisory roles in provinces and counties, connected and affiliated with popular institutions	7	11
Authority to create flexible structures for middle circles (teams, groups, etc.)	2	4

Selective Codes	Axial Codes	Open Codes
Creating appropriate structures for general movement in the national innovation system, especially for middle science and technology circles	1	3
Think tanks composed of middle circles in ministries, organizations, and governmental companies	2	6
Establishing coordination and supervision headquarters for middle science and technology circles	2	4
Institution for measuring the effectiveness of the general movement and related structures	2	2
Commercial stock exchange for ideas, services, and products of middle circles	2	4
Strengthening the organizational structure of Basij to guide middle circles	6	15

Table 9: Open, Axial, and Selective Cdes for "Contextual Factors and Requirements of National Mobilization in Science and Technology"

Selective Codes	Axial Codes	Open Codes
Iranian-Islamic civilization-building social technologies (endowment, charity festivals, etc.)	4	4
Failure in Western civilization indicators and attraction of Basij (resistance) for the world	3	3
Chain nature of science and technology production path and possibility of creating a general movement therein	2	2
Platform for connection of industrial and service units with universities	2	2
Untapped capacities and utilization in the first phase	5	5
Upstream documents (Comprehensive Scientific Map, Islamic-Iranian Progress Model) determine the path	3	3
Investment and strengthening other recommendations of the Second Step Statement (justice, independence, etc.)	3	3
Capability of key first-step successes (military, nuclear, etc.) becoming a model for other national and regional domains	2	2
Capacity to accept indigenous soft technologies (Basij, Construction Jihad, Rahian-e Noor, Industry Clinic, etc.)	6	6

Selective Codes	Axial Codes	Open Codes
All Second Step actions (recommendations) oriented and linked to building the new Islamic civilization	2	2
Convergence and agreement among middle circle officials and institutions	2	2
Essential needs of nation-building and civilization-building in the country, region, and world	1	1
Network building and dissemination tradition of Shia scholars in Islamic knowledge	1	1
Existence of rich and sublime cultural and literary capacities for teamwork in Iranian and religious sources	4	4
Capacity and capability of the Second Step Statement for policy-making in the next forty years	3	3
Approach of opinions, methods, manners (words, actions, and approvals) of the Imams of the Revolution to create a general scientific and technological movement	3	3
Existence of social classes, unresolved issues, and fundamental topics requiring formation of middle circles for bottom-up general movement	7	7
Revolutionary outlook, spirit, and jihadi action in the Second Step	3	3

Table 10: Open, Axial, and Selective Codes for "Facilitating Contextual and Behavioral Factors and Requirements of National Mobilization in Science and Technology"

Selective Codes	Axial Codes	Open Codes
Regulation of laws, rules, and upstream documents (Strategic Document of Scientific Movement)	3	9
Assigning responsibility and training people to increase social capital and hope	2	5
Effective media structures for Basij science and technology mobilization	2	3
Involvement of private sector and compensation of operators from Basij science and technology benefits	2	4
Attitude and belief of government officials and popular institutions toward the general movement (considered an act of worship)	3	5
Designing scientific and technological processes and outputs based on building a new Islamic civilization	1	2

Selective Codes	Axial Codes	Open Codes
Positive attitude toward creativity of student, Basij, and popular ideas	2	4
Promoting the style and method of Sacred Defense and Arbaeen (spontaneous) in middle circles of Basij science and technology	3	5
Guarantee of divine assistance with national mobilization of scientific and technological civilization	2	2
Indigenous theory development forums	1	1
Basij and jihadi mindset among officials and trustees of Basij science and technology	1	3
Scientific revolution culture (Culture House and Student Council)	1	2

Table 11: Open, Axial, and Selective Codes for "Threatening Contextual and Behavioral Factors and Requirements of National Mobilization in Science and Technology"

Selective Codes	Axial Codes	Open Codes
Lack of creative thinking in educational curricula	1	2
Researchers becoming bureaucrats and idea generators limited to article production	2	3
Income-driven innovation and conflict of innovation policies with social and civilizational culture	3	5
Attraction and organization of elites and graduates by the enemy	1	2
Theses that do not solve the country's problems and new Islamic civilization issues	1	2
Sanctions on exporting civilization-building technologies, products, and services	2	3
Neglect of elites toward general movement strategy and software of middle circles	1	1
Dependence on infrastructural materials and products	1	1
Lack of civilizational outlook and government changes hindering infrastructure and general movement	3	8
Weakening of national mobilization and deviation among youth through promoting despair and skepticism	2	6

Summary of "Basic Strategies and Solutions for the General Movement"

- Out of 398 open codes from expert interviews, 52 open codes, 36 axial codes, and 16 selective codes were assigned to the question on **"Basic Strategies and Solutions for the General Movement."**

Table 12: Open, Axial, and Selective Codes for "Basic Strategies and Solutions for the General Movement of National Mobilization in Science and Technology"

Selective Codes	Axial Codes	Open Codes
Aligning practical science and technology policies of the country with the Axis of Resistance and friendly countries for building a new Islamic civilization	1	3
Changing the approach from being a follower to mastery in science and technology in the region	1	1
Integrating popular movements in Basij science and technology for strategic and civilizational affairs of the country	1	2
Strengthening idealism in middle circles of science and technology toward conquering civilization peaks	2	2
Trust and solving country's problems prioritizing the use of middle circles of science and technology	2	4
Delegating the leadership role in demands and follow-ups of Basij science and technology to the middle circles	2	3
Simultaneous use of middle circles for producing science and reaching scientific reference status through problem identification, problem creation, and solving country's issues	2	5
Inviting and assigning responsibility to creative middle circles in science and technology for transformation in the country	2	4
Popularizing and creating efficient and effective competition in Basij science and technology within middle circles	2	3
Investment for propelling the field of science and technology for progress in other recommendations of the Second Step Statement	1	2
Identifying and neutralizing enemy activities exploiting national capacities, keeping elites dependent and especially discouraging them	1	2
Creating middle circles to guide elites and all people in the development of science and technology chains	2	3
Encouraging social innovation and popular participation (key driver of progress) for science and technology production, especially in humanities	2	4
Creating middle circles for producing practical solutions for Basij science and technology in essential country issues	1	4
Strengthening culture, spirit, determination, and jihadi Basij management skills in country managers and middle circles for speed, guarantee, and creativity in achieving enemy-breaking scientific and technological power	7	10
Prioritizing Basij organization for supporting and backing middle circles accelerating science and technology leap in the country	3	4

Conclusion and Suggestions:

A. Conclusion

The answer to the main question:

The model for implementing Basij science and technology or creating a movement in the country's science and technology, derived through this grounded theory research, addresses structural factors, contextual factors, and behavioral factors as well as the core and foundational aspects of creating a general and mobilized movement in science and technology — including its concept, dimensions, and indicators. This model pays attention to strategies and solutions for Basij science and technology in the second step of the revolution, with consideration of facilitating and threatening factors.

In line with the leadership concept of Imamat-e-Ummah (Leadership of the Nation) by the Great Leader of the Revolution and the religious democracy of Imam Khamenei, the social technology of popular Basij, by creating a general movement and transformative efforts both in social processes and orientations, has helped the Islamic Revolution in achieving its lofty goals. This social technology has shown its effectiveness over the years and manifested unique performance indicators known as the *Basiji spirit*. This spirit led to remarkable successes in some sciences and technologies during the first step of the revolution. Examples include Martyr Soleimani in the Basij resistance, Martyr Fakhrizadeh and Ahmadinejad Roshan in the nuclear field, etc.

Now, in the second step, this social technology should expand to all fields, sciences, and civilization-building technologies to break knowledge barriers and conquer technological peaks, moving from the era and status of "studentship" to "mastery" at the regional and global levels.

Figure 2: Model for Implementing the National Mobilization Strategy in Advancing Science and Technology in the Second Step of the Revolution

Concept, Identity, and Nature of Implementing the Science and Technology Mobilization

The concept, identity, and nature of implementing the Science and Technology Mobilization were derived under seven main themes, which are reflected in the findings and the implementation model (answering the main research question). The dimensions, domains, and key actors involved in the implementation are identified in eight categories, while the implementation indicators for the Science and Technology Mobilization are presented in fifteen items.

Outcomes of Implementing the Science and Technology Mobilization

Based on the explicit guidance and demands of Imam Khamenei in the Second Step of the Revolution statement, the anticipated outcomes are:

- The "Rising of the Sun of the Supreme Leadership (May God hasten his reappearance)"
- "The Establishment of the New Islamic Civilization"

The macro indicators for measuring the outcomes of the Science and Technology Mobilization, also based on Imam Khamenei's explicit guidance, include:

1. **Speed:** Crossing the frontiers of knowledge, winning scientific competitions, and rapid progress.
2. **Discipline:** Scientific jihad that defeats the enemy, an organized scientific revolution, and an efficient and advanced country.
3. **Youthfulness:** Compensating for scientific backwardness, fostering youth responsibility, and securing hopeful cadres for the revolution.
4. **Tangibility:** Solving revolutionary challenges, focusing, guiding, and continuous monitoring to reach the peaks of knowledge and technology.

Recommendations

1. The Vice Presidency for Science and Technology should formulate and issue regulations, guidelines, and implementation manuals to enable the effective participation of middle-level groups in the nationwide movement and mobilization of civilization-building

science and technology, aligned with the era of the awaited reappearance.

2. All responsible officials of the middle-tier groups within the Science and Technology Mobilization across the country should annually elect, through formal and public elections, the heads of the "Coordination and Supervision Headquarters of the Middle-Tier Groups in the Science and Technology Mobilization."
3. National institutions and people-related centers (such as the Basij Organization of the Oppressed, the Imam Khomeini Relief Foundation, the Ministry of Agriculture's Jihad Organization, etc.) should conduct research similar to this thesis to foster public mobilization and engagement in the other six recommendations of the Second Step statement (spirituality and ethics, economy, justice and anti-corruption, independence and freedom, national dignity and foreign relations, and lifestyle).
4. Revolutionary universities and research institutes (such as Imam Sadiq University, the Supreme National Defense University, Imam Hossein University, and other top national universities) should develop and implement localized models aligned with their missions for utilizing middle-tier groups to create public mobilization and accelerated progress in science and technology.

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