Women's Innovative Strengths for Development

Luisa Nenci. Consultant expert in economic issues, Italy

According to Helen Fisher (2005), a biological anthropologist at Rutger's University, women's thinking is different from men's. She refers to the interrelated way women think as "web thinking". Women think contextually and holistically and display more mental flexibility. They take in more data and synthesize them expertly, connecting the details faster, using imaginative judgment. The characteristics of web thinking are essential to innovation. Since women do it naturally, their role in teams and in organizations is becoming more important. Women can become instrumental for innovation to produce change in a world where sustainable development requires profound transformation in thinking, in economic and social structures and in consumption and production patterns.

Women's Thinking

In globally competitive markets, creating economic value requires that companies – large and small, new and established – continually generate innovative ideas, quickly commercialize them and readjust them as market conditions change. The ability to generate new ideas is the product of imagination, a result of women's mental flexibility: the capacity to reach into the depths of one's stored knowledge, assemble *chunks* of data in new manners, examine different combinations, and "play" with various arrangements. Women's web thinking integrates more details faster and arranges these data into more complex patterns.

Chunking is an intellectual capacity that has been explained by psychologist Herbert Simon (1974) as people learn how to analyze the stock market, run a business, or follow a political issue. People begin to recognize the patterns involved and mentally organize these data into blocks of knowledge. With time, more and more related patterns are chunked, and clusters of knowledge are stored in long-term memory. Then the ability to use those chunks, assessing multiple, complex scenarios and plotting a long-term course is related to "web thinking" as long-term planning. Women may have evolved the propensity to think long term to plan for their children's distant future.

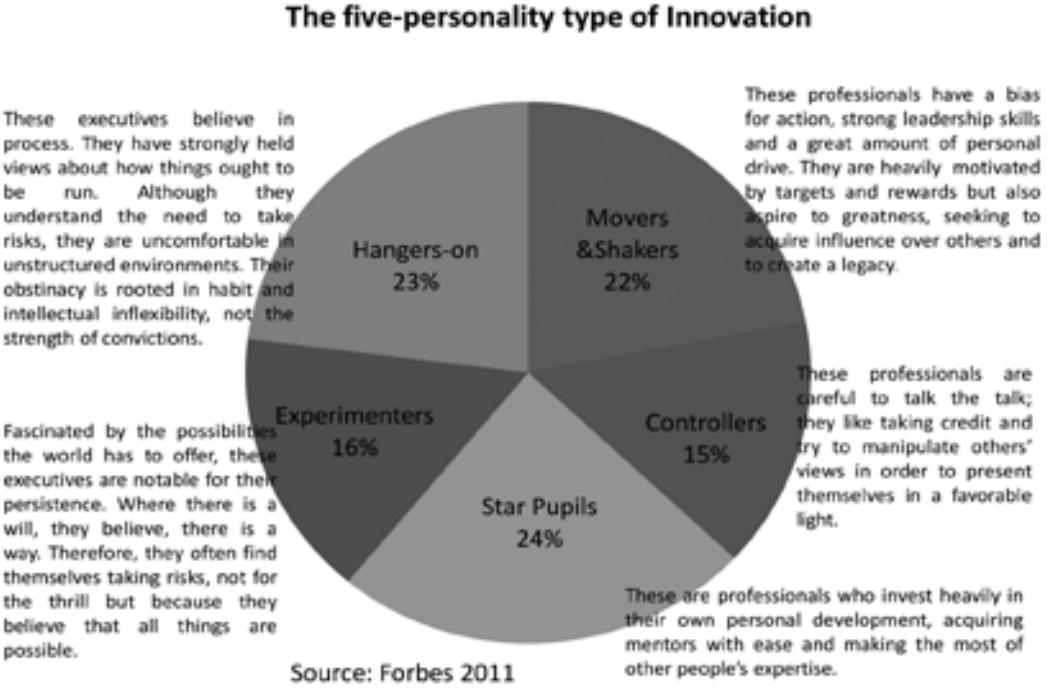
Along with these capabilities there are also women's social skills and their remarkable facilities for networking, collaboration, empathy, inclusion, and sharing power. These feminine dispositions to work in egalitarian teams or networks, and to support others were undeniably vital to ancestral women who needed to support one another and their children. This is evident

in the Sandpit[1] and Ideas Labs, too. When there are women in the group, the dynamics are different: there is more apparent collaboration and a gentler, collective creative process.

These talents are not exclusive to women, of course, yet women display them more regularly than men. As women make decisions, they tend to weigh more variables, consider more options, and see a wider range of possible solutions to a problem. Women tend to generalize, to take a broader, more holistic, more contextual perspective of any issue. The feminine way of reasoning is to think in webs of factors, not straight lines, as described by Ms Fisher's "web thinking". Men are more likely to focus their attention on one thing at a time. They tend to classify pertinent material, discard what they regard as irrelevant data, and analyze information in a more linear, causal path. Ms Fisher calls this male pattern of cogitation "step thinking".

Personalities for Innovation. Innovative Potential

The entrepreneur is presented in Schumpeter's early writings as the personification of innovation, while in his later work the process of innovating becomes a constant innovation happening within companies as they seek to solidify their competitive position. Although



1. The Sandpit was conceived by the Engineering and Physical Sciences Research Council (EPSRC) in 2003 with the goal of inspiring more innovative and multi-disciplinary research proposals.

Schumpeter describes this process as the bureaucratization of innovation, nevertheless he assumes that it must still be driven by enterprising personalities.

Ipsos Observer (Forbes Insights, 2011) surveyed 1,245 European executives to identify the actual enterprising personalities for innovation, and responses were grouped into five clusters with different personality dimensions, motivations and behaviors. Some are more entrepreneurial, others more process-oriented. The five personality types recognized (described in Figure 1) exist in every organization without ranking one better than the others. All of them bring different kinds of value to organizations. Leaders need followers. Doers need thinkers. Visionaries may be poor at execution. Nevertheless, among innovative and entrepreneurial companies, certain personality types are more prominent.

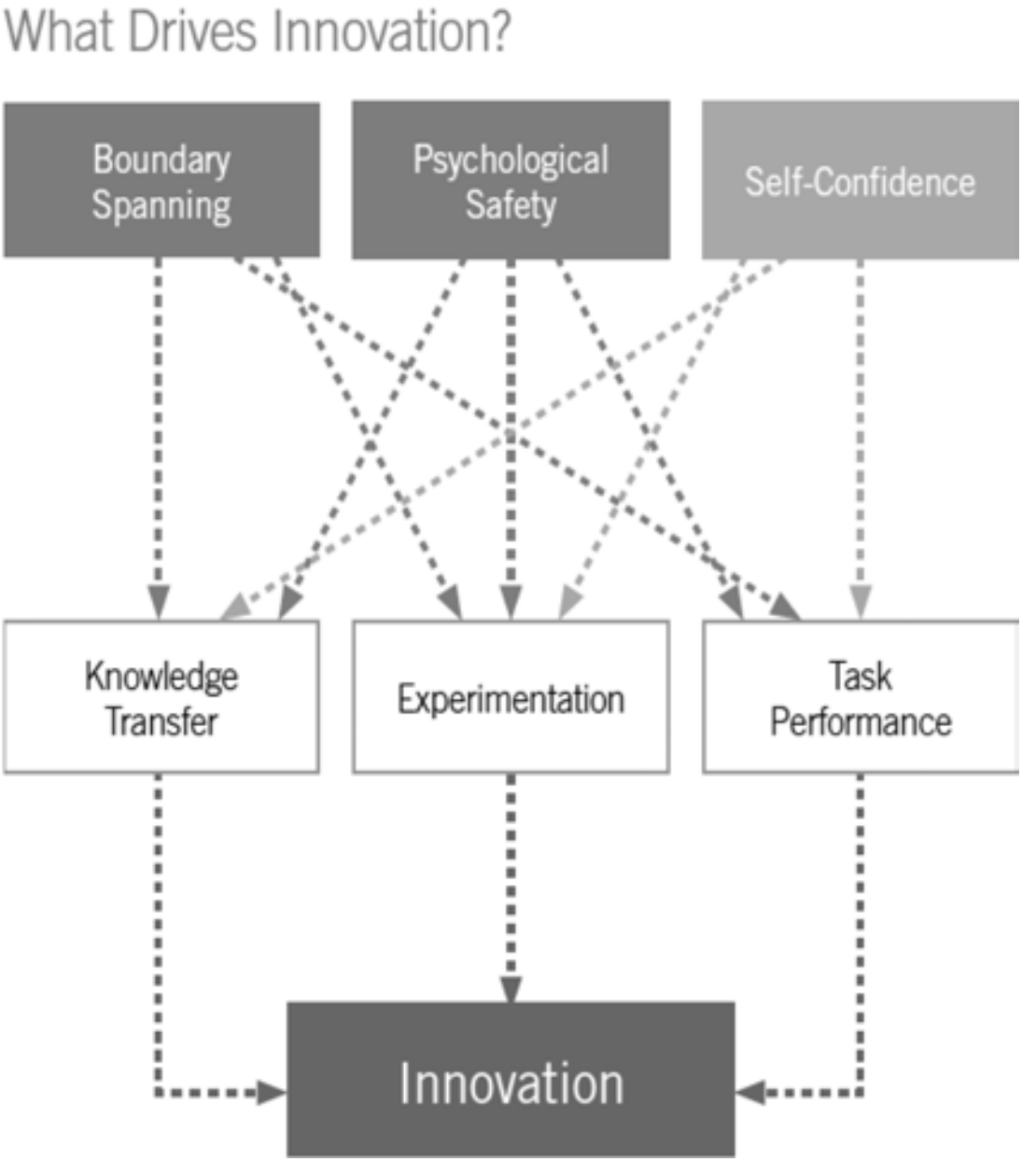
Even though there is not a group which corresponds perfectly to the profile of the successful entrepreneur, Movers & Shakers and Experimenters come very close. Young and innovative firms generally need Movers & Shakers at the helm, promoting the vision that directs the energies of Experimenters. More established organizations tend to nurture Star Pupils to become Movers & Shakers. Innovative firms generally try to avoid Controllers and Hangers-On, although bureaucracy requirements for innovation implementation will inevitably raise the need of them. In fact, when firms shift from high growth to a more mature stage, the requirement of strengthening processes with control and risk-taking moderation grows.

The main conclusion of this survey is that individuals with a unique set of personality traits are required to boost innovative firms. Further analysis reveals that among these entrepreneurs there is no great difference between genders and that their success occurs in environments that recognize and support their mission.

The research paper on innovative potential run by the LSE-Lehman Brothers Centre for Women in Business (2007) based on a survey sent to 100 teams, shows that the optimal percentage for the gender balance of men and women on teams is 50:50. The critical innovation factors that are influenced by the 50:50 optimal proportion of men and women in a team are the psychological safety of team members and the whole team, the extent to which they are prepared to take risks and experiment, and the general efficiency of the team.

However, while gender diversity is essential for optimizing the teams' innovative potential, research results highlight the significance of women's contribution: having a slight majority of women (about 60%) improves the team's self-confidence. Even when in a minority, women tend to network outside the team, bringing the positive outcome of spanning its boundaries leading to knowledge transfer, whereas men, while in a minority, tend to become less motivated.

: Personalities by Gender



Housework duties and family burdens of team leaders were also surveyed valuing diversity among team leaders. Males were more likely to work "significantly" longer hours than their female counterparts, with the result that male team leaders may suffer from exhaustion, whereas women team leaders were six times more likely to perform the domestic labor duties at home than men. Whilst 96% of the male team leaders who responded had children (more

likely young children), only 48% of the female team leaders had. Those results led to the first report recommendation that companies should offer and reinforce "family-friendly" policies and practices encouraging shared domestic labor and work flexibility. This is to encourage both the optimal teams' gender diversity to be implemented and the negative spillover from either home or work eliminated.

Companies should offer and reinforce "family-friendly" policies and practices encouraging shared domestic labor and work flexibility

The research run in Spain by the University of Alcala (Martí et al. 2011) shows that gender-related differences can be the vehicle to introduce innovative aspects, particularly in those fields where business output is related to the quality of life. Results indicate the coexistence of two different types of entrepreneurial women with different profiles and results. The first one mainly consisted of women from entrepreneurial families, and develops basically in the same sectors as the economic average with just a slightly larger presence in service activities; the second one mainly operates in those sectors traditionally considered as female. Entrepreneurs in this case frequently have family burdens and are low qualified, working in services, particularly personal services and retail trade. Technological and managerial characteristics of companies managed by the female entrepreneurs belonging to this group differ substantially from the average, having a much more traditional and less innovative profile.

The important conclusion of this research is that, despite the fact that male and female personal features and motivations are different, the reasons for success and survival of their enterprises are substantially the same. The most significant differences are: the greater amount of time devoted by female entrepreneurs to household chores and (the two most important ones not referred to in the literature) that women enterprises are more often involved in product and services innovation, and that women have a significantly higher participation in their staff.

The Mediterranean Environment

The Gallup Survey (2010) on the Mediterranean areas showed up that entrepreneurship is now becoming increasingly attractive in the MENA area with 62% of young Mediterranean people willing to become entrepreneurs compared to just 45% in Europe, thus creating a very strong potential for the establishment of innovative business. Furthermore, more key findings of surveying the Arab young generation are that empowering young girls and women and battling gender stereotypes are identified as key components to address gender discrimination and to foster sustainable development of the society as a whole (Kouri and Shehata, 2011). Gender equality allows for happier, healthier and more educated youth to develop and become productive citizens.

Nevertheless, one in three young males believes that educating boys is more important than educating girls, and the majority of boys and girls do not believe that boys should do as much domestic work as girls (Population Council, 2010). And so, despite increasing representation in the education system, young women still face limited decision-making power and are generally underrepresented in the public and economic spheres. Within MENA, gender roles are justified largely by arguments based on biological determinism, culture and religion, as popular definitions of masculinity value such traits as aggressiveness, competitiveness, dominance, strength, courage and control. Marginalizing women, both through acts of

sex-selective violence and domination in the social sphere, can become a matter of affirming one's masculinity. As a result, phenomena such as domestic violence, female genital mutilation and honor killings become socially acceptable in some societies (Kouri and Shehata, 2011).

Other cultural barriers to innovation in the MEDA area are identified by the ANIMA research study (2012) in the willingness of sharing information about innovation projects or offers and requests of partnership, and the trust in collaboration between research and industry. Moreover, companies are wary of intermediaries whose task is supposedly to promote innovation whilst administrations has poor innovation culture, with the difficulty to handle the non-tangible aspects of innovative projects, and therefore, to realize the entire nature and importance of innovation. Furthermore, the same business sector finds that the management of research projects is often too complex and risky. All of this is leading to importing the expertise when needed instead of using local sources of innovation.

Capitalizing on Innovation for Empowerment

Innovation through new ideas, products and practices is increasingly seen as a force for social change. Also, gender mainstreaming and the empowerment of women have often been seen, particularly in aid and development agencies, as one of the most effective ways of introducing change (Bureau of European Policy Advisers, 2011). Innovation and women's empowerment are not often paired but certainly both have essential value for human progress. Innovation as well as women's empowerment require thinking "out of the box", acting beyond existing predefined parameters and traditional interventions (Malhotra et al., 2009). Recent developments in innovation thinking increasingly emphasize the opportunities that innovations can bring about to address development issues and stimulate wider social change.

The new definition of innovation aligns largely with the emerging concept of "social innovation," emphasizing not only progress and social change, but also social justice as an important element

A new nature of innovation is emerging. Innovation is no longer mainly about science and technology. Firms can innovate in other ways, through co-creation and stakeholders' involvement, thus environmental and societal challenges increasingly drive innovation today. Collaborative, global networking and new public-private partnerships are becoming crucial elements in companies' innovation processes. Companies constantly search for new business opportunities and social and environmental challenges – such as climate change, the supply of clean air and water, and so on – that constitute a huge new market barely explored. In the report *The New Nature of Innovation*, the authors state that "by creating new and more responsible and sustainable solutions, companies can cultivate new business opportunities" (FORA, 2009:11).

The new definition of innovation aligns largely with the emerging concept of "social innovation," emphasizing not only progress and social change, but also social justice as an important element. Phills, Deiglmeier and Miller (2008:36) define social innovation as "a novel solution to a social problem that is more effective, efficient and sustainable, or just than existing solutions and for which the value accrues primarily to society as a whole rather than private individuals." The emerging field of social innovation is broad and varied – from new models of learning to new ways to reduce waste, empower communities and transition to a low carbon economy – and

there are many organizations and individuals engaged in the development and use of social innovation across Europe (the Social Innovation eXchange (SIX) and the Young Foundation for the Bureau of European Policy Advisors, 2010). Social innovations are an essential component of the EU's change drivers for "effectively addressing poverty, generating sustainable wealth and well-being and promoting a learning and participative society" (BEPA, 2011:119).

There is a substantial overlap between innovation and improvement, change and creativity

As with innovation in technology or business, social innovation is distinct from "improvement" or "change" and from "creativity" and "invention" (BEPA, 2011). These last two are both crucial to innovation but overlook the important stages of implementation and diffusion which make new ideas useful. Nevertheless, there is a substantial overlap between innovation and improvement, change and creativity. Some social innovations are incremental (they build on what went before) and others are radical (they provide entirely new models for thinking and doing). Innovations can be disruptive and generative – that is, they can disrupt patterns of production, consumption and distribution and generate further ideas and innovations (like the move to a low carbon economy or the creation of a preventative system of criminal justice).

Equally, the public sector is facing new challenges – increasing demands from citizens for higher quality and more personalized public services, together with greater budgetary constraints – and in order to formulate appropriate innovation policies encompassing the new nature of innovation, it is important to understand how the nature of innovation is changing. "A successful innovation policy is one that involves all actors in society; innovation is something you do with people, not to them."[2] If the ultimate objective is to introduce sustainable change, then the main variable is people's empowerment.

By looking at empowerment and development together, attention is focused on issues that matter most in the lives of families and their communities – opportunities for decent work, the chance to enjoy basic services and participate fully in the political life of their countries.[3] The Sustainable Development Strategy for an Enlarged EU (General Secretariat of the Council Of The European Union, 2006) stresses that sustainable development requires profound changes in thinking, in economic and social structures and in consumption and production patterns which must be taken up by society at large as a principle guiding the many choices each citizen makes every day, as well as the big political and economic decisions. And social innovation is a core element in the strategy.

Women as Proactive Agents for Social Innovation

As a new frontier of empowerment, social innovation balances the value directly attained by women (Malhotra, 2009) with an understanding that investments in women as development actors can support the flow of benefits to households, communities and wider development processes. Women can be instrumental for

2. This idea was expressed by President Barroso in a recent Speech on 13 October 2010.
3. UN Secretary-General Ban Ki-moon's message to the International Conference on "People's Empowerment and Development", in Dhaka, Bangladesh, on 5 August.

innovation to produce a change in a world that is experiencing technological and social change as well as economic at a pace never experienced before in human history.

The development of social innovation ideas into the actual implementation of innovative processes to address social challenges is not linear and requires different types of support along the way. Policy makers, managers and entrepreneurs today are expected to cope with increasing complexity, change and diversity (Jackson, 2003). Complex environmental and sustainability problems tend to transcend the jurisdictions and capacities of any single organization or profession to manage (Nguyen, 2011). It is crucial for managers and entrepreneurs to be equipped with a holistic understanding of the systems that they have responsibility for: a different way of thinking (Cabrera, 2008) which offers a holistic way of appreciating all dimensions of a complex problem and enables the formation of effective and long-term management strategies.

Women can be instrumental for innovation to produce a change in a world that is experiencing technological and social change as well as economic at a pace never experienced before in human history

The natural talents of women (Fisher, 2005), their way of thinking and the predisposition to examine complex social, environmental, and political issues with a broad, contextual, long-term view will benefit all levels of society in today's flat world, where a high rate of innovation is one of the few ways to sustain competitive advantage. The support of innovation, which is crucial, is not about creating entrepreneurs but nurturing and encouraging those who put forward innovations wherever they may be. Not just one type of person corresponds to the notion of the entrepreneur but different personality traits that are valuable in the conception of ideas and its implementation to benefit society with their diverse contribution.

References

ANIMA, Promoting innovation in the Mediterranean Investment Network, Study n.63, 2012.

Bureau of European Policy Advisers (BEPA), European Commission, Empowering people, driving change: Social innovation in the European Union, European Communities, 2011.

Cabrera, D.; Colosi, L., Lobdell, C., Systems thinking Evaluation and Program Planning 31 299-310, 2008.

Fisher, H., The Natural Leadership Talents of Women. Enlightened Power: How Women Are Transforming the Practice of Leadership. L Coughlin, E Wingard and K Hollihan (Eds). San Francisco, CA: Jossey Bass, 2005.

FORA, together with the Ministry of Economic and Business Affairs in Denmark and the Ministry of Economic Affairs in Finland. The New Nature of Innovation, OECD Committee for Industry, Innovation, and Entrepreneurship (CIIE), 2009.

General Secretariat of the Council Of The European Union, Renewed EU Sustainable Development Strategy n.10917/06, 2006.

Khouri R. G., Shehata D. with the contribution of Ibrahim, B.; Gause G. and Christine Asaa, A generation on the move: Insights into the conditions, aspirations and activism of Arab youth chapter five Young Women And Girls: The gendered experience of growing up a young Arab Woman. Published by *Issam Fares Institute for Public Policy & International Affairs American University of Beirut, Lebanon with the support of of the IFI-AUB and the United Nations Children's Fund*, 2011.

Jackson M.C., Systems Thinking: Creative Holism for Managers. John Wiley & Sons: Chichester, UK, 2003.

Ipsos Observer, ACCA, "Nurturing Europe's spirit of enterprise: how entrepreneurial executives mobilize organizations to innovate' Forbes Insight, 2011.

Malhotra, A.; Schulte, J.; Patel, P.; Petesch, P., Innovation for women's empowerment and gender

equality The International Center for Research on Women (ICRW), 2009.

Martí F. P., García-Tabuenca, A., Crespo-Espert J.L., Do gender-related differences exist in Spanish entrepreneurial activity? Institute of Economic and Social Analysis, University of Alcala (Madrid, Spain)"Entrepreneurial Women, Differential Behaviours And Business Innovation," ERSA conference papers ersa11p1130, European Regional Science Association, 2011.

Nguyen, N.C,Graham, D., Ross, H., Maani, K. and Bosch, O., Educating Systems Thinking for Sustainability: Experience with a Developing Country Systems Research and Behavioral Science Syst. Res. Published online in Wiley Online Library (wileyonlinelibrary.com) DOI: 10.1002/sres.1097, 2011.

Population Council, Survey Of Young People In Egypt Young People's Attitudes Toward Gender Roles, 2010.

Phills, J. A. J., Deiglmeier, K. and Miller, D.T., Rediscovering Social Innovation. Social Innovation Review. Stanford Graduate School of Business.

Simon, H. A. (1974). How big is a chunk? Science, 183, 2008, 482-488.

The Gallup Organization Europe, First Euro-Mediterranean Survey on Intercultural Trends. Anna Lindh Foundation, 2010.

The Lehman Brothers Centre for Women in Business, Innovative Potential: Men and Women in Teams, 2007

The Social Innovation eXchange (SIX) and the Young Foundation for the Bureau of European Policy Advisors. Study on Social Innovation European Union/The Young Foundation, 2010.